European GNSS Agency

Programming Document

Years 2018 – 2020

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Foreword

The 2018-2020 period will conclude with the Galileo system reaching Full Operational Capability (FOC). This is a critical milestone for the programme, and one that drives many of the Agency's activities.

In 2016, the Agency's Galileo Security Monitoring Centre (GSMC) started 24/7 operations. This was a major achievement, from which the Agency will continue to build on following the Declaration of Galileo Initial Services. However, the Agency's work in security is not limited to the GSMC.

The Agency has the responsibility of carrying out tasks relating to the PRS, which include dealing with the relevant Competent PRS Authorities (CPAs) of the various Member States and acting as a CPA for various entities. This responsibility is in compliance with the Common Minimum Standards for the Public Regulated Service (PRS).

As Galileo progresses towards FOC, the Agency's extensive marketing and communications activities will build on recent successes in order to further develop the market opportunities for European GNSS across all relevant segments. This work includes monitoring the market and providing value market insight through the publishing of the biannual GNSS Market Reports and the new GNSS User Technology Report, both of which are positioned as world-renowned sources of information about Global Navigation Satellite Systems (GNSS) markets. All of the Agency's marketing and communications work is geared towards promoting the European GNSS (EGNSS) programmes, the added value they bring to industry, and how the end user can benefit.

Through various agreements, the European Commission (Commission) has delegated a considerable number of activities to the Agency. These tasks continue to make up the lion's share of the European GNSS Agency's tasks, particularly as they concern the operations and service provision of Galileo and EGNOS.

The Commission has also entrusted the Agency with implementing the GNSS-related activities under the ambitious Horizon 2020 (H2020) framework programme for research and innovation. The first three H2020 calls under the programme are now underway, with numerous funded projects already producing results, fuelling demand and enhancing the dynamic GNSS market. During the 2018-2020 timeframe, the GSA will manage projects funded under the programme's third call for proposals.

In summary, 2018-2020 promises to be the period when the Agency fully evolves into its role as the end-to-end service provider for the European satellite navigation programmes, in close cooperation with both the Commission and the European Space Agency (ESA).

List of Acronyms

Acronym	Definition
AA	Appointing Authority
AD	Administrator
ANSP	Air Navigation Service Provider
ARB	Anomaly Review Board
AST	Assistant
ATO	Authorisation to Operate
CA	Contract Agent
CDA	Crypto Distribution Authority
CEOS	Conditions of Employment of Other Servants (of the EU)
CFSP	Common Foreign and Security Policy
CMS	Common Minimum Standards
COMSEC	Communications Security
CPA	Competent PRS Authority
CS	Commercial Service
DPO	Data Protection Officer
DRP	Disaster Recovery Plan
DG GROW	Directorate General Growth
DUER	Document Unique d'Evaluation des Risques
EDPS	European Data Protection Supervisor
EEAS	European External Action Service
EFTA	European Free Trade Agreement
EGNOS	European Geostationary Navigation Overlay System
EGNSS	European GNSS
EMC	Enhanced Minimum Configuration
ESA	European Space Agency
EU	European Union
EUCI	EU Confidential Information
EUR	Euro
FKC	Flight Key Cell
FOC	Full Operational Capability
FP7	Seventh Framework Programme for Research and Technological Development of the European Union
FR	France
FTE	Full-Time Equivalent
GCC	Galileo Control Centre
GNSS	Global Navigation Satellite Systems
GRC	Galileo Research Centre
GSA	European GNSS Agency
GSC	European GNSS Service Centre
GSF	Galileo Security Facility
GSMC	Galileo Security Monitoring Centre
GSOp	Galileo Service Operator
H2020	Horizon 2020
HR	Human Resources
HVAC	Heating, Ventilation and Air Conditioning
IATO	Initial Authorisation to Operate

Acronym	Definition
IAS	Internal Audit Service
ICC	Internal Control Coordinator
ICT	Information and Communications Technology
IMS	Integrated Management System
ISO	International Standards Organisation
IT	Information Technology
ITS	Intelligent Transport System
JRC	Joint Research Centre
PI	Performance Indicator
LBS	Location Based Service
LPV	Localiser Performance with Vertical guidance
LSAA	Local Security Accreditation Authority
M2M	Machine to Machine
MaaS	Mobility as a Service
M2M	Machine-to-Machine
NDA	Non-Disclosure Agreement
NSA	National Security Authority
ORR	Operational Readiness Review
OSRR	Operational Service Readiness Review
OVRR	Operational Validation Readiness Review
PA	Product Assurance
POC-P	Point of Contact Platform
PRS	Public Regulated Service
QA	Quality Assurance
R&D	Research and Development
RAMS	Reliability, Availability, Maintainability and Safety
RLS	Return Link Service
R-UE	Restreint-Union Européenne (Restricted - European Union)
SAA	Security Accreditation Authority
SAB	Security Accreditation Board
SAP	Security Accreditation Panel
SAR	Search and Rescue
SATO	System Authorisation To Operate
SC	Specific Contract
SecOps	Security Operations
SLA	Service Level Agreement
SLT	Service Level Target
SME	Small and Medium Enterprises
SNE	Seconded National Expert
SOIF	Security Operational and Intelligence Facility
SSRS	System-specific Security Requirements Statement
TA	Temporary Agent
TBD	To be Determined
UCP	User Consultation Platform
UK	United Kingdom
VAT	Value Added Tax
WBS	Work Breakdown Structure
WP	Work Package
WG	Working Group

Mission Statement for the Agency

The Agency's mission is to support the European Union's (EU) objective of achieving the highest rate of return on its investment in EGNSS, in terms of 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 services that ensure user satisfaction in the most cost-efficient manner;

- Engaging market stakeholders to develop innovative and effective applications, value-added services and user technology that promote the achievement of full European GNSS adoption;

- Ensuring that European GNSS services and operations are thoroughly secure, safe and accessible.

Satellite navigation has made major inroads 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.

By developing a new generation of GNSS, Europe is laying the foundation for the development of new high-technology industry, job creation and economic growth. With Europe in the driver's seat, independent and self-sustaining, Galileo will offer the global navigation positioning system of the future.

Mission Statement for the Security Accreditation Board

The Security Accreditation Board (SAB) is the European GNSS Security Accreditation Authority. It is established within the Agency as an autonomous body pursuant to Article 3 of the GSA Regulation and takes its decisions independently and objectively, including with regard to the Commission and other bodies responsible for the implementation of the programmes and for service provision, as well as with regard to the Agency's Executive Director and the Administrative Board. All the security accreditation decisions related to the GNSS systems are of its sole competence.

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

- Approval of satellite launches;
- Authorisation to operate the systems in their different configurations and for the various services up to and including the signal in space;
- Authorisation to operate the ground stations;
- Authorisation of bodies to develop and manufacture PRS receivers or PRS security modules, taking into account the advice provided by national entities competent in security matters and the overall security risks.

The Agency conducts security accreditation activities as defined in Chapter III of the Regulation, ensuring the technical and administrative secretariat to the SAB and providing the underlying security assurance to enable the SAB to make proportionate, appropriate and cost-effective security accreditation decisions.

The Agency also plays an important management and coordination role for the SAB's subordinate bodies (European GNSS Security Accreditation Panel, SAB Crypto Distribution Authority (CDA) Task Force). According to Article 11(10) of the Regulation, the Agency provides the SAB with the appropriate human and material resources required for it and its subordinate bodies to be able to independently perform their tasks.

Section I - General Context

Europe's GNSS programmes, Galileo and EGNOS, have taken major steps towards achieving their objective of delivering services to end users, starting with EGNOS providing its Safety of Life service in 2011 and continuing with the Declaration of Galileo Initial Services at the end of 2016. These major steps are the result of continued progress being made in, for example, the deployment of the Galileo system infrastructure including both the ground and space segments, and the launch of Galileo satellites including the first quadruple launch with the Ariane 5 in November 2016.

A number of priorities have been identified for the coming years, including:

- Completing the deployment of Galileo's constellation and infrastructure by launching additional satellites by 2020, delivering improved releases of the ground segment, and enabling further service declarations;

- Starting the Galileo exploitation phase: Galileo Initial Services have been available since 2016. These services include the Open Service, Search and Rescue service and PRS.

- Progressively enhancing available Galileo services including the Commercial Service, and enabling further service declarations.

To achieve these priorities and set a clear direction for both programmes, the GNSS Regulation 1285/2013 assigned roles to international public sector actors, including the Commission, the ESA and the GSA. Within the framework of the GNSS Regulation and the revised GSA Regulation 512/2014, the Commission has delegated the main EGNOS exploitation and Galileo exploitation activities to the GSA. The GSA's role is further described below.

I.01 Role of the European GNSS Agency

The GSA has responsibility for the following operational areas:

- **Security accreditation:** security accreditation activities are managed by the SAB, an independent body within the Agency and the security accreditation authority for European GNSS. Its objectives are to ensure the Galileo system continuously complies with applicable security requirements, identify possible new risks, and to ensure the system security plan is complemented where appropriate. Although during the development phase security accreditation activities focused on Galileo infrastructure, is they are now progressively moving

towards services in anticipation of their gradual evolution during the exploitation phase. Similar activities are foreseen to be extended to EGNOS. Security accreditation is a core task of the Agency.

- **Operation of the GSMC:** the GSMC delivers services related to Galileo security monitoring and to providing access to the PRS. Due to the strategic nature of Galileo, the EU legislation establishes a framework to address threats to the Galileo infrastructure and signals, as well as to protect against unauthorised use of its navigation signals. This enables the EU to maintain full control of the system at all times. The operation of the GSMC is a core task of the Agency.

- **Public Regulated Service**: the Agency delivers specific PRS tasks in complement to the GSMC's PRS related operations.

- **Market development and communications:** the Agency promotes and market Galileo and EGNOS services by:
  - o Establishing and maintaining contact with users and collecting information on their needs, analysing market trends and developing the downstream market, and fostering the uptake of services by the user community. The Agency also complements the Commission's initiatives, including legislative initiatives, for the development and adoption of regulated applications.
  - o Promoting the development of innovative EGNSS chipsets, receivers and antennas via the Fundamental Elements funding programme. The Agency promotes such development through various activities with relevant manufacturers.

  These market development and communications activities are a core task of the Agency.

- **EGNOS Exploitation:** The Agency took over the main tasks of EGNOS exploitation on 1 January 2014. As a result, and in close cooperation with the ESA, the GSA manages the service provider contract and the technological evolution of the system, including changes in the infrastructure. EGNOS exploitation focuses on ensuring the continuity of services, extending its geographical coverage, and improving the services provided. These activities are performed under delegation from the Commission.

- **Galileo Exploitation:** In 2017, the Agency took over responsibility for the Galileo initial services provision in particular through the Galileo Service Operator (GSOp) specific contract 2 for operations. Working closely with the ESA, the Agency also undertakes tasks related in particular to the ground segment and system engineering. The Agency performs these activities under delegation from the Commission.

- **Horizon 2020 R&D Applications:** the Agency manages GNSS-related R&D projects for the H2020 programme under delegation from the Commission.

In addition to the tasks above, the Agency also recognises the challenges it faces in respect to cyber security as well as the need to reinforce the development and implementation of cyber security and the associated culture throughout its activities. To achieve this, the Agency provides expertise to the Commission to develop cyber security requirements for the Galileo programme and, more globally, a cyber policy which will be applied to the European GNSS programmes. The GSA has already started planning the implementation of the cyber security requirements. At an administrative level, The GSA has taken actions to establish a Service Level Agreement with the EU Computer Emergency Response Team to also enhance cyber security. A set of policies and awareness trainings are planned to be developed to improve the cyber security culture of all employees.

This Single Programming Document focuses on the Agency's multi-annual and annual work programme for its core tasks. Programming activities related to the delegated tasks are addressed in the delegation agreements. Delegation agreements applicable in 2018 are listed in Annex XI - Tasks Delegated to the European GNSS Agency.

I.02 Main Assumptions

This programming document is drafted based on the following assumptions, which are correct at the time of writing:

- The remaining issues concerning the Galileo handover of the infrastructure from the Commission to the Agency are appropriately in place to ensure the operations of the GSOp;
- The performance of the Galileo system after the Declaration of Initial Services remains in-line with expectations;
- The United Kingdom having notified the EU about its intention to leave the European Union, the GSMC back up site will be relocated to a site in the remaining 27 Member States.

Section II - Multi-annual programming 2018 – 2020

This Single Programming Document contains a multi-annual work programme for the GSA's core tasks, as stipulated in Article 32 of the GSA Financial Regulations. As a minimum, it covers a three-year period.

II.01. Multi-annual Objectives

The Agency's mid-term strategic objectives are based on the definition of tasks assigned to it by virtue of Article 14 of Regulation (EU) 1285/2013 on the implementation and exploitation of European satellite navigation systems (GNSS Regulation).

	Strategic objective	How it is implemented
14 1(a) (i)	With regard to the security of the Galileo and EGNOS programmes, the Agency shall ensure, through its Security Accreditation Board, the security accreditation in accordance with Chapter III of Regulation (EU) No 912/2010 ("GSA Regulation").	The Agency will monitor the implementation of security procedures and will perform system security assessments, audits, tests and inspections.
14 1(a) (ii)	With regard to the security of the Galileo and EGNOS programmes, the Agency shall ensure the operation of the Galileo Security Monitoring Centre, as referred to in Article 6(d) of the GSA Regulation.	The Agency will adhere to the standards and requirements referred to in Article 13 of the GNSS Regulation, the Decision No 1104/2011/EU for the GSMC operations, and to the instructions pursuant to Joint Action 2014/496/CFSP.
14 1 (b)	The Agency shall perform the tasks provided for in Article 5 of Decision No 1104/2011/EU ("Rules for access to the Public Regulated Service (PRS)"), and assist the Commission in accordance with Article 8(6) of that Decision.	The Agency will comply with provisions of Article 5, in particular to support the Commission as described in Article 8(6). The Agency will also comply with the provision of the arrangement concluded between the Commission and the GSA pursuant to Article 14(c) of the Decision.
14 1 (c)	The Agency shall contribute, in the context of the deployment and exploitation phases of the Galileo programme and the exploitation phase of the EGNOS programme, to the promotion and marketing of the services referred to in Article 2(4) and (5) of the GSA Regulation.	The Agency will: • provide an annual market report on the market for applications and services; • 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; • draw up an action plan for the uptake of services by the user community as referred to in Article 2(4) and (5) of the GSA Regulation, and, in particular, comprising of relevant actions relating to standardisation and certification.

These four strategic objectives serve as the framework for the Agency's core tasks as described in section I.01, namely:

- Security accreditation
- GSMC
- PRS
- Market development and communications

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.

Furthermore, the Agency will perform tasks entrusted to it by the Commission through the delegation agreements.

II.02. Multi-annual Programme

This three-year programme details the activities the Agency plans to perform in order to achieve its core strategic objectives.

II.02.01 SECURITY ACCREDITATION (WBS 2.04, WBS 2.05, WBS 2.06)

In accordance with point (b) of Article 11(4) of the GSA Regulation, SAB prepared section II.02.01. It is incorporated into this programming document without any change.

The European GNSS Agency hosts the Security Accreditation Board as an independent body pursuant to Article 3 of the GSA Regulation and makes its decisions independently and objectively, including with regard to the Commission and other bodies responsible for the implementation of the programmes and for the service provision, as well as with regard to the Agency's Executive Director and Administrative Board. All the security accreditation decisions related to the GNSS systems are of its sole competence.

As far as Galileo is concerned, up to 2016, SAB focused on the accreditation of the infrastructure, issuing accreditation statements for all Galileo launches and Galileo ground stations. In June 2014, for the first time, SAB issued a limited Initial Authorisation to Operate (IATO) the Galileo system at risk. This was extended in December 2014 and renewed in June 2015 and December 2015 under certain

conditions. At the end of 2016, SAB began accreditation activities for Galileo services. Leading to 2020, SAB will focus on:

- The incremental accreditation of the GSMC configurations.

- The re-accreditation/re-authorisation (as applicable) of the existing Galileo ground stations and the accreditation/authorisation (as applicable) of a limited number of new ground stations, thus complementing the existing infrastructure.

- The authorisation of Galileo launches.

- The authorisation of Galileo services.

- The accreditation/authorisation (as applicable) of necessary sub-systems and elements of an increasingly growing PRS user segment, with the authorisation of European companies to undertake research and development of PRS receivers and security modules, and the authorisation of those companies undertaking the manufacturing of PRS equipment for the mass market.

As far as EGNOS is concerned, although EGNOS v2 is currently in operation, it is not yet identified as containing elements requiring accreditation. Nevertheless, SAB has engaged in a number of advisory activities to help improve the security of the existing versions in operation. In the coming years, SAB will ramp-up preparatory activities in view of the accreditation of EGNOS v3 (that shall contain sub-systems and elements requiring accreditation). These accreditation decisions are expected to be made after 2019.

The Agency supports security accreditation activities as defined in Chapter III of the Regulation by ensuring the technical and administrative secretariat to the SAB and providing the underlying security assurance needed for the SAB to make proportionate, appropriate and cost-effective security accreditation decisions.

The Agency also plays an important management and coordination role for SAB's subordinate bodies (European GNSS Security Accreditation Panel, SAB Crypto Distribution Authority (CDA) Task Force). According to Article 11(10) of the GSA Regulation, the Agency provides SAB with the appropriate human and material resources needed for it and its subordinate bodies to independently perform their tasks.

II.02.01.01 Tasks until 2020

	Activity	Objective	Performance Indicator (PI)	Year[1]
1	Approvals to launch	Conduct security assurance activities and administer corresponding accreditation decisions for satellites launches.	• Accreditation statement for all launches. • Provide the draft documents on time for consultation/adoption. • Ensure decisions are in accordance with the rules of procedure.	2014 – 2020
2	Authorisations to operate the systems in their various configurations and for the various services	Conduct system operations/services security assurance activities and administer corresponding accreditation decisions (currently for Galileo, progressive development until 2020 for EGNOS).	• Accreditation statement for all system configurations/services operated. • Provide the draft documents on time for consultation/adoption. • Ensure decisions are in accordance with the rules of procedure.	2014 – 2020
3	Authorisations to operate sites	Conduct site security assurance activities and administer corresponding accreditation decisions (currently for Galileo; progressive development until 2020 for EGNOS).	• Accreditation statement for all sites. • Provide the draft documents on time for consultation/adoption. • Ensure decisions are in accordance with the rules of procedure.	2014 – 2020
4	Galileo PRS Manufacturers Authorisations	Conduct PRS User Segment security assurance activities and administer corresponding decisions (currently for Galileo research and development only, progressive development to manufacturing).	• Authorisation statement for all companies involved. • Provide the draft documents on time for consultation/adoption. • Ensure decisions are in accordance with the rules of procedure.	2014 – 2020
5	SAB Secretariat	Ensure the SAB secretariat.		

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[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.

	Activity	Objective	Performance Indicator (PI)	Year[1]
		Ensure general support to the SAB chair and deputy chair in discharging their regulatory responsibilities.	• Prepare and administer all SAB decisions in compliance with the Rules of Procedure.	2014 – 2020
6	SAB Subordinate panel (and related groups of experts)	Elaborate comprehensive Security Accreditation Reports for SAB. The Panel is divided into a number of expert groups and is, for the interim, chaired by the Agency, which also provides secretariat support.	• Implementation of SAB decisions/actions attributed to the Panel. • Provide the reports on time for consultation/adoption.	2014 – 2020
7	Communications Security (COMSEC) assurance – SAB subordinate CDA	The Agency chairs the SAB CDA and this is managed in order to assess the conduct of European Commission COMSEC policy throughout the EGNOS and Galileo Programmes. It shall continue to achieve this through the authoritative assessment of COMSEC experts from the Member States Distribution Authorities of evidence supplied to it by the EU GNSS Distribution Authority (DA) regarding COMSEC activities within the EGNOS and Galileo Programmes. The SAB CDA shall then provide COMSEC assurance to SAB, communicated as a COMSEC risk assessment, in order to facilitate successful accreditation and/or authorisation as applicable.	• SAB feedback is positive. • Programme COMSEC governance and service is improved by interaction with SAB CDA. • Accreditation milestones are provided with COMSEC assurance statements. • SAB CDA attendance and interest from Member States is high.	2014 – 2020
8	COMSEC management – Flight Key Cell (FKC)	To ensure the security of flight keys during EU GNSS programme launch campaigns and, where necessary, their use in the Ground Segment. The FKC is a sub-cell of the SAB CDA, organised and managed by the Agency and consisting of COMSEC experts from the Member States. It is primarily formed for the duration of launch campaigns and answers to the EU GNSS DA for its operational role in operating an EU GNSS DA COMSEC Account and to SAB CDA TF in the provision of assurance of flight key COMSEC activities within the Programme.	• COMSEC compliant launches. • EU GNSS DA COMSEC compliance statement per launch. • SAB CDA TF KMOP review per launch. • SAB CDA TF COMSEC risk statement per launch.	2014 – 2020
9	New SAB regulatory responsibilities	Implementation of the new responsibilities entrusted to SAB by Regulation (EU) No 512/2014 and laid down in Article 11 thereof, in particular paragraph 3 points (c) to (l) and paragraph 4.	• Statement of Compliance to the Regulation.	2015 – 2020

II.02.02 GALILEO SECURITY MONITORING CENTRE (WBS 4.06)

The Agency operates the GSMC, which manages Galileo system security during the operational phase. The GSMC also provides the operational interface between the Galileo Control Centres and the Member States' competent PRS authorities, the Council of the European Union and the High Representative of the Union for Foreign Affairs and Security Policy, acting under Council Decision 2014/496/CFSP. The GSMC must inform the Commission of any event that may affect the smooth running of the PRS.

The GSMC started 24/7 operations based on the Enhanced Minimum Configuration version on 13 July 2016. This major accomplishment resulted in the GSMC being declared ready to deliver service in December 2016, in anticipation of the Declaration of Galileo Initial Services. The GSMC is progressively implementing the following missions through the 2017-2018 period:

- **Galileo security and system status monitoring:** The GSMC is ensured by one master centre in France (FR) and one backup centre located in the United Kingdom (UK), with data replicated across a network link. This mission includes the Galileo security system monitoring, which processes system security raw events and other security status information from different stakeholders. By monitoring this information, the GSMC can provide an overall view of Galileo's security status to the MS, the Commission, the Council and the HR. It can resolve most security incidents relating to Galileo operations and escalate those covered by Council Decision 2014/496/CFSP to the Council and the HR. The GSMC-UK site will be replaced by another site.

