



European
Global Navigation
Satellite Systems
Agency

ADOPTED
by the GSA Administrative Board

GSA-AB-45-16-06-05

European GNSS Agency

45th meeting of the Administrative Board

Prague, 23 June 2016

**adopting the annual activity report of the European GNSS
Agency for year 2015**



DECISION OF THE ADMINISTRATIVE BOARD OF THE EUROPEAN GNSS AGENCY

of 23 June 2016

adopting the annual activity report of the European GNSS Agency for year 2015

THE ADMINISTRATIVE BOARD OF THE EUROPEAN GNSS AGENCY ('Agency' or 'GSA'),

Having regard to Regulation (EU) No 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency as amended by Regulation (EU) No 512/2014 (hereinafter referred to as the "GSA Regulation"), and in particular to Article 6(2)(h) thereof,

Having regard to Regulation (EC) No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of European satellite navigation systems, and in particular to Article 14 thereof,

Whereas:

- (1) Under Article 6(2)(h) of the GSA Regulation the Administrative Board should adopt the annual report on the activities and prospects of the Agency,
- (2) This report should incorporate without any change the section drafted by the Security Accreditation Board in accordance with point (c) of Article 11(4) of the GSA Regulation,
- (3) This report should be forwarded, by 1 July, to the European Parliament, the Council, the Commission and the Court of Auditors;

HAS DECIDED AS FOLLOWS:

Article 1

The annual activity report of the European GNSS Agency for year 2015, attached in annex, is hereby adopted.

Article 2

This decision enters into force on the day following its adoption.



European
Global Navigation
Satellite Systems
Agency

ADOPTED
by the GSA Administrative Board

GSA-AB-45-16-06-05

Done in Prague on 23 June 2016

For the GSA Administrative Board

A handwritten signature in blue ink, reading "Danielle", is enclosed within a rectangular box.

Chair of the GSA Administrative Board



Consolidated Annual Activity Report of the European GNSS Agency Year 2015

[In pursuance of Financial Regulations 996/2012, Framework Financial Regulations No 1271/2013 and Regulation (EU) No 912/2010¹]

¹ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union; Regulation (EU) No 1271/2013 of 30 September 2013 on the framework financial regulation for the bodies referred to in Article 208 of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council and Regulation (EU) No 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency.



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Management Analysis and Assessment

Note by the Chair of the Administrative Board

The year 2015 was a very important and also very successful one for European GNSS. Three launches with 6 more satellites in space and another 6 planned to be launched in 2016, show that Galileo is growing quickly and we expect the initial services to be available in 2016.

The GNSS Regulation No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of European satellite navigation systems established a new governance for the exploitation phase of the European GNSS programmes. This refers to the exploitation of EGNOS services and the upcoming availability of Galileo initial services. The Commission delegated these tasks to the Agency through specific Delegation Agreements for EGNOS, Galileo and Horizon 2020 – these were all signed in 2014 and significantly increased the number of delegated tasks as the Agency became entrusted with all the tasks related to the exploitation of the GNSS programmes (EGNOS and Galileo) and with the management of Horizon 2020 grants. In 2015 the Board supported the achievement of the Agency's strategic goals and contributed to this by getting the Agency ready especially for the exploitation of the Galileo programme, inter alia maintenance, operations and service provision and the management of a considerable volume of contracts and grants.

In 2015 the Board therefore decided inter alia on an anti-fraud strategy and action plans, on an internal audit capability work plan for 2015 and 2016, and a policy on prevention and management on conflict of interest. The latter was laid down in new rules of procedure for the Board. To foster the Agency's performance and effectiveness, the Board also decided on the appointment of an Accounting Officer from the Commission, instead of having an in-house officer, and on sharing an Internal Audit Capability with the Chemical Agency.

The Agency noted its loss of attractiveness as an employer which resulted in being at risk of failing to retain and hire managers and senior technical experts. The Board decided in mid 2015 to create a think tank to discuss possible social measures to help the Agency recover its attractiveness as an employer in a very competitive and technical labor market niche. After having reviewed the recommendations, the Board agreed on the provision of a set of social measures that the Agency shall design and implement from 2016 onwards. These measures are temporary in nature and the Agency will pursue other long term structural measures as well.



Last, but definitely not least, the Board decided to extend the Executive Director's term of office to provide four more years of stability for the Agency in these busy, but exciting, times.

As my second term of office will run out mid-2016, I would like to express my sincere thanks to all the people I had the pleasure to work with as Chair of the Board for their cooperation and commitment and to express my hopes and expectations that, although there is still a lot to be done, European GNSS is on a good path now and will bring considerable benefits to all its users in the very near future.

Sabine Dannelke

Chair of the Administrative Board



Note by the Chair of the Security Accreditation Board

This has been another challenging year due to a heavy launch schedule and constant changes in the Galileo programme schedule. The Security Accreditation Board (SAB) has nevertheless proactively continued to engage the EU GNSS Programme management authorities in a demanding dialogue to improve the overall security management processes and to gain concrete improvements in terms of security.

The SAB authorised three Galileo launches in 2015. The Flight Key Cell (FKC) ensured full coverage of these launches and successfully oversaw the secure distribution of Galileo flight key material and satellites throughout the launch operations.