- **Management of PRS access:** The GSMC delivers PRS Access Service to CPAs[2], using a secure method for CPAs to manage access to the PRS, in accordance with the PRS Service Definition Document and the system security requirements. It provides CPAs with the assurance that sensitive information relating to their use of Galileo is suitably managed and protected. The GSMC also ensures that sensitive information related to CPAs is not exposed to the rest of the Galileo system.

- **Implementation of Council Decision (2014/496/CFSP) instruction:** The GSMC operator ensures the implementation of Council Decision (2014/496/CFSP) instructions coming from the Council or from the High Representative. The GSMC is the single point of entry for these instructions which

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[2] PRS access will be progressively implemented by the GSMC up to 2020 and beyond

impact Galileo and instruct changes affecting the whole system, including changes to the Galileo operating modes.

- **PRS and Galileo security expertise and analysis on request:** As part of the PRS and Galileo security expertise provision on request and in-line with Article 5 of Decision 1104/2011/EU and the provisions of the arrangement referred to in Article 14 of Decision No 1104/2011/EU, the GSMC provides technical assistance to CPAs. The GSA is currently developing the details of the topics and design of this service. As set out by Article 3(2) of the Council Decision 2014/496/CFSP, the GSMC will provide advice to the Council of the EU (when invited to do so under that decision) and technical expertise to the Commission under the provisions of Article 14(5) of Regulation 1285/2013.

The progressive[3] deployment of the GSMC is aligned with the delivery of various configurations of GSMC equipment:

- **GSMC Enhanced Minimum Configuration (EMC) in 2016:** Capable of performing network security trend analysis and event correlation and alerting; related security monitoring service procedures; forensic analysis; and increased awareness of potential cyber-attacks on the Galileo system.
- **Reorganisation of GSMC sites**, possibly as soon as of early 2018.
- **Galileo Security Facility P2.2 in Q2 2018 (date TBC once the new GSMC backup site is available)** which supersedes the Galileo Security Facility (GSF) P2.0.1 initially planned in Q2 2017**:** Extends GSMC capability to automated PRS management with the Galileo Control Centres (GCCs) and to manual[4] distribution of PRS keys to CPAs; reinforcing the availability of GSMC operations and services, delivering greater functionality at the main (France) site. New evolutions of the GSF are planned for 2019-2020 (GSF P2.3) and 2020-2021 (GSF P3.0), in-line with the evolution of the Galileo ground segment.
- **Security Operation Intelligence Facility (SOIF1) in Q2 2018:** The GSF constitutes the GSMC's main toolset for fulfilling its mission on Galileo security monitoring. Nevertheless, a new set of tools integrated into a new system under the SOIF concept was proposed by the ESA in 2014 and

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[3] As mentioned in I.02 Main Assumptions, the United Kingdom having notified the EU about its intention to leave the EU, the GSMC back-up site will be relocated to a site in the remaining 27 Member States. Therefore, all dates below are indicative and may change to reflect possible impact of the reconfiguration.

[4] Automated release of PRS keys to CPAs is dependent on the availability of related secure network and "Point of Contact Platforms" (POCPs) that will start being delivered by the Galileo Programme as of 2018 (The Agency notes that this date has yet to be confirmed).

approved by the Commission as being better tailored to the detection of advanced cyber-threats. A progressive deployment of the SOIF is currently envisaged, with a first configuration called SOIF1, to be operated by the GSMC at the same time as the GSF P2.2. The SOIF1+ and SOIF2 should be associated with the operations of the GSF P2.3 and GSF P3.0.

The Agency will carry out these activities while respecting its obligations under the relevant agreements. Between 2018 and 2020, the main challenges will be:

- The reorganisation of GSMC-sites and its impact on the operations and the migration of new system releases. This includes an adaptation of the business continuity plans and a potential accreditation of the validation chain;

- The deployment of the GSF P2.3/SOIF 2 and of the GSF P3.0/SOIF3 in GSMC-FR;

- The full Galileo FOC2 implementation and related evolutions of GSMC Service Level Targets (SLTs);

- The definition and consolidation of Performance Indicators both for security monitoring and for PRS operations.

The main operational milestones planned for the GSMC related to the start of service delivery within the next four years are heavily dependent on a number of key factors including the approach taken to the GSMC-UK site and the possible accreditation strategy of the validation chain but are planned to include:

- GSMC EMC: 14 December 2016 (Main site only, GSMC-FR);
- GSF P2.2 & SOIF1: Q2 2018 (SOIF1 only deployed in GSMC-FR)
- GSF P2.3 & SOIF1+: 2019-2020 (SOIF1 only deployed in GSMC-FR)
- GSF P3.0 & SOIF2: 2020-2021 (Introduce also the SOIF capability on the back-up site)

II.02.02.01 Tasks until 2020

The tasks of the Galileo Security Monitoring Centre are structured by processes (see figure below). Three types of processes are defined to provide an overview of the GSMC's organisation:

- Management Processes lead the organisation in providing strategic guidelines. Most of the processes directly interface with similar Agency's processes.
- Core Processes represent the GSMC's core businesses and are based on its main missions.
- Support Processes reinforce and constantly help maintain the performance level of the GSMC's main activities. These processes mostly reflect the Agency's main administrative processes.

European
Global Navigation
Satellite Systems
Agency
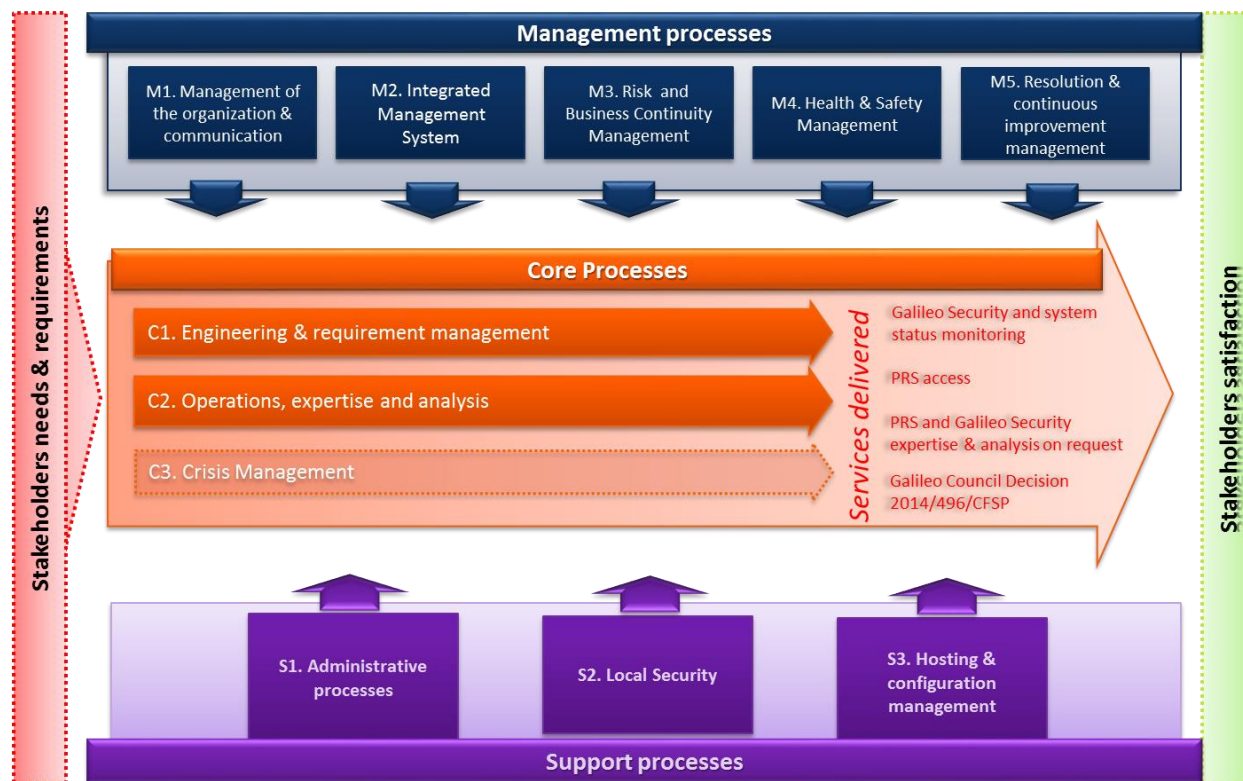
Each process is associated with a list of objectives linked to the main GSMC activities, which then trigger the performance indicators listed below.

	Activity	Objective	Performance Indicator	Year[5]
1	Management of the organisation and communication (Management process)	Define the strategy and objective(s) to be implemented by the GSMC.	• Strategy and objectives management: annual objectives in place, quarterly update of GSMC Dashboard. • Schedule management: monthly, or as required, update of the GSMC master schedule. • Internal management and communication: weekly and monthly reports. • External management and communication: weekly and monthly reports. • Project management: monthly dashboard on all GSMC projects.	2018 - 2020
		Prepare and implement the GSMC's operations[6] by scheduling milestones and main activities in order to provide a long-term global overview used to steer activities.		
		Coordinate activities within and between the teams through regular team meetings and follow up.		
		Provide an overview of GSMC's internal communication (top-down and bottom-up approaches) and how the teams are organised and interact together.		
		Ensure the development and ongoing implementation of project management processes, methodologies, tools, and reporting.		
2	Integrated Management System (Management Process)	Monitor integrated Management System (IMS).	• Quality management communication: quarterly, or as required, update of the GSMC's contribution to the Agency's IMS. • GSMC processes management: annual, or as required, update of the process map in-line with the Work Breakdown Structure. • Document management: monthly update of a register containing all GSMC products.	2018 - 2020
		Ensure GSMC meets standard requirements and that all processes are documented, monitored and audited.		

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[5] The year indicates when the Agency expects to perform that action. These dates are correct as of time of writing and are based on the current plans.
[6] GSMC strategy and operations will be impacted multi-annually by the staffing plan 2018, including for the new GSMC backup site, the improvement of the PRS/SECMON services, and the implementation of a cyber security policy.

	Activity	Objective	Performance Indicator	Year[5]
		Ensure documents are drawn up and managed in accordance with the principles of the IMS.	• Audit: annual contribution to quality audits, quarterly (or as required) update/implementation of GSMC continuous improvement actions plan and implementation. • ISO 9001 certification: annual contribution to ISO 9001 certificate renewal and maintenance.	
3	Risk and business continuity management (Management Process)	Identify potential risks that could impact the proper functioning of the Galileo/EGNOS programmes and take relevant actions to mitigate them.	• Risk management: monthly update of GSMC's risk register and related escalation, including participation in the Agency's Risk Management Board. • Business continuity and disaster recovery: annual establishment, maintenance and validation of the GSMC business continuity plan and disaster recovery plan.	2018 - 2020
		Ensure availability and continuity of GSMC services even in a reduced functionality mode, in case of a service breach.		
4	Health & Safety management (Management Process)	Define and describe the responsibilities and polices for health and safety at work.	• Health and safety management: annual review of the Agency's policy, update of DUER (Single Administration for Occupational Hazard Prevention) in GSMC-FR site.	2018 – 2020
		Provide and maintain a safe working environment for GSMC staff, visitors and contractors.		
5	Resolution and continuous improvement management (Management Process)	Development of GSMC systems in-line with Galileo evolutions and the ESA.	• Anomaly, incident and observation management: bi-monthly reporting on the outcome of the GSMC Anomaly Review Board (ARB). • Annual update of the GSMC service level management plan and service improvement plan. • Associated justification files. • Customer satisfaction management: annual internal and external survey.	2018 - 2020
		Identify and deal with potential events that could impair the proper functioning of the GSMC and undertake relevant actions to correct and/or prevent them through Anomaly Review Boards.		
		Development of GSMC services in-line with the evolution of the service description and service implementation plan.		
6	Engineering and requirement	Identify, analyse and flow-down the requirements that could impact the GSMC and the maintenance of the applicable baseline.	• Requirement management: maintenance of requirement baselines through DOORS (Rational Dynamic Object Oriented Requirements System); release of statement of compliance and justification files to programme as required, maintenance of GSMC service baseline.	2018 – 2020

	Activity	Objective	Performance Indicator	Year[5]
	management (Core Process)	Ensure and report the GSMC's compliance with programme requirements over time.	• Maintenance of the applicable documentation tree for all processes associated with the GSA work packages "4.06.01 GSMC Operations" and "4.06.03 GSMC Hosting Services". • Inventory and justification file associated with all programme requirements applicable to the GSMC. • Operations and engineering: establishment, maintenance and execution of the operations engineering process, as required. • Technical engineering: establishment, maintenance and execution of the operational engineering process, as required.	
		Satisfy operational requirements by designing the operations; identify activities and all necessary documentation for operations, trainings and maintenance; validate the concept of operations and associated procedures.		
		Identify and define processes, methods, tools and logic of system development activities, including maintenance and support capabilities for the two sites.		
		Manage the lifecycle of technical processes that lead to the in-production setting of new technical supporting assets and processes.		
7	Operations, expertise and analysis (Core Process)	Monitor status of system security and health, react to all security incidents and technological surveillance.	• Security and system status monitoring: compliance with the applicable Service Level Agreements (SLA) through the monthly reporting on related PIs. • PRS access management: compliance to the Service Level Agreements applicable through the monthly reporting on related PIs. • GSF version PIs compliant with applicable baseline. • Monthly release of GSF version PIs to the Commission, in compliance with the SLA established for the declaration of GSMC GSF Version services.	2018 – 2020
		Enable an access to PRS to authorised stakeholders, in compliance with PRS access rules (including Common Minimum Standards) and within the limit of the system design.		
		Manage the lifecycle of PRS access in order to assure the service continuity, including through service support and secure communication interfaces (POC-P).		

	Activity	Objective	Performance Indicator	Year[5]
8	Crisis management (Core Process)	Specific activities and configuration of the GSMC needed to respond to the needs and requirements of a crisis affecting the Galileo system, including supporting the Council decision (joint action) process. This process will be activated only under specific conditions and its achievement will be dependent on external factors e.g. BREXIT.	• Support the resolution of a crisis affecting the EU or the Galileo system. • Establish and implement internal procedures in case the European External Action Service (EEAS) triggers Galileo council decision instructions.	2018 – 2020

9	Administrative processes (Support Process)	Support the overall administration of the human resources, legal and procurement, and finance functions in accordance with Agency's policies.	• Human resources management:
			  o Core missions training: annual establishment and implementation of the training map.
			  o Standby officer management: weekly update of rosters associated with standby duties; validation and payment of related allowances to concerned staff.
			  o Certification of the operators: establishment, maintenance and execution of the GSMC's certification process, in-line with the Agency's certification process and as required. Management of the Agency's Certification Board chaired by the GSMC. No operator is authorised to work on the Galileo operational system without a valid certificate.
			• Procurement management: maintenance of the procurement and contract database. Ensure and provide, as required, reporting on the commitment appropriations, for both core and delegated budgets.
			• Legal management: assess and reduce, as required and in close coordination with other Agency departments, risks of deviation from the applicable Agency regulatory framework.
			• Financial and cost management: support the GSA administrative departments in developing and implementing a cost modelling competence. Ensure and provide, as required, reporting on the payment appropriations for both core and delegated budgets.
				2018 – 2020

| 10 | Local security (Support Process) | Prepare for, ensure, and maintain local security operational support to protect EU classified information present on GSMC sites and to protect its assets. | Site and system security accreditation: Ensure the delivery and maintenance of security certificates from the EU GNSS Security Accreditation Board, the Agency Security Accreditation Authority and the relevant Local Security Accreditation Authorities. Apply and implement the GSMC's security requirements, determine the security design and contribute to system security accreditation. Ensure the definition, maintenance and implementation of the GSMC's obligations in relation to its status of critical national infrastructure. COMSEC management: Establish, maintain, and execute the COMSEC Policy in line with instructions from the EU GNSS distribution authority. Provide access to classified cryptographic devices or keys to authorised users and stakeholders. Manage COMSEC materials and ensure secure transfer to or from users or other parties, through the enforcement of the appropriate procedures and the use of approved channels. Crypto account management: Establish and maintain the crypto accounts for both sites in line with applicable regulations. Operate the ongoing configuration of cryptographic equipment in order to enable technical services that rely on such equipment. Crypto operations: establish, maintain and execute the crypto operations as required. Local security operations: Establish, maintain, and execute the local security operations as required. Ensure physical security of people, properties, facilities, activities and information, and prevent the compromise of | 2018 – 2020 |

	Activity	Objective	Performance Indicator	Year[5]
			classified or crypto information (compromising of staff, malicious acts, etc.). • Registry control management (France and UK): establish and maintain the EU Classified Information (EUCI) registry.	
11	Hosting and configuration management[7] (Support Process)	Prepare for, ensure, and maintain technical operational support to provide the necessary site hosting and Information and Communications Technology (ICT) means required for meeting the GSMC's core missions and to support its staff. Provide a continuity of hosting services through building maintenance and by managing extra requests related to the evolution of the facilities and ICT.	• Facilities management (hosting services): establishment and proper contractual management of the facility management service contract. • GSF equipment management (general technical operations): define and enforce the roles of system administrators of GSF equipment. • Supporting Information Technology Systems (operational systems first-line maintenance): contribute, as required, to the maintenance of the Agency's operational Information Technology (IT) systems deployed at the GSMC sites. • Ensure (with L2 delivery) availability of spare parts and logistical flows of spare parts and configuration management of installed items in the operational systems. Monitor operational systems' status and perform relevant technical level 1 configurations and status checks to ensure availability of such systems.	2018 – 2020

[7] The re-organisation of the GSMC sites has not yet been assessed.

II.02.03 THE PUBLIC REGULATED SERVICE (WBS 2.03)

PRS Decision No 1104/2011/EU specifies certain tasks for the Agency to carry out, in addition to those related to the SAB and the GSMC's PRS related operations.

The 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 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)).

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

Additionally, access to the PRS technology and ownership or use of PRS receivers, as needed by the Agency in accomplishing the task referred to in Article 14(1) (a) of Regulation (EU) No. 1285/2013 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 Commission and the GSA pursuant to article 14(c) of Decision 1104/2011/EU.

II.02.03.01 Tasks until 2020

All tasks described below are subject to formal request from the Commission. At the time of writing, the Commission has not requested the Agency to provide support to CMS implementation for these activities. This is expected to materialise in the course of 2018.

	Activity	Objective	Performance Indicator	Year[8]
1	PRS management Plan	Define the organisational structure and rules for implementing the management of PRS items and PRS information.	• Annual update of PRS management plan made available one month (TBD[9]) before the following year.	2018 - 2020
2	PRS entities database	Ensure a constant update of the database of entities authorised by CPAs and the SAB to carry out PRS activities.	• Bi-monthly availability of (updated) database.	2018 - 2020
3	PRS article 14 implementation report	Create a report summarising all movements, requests, and security breaches associated with the PRS items/PRS information under the responsibility of the Agency.	• Report sent to the Commission within one month of the reporting quarter, every quarter.	2018 - 2020
4	PRS article 14 inspections	Perform regular audit or inspection of the Agency's handling of PRS information.	• Annual (TBD[10]) report on inspections.	2018 - 2020
5	Risk Assessment	Regular and robust risk assessment of PRS activities to ensure they do not pose a risk to the security of the system, Member States or the EU.	• Annual update of PRS risk assessment or security plan.	2018 – 2020

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

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

[10] idem

	Activity	Objective	Performance Indicator	Year[8]
6	Support to CPAs	Provide technical support to CPAs on the basis of specific arrangements.	• Endorsement by the EC of a template for specific arrangements • Definition of specific arrangements with CPAs and performance of tasks therein specified (when requested).	2018 - 2020
7	GSA CPA implementation	Implementation of the GSA Competent PRS Authority in support of entities requesting the GSA to act as their CPA (Art.5 of Decision 1104/2011/EU).	• Endorsement by the EC of a template for specific arrangements • Organisation of the GSA CPA and performance of specific tasks identified in the arrangements defined with the requesting entities.	2018 - 2020

II.02.04 PROMOTION AND MARKETING OF THE SERVICES (WBS 5.02, 5.03, 1.03.01)

As to the promotion and marketing of services, the GSA uses a systematic, integrated approach for each vertical market segment. Furthermore, as the 2018-2020 period leads to Full Operational Capability – a crucial milestone for the Galileo programme – all market development and communications activities will be focused on four main areas applicable to each market segment:

- **Market and user knowledge:** by monitoring the GNSS market and GNSS user technology, including analysing user needs, requirements and satisfaction, the Agency can understand future market and technology trends, allowing it to work towards maximising the market uptake of EGNSS.

- **Demand support:** design and systematic implementation of an adoption roadmap per market segment, thus ensuring market readiness for EGNSS adoption in all application areas. This includes cooperating with chipset and receiver manufacturers, system integrators and application developers.

- **Offer creation (delegated task):** support the development of innovative solutions that facilitates the adoption of EGNSS through the provision of dedicated funding under H2020 and Fundamental Elements initiatives. The Commission has delegated research and development activities to the Agency in order to leverage market adoption in all market segments. This has become an integral part of the market strategy.

- **Communications, promotion and information provision:** 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, new media, tailored events, etc.) to deliver messages and information that stimulates:
  - Positive awareness, understanding, appreciation and use of EGNOS and Galileo;
  - Participation in the H2020 funding programme and awareness of the results coming from funded research;
  - Successful transfer of specific messages that encourage target audiences to support the achievement of the above aims and objectives.

II.02.04.01 Tasks until 2020

	Activity	Objective	Performance Indicator (PI)	Year[11]
1	Market and technology monitoring, including cooperation with receiver manufacturers	Be the source of competence in GNSS market and technological developments.	• Bi-annual publishing of GNSS market report.	2019
			• Bi-annual publishing of GNSS user technology report.	2018 - 2020
		Support chipset and receiver manufacturers in implementing EGNSS.	• List of receiver manufacturers with Galileo and EGNOS capability. • List of Non-Disclosure Agreements (NDAs) with receiver manufacturers.	2018 - 2020
2	User satisfaction monitoring process and customer assistance	Build user experience and satisfaction; implement user feedback in the evolution of EGNSS.	• Report findings of user satisfaction survey. • Provide user input into the evolution of the mission requirements document. • Create EGNOS user support improvement plan based on feedback from downstream user sectors and their value chains. • Monitor user satisfaction of EGNOS services and performance. • Galileo GNSS Service Centre (GSC) support improvement plan based on feedback from downstream user sectors and their value chains.	2018 - 2020
3	Market development by user segment (Aviation, Road, Location Based Services (LBS),	Identify needs and opportunities for services and applications.	• User fora and user consultation platforms by segment user needs and requirements.	2018 - 2020

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

European
Global Navigation
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	Activity	Objective	Performance Indicator (PI)	Year[11]
	Agriculture, Maritime, Rail, Mapping and Surveying)	Maximise adoption of EGNSS by value chain and its availability to users.	• Measure EGNSS implementation and its use in GNSS applications per market segment (e.g. the number of approach procedures in aviation).	2018 - 2020
4	Management of active internet-based communications via websites and social media.	Management of active internet-based communications via websites and social media.	• Participate in conferences and exhibitions and organise targeted events. • Create and disseminate high quality, tailored content. • Manage active internet-based communications via websites and social media. • Production and targeted distribution of informative, timely and relevant printed, video and multi-media materials. • Seize opportunities for organising effective tailored public relations activities.	2018 - 2020

II.03. Human and Financial Resource Outlook (2018 – 2020)

II.03.01 OVERVIEW OF THE PAST AND CURRENT SITUATION

In 2016, the Agency successfully addressed the challenges generated by resignations and internal staff movements. Five staff members were employed as replacements for departing staff (resignations), three for posts that had been vacant since 2015 and eleven for newly established posts. Due to staff departure, the overall expenditure on staff-related costs (Title 1) was lower than forecast. A strong use of external resources, including interims and trainees, continued.

Following agreement with both DG-GROW and the Administrative Board, the Agency reinforced the Contract Agent numbers in 2016 and 2017, resulting in an increase in the planned staff budget for both years. In order to compensate for this increase in staff costs, the Agency has taken significant steps to implement savings through reprioritisation, in particular by a reduction in the number of interims and trainees used, the cancellation or postponement of certain IT projects and the reduction of expenditure on Title 3 activities.

In 2018 the Agency expects an increase in the Title III budget of approximately 16% compared to 2017 figures. This will bring the total annual available operational budget to 7 411 000 EUR in 2018, remaining stable through 2020.

II.03.02 RESOURCE PROGRAMMING FOR THE YEARS (2018 – 2020)

II.03.02.01 Financial resources

The maximum ceiling for the EU contribution in 2018, as stipulated in the Commission Communication to establish a programming of human and financial resources for decentralised agencies 2014-2020 (COM(2013)519 of 10 July 2013), is 30 848 000 EUR. The final 2018 budget allocated to the Agency by the Budgetary Authority equals 31 538 001 EUR.

The European Free Trade Agreement (EFTA) contribution for 2018 is 692 581 EUR, based on the 2017 EFTA contribution percentage of 2.21 % of the EU contribution.

According to the Communication, the Agency is expected to grow with two more Temporary Agents in 2018. However, the Agency intends to reinforce its resources to undertake the efficient management and implementation of all its tasks, both core and delegated. This will have an impact on several budget lines in coming years, especially as to salary costs. With this in mind, overall staff

costs are expected to increase in 2018 by approximately 12 %. Salary assumptions are based on existing real costs per grade and staff. Current correction coefficients for the place of living have been applied to the staff located in the Czech Republic, France and the UK (73.2 %, 113.8 % and 141.8 % respectively). Part of the staff costs are linked to the installation and one-off costs for all new staff, in accordance with the Staff Regulations of Officials of the European Communities and Conditions of Employment of other Servants of the European Communities.

Recruitment costs will be significantly lower in 2017 compared with 2016, a result of a slower increase in establishment plan posts (only three new posts in 2017 as compared to 11 in 2016). These costs will increase again in 2018 and 2019 due to requests for additional human resources. Multilingual tuition costs for children increase in proportion to the number of staff and are estimated based on a thorough analysis and extrapolation of present-day costs.

It should be noted that mission costs remain relatively stable, despite increasing staff figures and an increasing level of delegated activities for which no mission budget is allocated. This is possible due to more efficient mission management, the use of videoconferencing whenever appropriate, and effective advance planning.

Training costs for 2018 will also remain stable, increasing proportionately to the number of new staff. The Agency has continuously sought effective and financially efficient training methods, such as grouping training sessions for staff where appropriate, holding training on-site in order to avoid mission costs and, wherever possible, taking advantage of "in-house" training to pass on knowledge between staff members.

The Agency introduced social welfare for Prague-based staff into its 2016 budget by means of an amending budget – a practice that will be continued in the future. The Agency's Administrative Board agreed on this need as a result of falling interest in vacant posts and difficulty in both recruiting new staff and retaining current staff. This is attributed to a large extent to a perceived low level of attractiveness of Prague within the space labour market, combined with successive decreases in the correction coefficient for the Czech Republic.

In January 2015, the Agency took over the entire building in Prague which it had previously shared with the Czech Ministry of Finance. The rent was set at a symbolic 1 EUR annually for the first five years of the lease agreement, with the Agency obliged to pay 25 % of the market rate as of September

2017. Following an expert analysis, the estimated amount for the four months ending in December 2017 is 50 000 EUR. As of 2018, the Agency will pay 25 % of the market rate for the full 12 month period at a cost that is currently estimated at around 200 000 EUR. Utility consumption costs are expected to increase only in proportion to the number of additional staff added. Facility management, reception, hosting services, and security services for all sites are indexed and thus will also increase annually to a minor extent.

The fact that the Agency currently has four separate locations creates a necessary budgetary burden in terms of administrative costs. However, the Agency has set up new IT applications and videoconferencing capabilities to minimise increasing costs. These investments and their associated maintenance costs are reflected in the Data Processing and the Telecommunications budgets.

In compliance with the global EU effort to reduce costs, a 1 % reduction in the regular administrative costs of the Agency has already been applied to 2018 in the revised financial statement annexed to the GSA Regulation.

The Title 3 operational core budget covers the Agency's core tasks as stipulated by the GNSS Regulation 1285/2013.

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 3 100 000 EUR per year for this reporting period.

The SAB budget of 1 050 000 EUR will be used for accreditation support contracts that are required in order to perform technical activities linked to the security accreditation process and, in particular, to the on-going preparation of the upcoming Galileo system accreditation milestones (e.g. Authorisations to Launch). These support contracts are essential to providing the expected level of support to the SAB, as stipulated by the current GSA Regulation 912/2010, amended by 512/2014.

For the operation of the GSMCs, operational support contracts will be required for 2018-2020 for an estimated amount of 3 261 000 EUR per year. These support contracts will be crucial to ensuring the operational, technical and security activities supporting GSMC services for both GSMC sites (France and the UK).

II.03.02.02 Human Resources

The Agency concluded the year 2016 with all 113 available posts filled (which translates into 100% fulfilment of the establishment plan).

For the period 2018-2020 the Agency had been allocated four new posts (two in 2018 and one each in 2019 and 2020). Following the increased activities entrusted and the need to internalise rather than outsource, the Agency requested 23 additional resources for 2018. This request resulted in a proposal of an additional 5 new posts for 2018. Such a proposal can be found in the statement of estimates of the European Commission for the financial year 2018 and was meanwhile increased to from five to ten new posts.

New tasks and growth of existing tasks

The Agency is categorised as a 'New tasks' agency. The major tasks and activities listed in this document require appropriate staffing, both in terms of a programme exploitation and security team perspective, but also from an associated support perspective.

The delegation agreements signed in 2014 for EGNOS Exploitation, Galileo Exploitation and Horizon 2020 applications have greatly expanded the Agency's tasks. The Galileo and EGNOS delegation agreements were both revised in 2016, leading to a further significant increase in new tasks assigned.

Efficiency gains

Efficiency gains are expected on a qualitative level due to:

- Achievement of ISO 9001 certification. The framework for the IMS was established and all processes were documented, including processes for continual improvement, which will continue to enhance the Agency's services and development of efficient processes, improve its management of public funds and overall performance, and increase its focus on stakeholder.
- Compliance with applicable management standards, ISO 9001 requirements, and the Commission's Internal Control Standards.
- Stable costs related to general administrative expenditure, despite the growing number of staff.
- Efficient mission management[12]: videoconferencing is being utilised wherever appropriate and missions are being planned in advance when possible.

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[12] See also section II.03.02.01 "Financial Resources"

- Stable training costs for staff[13]: The Agency has continuously sought effective and financially efficient training methods, including grouping training sessions, holding training on-site in order to avoid travel costs and, when possible, taking advantage of 'in-house' training to effectively pass on knowledge between staff members.

- A commitment to avoid redundancy and cost increases. The current set-up of the Agency in multiple sites has a non-negligible cost, especially as it relates to administrative functions. The Agency wishes to guarantee a common standard of support in the corporate services for all sites and has, for example, deployed one corporate service officer to the GSMC site to handle all administrative functions and to liaise with all administrative departments at headquarters. Moreover, when possible, support functions are shared among departments.

- Efficiency gains through more automated work (e.g. the introduction of an e-tool for recruitment, objectives and the appraisal exercise; 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 a paperless financial validation tool).

- The ratio of administration to operations has been kept at 20:80.

Negative priorities/Decrease of existing tasks

The Agency's existing tasks are overall being maintained and increased in a number of areas so the scope for finding savings from decreases in 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 in order to best focus its energies, with status checks on a quarterly basis through the Quarterly Progress Meeting chaired by the Executive Director. Further, through this exercise, the Agency is able to identify negative priorities for the situation where it is not possible to undertake particular activities due in particular to staffing constraints, and it is further not possible to make recourse to outsourcing. A separate specific example of the approach to how the Agency plans to handle negative priorities can also be found in section III.02.02.02 and III.02.03 concerning PRS and GSMC.

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[13] Idem

Redeployment of resources in view of budgetary constraints

The Agency analyses the allocation of posts in order to optimise the use of existing resources, including staff redeployments when required, but in particular when there are changes of the GSA tasking, related to either core or delegated tasks. Daily duties and responsibilities of a number of operational staff temporarily or permanently are being changed in order to deliver the set priorities. For the GSA as a multisite Agency, it can also mean the redeployment of staff between different GSA sites. It should be noted that the redeployment of resources is also mirrored through changes in the GSA Work Breakdown Structure which provides the mapping of the complete set of tasks of the GSA.

Section III - Work Programme 2018

This section is the equivalent of a financing decision in accordance with Article 68 of the GSA Financial Regulation.[14] 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);

- 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), which is planned to be updated to reflect the changes introduced by the 2017 re-organisation of the GSA (see Annex X: 2018 Organisation Chart). The graph below represents how the Agency's activities are structured. Each objective is organised with the appropriate WBS number as a reference.

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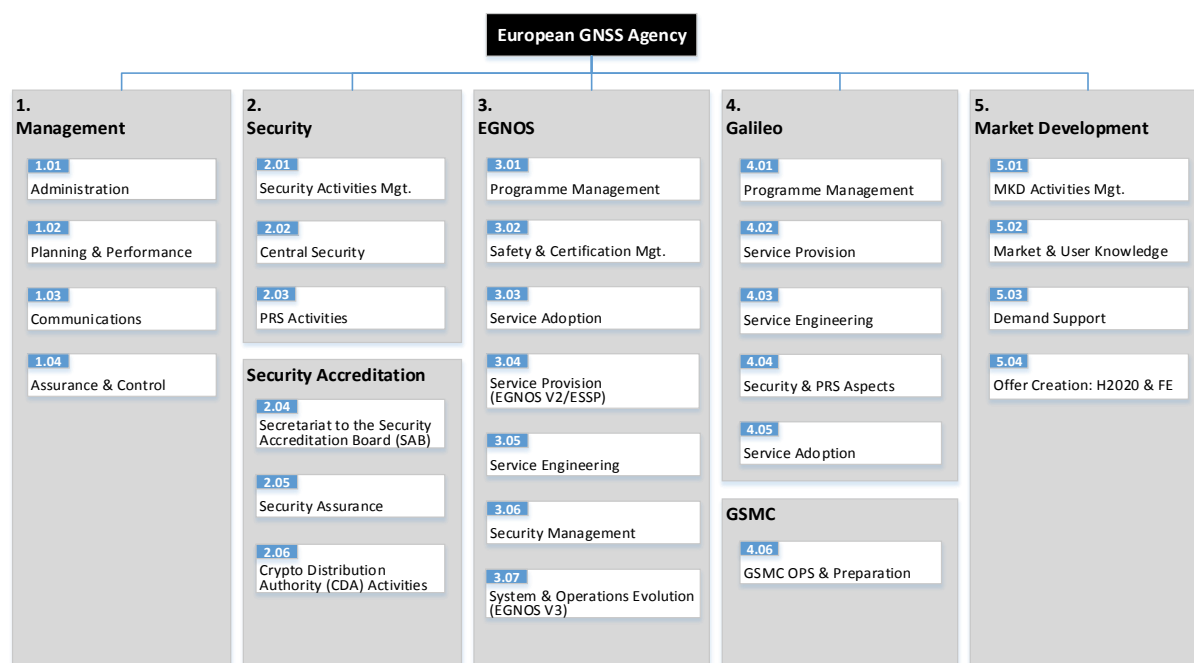
[14] Ref: GSA-AB-WP-32

III.01. Executive Summary

In 2018, the Agency's core activities are an extension of its activities from previous years. In particular, the Agency will continue to implement the GSA re-organisation which was decided at the Administrative Board meeting 48 in March 2017.

The SAB will continue to authorise ground stations and the systems in their various configurations. The Agency expects that more authorisations will be requested by manufacturers who wish to build receivers or security modules for the PRS, especially now that Galileo Initial Services have been announced. Activities related to all accreditation tasks continue as expected as the Agency continues its work towards completing the Galileo constellation.

Separate from its accreditation work, the Agency also intends to work on other security related tasks. These will focus on the PRS in general and, in particular, the implementation of the Agency's responsibilities regarding Competent PRS Authorities (CPAs) and the assistance it provides to other CPAs should the adequate level of human resources be made available. It is worth noting that there was no core budget allocated to this activity in 2017.

The Agency will upgrade its service capabilities associated with the GSF and SOIF programme deliveries. The Agency has played close attention to the GSOp handover in 2017 from a GSMC perspective to ensure all relevant procedures are carefully aligned.

Driven by the Declaration of Galileo Initial Services and the corresponding market reaction to it, the Agency will continue its work in all major market segments, especially aviation, road usage and maritime. The Agency expects to reach several major milestones in 2018, including the launch of eCall operations, which requires a dedicated focus on these markets.

Finally, the Agency will continue to reinforce the administrative teams that support all of these operational activities. This reinforcement is crucial because the complexity of running operational satellite programmes also has an impact on the standard EU Agency administrative functions.

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 GSA IMS is a framework of policies, processes, procedures and reporting that defines a unified approach to the organisation of the GSA's activities. It uses a work breakdown structure as the principle means for activity organisation (as Work Packages), and maintains performance indicators

aligned with the SPD, the staff annual objectives and the GSA's quality objectives. The GSA IMS is aligned with the ECSS standards (European Cooperation for Space Standardization) and promotes the ITIL best practices for IT service management. ISO27001 certification is under consideration.

III.02. Activities

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

In accordance with point (b) of Article 11(4) of the GSA Regulation, the 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 sole security accreditation authority for the European GNSS programmes.

The Agency's security accreditation activities enable the SAB to make informed decisions, most notably on the approval of satellite launches, the authorisation to operate the systems in their different configurations and for the various services up to and including the signal in space, the authorisation to operate the ground stations, and the authorisation of bodies to manufacture PRS receivers and security modules. They include:

- **SAB secretariat:** includes organising a secretariat of staff, allocated to the SAB, to coordinate, facilitate and prepare the relevant files for security accreditation decisions. SAB meetings should be planned in order to allow a timely decision for each programme milestone, after due consultation of the relevant expert groups (Panel/CDA). Specific documents should be prepared and submitted to the SAB to support the decision-making. The SAB secretariat maintains and retains all security accreditation decisions made by the SAB.

- **Support to SAB:** including managing and drafting the work programme, budget, staff establishment plan, and day-to-day management of the Security Accreditation resources (staff and resources).

- **Security Accreditation Panel management:** the staff allocated to the SAB to coordinate and prepare relevant files for security accreditation recommendations to the GNSS Security Accreditation Panel (SAP). The primary mission of the GNSS SAP is to assess security risks and recommend security accreditation decisions to be made by the SAB. These recommendations are

drafted based on the outcomes of the specific Security Accreditation Tasks described hereafter, taking into account any specific demand of the Security Accreditation Authority (SAA) and the result of the relevant security analysis.

- **SAB CDA management:** the staff allocated to the SAB guarantees the chair and secretariat of the SAB CDA Task Force (group of Member State COMSEC experts who provide oversight of Programme COMSEC activities), secretariat, and organisation of Flight Key Cell activities for each launch campaign, as well as standardisation, regulatory and reporting of assurance with respect to programme COMSEC activities.

- **Flight Key Cell activities:** represent a vital part of the set of activities performed by a dedicated formation of the SAB CDA, constituted of staff allocated to the SAB and EU Member States representatives, responsible for the assurance of the security of COMSEC items (in particular Flight Keys) during satellite launch campaigns and, where necessary, the use of flight keys in the Ground Segment.

- **System level activities:** system design reviews and, where agreed to by the SAB, system security audits and assessments to verify that the Galileo System-specific Security Requirements (SSRS) and other applicable security requirements are met. The GNSS accreditation process is strongly linked to the GNSS design, development and deployment process. For each specific Galileo or EGNOS technical milestone, staff allocated to the SAB are required to examine the security features of the system (according to the predefined scopes of each milestone) to verify compliance to security requirements and that the system is sufficiently secure to allow EU Classified Information to be processed by it. This includes the performance of independent security tests.

- **Ground station level activities:** security audits and assessment visits to EU GNSS sites to verify the EU GNSS Security Requirements. Each Galileo ground station is subject to a local security accreditation process under the responsibility of the LSAA (Local Security Accreditation Authority).

- **PRS manufacturer authorisation activities:** optimise and maintain the SAB authorisation process for PRS receiver and security module manufactures, provide support to Member States when requesting PRS manufacture authorisation in the SAP and SAB process, and maintain the database of all SAB provided authorisations.

- Support to the accreditation reviews of internal Agency systems/areas.

III.02.01.02 Objectives, indicators, expected results and outputs

Annual Objective 1	Ensure the secretariat for the SAB (WBS 2.04.01)		
Expected Results	- Reports to SAB chairman - Propose SAB meeting plan - Distribution of working papers in due time before each meeting - Establishment of minutes in due time after each meeting - Administrate written procedures as necessary - Record and transmit all SAB decisions		
Status	Objective continues from last financial year		

Indicators	Result 2016	Target 2018	Means & frequency of verification
SAB meetings organised	6	4	SAB meeting plan
Written procedures administrated	100%	100%	SAB written procedures register
SAB decisions	100%	100%	SAB decision list

Outputs relating to the multi-annual work programme objectives:
- Approvals to launch
- Authorisations to operate the systems in their different configurations and for the various services, including up to the signal in space
- Authorisation to operate the ground stations
- Authorisation of bodies to develop and manufacture PRS receivers or PRS security modules
- Other SAB decisions

Other outputs:
- Security accreditation reports
- Recommendations to SAB / SAB chairman

Annual Objective 2	Support to SAB management (WBS 2.04.02)		
Expected Results	- Draft 2019 SAB Work Programme, taking into account the inputs from the Panel and CDA - Draft 2019 SAB budget, taking into account input from the panel and CDA - Report on 2018 SAB budget - Draft/update SAB Staff Establishment Plan		
Status	Objective continues from last financial year		

Indicators	Result 2016	Target 2018	Means & frequency of verification
Work Programme adopted	Yes	Yes	Administrative Board decision / Yearly
Budget adopted	Yes	Yes	Administrative Board decision / Yearly
Establishment plan adopted	Yes	Yes	Administrative Board decision / Yearly

Outputs relating to the multi-annual work programme objectives:
- Work Programme adopted
- Budget adopted
- Establishment plan adopted

Other outputs:
- Security accreditation reports
- Recommendations to SAB / SAB chairman

Annual Objective:	Define and approve security accreditation statements (WBS 2.04.04):			
3	• Approvals to launch			
4	• Authorisations to operate systems in their different configurations and for the various services, up to and including the signal in space.			
5	• Authorisations to operate the ground stations			
6	• Authorisations of bodies to develop and manufacture PRS receivers or PRS security modules			
Expected Results	• Security accreditation statements • Changes to existing security accreditation statements • Re-accreditation statements			
Status	Objectives continue from last financial year			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Approvals to launch	2	1[15]	SAB decision list	
Authorisations to operate the Galileo system in their different configurations	1	1	SAB decision list	
Authorisation to operate the ground stations	15	7	SAB decision list	
% of processed requests of authorisation of bodies to develop and manufacture PRS receivers or PRS security modules	100%	100%	SAB decision list	

Outputs relating to the multi-annual work programme objectives:

• Approval to launch
• Authorisations to operate the Galileo system in its different configurations and Galileo services
• Authorisation to operate the ground stations
• Authorisation of bodies to develop and manufacture PRS receivers or PRS security modules

Annual Objective 7	Ensure the chairmanship of the Panel, its technical and organisational secretariat (WBS 2.05.05)			
Expected Results	• Propose panel meeting plan • Draft reports in preparation for panel reviews • Organise panel meetings throughout the year • Deliver accreditation reports and recommendations to SAB			
Status	Objective continues from last financial year			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
• Panel meetings	8	4	SAB meeting plan	
• Security accreditation reports	3	3	Panel document register	
• Panel recommendations	10	10	Panel Reports	

Outputs relating to the multi-annual work programme objectives:

• Security accreditation reports
• Recommendations to SAB and/or SAB chairman

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[15] Noting that the Programme will take any available opportunities to increase the number of launches per annum in order to improve the progress of deploying the Galileo constellation.