The Galileo Initial Authorisation to Operate (IATO) was extended twice, lastly and for the first time for a period up to one year, whilst at the same time being made subject to a number of conditions that the Programme is expected to implement. Work on fulfilling the conditions that significantly reduce the risk profile continues. Although the Initial Services declaration has been postponed beyond 2015, the security accreditation activities have started.

Sites Authorisations To Operate (SATO) were extended for a good half of the Galileo ground infrastructure, and sites authorisations have been added for new sites, raising the total number of Galileo sites authorised to operate to 32 by the end of the year.

The SAB issued 35 interim authorisations to European companies supporting or directly involved in the development of technology for the Public Regulated Service (PRS), raising the total number of SAB authorised companies above 80.

During its second year of existence, the SAB Crypto Distribution Authority (CDA) continued to work firmly on COMSEC activities, including governance, organisation, identification of COMSEC assets, distribution and further accounting of the COMSEC assets within the Programme. Whilst a number of shortfalls have been identified, the CDA first provided recommendations to the Programme, which led the Commission to adopt a clear EU GNSS INFOSEC and COMSEC organisation at the end of the year, including the establishment of an EU GNSS Distribution Authority under the Programme Crypto Authority to manage the Programme COMSEC assets. Finally, thanks to close co-operation with the stakeholders, progress was made to establish a centralised overview of the GNSS COMSEC assets and to obtain assurance on their certification and approval, thereby significantly reducing the COMSEC risk within the EU GNSS Programmes.



Unfortunately, EGNOS preparatory accreditation activities, which had begun in 2014, had to be put on hold in November 2015 pending a clear request from the EGNOS programme regarding the accreditation of EGNOS v2 and/or v3.

It is worth noting that the SAB achieved these results with limited and reducing resources, thanks to the significant efforts of all actors involved. I would like to take this opportunity to acknowledge the significant commitment of all stakeholders to the success of the EU GNSS programmes, and thank them for their efforts and co-operation whilst at the same time acknowledging that much still remains to be done within the security arena. I must also recognise and applaud the professional competence demonstrated and advice offered by the SAB support team who enable the SAB to take informed, yet difficult, decisions ensuring the security of this important EU asset. In particular I wish to thank my Deputy Chair Bruno Vermeire for his constant support and wise counsel and my colleagues from the SAB who have renewed both of us for another two-year mandate.

Jeremy Blyth

Chair of the Security Accreditation Board of the EU GNSS

Note by the Executive Director

The year 2015 ended my first term as Executive Director of the Agency and marked an important step in the maturity of the Agency and its efforts to take over new ambitious responsibilities.

Galileo is growing quickly and the Agency is preparing itself for the transition to service provision which will materialize in 2016:

- The Galileo Service Operation invitation to tender was launched at the beginning of the year and progressed over the year.
- The Galileo Security Monitoring Centre (GSMC) successfully achieved the Operation Validation Readiness Review in the summer.
- The Galileo Reference Centre deployment and operation invitation to tender was launched at the end of the year.

The Agency learnt from the EGNOS service provision which progressed successfully over 2015, with one of the best performing years ever achieved. With the announcement in October of LPV-200 capabilities, equivalent to ILS CAT I, this provides civil aviation users with new potential benefits on top of the existing 180 airports which already benefit from EGNOS across Europe. It is worth mentioning that the Agency has consistently encouraged EGNOS usage in other sectors such as maritime, rail and road transport. Significant results are now becoming visible thanks to these efforts.

The Agency's work in the security field is also growing:

- The Security Accreditation Board was adequately supported during an intense year, characterised by three launches and the related initial authorizations to operate.
- The Public Regulated Service (PRS) user segment team succeeded in launching three key developments that enable European industry to be competitive in this very specific market, proving competences which are quite unique.

Overall the Agency's administrative and managerial functions are also rapidly growing, despite some instability caused by high staff turn-over:

- Human resources, the Agency's real capital now stands at 139 employees.
- The annual number of financial transactions, which gives an idea of the volume of administrative work is now 4267.



- The number of procurements, which indicates how the whole Agency attempts to outsource services and goods is now 267

All the above requires more and more careful trade-offs between efficiency and compliance with existing Regulations. In this respect 2015 was a positive one without major observations from the Court of Auditors, the Internal Audit Service or external auditors. This provides us with solid grounds to be optimistic, enthusiastic but nevertheless cautious about the next four years. This period coincides with my next four year term as Executive Director, as confirmed by the Administrative Board at the end of October .

Carlo des Dorides

Executive Director

Executive Summary

By developing a new generation of Global Navigation Satellite Systems (GNSS), Europe is opening new doors for industry development, job creation and economic growth. With Europe in the driver's seat, Galileo has the potential to become a cornerstone of the global radio-navigation positioning system of the future. In support of Galileo, and EGNOS, the European GNSS Agency was established in 2004 as a European Union Regulatory Agency.

During the reporting period, the Agency was responsible for a range of activities, including:

- Ensuring the security accreditation of the system and the operation of the Galileo Security Monitoring Centres (GSMCs). The Security Accreditation Board approved the fourth, fifth and sixth launches, which were held successfully during the reporting period.
- Operating the Galileo Security Monitoring Centre (GSMC). During the reporting period, the Operations Validation Readiness Review took place successfully in line with the programme schedule.
- Accomplishing other tasks entrusted to it by the European Commission, such as managing the research and development EU framework programmes for European GNSS applications, promoting satellite navigation applications and services, preparing for the successful commercialisation and exploitation of the systems, aiming for smooth functioning, seamless service provision and high market penetration, and ensuring that the systems' components obtain certification. The Agency managed the second call for proposals during the reporting period.
- Fulfilling the terms of two delegation agreements related to the exploitation phases of the Galileo and EGNOS satellite programmes. The Agency has been involved in preparatory activities since 2012 under the terms of a previous agreement. During the reporting period, the Agency carried out Phase-I of the Galileo Service Operator tender by completing the evaluation of preliminary proposals and initiating the competitive dialogue (Phase-II). The Agency also ensured a smooth transition of System Evolution activities performed by ESA, from the EC-GSA Delegation Agreement to the GSA-ESA EGNOS Working Arrangement. The Agency concluded and signed this Working Arrangement in July 2015.
- Fulfilling tasks defined under a delegation agreement related to management of projects under the Horizon 2020 framework programme. The projects concerned are all related to GNSS applications.

The Agency has fulfilled the terms of its Annual Work Programme for the reporting period with a few exceptions. Some tasks were affected by the declaration of Galileo Initial Services which was delayed to 2016. The Agency also faced difficulties in recruiting and retaining staff which led to the formation of a think tank composed of members of its Administrative Board to identify potential short-term and long-term solutions.



1 Achievements of the year

The Agency performs both core tasks under Regulation (EU) No 912/2010 of the European Parliament and of the Council on setting up the European GNSS Agency ("GSA Regulation") and a number of tasks under delegation from the European Commission. The delegated tasks are described in section 1.8.

All activities are mapped in the Agency's Work Breakdown Structure (WBS). Each objective is shown here with the appropriate WBS number as a reference to show how the Agency's activities are structured.

1.1 Agency Management (WBS 1)

During the reporting period, the Agency continued with the implementation of its Integrated Management System following the successful ISO 9000 quality certification in the previous year. As part of its continuous improvement programme, the Agency upgraded all relevant documentation and followed up on all relevant actions.

A major development in this respect is the Agency's Work Breakdown Structure (WBS) through which an agency-wide approach towards the management and modelling of business processes can be applied. This contributes to the mapping and organisation of all major activities in a common format across all departments. It is complemented by 137 Work Package Descriptions (WPD) containing information on inputs and outputs, task ownerships, KPIs, milestones, etc. The numbering system established for the WBS and corresponding WPDs will be in line with related high-level Agency documentation (e.g. Annual Activity Report, Single Programming Document, etc.), allowing its consistency and suitable alignment. The WBS is also structured in a manner that will be compatible and will serve as a reference point for other activities such as budgeting (Agency and Delegated activities, budgetary processes), audits, scheduling, document management and staff resource planning. In addition, the analysis of WBS and associated WPDs will support the interfaces between WPs, enabling the identification of overlaps and gaps among all activities carried out by the Agency.

The WBS covers both core and delegated activities.

The Agency also developed an Internal Audit Capability, which designed and implemented a work plan for the period 2015-2016.



1.1.1 Tasks

Task	Name	KPI/Deliverable	Timing	Results
1.	Implementation of the Integrated Management System (IMS)	<ul style="list-style-type: none"> IMS periodically assessed and maintained IMS documentation upgraded and made available internally Meetings for Quality Officers & Quality Management Board meetings coached. Actions agreed, executed and documented. IMS related training (Quality management and Quality Audit) made available and delivered. 	Periodically throughout the year	<ul style="list-style-type: none"> The continuous improvement of the Agency's integrated management system continued in line with ISO 9001 requirements.
2.	Design and implementation of the Internal Audit Capability (IAC)	<ul style="list-style-type: none"> Develop IAC Audit Processes Present IAC Annual Work Plan Implement IAC Annual Work Plan IAC Annual Activity Report 	<ul style="list-style-type: none"> 15 Feb 15 Mar Q2-Q3 End 2015 	<ul style="list-style-type: none"> The IAC work plan for 2015-2016 was presented and approved by the Administrative Board. It is being implemented and will be completed by the end of 2016. The IAC will issue an audit report once implementation is complete.



1.2 Security Related Activities (WBS 2)

The Agency's security related activities during the reporting period, outside those falling under chapter III of the GSA Regulation, are grouped under the following two headings:

- Central Security Office (CSO)
- Tasks related to the PRS Decision No 1104/2011/EU

1.2.1 Central Security Office (WBS 2.02)

The Agency's Central Security Office offered services to the entire Agency in all its locations. This office assumed the functions of the Agency's Central EUCI Registry, and established and maintained a secured document management system for classified documents.

Some of the planned activities were affected by the reconstruction of the Agency's Headquarters, which required ensuring the security of the building whilst guaranteeing the provision of nominal security services in support of the whole Agency.

1.2.2 Tasks related to the Decision No 1104/2011/EU (PRS Decision) (WBS 2.03)

As part of the technical assistance task to the Member States' Competent PRS Authorities (CPAs), the Agency continued supporting these CPAs, notably through the organisation of a CPA workshop. This workshop focused mainly on the organization of the PRS pilot projects and the establishment of the CPA set-up for which the Agency was developing a guidance document.

The Agency started the implementation of all the processes and procedures required to ensure that all its activities are in line with the PRS Decision as specified through the PRS arrangement with the Commission under Article 14 of the PRS Decision, which was signed in December 2014. This includes the development of a draft PRS need-to-know policy and the design of a classified document management system. The latter is being implemented on the GSUE network. The late approval of the PRS Common Minimum Standards will require a gap analysis of the elaborated processes and an update of the relevant procedures is expected to ensure consistency.