Annual Objective 8	System level accreditation tasks (WBS 2.05.01)		
Expected Results	• Review existing strategies to ensure consistency with the regulation/ programme and propose enhancements as appropriate • Carry out independent security assessments and system audits/reviews and report to panel/SAB accordingly • Participate in security-sensitive programme reviews at system level and, where necessary, ad hoc participation in segment reviews • Carry out independent security vulnerability analysis and system security tests and report to panel/SAB accordingly • Monitor risks and treatment plans and report to panel/SAB accordingly		
Status	Objective continues from last financial year		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Number of independent vulnerabilities assessments carried out	3	2	Security accreditation reports
Outputs relating to the multi-annual work programme objectives:			
• Security accreditation reports • Recommendations to SAB and/or SAB Chair			

Annual Objective 9	Ground stations level accreditation tasks (WBS 2.05.02)		
Expected Results	Plan activities to ensure ground stations meet the security requirements expected for the launches and services.		
Status	Objective continues from last financial year		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Operational sites accredited or covered by a recommendation to SAB	100%	100%	SAB System Authorisation To Operate (SATO) dashboard
Outputs relating to the multi-annual work programme objectives:			
• Site accreditation report • Recommendations to SAB and/or SAB Chair • Authorisation to operate the ground stations			

Annual Objective 10	PRS manufacturer authorisation activities (WBS 2.05.04)		
Expected Results	Authorisation of bodies to develop and manufacture PRS receivers or PRS security modules, in compliance with the Common Minimum Standards		
Status	Objective continues from last financial year		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Requests for PRS manufacturer authorisation processed.	100%	100%	SABAP2M database
Outputs relating to the multi-annual work programme objectives:			
• Recommendations to SAB and/or SAB Chair • Authorisation of bodies to develop and manufacture PRS receivers or PRS security modules			

Annual Objective 11	COMSEC assurance - SAB subordinate CDA (WBS 2.06.01)			
Expected Results	Assess the conduct of EC COMSEC policy throughout the EGNOS and Galileo programmes. It shall continue to achieve this through the authoritative assessment of the COMSEC experts from the Member States (NDAs) of evidence supplied to it by the European GNSS Distribution Authority regarding COMSEC activities within the EGNOS and Galileo programmes. The SAB CDA shall then provide COMSEC assurance to SAB, to be communicated as a COMSEC risk assessment, in order to facilitate successful accreditation.			
Status	Objective continues from last financial year			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Task force meetings	5	4	SAB meeting plan	
Contribute to Panel Security Accreditation reports	5	3	Panel document register	
SAB CDA recommendations	6	4	CDA reports	

Outputs relating to the multi-annual work programme objectives:
- COMSEC assurance statements to SAB meetings
- Recommendations to the SAB and/or SAB Chair
- Identified COMSEC risks reflected in System Security Plan

Annual Objective 12	COMSEC assurance – Flight Key Cell (FKC) (WBS 2.06.02/ WBS 2.06.03)			
Expected Results	To assure the security of flight keys during European GNSS programme launch campaigns through specification of the necessary security procedures to assure launch security and subsequent implementation of those procedures, culminating in an assessment of launch compliance that can be used by the SAB to derive assurance that the launch was conducted securely.			
Status	Objective continues from last financial year			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
FKC launch campaigns	2	1	FKC launch campaign report	
FKC Launch Key Management Operational Plans	2	1	FKC Key Management Operational Plans	

Outputs relating to the multi-annual work programme objectives:
- Contribution to SAB CDA COMSEC Reporting and Risk Identification
- Recommendations to SAB/SAB chairman
- SAB/FKC Launch Readiness Review presentations

Annual Objective 13	Implement new SAB regulatory responsibilities (WBS 2.04.03)
Expected Results	Implement new responsibilities entrusted to SAB by Regulation (EU) No 512/2014 and laid down in Article 11 thereof, in particular paragraph 3 points (c) to (l): • Examining and, except as regards documents which the Commission is to adopt under Article 13 of Regulation (EU) No 1285/2013 and Article 8 of Decision No 1104/2011/EU, approving all documentation relating to security accreditation; • Advising, within its field of competence, the Commission in the elaboration of draft texts for acts referred to in Article 13 of Regulation (EU) No 1285/2013 and Article 8 of Decision No 1104/2011/EU, including for the establishment of security operating procedures (SecOps), and providing a statement with its concluding position; • Examining and approving the security risk assessment developed in accordance with the monitoring process referred to in Article 10(h), taking into account compliance with the documents referred to in point (c) of this paragraph and those developed in accordance with Article 13 of Regulation (EU) No 1285/2013 and Article 8 of Decision No 1104/2011/EU; cooperating with the Commission to define risk mitigation measures; • Checking the implementation of security measures in relation to the security accreditation of the European GNSS systems by undertaking or sponsoring security assessments, inspections or reviews, in accordance with Article 12(b)of this Regulation; • Endorsing the selection of approved products and measures that protect against electronic eavesdropping (TEMPEST) and of approved cryptographic products used to provide security for the European GNSS systems; • Approving or, where relevant, participating in the joint approval of, together with the relevant entity competent in security matters, the interconnection of the European GNSS systems with other systems; • Agreeing with the relevant Member State the template for access control referred to in Article 12(c); • On the basis of the risk reports referred to in paragraph 11 of this Article, informing the Commission of its risk assessment and providing advice to the Commission on residual risk treatment options for a given security accreditation decision; • Assisting, in close liaison with the Commission, the Council in the implementation of Joint Action 2004/552/CFSP upon a specific request of the Council; • Carrying out the consultations necessary to perform its tasks.
Status	New Objective

Indicators	Result 2016	Target 2018	Means & frequency of verification
All new responsibilities entrusted to SAB are implemented	N/A	100%	Independent assessment

Outputs relating to the multi-annual work programme objectives:
• Revised terms of reference for subordinate bodies
• SAB decisions

III.02.01.03 Resources

Human Resources

	2018	2019	2020
Temporary Agents	10	10	10
Contract Agent and Seconded National Experts	1	1	1
Total	11	11	11

Financial Resources

Type of Action	Budget line	Indicative Amount 2018	Indicative amount 2019	Indicative amount 2020
Procurement/Agreement	3300	1 050 000	1 050 000	1 050 000
Other operational costs		-	-	-
Total		1 050 000	1 050 000	1 050 000

III.02.02 PUBLIC REGULATED SERVICE (PRS) ACTIVITIES (WBS 2.03)

III.02.02.01 Overview of the activity

The Agency will carry out its core PRS activities entrusted to it by PRS Decision 1104/2011/EU.

These tasks include:

- Implementing of the arrangement concluded between the 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. PRS information and PRS companies' database, risk analysis, internal auditing, etc.) the Agency is required to perform[16] to ensure compliance with the PRS framework.

- The implementation and maintenance of the Agency's CPA functionality, including the set-up of relevant arrangements, development of relevant processes and tools and maintenance of required infrastructure (e.g. tools), in order to enable the Agency to perform those tasks (CPA functionality or CPA technical assistance) that can be entrusted to it by virtue of Article 5 of the PRS decision[17].

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

[17] The cost of functioning is not part of the Agency's expenses.

III.02.02.02 Objectives, indicators, expected results and outputs

Please note that the annual objectives 1 to 3 include activities that are not sure to be required in 2018. In view of the resources constraints the Agency faces, such activities have been given lower priority for 2018. More details are provided within each objective.

Annual Objective 1	The Agency's CPA implementation (WBS 2.03.04)
Expected Results	This objective includes all activities related to implementing the Agency's CPA functionalities in case such a need arises. This covers both the Agency's performance acting as a CPA for its own activities (if needed) and its performance acting as a CPA for third parties. The expected results are described as follows: Phase 1: preliminary analysis • Analysis of the activities that the Agency may need to perform as a CPA and/or provide technical assistance to CPAs in performing their tasks • Organisational structure for the Agency to support CPA task implementation • Impact assessment of the Agency's implementation of CPA tasks (including resource needs) • Cost and financial models Phase 2: establishment • Preparation of the draft arrangement defining the rules and operations to be performed by the Agency for those cases that it can be designated a CPA • Development/acquisition/maintenance of relevant tools (including those required to perform technical assistance)
Status	This objective continues from the previous year, focusing on the preliminary analysis of the establishment of a GSA CPA. Should phase 2, establishment of a Competent PRS Authority inside the GSA, be activated it would require the implementation of new tasks and functions. In view of the overall resources situation this activity would however be given low priority in the year 2018.

Indicators	Result 2016	Target 2018	Means & frequency of verification
% of completion of preliminary analysis	N/A	100%	GSA quarterly review
Establishment of the GSA CPA (if required)	N/A	100%	Legal establishment of the GSA CPA; GSA quarterly review
Outputs relating to the multi-annual work programme objectives:			
• The Agency's CPA organisation and set-up (if required) • Draft arrangement for the Agency to act as CPA for third parties (when required) to be endorsed by the Commission			

Annual Objective 2	Third parties CPA arrangements (WBS 2.03.03)			
Expected Results	This objective includes all activities related to implementing the Agency's CPA functionalities for third parties. The expected results are described as followed: • Establishment of the agreement to become a PRS participant (if needed) • Tailoring draft agreement developed under Objective 3 (WBS 2.03.03) for the entity requesting the Agency to be its CPA • Approval of the agreement by the Commission • Establishment of the agreement to set up the Agency as CPA of the involved entity • Start performing the task required by the CMS for that CPA			
Status	This objective continues from the previous year, even though no request was made during the year 2017. Should an activation be necessary to define and implement arrangements, it would require the implementation of new tasks and functions. In view of the overall resources situation this activity would however be given low priority in the year 2018.			
Indicators		**Result 2016**	**Target 2018**	**Means & frequency of verification**
Level of compliance to the CMS and the PRS agreement when performing CPA tasks for third parties (if required)		N/A	100%	Availability of annual CPA activity report; GSA quarterly review; Quarterly review with Commission
Outputs relating to the multi-annual work programme objectives:				
• Agreement between the Agency and third parties for performing CPA tasks (for approval) • Notification to the Commission of the signature of an agreement to act as a CPA and of the start of activities				

Annual Objective 3	Technical assistance to CPAs (WBS 2.03.05)			
Expected Results	This objective includes all activities related to the implementation of Article 5(9) of the PRS decision, according to which a CPA may request technical assistance from the Agency in order to perform its tasks. The expected results are: • Drafting a generic template (including administrative and technical details) for the provision of technical assistance to a CPA • Interface with requesting CPA on tailoring technical assistance arrangement • Elaborate specific arrangement with each CPA requesting assistance to ensure its approval from the Commission • Sign agreement • Implement technical assistance tasks as specified in the agreement			
Status	This objective continues from the previous year, even though no request was made during the year 2017. Should a request for technical assistance be made, it would require the GSA to provide technical support to other Competent PRS Authorities. In view of the overall resources situation this activity would however be given low priority in the year 2018.			
Indicators		**Result 2016**	**Target 2018**	**Means & frequency of verification**
Timely delivery of support for technical assistance agreement (both admin and technical)		N/A	100%	GSA quarterly review
Outputs relating to the multi-annual work programme objectives:				
• Draft (generic) technical assistance agreement to be endorsed by the Commission • Specific agreement between the Agency and CPA for performance of technical assistance (for approval)				

Annual Objective 4	Article 14 arrangement implementation management (WBS 2.03.06)		
Expected Results	This objective includes all activities related to managing of the implementation of the EC-GSA arrangement pursuant Article 14 of the PRS Decision, in particular regarding the different reporting streams, compliance checks and associated risk assessment. This objective also implements the provisions related to the Agency's access to PRS information. This activity includes: • Preparing and maintaining the PRS information management plan that defines the organisational structure and the rules for implementing the management of PRS items and PRS information • Reviewing Article 14 arrangement (if required) • Preparing Article 14 quarterly implementation reports and delivering to the Commission • Carrying out regular inspections of the departments within the agency dealing with PRS items and PRS classified information • Performing regular risk assessments (monthly) • Maintaining PRS items and PRS information database and drafting report summarising movements, requests and security breaches associated with the PRS items/PRS information under the responsibility of the Agency		
Status	This objective continues from the previous year.		

Indicators	Result 2016	Target 2018	Means & frequency of verification
Timely review of PRS information management plan	N/A	1	Up-to-date PRS information management plan made available annually; GSA quarterly review
Regular update of the risk analysis	N/A	monthly	Up-to-date risk register made available ; GSA quarterly review
Successful maintenance of PRS items and information database	N/A	Quarterly	Availability of report summarising movements, requests and security breaches; GSA quarterly review
Level of compliance to Article 14	N/A	100%	Audit reports; GSA quarterly review

Outputs relating to the multi-annual work programme objectives:

• Quarterly Article 14 implementation report sent to the Commission
• Quarterly report on PRS items and PRS information movement/requests/incidents

Annual Objective 5	PRS entities database (WBS 2.03.07)
Expected Results	This objective includes all activities related to the implementation of Article 6 of the Article 14 arrangement for the management of a database of entities authorised to carry out PRS activities. This database, the structure of which needs to be approved by the Commission, needs to be constantly updated and shall include: • A complete list of the PRS entities • The scope of the activities pursued by those entities (unless the Member State objects) • The date of authorisation and expiry It is important to note how this activity, which is performed on behalf of the Commission, is independent from (although linked to) the activities of a similar nature that are carried out by the SAB.
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Time to process requests from the Commission on PRS entity	N/A	≤ 5 days	PRS entities database; GSA quarterly review
Timely update of the PRS entities database after notification from the SAB	N/A	≤ 5 days	PRS entities database

Outputs relating to the multi-annual work programme objectives:
• PRS entities database

III.02.02.03 Resources

Human Resources

	2018	2019	2020
Temporary Agents	2	3	3
Contract Agent and Seconded National Experts	1	1	1
Total	3	4	4

Financial Resources

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

III.02.03 GSMC OPERATIONS & PREPARATION (WBS 4.06)

III.02.03.01 Overview of the activity

In 2018, the Agency will continue to demonstrate the GSMC's operational capability. This will be based on the GSF and on the SOIF mentioned in section II.02.02, and in-line with agreed upon PIs. The Agency will upgrade the GSMC service capability in July 2018 based on system capability associated with the GSF P2.2 / SOIF1 programme delivery.

III.02.03.02 Objectives, indicators, expected results and outputs

The Agency has organised its GSMC operations activities, through the work breakdown structure, into five major processes: Operations; Operations engineering; Hosting Services; Management; and Administration.

Please note that the nature of the achievement of the annual objectives 1 to 4 in particular is strongly connected with the stability in the programme baseline. This programme baseline is expected to trigger changes in 2018, especially in terms of new back up site connection and GSF related availability. In this situation, other activities may temporarily be given lower priority. More information is provided within each objective.

Annual Objective 1	Operations processes (WBS 4.06.01)

Expected Results	**Operations, expertise and analysis:**
	• *Security and system status Monitoring***:** monitor system security and health, react to all security incidents and technological surveillance, including:
	    o Galileo System Incident Management
	    o Galileo System Vulnerabilities Assessment
	
	• *PRS access management:* 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 the service continuity, including through service support and secure communication interfaces (POC-P).
	
	Crisis management: specific activities and configuration of the GSMC to respond to the needs and requirements of a crisis affecting the Galileo system, including supporting the Council decision (Joint Action) process. This process will be activated only under specific conditions.

Status	All operational activities continue from the last financial year. The migration plan to GSF P2.2.1, the new requirements coming from the Commission's cyber policy and the SOIF implementation could trigger additional activities under

"Operations, expertise and analysis". If required, these activities and associated outputs will be given a higher priority.			
Indicators	**Results 2016**	**Target 2018**	**Means & frequency of verification**
The indicators for this objective are marked as RESTREINT-UE/EU RESTRICTED.			

Outputs relating to the multi-annual work programme objectives:

- System status and security monitoring: incident handling, resolution of security incident, assessment of vulnerabilities and recommendations.
- PRS access management: availability of PRS access.
- Operations, expertise and analysis: agreement on associated budget, terms and conditions, and the updated annual work programme.
- Crisis management: escalation to Member States or to Council decision.

Annual Objective 2	Operations engineering processes (WBS 4.06.02)
Expected Results	**Engineering and requirement management:** • *Requirement management:* o Identification, analysis and flow-down of requirements that could impact the GSMC and the maintenance of the applicable baseline o Ensure and report on GSMC compliancy with programme requirements over time • *Operations engineering:* design the operations; identify activities and all documents necessary for operations, training and maintenance; and validate the concept of operations and all operational procedures in order to satisfy operation requirements. • *Technical engineering:* o Identify and define the processes, methods, tools and logic of system development activities, including maintenance and support capabilities for the two sites o Manage the lifecycle of the technical processes that lead to the in-production setting of new technical supporting assets and processes
Status	All operational activities continue from the last financial year. The engineering activities, which were reaching a cruising mode, may have to be re-oriented based on the selection and availability of the new back-up site. If required, these activities and associated outputs will be given a higher priority.

Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
% review milestones on time	N/A	100%	Monthly report made available; GSA quarterly review

Outputs relating to the multi-annual work programme objectives

- Requirement management: service level management
- Operations engineering: GSMC Operations Engineering Plan, Validation Plan, Validation Report, Product Assurance Report, support documentation for the process (change analysis, test case, test case results, test schedule, etc.)
- Technical engineering:
    - o Long-term GSMC technical evolution roadmap and requirements, and related technical integration analysis (hosting and IT assets).
    - o Participate and contribute to program-related milestones and coordinate with providers (mostly WP2-WP2X).
    - o Technical project documentation and contribution to project portfolios.

Annual Objective 3	Hosting Services processes (WBS 4.06.03)[18]
Expected Results	**Local security**: prepare for, ensure and maintain the local security operational support needed to protect EU classified information present on site and its assets. • *Site and system security accreditations*: apply and implement security requirements to the GSMC, determine security design and contribute to the security accreditation of the systems. • *Registry control management*: manage all exchanged and produced EU classified information (documents, items, etc.). • *Local security management*: ensure physical security of people, properties, facilities, activities and information, prevent the compromising of classified or crypto information (by staff, malicious acts, etc.) and establish, maintain and execute the local security operations. • *COMSEC management:* o Manage COMSEC materials, ensure its secure transfer to or from users or other parties through the enforcement of appropriate procedures and the use of approved channels. o Provide authorised users/stakeholders access to classified cryptographic devices or keys. o Establish, maintain and execute the COMSEC policy, in-line with instructions from the EU GNSS distribution authority. • *Crypto management and operations:* o Establish, and maintain the crypto accounts for sites in-line with applicable regulations. o Establish, maintain and execute the local security operations as required. o Operate the ongoing configuration of cryptographic equipment to enable technical services that rely on such equipment. o Ensure the physical security of people, properties, facilities, activities and information, and prevent the compromise of classified or crypto information (compromising of staff, malicious acts, etc.). **Hosting and configuration management**: provide a continuity of hosting services through building maintenance and manage extra requests related to the evolution of the facilities. • Facilities management (relevant hosting services). • Local support for IT systems (general technical operations). • GSF equipment support (operational systems first line maintenance): o Perform system administration. o Perform first line maintenance of GSMC operational systems, including planning for and providing of preventive maintenance, basic preventive initial repair, and (escalation to Level 2/Level 3) maintenance. Ensure (with L2 delivery) availability of spare parts and logistical flows of spare parts, configuration management of installed items in the operational systems, monitor operational status of operational systems, and perform relevant technical Level 1 configurations and status checks to ensure availability of such systems.

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[18] The new back-up site is not included in this plan

Status	Objective continues from last financial year regarding the main GSMC site. The selection and availability of the new back-up site may require the GSA to prioritise activities in order to ensure the management of hosting processes. If required, activities related to sites and security accreditation, or hosting and configuration management (including associated outputs) will be given a higher priority.			
Indicators		**Result 2016**	**Target 2018**	**Means & frequency of verification**
Site and system security accreditation:				
• Number of accreditation certificates in valid standing.		11	11	Contribution to reporting on a (bi) monthly basis, both internally and to the Commission; GSA quarterly review
• Number of expected accreditation requests.		6	15	
• Percentage of data-packs timely released for accreditation requests (new or renewals) against annual plan baseline schedule.		100%	100%	
• Overall for GSMC: number of incidents raised and number of incidents still under investigation.		8/1	8/1	
Outputs relating to the multi-annual work programme objectives:				

Outputs relating to the multi-annual work programme objectives:

- Registry control management:
  - Up-to-date registry[19] (successfully audited) and, when necessary, destruction of classified documents.
  - Audit report(s).
  - Contribution to bi-monthly security report.
- COMSEC management:
  - Up-to-date procedures, (updated annually), audit report(s).
  - Release of audit report, report incident(s), COMSEC SecOPS, implement transportation plan, destruction of crypto material, crypto item delivered/safeguarded.
  - Contribution to bi-monthly security report.
- Crypto management and operations:
  - Up-to-date procedures, GSMC crypto account audit, audit report(s), destruction of crypto material, crypto item delivered/safeguarded, and contribution to the security report.
- Site and system security accreditation:
  - Authorisation to deploy and operate SAA accreditation.
  - Accreditation strategy.
  - SAA approved security needs, business impact analysis, software integration plan and SecOPS.
  - SAA issued Authorisation to Operate (ATO)/Accreditation certificate.
  - Contribution to bi-monthly security report.
- Local security management:
  - Ongoing management of access control, annual access control report summaries, maintain access control list, contribution to bi-monthly security report.
  - Monthly reports on guarding support services contractors.
- Hosting:
  - Facility maintenance support contract, monthly reports from facility management providers.
  - Records on GSF maintenance.

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

Annual Objective 4	Management processes (WBS 4.06.04)
Expected Results	**Management of the organisation and communication:** • Define the strategy and objective(s) to be implemented by the GSMC • Prepare and implement operations by scheduling milestones and related activities in order to provide a long-term global overview that will steer activities • Coordinate activities within and between teams through regular team meetings and follow-up of actions • Provide an overview of internal communication strategy (top-down and bottom-up approaches) and of how the teams are organised and interact with each other • Ensure the development and ongoing implementation of project management processes, methodologies, tools and reporting **Integrated Management System and Product Assurance:** • Monitor the IMS, ensure documents are drawn up and managed in accordance with IMS principles • Ensure the GSMC meets standard requirements and that all processes are documented, monitored and audited • Support the activities of the ARB, NRB, and CCB **Risk and business continuity and disaster management:** • Risk management: identify potential risks that could impact the proper functioning of the Galileo programme and undertake relevant actions to mitigate them • Business continuity and disaster: in case of service breach, ensure availability and continuity of services in a reduced functionality mode **Health and safety management:** • Define and describe responsibilities and polices relating to health and safety at work, provide and maintain a safe work environment for staff, visitors and contractors **Resolution and continuous improvement management:** • System improvement (hosting + GSF): develop systems in-line with Galileo evolutions and the ESA • Resolution management: identify and deal with potential events that could impact the proper functioning of the GSMC and undertake relevant actions to correct and/or prevent them through Anomaly Review Boards • Service improvement: develop services in-line with the evolution of the service description document and the service implementation plan
Status	Objective continues from last financial year. Some activities required for the IMS, product assurance, business continuity and disaster recovery, and for resolution and continuous improvement management will be achieved through outsourcing.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Management of the organisation and communication:			
• % of milestones achieved since start	100%	80%	Monthly reporting to GSMC management; GSA quarterly review
• Number of opened tasks completed	199 opened /101 completed	All tasks opened to be completed.	