Due to the lack of allocated PRS core budget and unexpected shortfalls in resources within the security department (half of the staff allocated to PRS activities have left); the planned tasks related to the PRS Decision 1104 have not been fully implemented.



1.2.3 Tasks

1.2.3.1 Central Security Office (WBS 2.02)

Task	Name	KPI/Deliverable	Timing	Results
1.	Develop/amend policies and procedures for the corporate security of the Agency, including for a classified Document Management System, in line with EU rules and the quality project	Number of policies/procedures established/amended	Q2	<p>The policies are in place (Headquarters guarding manual, Access Badges Lifecycle, updated Security Operations for Secured Areas and meeting rooms of different levels of classification), as well as procedures (security clearances management, security incidents management, physical access to security areas and EUCI handling).</p> <p>A first version of the Document Management System for the handling of classified documentation (which also contains PRS information) was designed.</p> <ul style="list-style-type: none"> The physical security of the headquarters is secured and maintained. The Agency has treated all reported incidents appropriately. Secured areas are accredited and operational. Reconstruction of the building (which occurred in 2015) will require a re-accreditation process, which is dependent on the material to be provided by the Ministry of Finance (the owner of the building) to the National Security Authority. This documentation was delivered in May 2016.
2.	Ensure the physical security of the headquarters in liaison with the National Security Authority (NSA)	<ul style="list-style-type: none"> 100% of facilities accredited/reaccredited 100% of reported incidents investigated and treated 	Q1-Q4	
3.	Administrate the Agency's staff Personal Security Clearances and authorisations	<ul style="list-style-type: none"> 100% of Personal Security Clearances administrated in liaison with the Member States' NSAs 100% of the authorisations administrated 	Q1-Q4	<p>The Agency administers all the personal security clearances and authorisations on a regular basis. No non-conformities were noted.</p>



Task	Name	KPI/Deliverable	Timing	Results
4.	Administrate the Agency Central EUCI Register and checking decentralised registers	100% guarantee of compliance with 2015/844/EC for the central end decentralised registers	Q1-Q4	100 % compliance with (the newly adopted) Decision 2015/444/EC was properly reached and maintained. All necessary documentation was updated accordingly. A discussion on updating the existing system of central and decentralised registers has been opened.
5.	Develop the security training plan for Agency personnel and ensure the implementation at Agency facilities	Approval of the corporate security training plan; checking the implementation at Agency headquarters, GSMC and GSC.	<ul style="list-style-type: none"> Plan by Q1 Check by Q4 	This task is not complete, mostly due to the delayed reconstruction of the headquarters, and the subsequent security system updates and re/accreditation. The Agency delayed the development of the training plan to follow the new existing conditions.
6.	Administration of keys for the various groups (GNSS Security Board, SAB, GNSS Security Accreditation Panel, etc.)	Timely generation, distributing and administration of keys for all groups	Q1-Q4	The administration of all the relevant keys was provided successfully, following the needs of all the relevant bodies.
7.	Prepare the Agency secured networks for accreditation by the Security Accreditation Authority (SAA)	Decision by the SAA to accredit the Agency secured network RUES	Q1 2015 if IT infrastructure deployed by December 2014	The RUE network has not yet been deployed. The re/accreditation of other systems runs smoothly, according to the existing policy. A clear overview of existing accreditations and/or requests has been developed to make the accreditation process more efficient.
8.	Ensure the security aspects of the extension of the Prague facilities	In view of the full occupation of the Prague building by January 2015, preparation and implementation of the security related aspects in coordination with the relevant services of the Agency and of the Czech authorities	Q1-Q4	The security aspects of the Prague facilities have been properly ensured – both during the process of reconstruction (where the CSO provided overseeing duties on security systems) and afterwards. The Agency's incorporation into the Czech Military Critical National Infrastructure is almost finalized. The Agency's incorporation into the Czech Civilian Critical National Infrastructure started during the reporting period and discussions are on-going.
9.	Ensure industrial security in line with EU rules	Advising and preparing on security aspects of Agency industrial contracts. Guarantee 100% compliance with 2006/548/EC	Q1-Q4	The industrial security aspects are properly kept within the Agency, following the relevant Commission legislation.



Task	Name	KPI/Deliverable	Timing	Results
10.	Develop security oversight procedures and ensure the implementation at Agency facilities in compliance with 2001/844/EC	Approval of a corporate security oversight plan; implementing the plan at Agency headquarters; checking the implementation at the headquarters, GSMC and GSC. 100% compliance with 2001/844/EC	<ul style="list-style-type: none">Plan by Q1Check by Q4	The corporate security oversight plan was not finished, due to the delays in the finalization of the headquarters reconstruction.
11.	Develop in cooperation with the HR department and in coordination with the Commission DG HR, the HR policies with security related content	Finalised policy (determined by HR)	<ul style="list-style-type: none">Plan by Q1;Check by Q4	The CSO has provided the necessary support and will (according to ongoing cooperation discussions results) play its role in the deployment of the rules, which will be implemented.

1.2.3.2 PRS Decision (WBS 2.03)

Task	Name	KPI/Deliverable	Timing	Results
1.	Organise 2-3 CPA workshops	Agenda and decisions/actions lists	Q1-Q4	1 CPA workshop was organized
2.	Develop the guide for the establishment of the CPA	CPA guide	Q3	The guidelines for the establishment of a CPA v0.9.5 were released to the GNSS Security Board in December 2015.
3.	Develop other assistance tasks to CPA	List of assistance tasks	Q3	The task was limited to the provision of relevant information to CPA representatives within the WG-PRS and the CPA workshop.
4.	Develop a PRS information dissemination an awareness policy	PRS information dissemination an awareness policy	Q4	An Agency PRS need-to-know policy was drafted (As of time of writing, this is under internal review) A first version of the Document Management System for the handling of classified documentation containing PRS information was designed.



1.3 Security Accreditation Activities (WBS 2.04, WBS 2.05, WBS 2.06)

In accordance with point (b) of Article 11(4) of the GSA Regulation, the Security Accreditation Board prepared this section. It is being incorporated into this document, without any change.

During the reporting period, Security Accreditation activities were significantly impacted by:

- The absence of a reliable Galileo Programme schedule, changing the number of milestones planned for the year and hence impacting the corresponding accreditation activities (notably the dates of launches, postponement of the declaration of Initial Services beyond 2015, etc.). The Programme stopped providing regular updates of the Security accreditation Milestones and Schedule in June 2015. The SAB consequently developed an independent accreditation schedule in order to plan the security accreditation activities according to the known Programme changes.
- The non-availability of the Commission Delegated Decision on Common Minimum Standards (CMS) in spite of extensive consultations with the Commission on the matter in the course of the year. For this reason, the adoption of SAB revised Rules of Procedures and the conversion of SAB interim authorisations of PRS manufacturers to ensure full implementation of the CMS had to be delayed beyond 2015.
- The absence of clear requests from the EGNOS programme regarding the accreditation of EGNOS v2 and/or v3. After intensive consultations with the EGNOS programme and taking into account the limited resources available within the accreditation team, in November 2015 the SAB decided to put the preparatory accreditation activities related to EGNOS on hold.

In spite of these changes, the Agency in general and the Security Accreditation Team in particular has provided the technical and administrative secretariat to the SAB, providing the underlying security assurance to prepare proportionate, appropriate and effective security accreditation decisions at the Programme milestones.

The main objectives for 2015 recalled hereafter were achieved:

- GALILEO continued accreditation activities
 - The fourth, fifth and sixth Galileo launches were approved by the SAB, which also adopted three decisions related to the authorisations already issued or requested by the Programme.
 - The Galileo IATO was extended twice, first for another period of six months, and then for a period up to one year, subject to a number of conditions to be implemented by the Programme. The



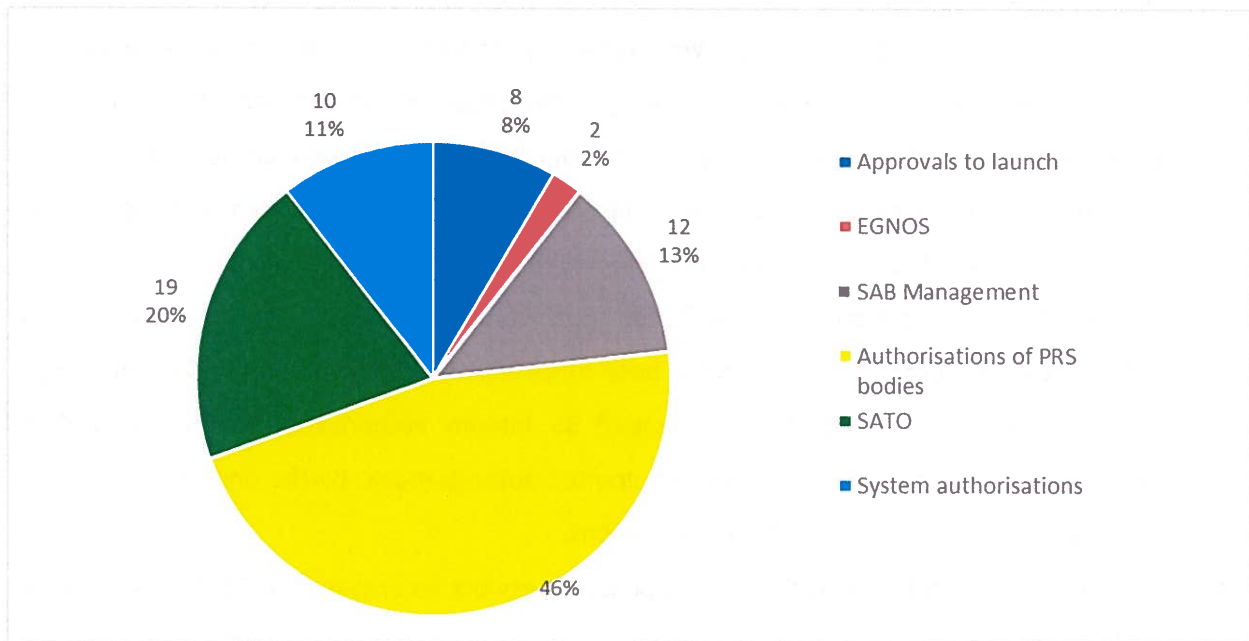
Programme's attention has been raised on a number of security issues deserving attention in order to ensure continuous availability of the Galileo infrastructure, leading the Programme to make significant investments in 2015 to improve the security of the Galileo ground segment. A third network security test campaign was prepared and the initial steps of its implementation were undertaken. Finally, although the Initial Services declaration has been postponed beyond 2015, the initial security accreditation activities have started.