Risks, business continuity and disaster management:			Reporting on a monthly basis to GSMC Management; monthly Review of the GSMC risk register and associated actions list; GSA quarterly review
• Number of risks under management.	14	All risks considered as not acceptable as is	
• Average criticality score	14	≤ 11 To reduce as much as possible the average criticality of the risks	
• Risk Management status: closed, transferred, opened	Information not available	95 % of actions completed on time	

Outputs relating to the multi-annual work programme objectives[20]:

- Management of the organisation and communication: reporting on the progress of activities (achievement of milestones), periodically report on local security operations and status of engineering processes, actions/task completed and closure.
- 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:
  o Risks are monitored and controlled.
  o An initial, comprehensive GSMC business continuity plan and organisation setup by Q2 2017 (based on GSF P2.0).
  o Annual audit/review of the business continuity plan.
- Resolution and continuous improvement: resolution of the reported anomaly/incident, proposal for changes to the GSMC service baseline, evolution roadmap.

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[20] This excludes any activities on the new backup site

Annual Objective 5	Administrative processes (WBS 4.06.05)
Expected Results	The Agency has a number of administrative processes that support the workings of the GSMC, for example financial and cost management, legal management, and procurement management. Although most are common for the entire Agency, some are GSMC specific. The expected results for administrative processes are as followed: **Human resources management:** • Core training • Standby officer management • Certification management: ensure the appropriate and on-time certification of staff (PRS Access Officer, Security Incident Handler, etc.) • GSMC specific training: ensure that staff are well-trained in the specific fields
Status	Objective continues from last financial year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
% of success rate of operator training (certification)	100%	100%	Monthly report; GSA quarterly review

Outputs relating to the multi-annual work programme objectives:
• Operators' certificates

III.02.03.03 Resources

Human Resources

	2018	2019	2020
Temporary Agents	21	21	21
Contract Agent and Seconded National Experts	15	15	15
Total	36	36	36

Financial Resources

Type of Action	Budget line	Indicative amount 2018	Indicative amount 2019	Indicative amount 2020
Procurement/Agreement		3 261 000	3 200 000	3 200 000
Other operational costs		-	-	-
Total		3 261 000	3 200 000	3 200 000

III.02.04 PROMOTION AND MARKETING OF THE SERVICES (WBS 5.02, 5.03, 1.03.01)

III.02.04.01 Overview of the activity

Following the Declaration of Galileo Initial Services in 2016, the Agency has intensified its efforts to stimulate demand for Galileo across user communities. In this respect, the Agency will continue to engage the entire value chain and main user communities in order to keep them committed to the agreed roadmaps for Galileo adoption. Some market segments, such as road, rail and maritime, will require specific efforts if key milestones are to be reached in 2018-2020 (e.g. launch of eCall, launch of SAR return link service, consolidation of final user requirements for safety relevant applications in rail). The main activities are:

- In every vertical market segment (i.e. aviation, road, rail, maritime, etc.):
  o Engage with users and decision makers and progress on the implementation of EGNSS adoption roadmaps;
  o Engage with the key actors in the value chain;
  o Support the Commission with on-going EGNSS related regulatory applications and new legislative initiatives within the framework of the new Space Strategy;
  o Maintain and improve the support provided to stakeholders and users in priority markets to ensure continuous increase in EGNOS adoption.

- Horizontally:
  o Continue to translate user needs into requirements and inputs for Galileo and EGNOS service development via careful monitoring of user communities and emerging trends in complementary and substitute technologies;
  o In cooperation with the Commission, manage application-specific User Consultation Groups;
  o Continue to provide market and technology monitoring, including socio-economic benefits and cost-benefit analysis as the main tools for making strategic decisions;
  o Support the integration of EGNSS into receivers within key market segments;
  o Conduct an EGNOS user satisfaction survey and implement a similar process for Galileo, use gathered information to improve the user experience;
  o Monitor user satisfaction with EGNOS services and performance;
  o Leverage the GSC, which is being developed and managed under delegation, as a key user interface and Galileo differentiator;
  o Represent perspective of users and industry in WG evolution.

III.02.04.02 Objectives, indicators, expected results and outputs

Annual Objective 1	EGNSS Market development in aviation (WBS 5.02.03 and 5.03.03)		
Expected Results	- Market monitoring, analysis and forecasting - Technology monitoring - Market and user oriented EGNSS market segment adoption strategy - Segment institutions and industry/user relationship management, including defining and updating user needs - Technical support and feasibility assessment to airports/heliports and Air Navigation Service Providers (ANSP) on implementing LPV/LPV 200, with priority to those affected by the future implementation of performance-based navigation in the European Air-Traffic Management Network regulation - EGNOS/Galileo added value for drones, initial roadmap for adoption defined - Beacon manufacturers ready to introduce Galileo SAR - EGNOS user satisfaction survey completed		
Status	This objective continues from the previous year.		

Indicators	Result 2016	Target 2018	Means & frequency of verification
Number of updates of report on penetration of Galileo and EGNOS in receiver models	1	1	Report on penetration available annually; GSA quarterly review
Number of updates of the adoption strategy for aviation	1	1	Progress report made available annually; GSA quarterly review
Successful organisation of annual sessions on user needs for all sub-segments using adequate forum	100%	100%	Annual report on user fora made available; GSA quarterly review
Number of EGNOS-based approaches designed which are tracked	400	500	Regular recording and monitoring; GSA quarterly review
Unmanned Aerial Vehicles demonstration tracked	30%	90%	Regular monitoring; GSA quarterly review
Successful implementation of all activities in support of the introduction of SAR beacons to aviation	100%	100%	% of the development of the first aviation SAR beacon that includes the Galileo Return Link Service completed; GSA quarterly review
Completion of annual EGNOS User Satisfaction survey	100%	100%	Annual report on survey; GSA quarterly review
Number of specific working groups established	N/A	3	GSA quarterly review

Outputs relating to the multi-annual work programme objectives:

- GNSS User Technology Report
- Report on Galileo and EGNOS penetration in avionics

- Updated adoption strategy
- Updated user requirements – limited to the report by the User Consultation Platform (UCP)
- EGNOS approach procedures
- Aviation SAR beacon that includes Galileo Return Link Service (RLS) partially developed
- Results of User Satisfaction surveys
- Institutions and industry/users cooperation material

Annual Objective 2	EGNSS market development in road (WBS 5.02.04 and 5.03.04)
Expected Results	- Market monitoring, analysis and forecasting in the area of road transportation - Technology monitoring in the area of road transportation - Market and user oriented EGNSS market segment adoption strategy - Segment institutions and industry/user relationship management, including definition and update of user needs - Technical support (including plan and testing) to smart (digital) tachograph industry for EGNSS adoption, in cooperation with the Joint Research Centre (JRC) - Recommendations provided to the Commission for its Cooperative-Intelligent Transport System (ITS) Master Plan[21], implementing parts relating to EGNSS. - Initiate standardisation/certification process implementation for EGNSS in autonomous vehicles - Complete roadmap for the market uptake of EGNSS in Mobility as a Service (MaaS) applications
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Number of updates of report on penetration of Galileo and EGNOS in available receiver models globally	1	1	Report on penetration made available annually; GSA quarterly review
Number of updates of the adoption strategy for road	1	1	Progress report made available annually; GSA quarterly review
Successful organisation of annual sessions on user needs within the respective forum	100%	100%	Annual report on user fora; GSA quarterly review;
Test plan for smart (digital) tachograph designed (% of test methods agreed with the JRC)	N/A	100%	GSA quarterly review; preliminary test plan available at the end of year
Number of smart (digital) tachograph receiver models tested	N/A	1	GSA quarterly review; annual technical note reporting on progress of testing
Galileo adoption in road GNSS receivers: % of models with Galileo capability	45%	65%	GSA quarterly review; report on Galileo adoption
% of actions within the roadmap for adoption in cooperative-ITS designed	N/A	100%	GSA quarterly review; adoption roadmap report

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[21] The master plan can be found online on the Commission's website at: http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_move_040_cooperative_intelligent_transport_en.pdf

% of actions within the roadmap for EGNSS standardisation and certification process in autonomous vehicles implemented	N/A	30%[22]	Annual Report on roadmap implementation; GSA quarterly review
% of entry plan for EGNSS adoption in MaaS applications designed	N/A	100%	GSA quarterly review; preliminary entry plan available at the end of the year

Outputs relating to the multi-annual work programme objectives:

- GNSS User Technology Report
- Report on Galileo and EGNOS penetration in receivers and chipsets models in road segment
- Updated user requirements – limited to UCP report
- Test plan and testing campaigns
- Adoption roadmaps and updated strategy report
- Entry plan

Annual Objective 3	EGNSS market development in maritime (WBS 5.02.05 and 5.03.05)
Expected Results	- Market monitoring, analysis and forecasting in the maritime segment - Technology monitoring in the maritime segment - Market and user oriented EGNSS market segment adoption strategy - Segment institutions and industry/user relationship management, including definition and updating of user needs - Galileo tested in ship-borne receivers - Main beacon manufacturers implementing SAR return link
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Number of updates of info on penetration of Galileo and EGNOS in available receiver models globally	1	1	Report on penetration available annually; GSA quarterly review
Number of updates of the adoption strategy for maritime	1	1	Progress report; GSA quarterly review
Successful organisation of annual sessions on user needs within the respective forum	1 forum organised + 1 user survey	100%	Annual report on user fora; GSA quarterly review
Number of ship borne receiver manufacturers engaged in Galileo testing	N/A	3	GSA quarterly review
% of development of the first maritime SAR beacon including Galileo RLS complete	10%	100%	GSA quarterly review

Outputs relating to the multi-annual work programme objectives:

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[22] With completion of % planned in the period 2021-2023.

- GNSS User Technology Report
- Report on Galileo and EGNOS penetration in maritime receivers and chipsets
- Adoption strategy report
- Update user requirements
- NDA signed by ship-borne receiver manufacturers
- Maritime SAR beacon that includes Galileo RLS developed

Annual Objective 4	EGNSS market development in rail (WBS 5.02.06 and 5.03.06)		
Expected Results	- Market monitoring, analysis and forecasting in the area of rail - Technology monitoring in the area of rail - Market and user oriented EGNSS market segment adoption strategy - Segment institutions and industry/user relationship management, including definition of update of user needs - Consolidation of final user requirements for safety relevant applications and analysis of their impact on EGNSS services. - Implementation of the roadmap for rail certification		
Status	This objective continues from the previous year.		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Number of updates of info on penetration of Galileo and EGNOS in available receiver models globally	1	1	Report on penetration available annually; GSA quarterly review
Number of updates of the adoption strategy for rail	1	1	Progress report; GSA quarterly review
Successful organisation of annual sessions on user needs within the respective forum	N/A	100%	Annual report on user fora; GSA quarterly review
Results of EGNSS performance tests available for endorsement by European rail signalling supplier community	N/A	100%	Share main EU rail signalling suppliers who have endorsed EGNSS tests; GSA quarterly review
Implementation of certification roadmap (% of actions completed)	N/A	20%	GSA quarterly review
Outputs relating to the multi-annual work programme objectives:			

- GNSS User Technology Report
- Report on Galileo and EGNOS penetration in rail receivers and chipsets
- Adoption strategy report
- Updated user requirements – limited to the UCP report
- Performance tests report
- Partially implemented roadmap

Annual Objective 5	EGNSS market development in high precision, agriculture and surveying market segments (WBS 5.02.01, 5.03.01, 5.02.02 and 5.03.02)
Expected Results	• Market monitoring, analysis and forecasting in the area of agriculture • Technology monitoring in the areas of high precision, agriculture and surveying markets • Market and user oriented EGNSS market segment adoption strategy • Relevant implementation actions for the high precision, agriculture and surveying market segments • Segment institutions and industry/user relationship management, including definition and update of user needs • Increased Galileo and EGNOS penetration in professional receivers and chipsets for agriculture • Support EGNSS adoption through dedicated awards for innovative integration of EGNSS in high precision, agriculture and surveying applications • Analysis of synergies with Copernicus • Initialise procedure to implement Commercial Service • Consolidate upgrade to Galileo in private and public reference networks
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Number of updates of info on penetration of EGNSS in number of receiver models available globally	1	1	Report on penetration available annually ; GSA quarterly review
Number of updates of the adoption strategy for high precision	1	1	Progress report; GSA quarterly review
Successfully conduct regular user fora	100%	100%	Annual report on user fora; GSA quarterly review
Galileo adoption in professional receivers and chipsets for high precision, agriculture and surveying (annual percentage of models with Galileo capability)	47%	60%	GSA quarterly review
Timely support for EGNSS adoption via dedicated awards for innovative integration of EGNSS in high precision, agriculture and surveying applications and/or devices	N/A	As per schedule	Report on prize(s), ceremony and sector-specific winners made available as per schedule; GSA quarterly review
Analysis of synergies between EGNSS and Copernicus completed	N/A	100%	Annual report on EGNSS-Copernicus synergies made available; GSA quarterly review
% of completion of selection procedure for the Commercial Service (CS) service provider	0%	90%	GSA quarterly review
% of completion for the analysis of Galileo penetration in private and public reference networks	N/A	100%	Report on Galileo penetration in reference networks made available annually; GSA quarterly review

Outputs relating to the multi-annual work programme objectives:

• GNSS User Technology Report
• Report on Galileo and EGNOS penetration in receivers and chipsets in agriculture and surveying

- Adoption strategy report
- Updated user requirements – limited to User Consultation Platform report
- Materials from awarded prizes
- Report analysing the synergies with Copernicus, including recommended actions
- Consolidated roadmap for the CS service provision approach
- Report on Galileo implementation in the reference networks

Annual Objective 6	EGNSS market development in LBS, machine-to-machine (M2M) and other mass market applications (WBS 5.02.07 and 5.03.07)
Expected Results	• Market monitoring, analysis and forecasting in the LBS segment • Technology monitoring in the LBS segment • Market and user-oriented EGNSS market segment adoption strategy • Segment institutions and industry/user relationship management, including defining and updating user needs • Increased Galileo penetration in mass market chipsets and consumer devices
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Number of updates of information about penetration of Galileo and EGNOS in receiver models available globally	1	1	Report on penetration available annually; GSA quarterly review
Number of updates of LBS adoption strategy	1	1	Progress report; GSA quarterly review
Successful submission of annual report to User Consultation Group	N/A	100%	GSA quarterly review
% of models with Galileo capability adopted in mass market applications (LBS and IoT) chipsets	45%	55%	Annual report of percentage of models with Galileo capability available; GSA quarterly review

Outputs relating to the multi-annual work programme objectives:

- GNSS User Technology Report
- Report on Galileo and EGNOS penetration in mass market receivers and chipsets
- Adoption strategy report
- Updated user requirements – limited to User Consultation Platform report

Annual Objective 7	EGNSS market development in timing and synchronisation (WBS 5.02.08 and 5.03.08)			
Expected Results	• Market monitoring, analysis and forecasting in the timing and synchronisation segment • Technology monitoring in the timing and synchronisation segment • Market and user oriented EGNSS market segment adoption strategy • Segment institutions and industry/user relationship management, including defining and updating user needs • Support Commission in regulatory actions for adoption of Galileo in critical infrastructures			
Status	This objective continues from the previous year.			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Number of updates of penetration of Galileo and EGNOS in number of receiver models available globally	1	1	Report on penetration available annually; GSA quarterly review	
Number of updates of the adoption strategy for timing and synchronisation	1	1	Progress report; GSA quarterly review	
Successful consultation of user needs within User Consultation Group	N/A	100%	Annual report on user needs approved by UCG; GSA quarterly review	

Outputs relating to the multi-annual work programme objectives:
• GNSS User Technology Report
• Report on Galileo and EGNOS penetration in timing and synchronisation receivers and chipsets
• Adoption strategy report
• Updated user requirements – limited to UCG report
• Supporting materials delivered (on request) to Commission in regards to Galileo in timing and synchronisation

Annual Objective 8	EGNSS market development in governmental use (WBS 5.02.09 and 5.03.09)			
Expected Results	• Market monitoring, analysis and forecasting in the area of governmental use • Delivery of necessary information to support Member States in the promotion of Galileo PRS within their user communities, following CPAs consultations.			
Status	This objective continues from the previous year.			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Number of updates of information about potential penetration of Galileo PRS	1	1	Report on penetration available annually; GSA quarterly review	
% of implemented action from CPAs consultation	N/A	20%	Regular monitoring; GSA quarterly review	

Outputs relating to the multi-annual work programme objectives:
• Report on Galileo's potential penetration in receivers and chipsets for governmental use
• Material about Galileo PRS status and supportive actions provided to CPAs

Annual Objective 9	Services, applications and R&D communications (WBS 1.03.01)
Expected Results	Communication activities relating to EGNOS and Galileo services and applications for research and development comprise of the following items: • Increased awareness of EGNOS and Galileo, their high performance and many benefits. • 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. • Strengthened communications with user networks and communities. • 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 can increase the functionality within existing applications by enabling it with EGNSS functionality. • Increased awareness of the Galileo programme, its role within the global multi-constellation satellite navigation system, and the benefits of Galileo Initial Services.
Status	This objective continues from the previous year.

Indicators	Result 2016	Target 2018	Means & frequency of verification
Increased positive activity across all channels utilised	100%	100%	Qualitative assessment, as part of Administrative Board presentation; GSA quarterly review

Outputs relating to the multi-annual work programme objectives:
- Annual Communications Plan
- Website creation, maintenance and management
- Social media campaigns
- Publishing of publications
- Video production of final product
- Event creation, participation and management (exhibition creation, advertising, promotion and presentation)
- Media, public relations and stakeholder initiatives
- Newsletter production and distribution
- Feedback surveys and studies

III.02.04.03 Resources

Human Resources

	2018	2019	2020
Temporary Agents	6	6	6
Contract Agent and Seconded National Experts	4	4	4
Total	10	10	10

Financial Resources

Type of Action	Budget line	Indicative amount 2018	Indicative amount 2019	Indicative amount 2020
Procurement/Agreement		3 100 000 EUR	3 100 000 EUR	3 100 000 EUR
Other operational costs		-	-	-
Total		3 100 000 EUR	3 100 000 EUR	3 100 000 EUR

III.02.05 Agency management (WBS 1)

> As the Agency finances support services out of Title 1 or Title 2 of the Agency's budget, these do not require 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.02.05.01 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, IT and logistics, 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.02.05.02 Objectives, indicators, expected results and outputs

Annual Objective 1	Legal, procurement, grants and contract management (WBS 1.01.02)		
Expected Results	- Procurement management: planning, preparing and executing procurement file up to signature of legal commitment - Grant management: planning, preparing and executing grant file up to signature of legal commitment - Legal commitments management: drafting, negotiating, signing, amending, assigning and other support throughout the lifetime of a legal commitment - Legal advisory services: identification, verification, assessment and provision of legal opinions		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Procurement and contract award: % of contracts in place and on time	96.15%	90 %	GSA quarterly review
Contract management: % of exceptions linked to legal department performance compared to total number of contracts signed in a year	0%	< 5%	List of exceptions; GSA quarterly review
Outputs:			
- Executive Director documentation (incl. 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	People and talent management (WBS 1.01.03)
Expected Results	• Selection, recruitment and on-boarding of the most suitable candidate for each vacant post and in accordance with applicable requirements and staff regulations • Welcome/work-life balance features • Staff administration and services: establishment of individual rights to ensure staff have a complete formal record and receive the correct entitlements due. • Staff performance • Learning and staff development • Human resources management

Indicators	Result 2016	Target 2018	Means & frequency of verification
% execution of the Establishment Plan	100%	95%	Regular recording and monitoring; GSA quarterly review
Average throughput time of the recruitment process	4 months	≤5 months	Regular recording and calculation; GSA quarterly review
Staff absenteeism	3.64%	≤6%	Regular recording and calculation; GSA quarterly review
% of appraisal exercises that are executed on time	98%	95%	Report available quarterly; GSA quarterly review
Number of annual leave carried over	8.9	12 days	Regular recording and calculation; GSA quarterly review
Average rating of quality of training	8.66	>7	Regular recording and calculation; GSA quarterly review

Outputs:
- Proposal and communication of action plans for specific, non-regular exercises
- Provision of quality advice to individual inquiries

Annual Objective 3	Finance and budget management (WBS 1.01.04)
Expected Results	**Budgeting and regular financial management:** • Budgeting, monitoring and reporting on level of budget execution to all internal and external clients • Daily management of Agency financial transactions • Provide Commission 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 and personal VAT reimbursement for Prague-based staff • General finance and VAT specific training as they pertain to EU financial procedures • Manage paperless tool **Administration and control of grants:** • Support and/or manage preparation of calls for proposals, grant agreements, amendments, payments, and reporting • Detailed ex-ante verification of all grant payments in-line with European Court of Auditors' recommendations • Management of external experts in relation to evaluation of grant calls and supervision and review of deliverables produced by beneficiaries of the EU grants under Agency management

	• Drafting of policies on ex-ante and ex-post checks for grants and on expert rules • Ex-post controls of grant payments • Report to the Commission and internal clients on execution of grants and cash flow needs		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Commitment rate and rate of payment within prescribed time limits	100 % (commitment rate) / 98% (payment rate)	95%	End of year financial results; GSA quarterly review
Outputs:			
• 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	Information and Communication Technology (WBS 1.01.05)		
Expected Results	The Agency's ICT activities are split along three fundamental lines: • Systems and infrastructure management to ensure all admin systems operate within optimal parameters and are reliable and available to Agency users as required • User management to ensure the appropriate provision of technical assistance and support • Project management of all internal IT projects according to the Agency's needs • ICT security to ensure the confidentiality integrity and availability of GSA data and ICT systems		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Tickets completed under 24h	N/A	At least 50% of tickets[23]	Quarterly quality compliance reports; GSA quarterly review. Current statistics can be checked in real-time in the ticketing tool.
Tickets completed within 1-5 days	N/A	Maximum 40% of tickets	Quarterly quality compliance reports; GSA quarterly review. Current statistics can be checked in real-time in the ticketing tool.
Tickets completed within 5-10 days	N/A	Maximum 5% of tickets	Quarterly quality compliance reports; GSA quarterly review. Current statistics can be checked in real-time in the ticketing tool.
Tickets completed after 10 days	N/A	Maximum 5% of tickets	Quarterly quality compliance reports; GSA quarterly review. Current statistics can be checked in real-time in the ticketing tool.

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[23] This target is indicative as of time of writing and these numbers are just for reference. Actual data will be analysed for around 6-9 months and new realistic targets will be implemented.