- Fifteen Site Authorisations to operate were issued by the SAB, either as first authorisations for new sites deployed or as changes to existing authorisation for sites already deployed. A re-accreditation process was approved by the SAB. On-site inspections were carried out in 60% of the cases to seek assurance on the actual implementation of the security measures. By the end of year, 32 ground stations worldwide had a valid site authorisation to operate.
- The SAB interim authorisation process for European companies supporting or directly involved in the development of PRS technology has been simplified and streamlined whilst keeping a high level of security assurance. The SAB issued 35 interim authorisations, either as a first authorisation or as a change to previously granted authorisations. By the end of the year, 86 European companies had valid SAB authorisations.
- EGNOS preparatory accreditation activities: an independent network security test for EGNOS Data Access Service (EDAS) was carried out in March 2015 and a number of possible cybersecurity improvements were reported to the Programme. The SAB approved the terms of reference for the conduct of security assessment in July 2015. EGNOS accreditation activities were put on hold by the SAB in November 2015 until an accreditation request is received.
- General activities, entailing in particular the provision of the secretariat of the SAB and its subordinate bodies as well as chairing subordinate bodies (the GNSS Security Accreditation Panel (GSAP) and the CDA Task Force), the administration of SAB decision-making entailing notably 100 SAB written procedures and the supervision of all activities contracted out to industrial partners. Finally, two independent network security tests were carried out on the different Agency networks in February and November 2015, permitting to recommend to the Executive Director a number of cyber-security improvements.
- During its second year of existence, the SAB CDA continued to work firmly on COMSEC activities, including governance, organisation, identification of COMSEC assets, distribution and further accounting of the COMSEC assets within the Programme. Whilst a number of shortfalls have been identified, the CDA provided recommendations to the Programme, which led the Commission to adopt a clear EU GNSS INFOSEC and COMSEC organisation at the end of 2015. This includes the establishment of an EU GNSS



Distribution Authority under the Programme Crypto Authority to manage the Programme COMSEC assets. Finally, thanks to close co-operation with the stakeholders, progress has been made to establish a centralised overview of the GNSS COMSEC assets and to obtain assurance on their certification and approval, thereby significantly reducing the COMSEC risk within the EU GNSS Programmes.

The achievements of the year are summarised in the chart below and detailed hereafter per task.





1.3.1 Tasks

Task	Name	KPI/Deliverable	Timing	Results
1.	SAB Secretariat	<ul style="list-style-type: none">• Report 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/update all SAB decisions.	As required to ensure 5 SAB meetings in the year	<ul style="list-style-type: none">• The SAB meeting plan 2015 was proposed for SAB approval and subsequently maintained, notably to take into account the numerous changes in the Programme schedule.• Six SAB meetings were organised in 2015, i.e. one more than planned in the work programme (SAB#20, SAB#21, SAB#22, SAB#23, SAB#24 and SAB#24b).• Working papers and reports were submitted before each meeting.• Minutes were established after each meeting and submitted to the SAB chair for review and approval.• Decisions that could not be taken during the meetings due to lack of quorum were administered via written procedures. One hundred (100) such procedures were administered by the Secretariat, 95% of which confirmed the decision shaped in the meeting.• All SAB decisions and actions were recorded.• All SAB decisions were addressed to the European Commission.



Task	Name	KPI/Deliverable	Timing	Results
2.	Support to SAB Management	<ul style="list-style-type: none"> Draft SAB Work Programme 2016, taking into account the inputs from the GSAP and CDA; Draft SAB Budget 2016, taking into account the inputs from the GSAP and the CDA. The SAB secretariat contributed to the drafting of the Agency's Staff Establishment Plan 2016. A draft Multiannual Work Programme 2014-2020 for security accreditation activities was proposed and adopted by the SAB in June 2015. Regular reports on the implementation of the SAB Budget 2015 were made. A draft Annual Activity Report 2014 for security accreditation activities was proposed and adopted by the SAB in June 2015. 	Q1/2015	<ul style="list-style-type: none"> A draft Work Programme 2016 for security accreditation activities was proposed, taking into account the inputs from the GSAP and the CDA. It was adopted by the SAB in October 2015. A draft Budget 2016 for SAB activities was prepared, taking into account the inputs from the GSAP and the CDA. The SAB adopted it in October 2015. The SAB secretariat contributed to the drafting of the Agency's Staff Establishment Plan 2016. A draft Multiannual Work Programme 2014-2020 for security accreditation activities was proposed and adopted by the SAB in June 2015. Regular reports on the implementation of the SAB Budget 2015 were made. A draft Annual Activity Report 2014 for security accreditation activities was proposed and adopted by the SAB in June 2015.
3.	Authorisations to launch and authorisations to operate the system under a given configuration;	Accreditation Statement	T0 + 2 months (T0 being the date of the accreditation request including all relevant information)	<ul style="list-style-type: none"> The SAB issued three Security Accreditation Statements related to the fourth, fifth and sixth Galileo launches in February, July and December 2015 respectively. The SAB also adopted three decisions related to the authorisations already issued or requested by the Programme.
4.	Authorisation to operate the Galileo sites	Site Authorisation To Operate	T0 + 2 months	<ul style="list-style-type: none"> The SATO procedure was reviewed to include the site re-accreditation. The SAB approval process concluded in February 2015. In 2015, 15 Site Authorisations to Operate were issued by the SAB, mainly as changes to existing authorisation for sites already deployed. On-site inspections were carried out in 60% of the cases to seek assurance on the actual implementation of the security measures. By the end of the year, a total of 32 ground stations worldwide had a valid site authorisation to operate.