Outputs:

- Implementation of requested changes (systems management)
- Execution and control of core IT projects (following PRINCE2 project management methodology)
- All staff exits managed by IT department and processed by Helpdesk (in Staff Movement List)
- Confirmation of receipt of Agency equipment (after staff exit), coupled with relevant policies
- Implementation of IT security policy following the development of the IT Security Policy Framework
- IT Information Security Policy in relation to ISO 27001 (when Information Security Management System is developed)
- Core objectives of the IT strategic plan 2017-2020:
  o Coherence and control of the overall IT infrastructure, including all locations;
  o Rationalisation of all tools used by the Agency, based on inter-institutional tools, DIGIT contracts, inter-agency tools and commercial off-the-shelf products;
  o IT governance for infrastructure, hardware, software and IT security.
- The long-term objectives are to study and implement a cloud infrastructure and to launch an ADMIN/GSA Restricted UE network single access study in order to improve and facilitate the security of data information exchange

Annual Objective 5	Facility management and logistics (WBS 1.01.06)		
Expected Results	• Timely facility management and logistical support to internal customers • Accurate asset and inventory management • Timely building management • Good cooperation with the building owner and its representatives		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
% of satisfaction from users	90% users satisfied within EXCELLENT and GOOD survey categories	90% users satisfied within EXCELLENT and GOOD categories	Annual facility management satisfaction survey made available; GSA quarterly review
Regular updates of the inventory system based on movement and inventory checks	N/A	Weekly	Up-to-date inventory available; real-time access via assets database
% of tickets addressed within 24 h	≥ 90%	≥ 90%	GSA quarterly review. Current statistics can be checked in real-time in the ticketing tool

Outputs:

- Activity report for building maintenance
- Weekly activity reports to the Head of Administration
- Execution report on, for example, cleaning services to Supervisor
- 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
- Monthly report based on ticketing tool outputs
- Annual facility management satisfaction survey
- Quarterly cleaning quality report for supplier's internal control
- Updated inventory system based on movement and inventory checks

Annual Objective 6	Administrative Board management (WBS 1.01.07)			
Expected Results	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.			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Schedule of meetings announced for year are not altered	Implemented as planned	Implemented as planned	Minutes of meetings; GSA quarterly review	
Outputs				
• Agenda and minutes of each meeting • Board decisions, including written procedures				

Annual Objective 7	Configuration and document management (WBS 1.01.08)			
Expected Results	Continued smooth implementation of an enterprise content management system that supports the Agency, particularly in the field of configuration management related to engineering functions.			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Enterprise content management system implemented and in use	N/A	100%	Periodic reporting to the Document Management Board; GSA quarterly review	
Policies, processes and procedures under configuration control	100%	100%	Audit reports; GSA quarterly review	
All new employees and relevant contractors trained	N/A	100%	Records of on-boarding procedure; GSA quarterly review	
Outputs				
• Enterprise content management system • Relevant policies, processes and procedures • Training materials				

Annual Objective 8	Personal data protection (WBS 1.01.09)			
Expected Results	Full Agency compliance with data protection rules (Regulation (EC) 45/2001)			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
All existing and new personal data processing notifications submitted to Data Protection Officer (DPO) – data subjects informed – DPO registry up-to-date	61 of 61 notified to DPO, however continuous work. Estimation is ~ 95% of all processing operations are making up the 61 notifications.	100% either notified or in preparation	Annual report (by end of January of N+1); GSA quarterly review (Q1)	
Number of prior-checking notifications successfully closed with European Data Protection Supervisor (if applicable)	12 of 14	100% either notified or under work	Annual report (by end of January of N+1); GSA quarterly review (Q1)	
Number of personal data incidents / breaches	2	No incidents / breaches occurred	Annual report (by end of January of N+1); GSA quarterly review (Q1)	
References to GSA in the European Data Protection Supervisor (EDPS) annual report	Not known yet	No negative references	Depending on EDPS, organisation and issuing of report and communication to GSA Executive Director; GSA quarterly review	
Outputs				
At the Agency / departmental level there are no further outputs.				

Annual Objective 9	Strategic planning and risk management (WBS 1.02.01)			
Expected Results	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: • Management of delegation agreements and working arrangements between the Agency and Commission or ESA • Implementing Administrative Board decisions • Preparing relevant programming documents and their corresponding reporting • Ensuring that appropriate resources are provided to the SAB • Implementing relevant internal controls to protect the EU's financial interests • Act as corporate risk manager			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Successful organisation of delegation agreements and working arrangements management activities	As per schedule	As per schedule	Periodic reporting to Administrative Board; GSA quarterly review	

Successful implementation of all Board decisions	100%	100%	Periodic reporting to Administrative Board; GSA quarterly review
Timely preparation of programming documents and corresponding reporting	100%	100%	Periodic reporting to Administrative Board; GSA quarterly review
Regular update of the risk management registry	N/A[24]	Quarterly	Minutes of corporate risk management meeting available; GSA quarterly review

Outputs

- Administrative Board decisions
- Single programming document
- Annual activity report
- Internal audit report
- Risk registry

Annual Objective 10	Quality and IMS (WBS 1.02.02)		
Expected Results	Appropriate quality management and the related ISO 9001 certification of the Agency, the development of an Integrated Management System (IMS) for other standards that the Agency intends to be certified against in future, and the development of Product Assurance (PA)/Quality Assurance (QA) Reliability, Availability, Maintainability and Safety (RAMS) activities within Galileo operations.		
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**
Progress on implementing quality audit (% of audit reports available)	100%	90%	GSA quarterly review; annual management review board
Implementation rate of actions in the continuous improvement database (open, closed and overdue items)	60%	70%	monthly tracking

Outputs

- Annual quality audit plan and quality audit reports
- Quality management review
- Continuous improvement database, including suggestions for improvements on non-conformances
- Quality indicator tracing and training materials
- IMS document libraries (including policies, processes, procedures and work instructions)
- PA and QA RAMS requirements and follow-up
- Best-practices (WBS, WP description, process management)
- Staff training on quality and IMS

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[24] Risk registry and associated processes set up in 2016

Annual Objective 11	Control audit management and internal control (WBS 1.04.01 and 1.04.02)
Expected Results	The Agency's internal control coordination and risk management activities are on-going tasks that help fulfil its statutory obligations. These include: • Liaising with, and reporting to, the Internal Audit Service and with internal and external stakeholders on internal control issues • Evaluating the compliance and effectiveness of the internal control strategy and related systems of the organisation by assessing the implementation of 16 internal control standards • Reporting on the follow-up of all open recommendations and action plans (from the Internal Audit Service, Internal Audit Capability, external auditors, the Court of Auditors and the Parliament's discharge) • Coordinating the Agency's Internal Audit Capability[25] in the preparation, execution, reporting and monitoring of recommendations relating to internal audit activities • Coordinating the Agency's external auditors, required under Delegation Agreements in the procurement of the audit services, preparation, execution, reporting and monitoring of recommendations related to these audit • Management of and reporting on all actions related to the Gifts and Hospitality Policy, including the gifts registry • Managing all actions relating to the Agency's Anti-Fraud Strategy • Assessing requirements for developing and implementing a Conflict of Interest Policy Execute a business continuity impact assessment and develop the different elements of the GSA corporate business continuity management

Indicators	Result 2016	Target 2018	Means & frequency of verification
% of conflict of interest cases handled, documented and monitored.	100%	100%	Reporting to Administrative Board; GSA quarterly review
% of key elements of the Anti-Fraud Strategy defined and implemented.	N/A	100%	Reporting to Administrative Board; GSA quarterly review

Outputs:

• Internal audit capability audit report
• Internal audit service audit report
• External auditors audit reports for delegated funds
• Declaration of assurance and management declarations under Delegation Agreements

• EC Internal Control Standards compliance report
• Anti-fraud internal information and support
• Gifts and conflict of interest registries
• Business continuity management framework

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[25] The GSA's Internal Audit Capability (IAC) is a resource shared with the European Chemical Agency (ECHA) under an SLA.

Annual Objective 12	Corporate communications (WBS 1.03.02)
Expected Results	• Strengthened and recognised corporate identity for the Agency • Enhanced overall awareness of the Agency and facilitated better understanding of its mission, vision and values • Increased awareness of the Agency's Work Programme and achievements • Consolidated and strengthened relationships with key European and international players in the space sector and key GNSS user communities • Strategic partnerships built/strengthened • Increased awareness of and appreciation for the Agency's work by Member States

Indicators	Result 2016	Target 2018	Means & frequency of verification
Increased positive activity across all channels utilised	100%	100%	Qualitative assessment, as part of Administrative Board presentation; GSA quarterly review

Outputs

- Annual communications plan
- 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
- Newsletters production and distribution
- Feedback surveys and studies

Annual Objective 13	Internal communications (WBS 1.03.03)
Expected Results	The Agency uses internal communications to empower its staff and to ensure everyone can stay 'on message'. This objective is meant to: • Foster a culture of positive team spirit and customer service • Promote better staff understanding and awareness of the Agency's mission, team and objectives • 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" • Improve working environment by increasing communication flow across departments and by enhancing information sharing

Indicators	Result 2016	Target 2018	Means & frequency of verification
Increased positive activity across all channels utilised	100%	100%	Qualitative assessment, as part of Administrative Board presentation; GSA quarterly review

Outputs

- Annual communications plan
- Event creation, participation and management
- Newsletters production and distribution
- Feedback surveys and studies

Annual Objective 14	Stakeholder liaison and communications (WBS 1.03.04)		
Expected Results	The Agency maintains and improves stakeholder liaison and communications to: • Increase dialogue and strategic partnerships aimed at fulfilling mutually-shared goals • Enhance positive and open working relationships, exchange of information, communications and liaison • Increase the visibility of and appreciation for the Agency's work and its role within the EGNSS programmes • Build trust and engage stakeholders as partners who can act as multipliers, further sharing key information and actively participating in the Agency's work and success • Better awareness amongst key stakeholders of the Agency's vision, mission and what it needs to succeed • Increase understanding and appreciation for the Agency's work, especially amongst the Commission, DG GROW colleagues and members of the Administrative Board		

Indicators	Result 2016	Target 2018	Means & frequency of verification
Increased positive activity across all channels utilised	100%	100%	Qualitative assessment, as part of Administrative Board presentation; GSA quarterly review

Outputs

• Annual communications plan
• Website creation, maintenance and management
• Social media campaigns
• Production and dissemination of publications and videos
• Event creation, participation and management (exhibition, advertising, promotion and presentation)
• Media and public relations initiatives
• Newsletters production and distribution
• Feedback surveys and studies

Annual Objective 15	Agency transversal security (WBS 2.02.01)		
Expected Results	• Management of authorisations to access EU Confidential Information (EUCI) • Management and maintenance of COMSEC accounts held by the Agency • Issuing security incident reports • Maintaining records of entries/exits to secured areas • Issuing security intervention reports • Delivery of EUCI data pack		

Indicators	Result 2016	Target 2018	Means & frequency of verification
% of compliance with Commission decisions 2015/444 and 2015/443	100%	100%	Annual ad-hoc external inspections and audits reports; GSA quarterly review

Outputs

• Authorisations to access EUCI
• Security incident reports
• Records of entries/exits to secured areas
• Security intervention reports
• Delivery of EUCI data pack
• COMSEC transfers and transportations
• Policy governance and authorisation of GSMC Operational COMSEC activities as defined in GSMC Operations and Preparation Objective 3

Annual Objective 16	Accreditation Panel of internal systems (WBS 2.05.06)			
Expected Results	• Organisation of the accreditation review of internal Agency systems/areas and reporting accordingly to the Agency's security accreditation authority • Accreditation statements for internal systems signed by the system accreditation authority			
Indicators	**Result 2016**	**Target 2018**	**Means & frequency of verification**	
Number of internal accreditation reviews	11	9	Internal accreditation control list, GSA quarterly review	
Outputs				
• Security accreditation report • Recommendations to the SAA • SAA decision / authorisation to operate Agency areas/systems				

III.02.03.03 Resources

Human Resources

For this activity, the Agency notes a distinction between its management and its general administration support staff.

Area of activity	2018	2019	2020
Agency Management			
Temporary Agents	17	17	17
Contract Agents and Seconded National Experts	21	21	21
Total	38	38	38

Financial Resources

The Agency does not finance this activity out of Title 3 of the Agency's budget. Further information about Titles 1 and 2 of the budget is available in Annex II, Table 1.

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Annexes

Annex I: Resource allocation per activity (2018 – 2020)

The Agency's activities are complemented by a large number of tasks delegated by the Commission. The table below shows an estimation of the staff effort planned to be allocated to the Agency's core and delegated tasks, not to specific Agency departments or teams.

	Activity	FTE 2018	FTE 2019	FTE 2020
Core Tasks	**Security accreditation tasks**			
	TA	10	10	10
	CA,SNE	1	1	1
	Total	11	11	11
	PRS activities tasks			
	TA	2	3	3
	CA,SNE	1	1	1
	Total	3	4	4
	GSMC operations tasks			
	TA	21	21	21
	CA,SNE	15	15	15
	Total	36	36	36
	Promotion and marketing of the services tasks			
	TA	6	6	6
	CA,SNE	4	4	4
	Total	10	10	10
	Agency management tasks			
	TA	17	17	17
	CA,SNE	21	21	21
	Total	38	38	38
Delegated tasks	**EGNOS exploitation tasks**			
	TA	16	17	25
	CA,SNE	4	4	4
	Total	20	21	29
	Galileo exploitation tasks			
	TA	52	74	80
	CA,SNE	12	12	12
	Total	64	86	92
	Research & Development (H2020) tasks			
	TA	4	4	4
	CA,SNE	5	5	5
	Total	9	9	9
	Total FTE TA	**128**	**152**	**166**
	Total FTE CA,SNE	63	63	63
	Total FTE	**191**	**215**	**229**

Regarding Temporary Agents, the initial GSA establishment plan for 2018, 2019 and 2020 was respectively 118, 119 and 120 TAs. The figures above illustrate the Agency's intent to reinforce its resources with a total of 46 new TA posts above the initial establishment plan. For the year 2018, it is noted that an additional 10 new TA posts have been included based on the Agency's budget for the financial year 2018. For the years 2019 and 2020, the Agency proposes respectively a total of 152 and 166 TAs (respectively 23 new TA posts and 13 new TA posts, in addition to the initial establishment plan). Any deviation from the financial programming is subject to the decision of the budgetary authority in the annual budget procedures for the years in question.

Linked with the Agency plans for the number of TA posts, it is further noted that the GSA has exceeded, and plans to continue to exceed, the number of CA posts foreseen in the Legislative Financial Statement, but within the budget available. This is due in particular to the increase in tasks beyond that originally planned.

Annex II: Financial Resources 2018 – 2020

All figures in this section are in EUR.

The maximum ceiling for EU contribution in line with European Commission Communication to the European Parliament and the council on the programming of human and financial resources for decentralised agencies 2014-2020 (COM(2013)519 of 10 July 2013) is 30 722 000 EUR for 2019 and 30 964 000 EUR for 2020. The Agency's intent to reinforce its resources is already reflected in the budget for years 2019 and 2020 in Table 1 and 2 below. It is also in line with 2018 European Union's budget adopted. .

TABLE 1 – EXPENDITURE

	2017		2018	
	Commitment appropriations	**Payment appropriations**	**Commitment appropriations**	**Payment appropriations**
Title 1	16 267 161	16 267 161	18 746 582	18 746 582
Title 2	5 800 487	5 800 487	6 073 000	6 073 000
Title 3	6 400 000	6 400 000	7 411 000	7 411 000
Total	28 467 648	28 467 648	32 230 582	32 230 582

Commitment appropriations

	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR[26] 2018/2017	Envisaged in 2019	Envisaged in 2020
Title 1 – Staff expenditure							
11 - salaries and allowances	12 646 198	14 185 161	15 906 582		12%	17 001 000	19 715 389
of which establishment plan posts	9 862 376	11 186 161	12 550 293		12%		
of which external personnel	2 783 822	2 999 000	3 356 289		12%		
12 expenditure relating to staff recruitment	123 000	50 000	116 000		132%	116 000	116 000
1210 medical expenses	20 000	30 000	60 000		100%	60 000	60 000
1300 missions	1 346 200	1 100 000	1 312 000		19%	1 409 000	1 503 000
14 training	215 000	100 000	200 000		100%	192 500	204 500
1500 social welfare	110 000	500 000	850 000		70%	900 000	910 000
16 external services	525 500	300 000	300 000		0%	300 000	300 000
17 receptions and events	714	2 000	2 000		0%	2 000	2 000
Title 2 – infrastructure and operating expenditure							

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[26] Variation

	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR[26] 2018/2017	Envisaged in 2019	Envisaged in 2020
20 rental of buildings and associated costs	2 668 349	2 835 000	3 000 000		6%	3 423 000	3 423 000
21 information and communication technology	1 910 435	1 385 487	1 500 000		8%	1 596 064	1 596 064
22 movable property and associated costs	117 156	30 000	30 000		0%	73 500	73 500
23 current administrative expenditure	721 479	760 000	863 000		14%	840 000	856 000
24 postage / telecommunications	245 604	385 000	270 000		-30%	405 300	405 300
25 meeting expenses	49 795	55 000	60 000		9%	60 000	60 000
26 running costs in connection with operational activities	454 266	350 000	350 000		0%	350 000	350 000
27 information and publishing							
28 studies							
Title 3 – operational expenditure							
operational expenditure	7 932 631	6 400 000	7 411 000		16%	7 350 000	7 350 000
3100 expenditure on studies	7 283 079	5 350 000	6 361 000		19%	6 300 000	6 300 000
3300 SAB expenditure	649 552	1 050 000	1 050 000		0%	1 050 000	1 050 000

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	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR[26] 2018/2017	Envisaged in 2019	Envisaged in 2020
Total expenditure	29 086 327	28 467 648	32 230 582		13%	34 078 364	36 924 753

Payment appropriations

	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR 2018/2017	Envisaged in 2019	Envisaged in 2020
Title 1 – staff expenditure							
11 - salaries and allowances	12 646 198	14 185 161	15 906 582		12%	17 001 000	19 715 389
of which establishment plan posts	9 862 376	11 186 161	12 550 293		12%		
of which external personnel	2 783 822	2 999 000	3 356 289		12%		
12 expenditure relating to Staff recruitment	123 000	50 000	116 000		132%	116 000	116 000
121 medical expenses	20 000	30 000	60 000		100%	60 000	60 000
13 missions	1 346 200	1 100 000	1 312 000		19%	1 409 000	1 503 000
14 training	215 000	100 000	200 000		100%	192 500	204 500
15 social measures	110 000	500 000	850 000		70%	900 000	910 000
16 external services	525 500	300 000	300 000		0%	300 000	300 000
17 receptions and events	714	2 000	2 000		0%	2 000	2 000

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	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR 2018/2017	Envisaged in 2019	Envisaged in 2020
Title 2 – infrastructure and operating expenditure							
20 rental of buildings and associated costs	2 668 349	2 835 000	3 000 000		6%	3 423 000	3 423 000
21 information and communication technology	1,910,435	1,385,487	1 500 000		8%	1 596 064	1 596 064
22 movable property and associated costs	117 156	30 000	30 000		0%	73 500	73 500
23 current administrative expenditure	721 479	760 000	863 000		14%	840 000	856 000
24 postage / telecommunications	245 604	385 000	270 000		-30%	405 300	405 300
25 meeting expenses	49 795	55 000	60 000		9%	60 000	60 000
26 running costs in connection with operational activities	454 266	350 000	350 000		0%	350 000	350 000
27 information and publishing							
28 studies							
Title 3 – operational expenditure							
operational expenditure	7 932 631	6 400 000	7 411 000		16%	7 350 000	7 350 000
3100 expenditure on studies	7 283 079	5 350 000	6 361 000		19%	6 300 000	6 300 000

	Executed budget 2016	Budget 2017	Draft budget 2018 (Agency request)	Draft budget 2018 (budget forecast)	VAR 2018/2017	Envisaged in 2019	Envisaged in 2020
3300 SAB expenditure	649 552	1 050 000	1 050 000		0%	1 050 000	1 050 000
Total expenditure	29 086 327	28 467 648	32 230 582		13%	34 078 364	36 924 753

TABLE 2 – REVENUE

Revenues	2017	2018
	Revenues estimated by the agency	Budget forecast
EU contribution	27 847 000	31 538 001
Other revenue	620 648	692 581
Total revenues	28 467 648	32 230 582

Revenues	Executed budget 2016	Revenues in 2017 estimated by the agency	As requested by the agency for 2018	Budget forecast for 2018	VAR 2018 /2017	Envisaged 2019	Envisaged 2020
1 Revenue from fees and charges							
2. EU contribution	28 350 073	27 847 000	31 538 001		13%	33 341 517	36 126 360
of which administrative (Title 1 and Title 2)	20 525 453	21 609 272	24 819 582				
of which operational (Title 3)	7 824 620	6 237 728	6 718 419				

of which assigned revenues deriving from previous years' surpluses	461 673	1 006 866	199 476				
3 Third countries contribution (incl. EFTA and candidate countries)	736 254	620 648	692 581		12%	736 847	798 393
of which EFTA	736 254	620 648	692 581		12%	736 847	798 393
of which candidate countries							
4 Other contributions	111 612 683	328 122 370	1 168 879 240			704 301 564	613 848 600
of which delegation agreement, ad hoc grants	111 612 683	328 122 370	1 168 879 240			704 301 564	613 848 600
5 Administrative operations							
6 Revenues from services rendered against payment							
7 Correction of budgetary imbalances							
Total revenues	140 699 010	356 590 018	1 201 109 822			738 379 929	650 773 353

TABLE 3 – BUDGET OUTTURN AND CANCELLATION OF APPROPRIATIONS

Budget outturn	2014	2015	2016
Revenue actually received	358 165 207.16	360 510 233.28	222 604 786.73
Payments made	(147 122 354.28)	(202 664 997.66)	(135 615 743.76)
Carry-over of appropriations	(256 679 212.88)	(403 727 197.28)	(487 481 904.90)
Cancellation of appropriations carried over	228 504.76	1 028 320.34	209 318.96
Adjustment for carry-over of assigned revenue appropriations from previous year	46 713 326.93	247 372 610.67	400 497 435.35
Exchange rate differences	(3 695.96)	(30 412.73)	(14 416.60)
Adjustment for negative balance from previous year	0.00	0.00	0.00

| Total: | 1 301 775.73 | 2 488 556.62 | 199 475.78 |

Annex III: Human Resources: quantitative

In the Commission Communication to establish a programming of human and financial resources for decentralised agencies 2014-2020 (COM(2013)519 of 10 July 2013), the figures planned for 2019 and 2020 were respectively 119 TAs and 120 TAs. The figures below illustrate the Agency's intent to reinforce its resources with a total of 152 TAs for 2019 and 166 TAs for 2020. It is also in line with the Agency's budget for the year 2018. Any deviation from the financial programming is subject to the decision of the budgetary authority in the annual budget procedures for the years in question.