pháp lệnh về việc quy định các quy định về việc quản lý và vận hành hệ thống vệ tinh định vị toàn cầu (GPS) của Việt Nam



Task	Name	KPI/Deliverable	Timing	Results
5.	PRS Manufacturer Authorisations	PRS Manufacturer Authorisations	T0 + 2 months	<ul style="list-style-type: none"> The SAB interim authorisation process for European companies supporting or directly involved in the development of PRS technology was simplified and streamlined in a version 2.0 whilst keeping a high level of security assurance. The SAB issued 35 interim authorisations, either as a first authorisation or as a change to previously granted authorisations. By the end of the year, 86 European companies had valid SAB authorisations, all issued in accordance with version 2.0 of the process. Numerous consultations were carried out to obtain clarifications on the applicability and obtain at least availability of the Commission Delegated Decision on CMS to the SAB; in the absence of a reply from the Commission, the conversion of SAB interim authorisations of PRS manufacturers to a regime compliant with the CMS had to be delayed beyond 2015.
6.	Ensure the GSAP chairmanship, technical secretariat and organisational secretariat	<ul style="list-style-type: none"> Propose GSAP meeting plan Draft reports in order to prepare GSAP reviews Organise 5 GSAP meetings in the year Deliver GSAP reports and recommendations to SAB 	As required to ensure SAB decision making	<ul style="list-style-type: none"> The GSAP meeting plan 2015 was proposed for SAB approval and subsequently maintained, notably to take into account the changes in the Programme schedule. 7 GSAP meetings were organised in 2015, GSAP#47, GSAP#48, GSAP#48b, GSAP#49, GSAP#50, GSAP#51 and GSAP#51b, i.e. two more than planned in the work programme. The Security Accreditation Team ensured the chairmanship and the technical and administrative secretariat of these meetings. A number of documents were issued, including the Security Accreditation Reports on the extension of the IATO, the fourth, fifth and sixth Approval to Launch Galileo satellites, SATO and the Authorisation of PRS manufacturers.



Task	Name	KPI/Deliverable	Timing	Results
7.	System level accreditation tasks	<ul style="list-style-type: none"> Review existing strategies to ensure consistency with the regulation / the programme and propose enhancements as appropriate; Carry out system audits/reviews and report to GSAP/SAB accordingly; Carry out security vulnerability analysis and system security tests and report to GSAP/SAB accordingly; Monitor risks, treatment plans and report to GSAP/SAB accordingly; 	As required to ensure GSAP/SAB decision making	<ul style="list-style-type: none"> The Security Accreditation Team carried out a number of security accreditation reviews in order to prepare the accreditation of the Galileo launches, the accreditation of Initial Services and the accreditation of EGNOS. Recommendations to the GSAP and the SAB were made accordingly. The Galileo IATO was extended twice, first in June for another period of six months, and then in December 2015 for a period up to one year, subject to a number of conditions to be implemented by the Programme. In addition, the SAB authorised the Ground Mission Segment (GMS) v2.01 to operate in June 2015 and issued a preliminary authorisation to operate the GMS v2.1 in October 2015. The Programme's attention has been raised on a number of security issues deserving attention in order to ensure continuous availability of the Galileo infrastructure, leading the Programme to make significant investments in 2015 to improve the security of the Galileo ground segment. As a result of the significant work undertaken by the SAB CDA, a comprehensive view of COMSEC risks was reported, assessed and approved by the SAB in October 2015. A third network security test campaign was approved by the SAB in July 2015 and the preparation of the related security tests started. Due to unavailability of Programme slots to run the tests, these were eventually postponed beyond 2015. Finally, although the Initial Services declaration has been postponed beyond 2015, the initial security accreditation activities have started. An independent network security test for EDAS was carried out in March 2015 and a number of possible cybersecurity improvements were reported to the Programme. EGNOS accreditation activities were put on hold on 01/11/2015 until an accreditation request is received.