The Agency foresees to further rely on an increased number of Contract Agents, in comparison with the Legislative Financial Statement, but under valid justification and in consultation with the Commission.

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

Staff population		Actually filled as of 31 Dec 2015	Authorised under EU budget 2016	Actually filled as of 31 Dec 2016	Authorised under EU budget for 2017	Actually filled as of 31 Dec 2017	Draft budget for year 2018	Envisaged	
								2019	2020
Officials	Administrators (AD)								
	Assistants (AST)								
	AST/ SC								
Temporary Agents	AD	94	108	108	111		123	148	163
	AST	5	5	5	5		5	4	3
	AST/ SC								
Total		99	113	113	116		128	152	166
Contract Agents	Function Group IV	25	31	34	46		46	46	46
	Function Group III	7	6	6	5		8	8	8
	Function Group II	4	3	3	4		3	3	3

Function Group I								
Total Contract Agents	36	40	43	55		57	57	57
Seconded National Experts	4	4	4	6		6	6	6
Structured Service Providers	35	35	35	45		35	35	35
Total	174	192	195	222		226	250	264
External staff for occasional replacement	8	8	9	8		8	8	8

TABLE 2 – MULTI-ANNUAL STAFF POLICY PLAN (2018 – 2020)

Category and grade	Establishment plan in EU budget 2016		Filled as of 31 Dec 2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in draft EU budget 2018		Establishment plan 2019		Establishment plan 2020	
	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA
AD 16																
AD 15																
AD 14		1		1				1				1		1		1
AD 13		1		1				2				3		4		4
AD 12		5		3		-2		5				6		7		8
AD 11		5		1		-4		6				7		8		9
AD 10		12		9		-3		13				14		19		21
AD 9		12		16		+3		12				13		23		27
AD 8		30		25		-4		30				32		48		53
AD 7		34		41		+7		34				35		28		32
AD 6		8		8				8				8		6		6
AD 5				3		+3						4		4		2
Total AD		108		108				111				123		148		163
AST 11																
AST 10																
AST 9																

Category and grade	Establishment plan in EU budget 2016		Filled as of 31 Dec 2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in draft EU budget 2018		Establishment plan 2019		Establishment plan 2020	
	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA
AST 8																
AST 7																
AST 6		1				-1		2				2		2		1
AST 5		2		2				1				1		1		2
AST 4		1		1				1				1		1		
AST 3				1		+1						1				
AST 2		1				-1		1								
AST 1				1		+1										
Total AST		5		5				5				5		4		3
AST/SC 1																
AST/SC 2																
AST/SC 3																
AST/SC 4																
AST/SC 5																
AST/SC 6																
Total AST/SC																

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Category and grade	Establishment plan in EU budget 2016		Filled as of 31 Dec 2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in draft EU budget 2018		Establishment plan 2019		Establishment plan 2020	
	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA	Officials	TA
Total		113		113[27]				116				128		152		166

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[27] 6 offers accepted, with staff members starting in 2017.

Annex IV: Human Resources: qualitative

A. RECRUITMENT POLICY

The recruitment procedures for Temporary Agents (TAs) and Contract Agents (CAs) are governed by the Staff Regulations and the respective implementing rules,[28] which will remain in place until the ex-ante agreement on the CA model decision is approved by the Commission, according to the procedure outlined in Article 110.

The selection procedures for both TAs and CAs include the following main steps:

- The Agency publishes the vacancy notice on its website, distributes them to its Administrative Board, and further markets them through social networks and other sites, stating the eligibility and selection criteria, indicating the type, duration and recruitment grade of the contract, and the main steps in the selection procedure. TA posts are also published internally by email, in-line with the new implementing rules TA 2(f).

- A selection board is set up with a minimum of three members with relevant expertise and of a grade level at least equal to that of the post. The panel must also include a representative of the staff committee.

- The Agency's HR department screens candidates' application forms based on eligibility requirements. The Selection Board endorses this screening.

- The Selection Board further evaluates eligible candidates based on essential and advantageous criteria.

- The HR department invites shortlisted candidates for interviews with the Board. The interview involves a written test based on pre-determined technical and behavioural questions covering the specific competences in the area of expertise, Agency activities, language, and behavioural competencies.

- The Selection Board recommends a reserve list of successful candidates and sends this to the appointing authority.

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[28] Decision GSA-AB-43-15-10-30-05 on the procedure governing the engagement and use of temporary staff under Article 2(f) of the Conditions of Employment of Other Servants of the EU, adopted on 30 October 2015 and the decision GSA-AB-10-03-24-07 on the procedure governing the engagement and use of contract staff adopted on 29 March 2010

- Based on the reserve list, the appointing authority decides which candidates will receive an offer of employment. Prior to doing so, the appointing authority may invite these candidates for an interview. As a general rule, the appointing authority interviews the two or three highest ranking candidates on the reserve list.

- When recruiting managerial positions, external consultants run an assessment centre as a complimentary tool.

- The HR department informs applicants, in writing, about the result of the selection procedure.

In order to improve the quality of the evaluation procedure, the Agency introduced an online business aptitude test for candidates. This test aims to enhance and complement the evaluation of the candidates' behavioural aspects.

The Agency's general rule regarding the type of contract offered is, whenever labour market conditions allow it, long-term positions should be filled with temporary agents and short-term positions should be filled with contract agents or Seconded National Experts.

The criteria of the Agency in identifying posts of a long-term duration is that, as such posts cover tasks of a continuing nature, resulting from its mandate and work programme, they must guarantee continuous expertise in the specific area.

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

- 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 of time;

- Handle specific projects and/or tasks on a temporary basis, which require specific competencies not available within the Agency;

- Temporarily assist different events, meetings and workshops organised by the Agency.

The Agency also makes active use of trainees and provides them with first-hand experience of the workings of the Agency and an EU body. In 2016, 10 trainees joined the Agency.

Officials

The Agency does not employ officials.

Temporary agents

The established recruitment grades for the key functions of TAs are listed in the table below based on the EC Decision of 16 December 2013 on 'Types of Post and Post Titles' C(2013) 8979 final:

Type of post	Function group / Grade	Post title
Director	AD 14	Executive Director
Adviser or equivalent	AD 13 – AD 14	Adviser, Senior Expert
Head of Unit or equivalent	AD 9 – AD 14	Head of Department, Head of Task Force
Administrator	AD 5 – AD 12	Principal Administrator, Administrator
Senior Assistant	AST 10 – AST 11	Senior Assistant
Assistant	AST 1 – AST 9	Assistant, Project Assistant
Secretary/Clerk (not foreseen at the moment)	SC 1 – SC 6	Secretary/Clerk

The Agency carefully evaluates all options so as not to recruit at excessive grade levels. Nevertheless, in some cases, the recruitment of senior technical and specialised experts might be set above the lowest entry grades.

In fact, in order to fill some crucial positions, the Agency must recruit senior specialised experts with a minimum of nine years of work experience. Those profiles with specific competencies are quantitatively scarce in the labour market and the Agency competes as an employer with the attractive employment conditions offered both by 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 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).

Contract Agents

The Agency foresees to further rely on an increased number of Contract Agents, in comparison with the Legislative Financial Statement, but under valid justification and in consultation with the Commission.

It is important to stress that the Agency is always fully committed to the efficient use of its resources undertakes reorganisations as necessary including staff redeployments when required, but in particular when there are changes of the GSA tasking, related to either core or delegated tasks to help further this commitment.

Seconded National Experts

The Administrative Board adopted rules on secondment to the Agency on 14 August 2012, by written Procedure 24.

The Agency launched selection procedures for Seconded National Experts to develop effective and smooth working relationships with Member States' Authorities, as well as to profit from the exchange of expertise between the Agency and the seconding administrations. In 2015, four Seconded National Experts joined the Agency in the Security, Galileo and Market Development departments. One additional procedure was organised in 2017 to attract SNEs for operational departments.

In these cases, the recruitment of previously foreseen CAs was cancelled.

Structural Service Providers

Outsourcing has been thoroughly considered by the Agency and implemented whenever budget allows. For example, reception services, part of the Facilities, Logistics and ICT functions, are managed through an external company, and the Agency has several external consultants working in various departments, including Exploitation and Market Development.

Structural service providers are contracted through an open tender procedure that leads to the conclusion of framework contracts.

B. APPRAISAL OF PERFORMANCE AND RECLASSIFICATION/PROMOTIONS

Table 1 - Reclassification of temporary staff/promotion of officials

Category and grade	Staff in activity at 1 January 2016		How many staff members were reclassified in 2016		Average number of years in grade of reclassified staff
	Officials	TA	Officials	TA	
AD 16					
AD 15					
AD 14		1			
AD 13					
AD 12		3		1	5.8
AD 11		2			
AD 10		7			
AD 9		10		2	3.5
AD 8		22		4	3.6
AD 7		38		3	3.2
AD 6		9		1	2.8
AD 5		2			
Total		94		11	3.8
AST 11					
AST 10					
AST 9					
AST 8					
AST 7					
AST 6					
AST 5		1			
AST 4		1		1	2.8
AST 3		2		1	3.3
AST 2					
AST 1		1			
Total AST					
AST/SC 1					
AST/SC 2					
AST/SC 3					
AST/SC 4					
AST/SC 5					
AST/SC 6					
Total AST/SC		5		2	3
Total		99		13	3.4

Table 2 - Reclassification of contract staff

Function group	Grade	Staff in activity on 1 January 2016	How many staff were reclassified in 2016	Average number of years in grade of reclassified staff
CA IV	18			
	17			
	16	1		
	15	5		
	14	8	4	3
	13	7	2	2.2
CA III	12			
	11	2		
	10	1	1	2.3
	9	3	1	2.8
	8	1		
CA II	7			
	6			
	5			
	4	3		
CA I	3			
	2			
	1			
Total		31	8	2.6

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, and are appraised based on the assessment of the performance indicators established and agreed upon in the previous year. The process also includes a proposal for a developing future career and professional development plan.

The reclassification system, in accordance with Articles 54 and 87 of the CEOS and applicable to Agency staff members, is based on consideration of the comparative merits of staff members eligible for reclassification. This system takes into account evaluation reports and the use of a language(s) in the execution of their duties other than the language for which they have produced evidence of thorough knowledge in accordance with Article 12(e) and 82 (3e) of the CEOS and the level of responsibilities exercised by them.

C. MOBILITY POLICY

Mobility within the Agency

As the Agency continues to grow, it predominantly publishes vacant posts externally in order to attract the best-qualified applicants from broad and various backgrounds. Nevertheless, the internal publication of vacancies has also been used as an instrument to internally re-deploy staff to other Agency sites.

Successful candidates in internal mobility selection procedures maintain their grade and contract conditions. In 2016, four internal transfers took place in the interest of the service and in-line with Article 7 of the Staff Regulations.

Mobility among agencies

The Agency has not filled any post by means of mobility between union agencies. In 2016, the majority of the newly employed staff came from employers other than EU Agencies and instead within the space industry and/or the security area.

5 staff members were employed from other EU institutions as a result of an external competition not mobility between agencies and were mainly employed within the administration departments.

2 staff members moved to other EU institutions as a result of external competitions.

D. GENDER AND GEOGRAPHICAL BALANCE

The figures shown in this section reflect the situation as of 31 December 2016 and includes active staff only. The number of staff who accepted an offer and were planned to start in 2017 is not reflected in these statistics.

Gender Balance

Temporary Agents

	AST	AD	Grand Total
Female	4	24	28
Male	1	78	79
Grand Total	5	102	107

Contract Agents

	FG II	FG III	FG IV	Grand Total
Female	3	6	18	27
Male	0	2	19	21
Grand Total	3	8	37	48

Seconded National Experts

	SNE	Grand Total
Female	2	2
Male	3	3
Grand Total	5	5

Staff by gender and grade
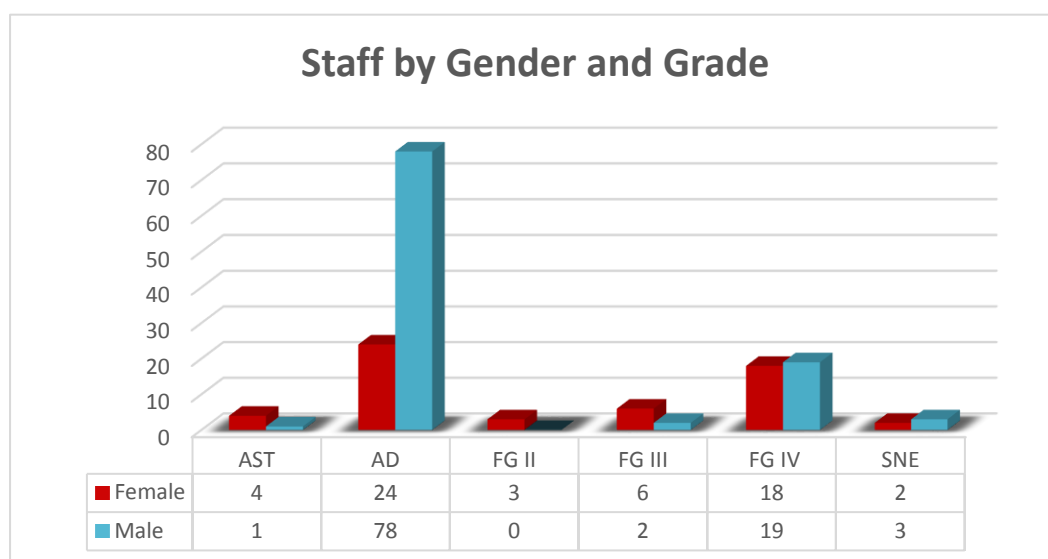
The specific technical labour market in which the Agency operates shows a predominant proportion of men. This specific characteristic makes it difficult for the Agency to achieve a balanced gender distribution. The Agency is fully committed to the provision of equality of opportunity for all the employees through its employment practices, policies and procedures, and gender equality is established as one of the GSA values. As of 2016 this value was introduced as part of the performance assessments as a means to promote gender equality competence for managers and staff. In this way

managers and staff are reminded to contribute to bring the organisation and all its activities in line with the objective of gender equality. All GSA boards and committees, including recruitment selection boards and joint reclassification committees, are composed paying attention to gender balance. All vacant posts are advertised containing statements regarding the Agency's practices as equal opportunities 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 and 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 considers with priority the underrepresented gender or nationality. The Agency is committed to continuously raising awareness of staff and managers on the asset that a diverse workforce represents. With regards to reconciling professional and personal life, a range of measures were put in place. These measures focus on teleworking, support to multicultural 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. The possibility of using flexi-time was also introduced.

Geographical Balance

Temporary Agents

	AST	AD	Grand Total
Belgium	2	5	7
Bulgaria		2	2
Croatia		1	1
Czech Republic		9	9
Estonia		1	1
France	1	23	24
Germany		2	2
Greece		2	2
Hungary		1	1
Ireland		1	1
Italy		22	22
Netherlands		2	2
Poland		3	3
Portugal		2	2
Romania		3	3
Slovakia		1	1
Spain	1	16	17

Sweden		1	1
United Kingdom	1	5	6
Grand Total	1	102	107

Contract Agents

	FG II	FG III	FG IV	Grand Total
Belgium		1	2	3
Bulgaria		1	1	2
Czech Republic	1	3	10	14
Finland			1	1
France			2	2
Greece	1		3	4
Italy			4	4
Malta			1	1
Poland			1	1
Romania	1	2	4	7
Slovakia			1	1
Slovenia			1	1
Spain			6	6
United Kingdom		1		1
Grand Total	3	8	11	48

Seconded National Experts

	SNE	Grand Total
France	2	2
Italy	1	1
Spain	1	1
United Kingdom	1	1
Grand Total	5	5

Staff by nationality

Staff by Nationality

Staff by nationality and grade

Staff by Nationality and Grade

	FR	IT	ES	CZ	BE	RO	UK	EL	PL	BG	DE	NL	PT	SK	HR	EE	HU	IE	SE	FI	MT	SI
SNE	2	1	1				1															
CA	2	4	6	14	3	7	1	4	1	2				1						1	1	1
TA	24	22	17	9	7	3	6	2	3	2	2	2	2	1	1	1	1	1	1			
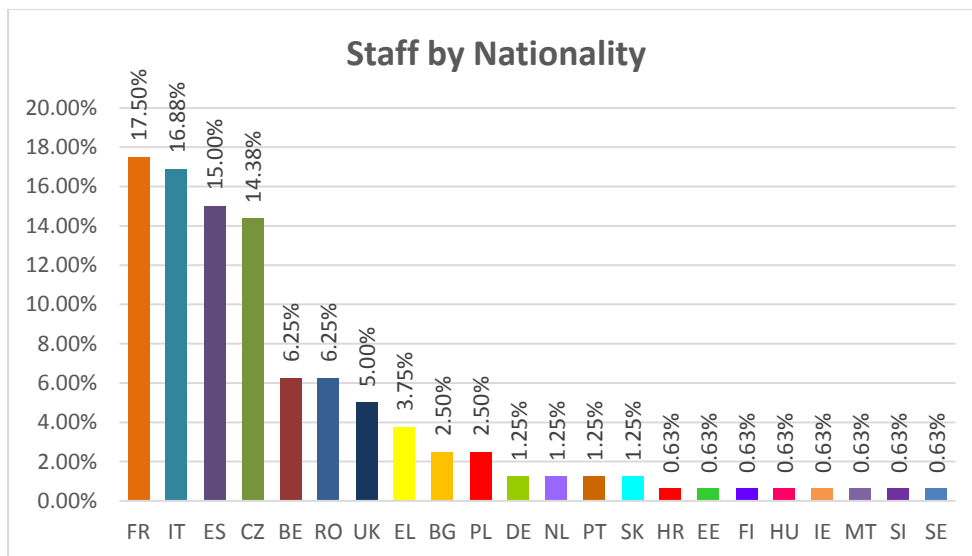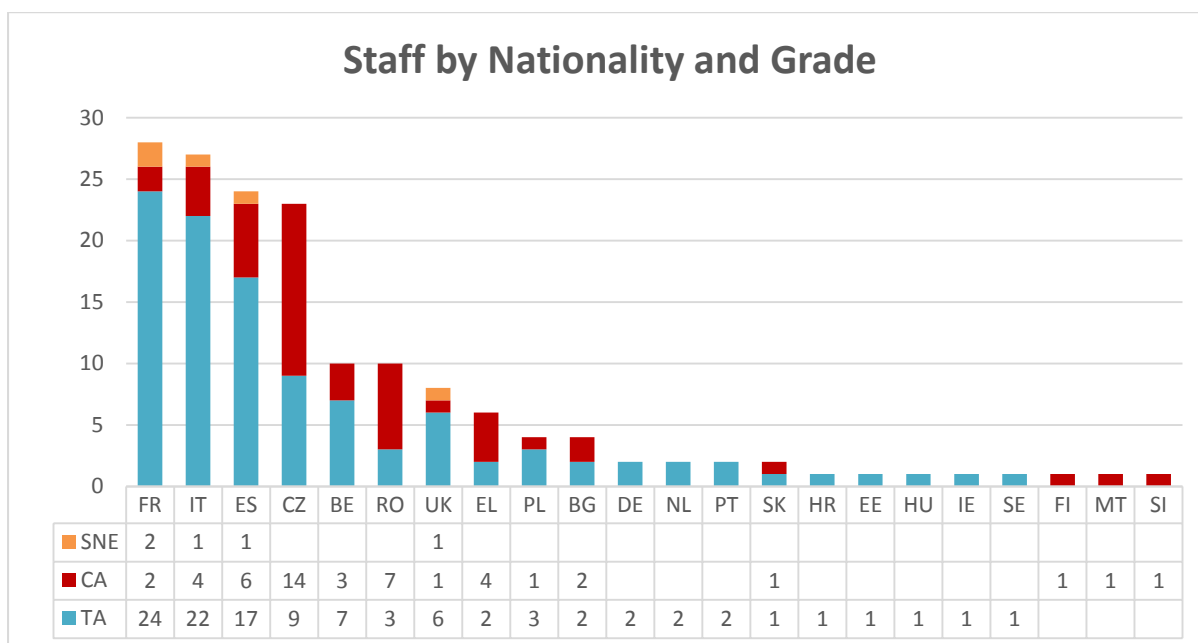
E. SCHOOLING

Prague does not currently offer an accredited European School. Until a European School is set up in the Czech Republic, the Administrative Board has adopted a transitional measure for staff to support the costs of international schools. The Agency has made a request to accelerate the accreditation of any of the international schools in Prague as a European School to the relevant Czech authorities. A

similar situation applies to staff located at the GSMC in France and the UK. Staff working at the GRC in the Netherlands have the possibility to make use of the European School in The Hague. Likewise, there is no European School in Toulouse either staff based there can apply for education allowances in-line with the applicable rules.

To date, the Agency has concluded 16 direct agreements with international schools in Prague including:

- Park Lane International School a.s.
- Riverside School
- Czech British School s.r.o.
- English International School of Prague s.r.o.
- 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)
- Mateřská škola b fresh s.r.o.
- Mateřská škola Duhovka, s.r.o.
- Soukromá základní Škola Hrou, s.r.o.
- Bambino Pre-school in Dejvice
- Bambino Pre-school in Kunratice (This school has since been closed)
- The Little Mole International Preschool of Prague
- Trois Petite Pommes
- KIDS Company Prague

The Agency concluded four direct agreements with international schools in proximity of Saint-Germain-en-Laye including:

- The British School of Paris
- Ecole Montessori Bilingue de Rueil Malmaison
- The Forest International School
- Montessori School of Saint-Germain-en-Laye

The Agency has concluded one direct agreement with an international school in the proximity of Swanwick, UK:

- St. Mary College

There were 72 children enrolled in Prague for the 2015-2016 academic year and 75 children for the year 2016-2017 (this is also the number of children as of 1 January 2017).

For the 2015-2016 academic year there were seven children enrolled from the GSMC site in France. This is the same for the 2016-2017 academic year.

Since the relocation to Swanwick in July 2016, two children were enrolled in the international school for the 2016-2017 academic year.

Annex V: Buildings

	Prague	Comments
Surface area (in square metres)	14 176.68	
of which office space	6 114	
of which non-office space	4 592.77	This is the area currently used by the Agency
Technical areas (HVAC technologies)	3 469.91	This is under the responsibility of the building owner
Annual rent (EUR)	190 190 (Proposed)	The maximum rent for 2018 is 200 000 EUR
Type and duration of rental contract	Indefinite	
Host country grant or support		The Agency pays 25 % of commercial rent and pays 100 % of its utilities consumption

	France (Toulouse)	Comments
Surface area (in square metres)	229	
of which office space	229	
of which non-office space	0	
Annual rent (EUR)	61 310	
Type and duration of rental contract	Indefinite	The contract is renewed yearly

	France (Saint-Germain-en-Laye)	Comments
Surface area (in square metres)	927	
of which office space	927	
of which non-office space		
Annual rent (EUR)	40 000	
Type and duration of rental contract	Indefinite	

	United Kingdom (Swanwick)	Comments
Surface area (in square metres)	328.4	
of which office space	328.4	
of which non-office space		
Annual rent (EUR)	404 460	
Type and duration of rental contract	Ends on 31 December 2030[29]	

	Belgium (Brussels)	Comments
Surface area (in square metres)	21	
Of which office space	21	
Of which non-office space		
Annual rent (EUR)	16 575	
Type and duration of rental contract	Indefinite	The contract is renewed yearly

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[29] In accordance with the decision of the Commission, the back-up GSMC will be relocated to Spain. The contractual implications of this transfer are being analysed

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 form immigration restrictions (Article 11).	
In addition, in the Czech Republic, the Agency enjoys VAT exemption for: local purchases higher than 4 000 CZK, 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).	In addition, exemption from social security scheme contribution in France (Hosting Agreement with France Article 13) and Czech Republic (Hosting Agreement with Czech Republic Article 13c).	
Further, the Agency enjoys immunities from national criminal, administrative and civil jurisdiction (Hosting Agreement with Czech Republic, Article 8).	Further, in the Czech Republic, 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) 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 venture team with the Finance department. Likewise, the Project Control is responsible for the control functionalities of EGNOS and Galileo.

The Agency's Internal Control Coordinator (ICC) exercises a 'coordination and reporting' role in relation to both internal controls executed by operational departments and to external controls from key stakeholders (like the Commission). The Administrative departments directly handle the relationship with the Court of Auditors, keeping the ICC informed.

The ICC coordinates interactions and controls through:

- The Internal Audit Capability;
- The Commission's Internal Audit Service;
- External auditors, hired to perform corresponding audits under Delegation Agreements for the benefit of the Commission's Directorate for Growth (DG GROW);
- DG GROWs internal control coordination.

The ICC executes ex-posts/actual controls. Actual controls are primarily executed by the Internal Audit Capability, the Commission's Internal Audit Service, and external auditors (for DG GROW), under the coordination of and involvement of the ICC.

Actual controls for the period 2018-2020 will be primarily executed in relation to major operations and/or horizontal processes (i.e. important procurements to be launched and managed by EGNOS and Galileo, horizontal processes like mission expenditure reimbursement process or procurement, funds to be allocated under Grant Management) and also in relation to typical horizontal topics of interest like those related to the various aspects of the Anti-Fraud strategy (conflict of interest, gifts and hospitality, etc.).

INFORMATION, REPORTING AND RECORDS

Information about audit records is systematically recorded 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 (IAS) Issue Track for periodic audit recommendations or in relation to operational topics, for example the Seventh Framework Programme (FP7) and H2020 grant management databases.

Annex VIII: Risks Management 2018

The key risks for 2018 are defined assuming 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 political and market objectives;
- Continue deployment, incorporate new satellites and ensure their successful integration into service operations;
- Ensure the definition of new/extended services (in particular, Commercial Services) and supervise system upgrade, the integration of GSMC (for security monitoring) and service providers (for GSC, GRC).

In this forward-looking prospective, the Agency's Risk Management Board approved the Agency's risk management policy in 2016. This enables the Agency to fulfil its mission in the most efficient and effective way by ensuring a proper, timely and adequate identification, evaluation, management and monitoring of all/main risks and opportunities where:

- Corporate risks are defined as 'potential events that adversely impact the Agency's achievement of strategic objectives, integrity of assets or staff, and/or fulfilment of corporate obligations';
- Corporate opportunities are defined as 'potential events that positively impact the Agency's achievement of strategic objectives, integrity of assets or staff, and/or fulfilment of corporate obligations'.

Corporate risks cover at least one of the two following notions:

- 'Strategic risks': risks that affect the overall achievement of the Agency's mission or may lead to a significant negative impact on its scope of activity, or which may affect the achievement of its strategic objectives and/or the integrity of its assets and people.

- 'Major risks' or 'severe operational risks': risks that, although related to a particular work package or Agency department, require Management/Executive Director awareness and monitoring as their occurrence may affect the overall achievement of the Agency's mission and/or the integrity of its assets and people. These include, for instance, risks that severely affect operations.

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

- GSA Headquarter in the labour market

- GSA resourcing level apportionment

- GSA readiness for post 2020 governance arrangements

- Achievement of Enhanced Services Milestone and Continuity of Initial Services

- Achievement of Full Services Milestone

- Continuity of Galileo Ground Segment activities through Galileo Working Arrangement

- Distribution of PRS information implementing Article 14

- Implementation of Galileo differentiators

- Effective market penetration (adoption high accuracy)

- Impact of BREXIT on GSA activities

The corporate risk activity started at the end of 2016 and gave the Agency an opportunity to benefit from the available management tool. One of the first outcomes of the assessment was risk mapping, or the connection between risks, which allowed the Board to define a more effective mitigation action plan for the following years. In 2018, the Agency expects to see multiple benefits from using this tool, particularly in the execution of identified mitigation actions. The target for 2018 is to have a continuously improving assessment of corporate risks.

Annex IX: Procurement Plan 2018

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

Please note that all launch dates and all 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
8,	Support services to independent reviews of security accreditation documentation	Q1-Q3	400 000	Specific Contract	1-2
8, 15	Support services to independent network security testing	Q1/Q2	200 000	Specific Contract	1-2
All	Support services to new tasks of the SAB	Q2	250 000	Specific Contract	1-2
8	Security assessment and outreach services	Q2	200 000	Specific Contract	1-2
	Total		1 050 000		

IX.02 PUBLIC REGULATED SERVICE (PRS) ACTIVITIES (WBS 2.03)

There is no budget from Title 3 for PRS Activities for 2018.

IX.03 GSMC OPERATIONS & PREPARATION (WBS 4.06)

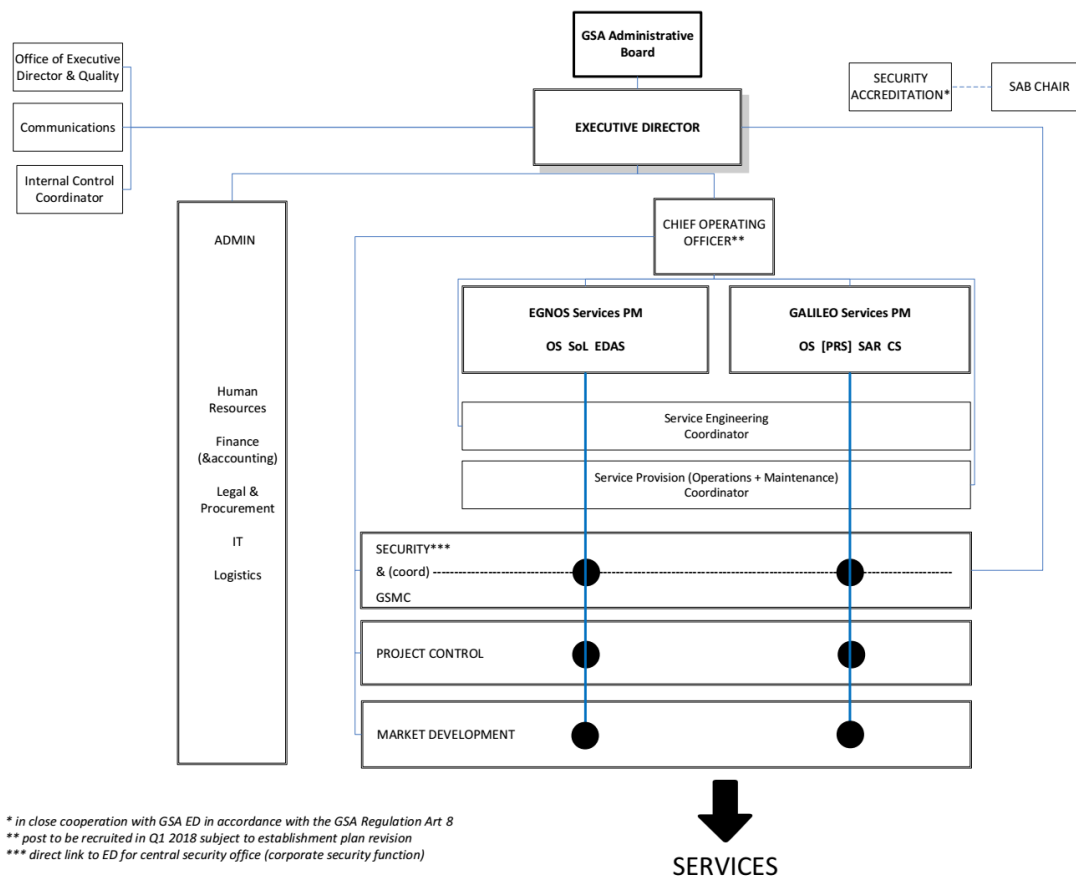| Objective	Name	Launch date	Budget (EUR)	Type of contract	Number of contracts
8	Acquisition and maintenance of GSMC SECTRA operational network	Q1	10 200	Specific contract	1
2	Quality management support services	Q2	413 400	Specific contract	1

Objective	Name	Launch date	Budget (EUR)	Type of contract	Number of contracts
6	GSMC security support services	Q3	2 537 400	Specific contract	1
7	GSMC security monitoring services	Q2	300 000	Specific contract	1
	Total		3 261 000		

IX.04 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	EGNSS user segment and market development in transport (aviation, road, rail, maritime)	Q4	650 000	Specific contract	4
5, 7, 8	EGNSS user segment and market development in high precision (agriculture, surveying, timing)	Q3	450 000	Specific contract	3
6	EGNSS user segment and market development in mass market	Q2	350 000	Specific contract	1
1 to 8	Market monitoring, user management and technology monitoring, including cooperation with receiver manufacturers	Q2	650 000	Specific contract	2
9	Promotional events, attendance at industry events	Q1	500 000	Specific contract	3
9	Web development and maintenance, video production and supporting publications	Q1	500 000	Specific contract	1
	Total		3 100 000		

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Annex X: Organisation Chart 2018

The GSA re-organisation was decided on in March 2017 as presented below.

GSA Administrative Board

Office of Executive Director & Quality

Communications

Internal Control Coordinator

EXECUTIVE DIRECTOR

SECURITY ACCREDITATION*

SAB CHAIR

CHIEF OPERATING OFFICER**

ADMIN

Human Resources

Finance (&accounting)

Legal & Procurement

IT

Logistics

EGNOS Services PM

OS SoL EDAS

GALILEO Services PM

OS [PRS] SAR CS

Service Engineering Coordinator

Service Provision (Operations + Maintenance) Coordinator

SECURITY***

& (coord)

GSMC

PROJECT CONTROL

MARKET DEVELOPMENT

SERVICES

*in close cooperation with GSA ED in accordance with the GSA Regulation Art 8
** post to be recruited in Q1 2018 subject to establishment plan revision
*** direct link to ED for central security office (corporate security function)

Annex XI: Tasks delegated to the European GNSS Agency

The Delegation Agreements between the Commission and the Agency that will be in force during 2018 are:

- Delegation Agreement for the Public Regulated Service (PRS) (signed in September 2011)

- Delegation Agreement for EGNOS Exploitation;

- Delegation Agreement for Galileo Exploitation;

- Delegation Agreement for the management of Horizon 2020 projects.

XI.1   DELEGATION AGREEMENT FOR PUBLIC REGULATED SERVICE (2011)

The Agency manages the Commission PRS Pilot Project 2 (P3RS-2) that started in December 2013. This includes the procurement of 20 PRS pre-operational receivers, in two batches of 10 units, each equipped with a different security module.

XI.2 DELEGATION AGREEMENT FOR EGNOS EXPLOITATION

The EGNOS Exploitation Delegation Agreement was signed on 16 April 2014, delegating 1 450 000 000 EUR to the Agency to undertake EGNOS exploitation tasks during the period 2014-2020. These include the provision of the Open Service, the Safety of Life Service and the EGNOS Data Access Service to users. This agreement defines the EC-GSA link for EGNOS exploitation as foreseen in the GNSS Regulation. Subsequently, a GSA-ESA Working Arrangement was signed in July 2015, per the GNSS Regulation. The working arrangement addresses the development of EGNOS V242 system upgrades and the EGNOS new generation (EGNOS V3).

On 27 September 2016, the delegation agreement was revised, delegating an additional 102 000 000 EUR to the Agency to undertake other tasks relating to extending EGNOS to Africa and V3 initial operations.

A summary of the EGNOS Service Evolution Plan, once the Service Evolution Plan approved by the Commission, is included in annex.

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Planned procurement

Activity	Title/Description	Type of financial instrument: procurement/grant	Existing/new/contract/ agreement (if defined)	Indicative number of contracts/agreements/ amendments/exercising of options	Indicative timetable for publication/launch	Indicative funds set aside for the award of contracts (k€)
EGNOS Programme Engineering support	• Specific contract for external support	Procurement	New	1	S1 2018	1,500
EGNOS Service Provision enablers	• Analysis of EGNOS based operations • Annual update of the SBAS capabilities in EU aircraft database • Training and analysis of aviation users' needs • Support to regulators to implement EGNOS based helicopter operators • Technical support for multimodal standards • Technical studies and simulations to support standardisation efforts at system- and receiver-level in the aviation, maritime and rail domains	Procurement	New and existing	3	S2 2018	950
EGNOS V2.4.2 B Phase C/D	• V2.4.2 B Phase C/D procurement through EGNOS GSA-ESA Working Arrangement	Procurement	New	1	S1 2018	TBC
EGNOS Service Provider activities	• Disposal of old equipment • Implementation of obsolescence study recommendations • 3 Additional V2/V3 RIMS sites: Kuusamo, Kiev, Ma'an (civil works, hosting and maintenance) • Extension of service provision to non-ANSP users • ESSP operations adaptation to hardware updates	Procurement	New and Existing	4	S1 2018	TBC

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	• Procurement of 4F2 GEO extension from 2022 to 2024					
EGNOS Service Provider Security	• System Security Risks analyses and treatment plans • EGNOS Service Provider Security Oversight Risk Treatment Plan implementation • Security related changes to EURONOTAM, EDAS • New specific contracts for external support.	Procurement	Existing	5	S1 2018	11,250

XI.3 DELEGATION AGREEMENT FOR GALILEO EXPLOITATION

The Galileo Exploitation Delegation Agreement between the Commission and the Agency was signed on 2 October 2014, with an amendment on 15 December 2015 and on 7 December 2016 and at the time of writing has delegated a budget of 2 400 000 000 EUR. The agreement and its amendments provide a framework and budget for the provision of Galileo services through 2021 and serves as an initial step towards the full Galileo exploitation phase. Under this agreement, the Agency undertakes Galileo exploitation tasks that result in the provision of Initial Services for the Open Service (OS), Public Regulated Service (PRS), and Search and Rescue (SAR) service. Furthermore, the Agency is preparing the provision of the Commercial Service (CS). The GSA carries out all activities necessary to launch and conclude public procurements and grant procedures, and manages the ensuing contracts and grant agreements.

Pursuant to Article 14(4) of the GNSS regulation, the Agency entered into a working arrangement with the ESA on 15 December 2016.

The exploitation phase was progressively rolled out from 2014 to 2017, with full operational capability scheduled for 2020. The implementation period of the Agreement runs until 2021.

Planned procurement

Activity	Title/Description	Type/subject of contracts envisaged (studies, technical assistance, industrial contracts…)	Type of financial instrument: procurement/grant	Existing/new/contract/ agreement (if defined)	Indicative number of contracts/agreements/ amendments/exercising of options	Indicative timetable for publication/launch	Indicative funds set aside for the award of contracts (k€)
Mission and Control Segments, including WP2, WP2X, GSF, WP3 and WP3X	• GSA networks	GSA network for GSMC backup	Procurement	New	1	S1 2018	TBC
	• Specific Contract 2 of Working Arrangement stage 3	SC2 of WA stage 3: WP2X Ground Mission Segment	Procurement	New	1		
	• Specific Contract 2 of Working Arrangement stage 2	SC2 of WA stage 2: WP3X Ground Control Segment	Procurement	New	1		
GNSS Service Centre (GSC)	• GSC operations, maintenance and infrastructure	Specific contract to create GSC V2 Infrastructure including with respect to Commercial Service and OS Navigation Message Authentication (NMA)	Procurement	Existing and new contract commitment	2	S1 2018	8,500
GSMC Hosting	• Service Centres - GSMC	Support in reviews of WP2X deployments/engineering of technical support procedures	Procurement	New	1	S1 2018	300
Exploitation support and communication	• Galileo Communication	Galileo communication events, web site, publications, video for Galileo communications.	Procurement	New	2	S1 2018	900
SAR	• SAR	Change to SGDSP framework contract for SAR activities	Procurement	Existing	2	S1 2018	TBC

Fundamental Elements	• Development of safety of life for localisation in train signalling	Development and qualification of a Safety of Life multiconstellation receiver for use in Safety critical railway signalling applications according to the user requirements	Grant	New	1	S1 2018	17,000
	• Emerging innovative receiver technologies	Foreseen to comprise a series of small grants (€200k each) managed via the Integration activity	Grant	New	5		
	• OS Authentication grants	OS Authentication User Terminals to be funded through grants	Grant	New	2		
	• Receiver I/NAV improvements	Development of receiver prototype implementing I/NAV improvements	Procurement	New	TBC		
	• Receiver for autonomous driving	Fundamental Elements-Multi-frequency receiver for autonomous driving/navigation, to be published in Q1 2018, once first outcomes of the FE project ESCAPE will be consolidated	Grant	New	2		
	• Receiver Technologies	Receiver technologies grants	Grant	New	5		
Exploitation & Standardisation support	• Engineering Support Specific Contract	External Support for GSA	Procurement	Existing	1	S1 2018	4,300
	• Tools Procurement	Procurement of GNSS Receivers and related equipments in support of the GSA-led Service Monitoring and Validation activities	Procurement	New	1		
Service Operations	• Service provision	activities needed for service operations mainly due to system evolution	Procurement	Existing	9	S1 2018	TBC
PRS and Security	• GSMC OPS interface training and support	External Support for GSA	Procurement	Existing	1	S1 2018	TBC

	• Security Engineering Support Specific Contract	External Support for GSA	Procurement	Existing	2		
	• Tools	PRS tools	Procurement	Existing	1		
	• Communication Networks	Galileo Robust Operational Network (GRON) version 2	Procurement	Existing	3		
	• PRS support activities		Procurement	Existing	2		
Galileo GSA Programme Management Reserve for 2018	• GSA Programme Management Reserve 2018	GSA Programme Management Reserve for 2018	Procurement	New	10	S1 2018 -S2 2018	TBC

XI.4 DELEGATION AGREEMENT FOR HORIZON 2020

The Commission has delegated the Agency responsibility for the implementation of H2020, based on the Delegation Agreement signed in April 2014 and amended in November 2014. The indicative total maximum amount of EU contributions to the Agency for the duration of the Agreement shall be 168 000 000 EUR. The annual maximum amount of EU contribution for the implementation of the entrusted tasks shall be defined in the transfer of funds agreements by the parties.

According to the general provisions of the delegation agreement, the Commission entrusts the Agency with the implementation of tasks under the following part of H2020 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.

The Agency's main tasks include the management of grant award procedures for the call for proposals, as well as managing the grants awarded without a call for proposals covered by a transfer of funds agreements, such as the publication of the call[30]. Moreover, the Agency shall manage all stages in the lifetime of actions supported by grants awarded under a transfer of funds agreement, using the IT tools developed for the purpose of managing H2020.

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, and also provide support to the Commission in implementing Galileo-related activities.

In 2018, the Agency will manage two projects from the first and nine projects from the second H2020 calls. The Agency kicked off the former in the first quarter of 2015 and the latter at the beginning of 2016. The Agency launched a third call for proposals on 8 November 2016, with a submission deadline of 1 March 2017. Projects awarded under this call will be managed in 2018.

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[30] See reference to calls: https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-galileo-gsa-2017.htm^l

In addition to the above mentioned tasks, the Agency has also endorsed the launch and management of PRS user segment related procurements organised into two items. In 2017, all projects under H2020 PRS were running and the Agency will have to continue to ensure the project and technical management of all procurement actions. In total, five projects will be running in 2018 (one under H2020 PRS Item 1 - DISPATCH, and four under H2020 PRS Item 2 - PRISMA).

The projects that the Agency shall manage in 2018 are shown below.

Acronym	Title
First H2020 Call	
SAT406M	An EGNSS application providing an end-to-end solution based on the SAR/Galileo service and, in particular, using the Return-Link-Message to improve the mobility and safety of citizens
BELS	Building European Links toward South East Asia in the field of GNSS
Second H2020 Call[31]	
BLUEGNSS	Promoting EGNSS operational adoption in BLUEMED FAB
EASY Pv	EGNSS high accuracy system improving photovoltaic plants maintenance
HELIOS	Second generation beacon for GALILEO/EGNOS EGNSS Search and Rescue applications
INLANE	Low-cost GNSS and computer vision fusion for accurate lane level navigation and enhanced automatic map generation
LOGIMATIC	Tight integration of EGNSS and on-board sensors for port vehicle automation
MOBNET	Mobile network for people's location in natural and man-made disasters
SKYOPENER	Establishing new foundations for the use of remotely-piloted aircraft systems for civilian applications
STARS	Satellite technology for advanced railway signalling
STRIKE3	Standardisation of GNSS threat reporting and receiver testing through international knowledge exchange, experimentation and exploitation

The H2020 third call was closed on 1 March 2017 with 78 proposals submitted. The indicative budget for this call is 33 000 000 EUR.As part of the H2020 delegation agreement, the Agency will organise events and other opportunities to promote the participation in and results of the programme.

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[31] Please note that majority of the 2nd Call projects are in the Grant Agreement preparation process while writing this document. In case the project will not sign the Grant Agreement, it will not be granted.

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