Task	Name	KPI/Deliverable	Timing	Results
8.	Site level accreditation tasks	Plan activities to ensure the sites meet the security requirements expected for the launches and Services; carry out 20-25 activities on-site and report to the GSAP/SAB accordingly.	As required to ensure GSAP/SAB decision making	<ul style="list-style-type: none"> The security Accreditation Team coordinated with the Programme to ensure the Galileo sites meet the security requirements expected for the launches and the IATO the system. The SAB approved a re-accreditation process for Galileo ground stations. On-site inspections were carried out in 60% of the cases to seek assurance on the actual implementation of the security measures. Reports were provided to the GSAP and the SAB accordingly, leading to the issuance of 15 Site Authorisation to Operate (either first authorisations for new sites deployed or changes to existing authorisation for sites already deployed). By the end of the year, 32 sites had valid Sites Authorisations to Operate. Terms of Reference for EGNOS security assessment visits were approved on 24 July 2015; however all EGNOS accreditation activities were put on hold on 01 November 2015 until an accreditation request is received.
9.	Component level accreditation tasks	Monitoring of component first/second evaluation and report to the GSAP/SAB accordingly	As required to ensure GSAP/SAB decision making	<ul style="list-style-type: none"> The security accreditation team coordinated with the Programme to ensure the security components meet the security requirements expected for the launches and the Initial Authorisation to Operate the system. Component first and second evaluation have been monitored and reports were made to the GSAP and the SAB accordingly.
10.	User segment accreditation tasks	100% of requests for PRS manufacturer authorisation administrated and recommendations made to GSAP/SAB accordingly	As required to ensure GSAP/SAB decision making	<ul style="list-style-type: none"> The SAB interim authorisation process for European companies supporting or directly involved in the development of PRS technology has been simplified and streamlined in a version 2.0 whilst keeping a high level of security assurance. The secretariat provided reports supporting the SAB in its decision making and drafted the SAB decisions. The SAB issued 35 interim authorisations, either as a first authorisation or as a change to previously granted authorisations. By the end of the year, 86 European companies had valid SAB authorisations, all issued in accordance with version 2.0 of the process. Numerous consultations were carried out to obtain clarifications on the applicability and obtain at least availability of the Commission Delegated Decision on CMS to the SAB; in the absence of a reply from the Commission, the conversion of SAB interim authorisations of PRS manufacturers to a regime compliant with the CMS had to be delayed beyond 2015.



1.4 Galileo Security Monitoring Centre (WBS 4.06)

The European GNSS Agency ensures the operation of the Galileo Security Monitoring Centre (GSMC). For the operational phase, the GSMC manages the Galileo system security. The GSMC also provides the operational interface between the Galileo Control Centres on the one hand, and the competent PRS authorities, the Council and the High Representative of the Union for Foreign Affairs and Security Policy on the other, acting under Council Decision 2014/496/CFSP. It must inform the Commission of any event that may affect the smooth running of the PRS.

The GSMC is currently, and has been since 2013, in the phase of setting up hosting services and operations, based on the following activities:

- GSMC Operations: since 2011 a GSMC Nucleus has offered early security monitoring and reaction capabilities;
- GSMC Organisational Design: ramp-up, including organisation, processes, and operational validation and accreditation for GSMC Operations;
- Contribution to Operational Equipment Development: as future operator of Galileo operational equipment, the GSMC operations team contributes to design specifications and reviews in order to ensure that the GSMC equipment (and the information it can get from or modify into the rest of the Galileo system) is appropriate for long term missions;
- Hosting Infrastructure Agreement: manage the operation and security of the two GSMC sites, and ensure the building infrastructure provided by France and the United Kingdom is appropriate for long-term missions, in line with the hosting agreement established by the Commission with these GSMC hosting states in 2013. This include optimising the use of the two GSMC sites after the start of GSMC operations in 2016.

The GSMC should start operations from mid-2016, in the perspective of Galileo Initial Service declaration, progressively implementing the following missions through the period 2016-2018:

- Galileo security and system status monitoring: The GSMC function is ensured by one master centre and one backup centre on a remote site, with data replicated across a network link. It is intended to provide management of the security activities surrounding the PRS that Galileo will provide once operational. This mission also includes the Galileo Security System Monitoring in order to



process system raw events and other security status information being provided by different stakeholders in order to provide an overall view of the security status of Galileo.

- **Management of PRS access:** The GSMC provides a secure method for the CPAs to manage access to the Galileo PRS. It provides assurance to CPAs that sensitive information relating to their use of Galileo is suitably managed and protected, and ensures that sensitive information related to CPAs is not exposed to the rest of the Galileo System.
- **Implementation of Joint Action instruction:** The GSMC Operator also coordinates the implementation of Joint Action instructions coming from the High Representative and the Council. The GSMC is the single point of entry of Joint Action instructions impacting Galileo and shall be able to instruct changes affecting the whole system, such as changes in the Galileo operating modes.
- **PRS and Galileo security expertise and analysis on request:** As part of the PRS or Security expertise provision on request and in line with Article 5 of Decision 1104/2011/EU, the GSMC will provide technical assistance to CPAs. As set out by article 3(2) of Council Decision 2014/496 /GFSP, the GSMC will provide advice to the Council of the Union (when invited to do so under joint action) and technical expertise to the Commission under the provisions of Article 14(5) of Regulation 1285/2013.

This progressive deployment is aligned to the delivery of various configurations of the GSMC equipment:

- **GSMC Enhanced Minimum Configuration (EMC):** capability to perform 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.
- **Galileo Security Facility (GSF) P2.0.1:** extending GSMC capability to automated PRS management with the Galileo Control Centres (GCCs) and to manual² distribution of PRS keys to CPAs;
- **GSF P2.2:** reinforcing the availability of GSMC operations and services by making a GSMC backup site and equipment in the United Kingdom operational, the main one being operated from France.

² Automated release of PRS keys to CPA is dependent of the availability of related secure network and "Point of Contact Platforms" (POCPs) to be delivered by the Galileo Programme from 2018 (TBC).

1.4.1 Tasks

Task	Name	KPI/Deliverable	Timing	Results
1.	GSF Operations Readiness Review (OVRR) ³	<ul style="list-style-type: none"> Decision from the programme to start GSMC operations validation. Updated version of all GSF Key Point 2 documentation Full list of detailed procedures Detailed Validation Plan (including test cases) Traceability between Validation Plan and ORD Statement of Compliance for OVRR 	GSMC OVRR successfully passed in line with the Programme Schedule.	The Agency successfully achieved the OVRR in line with the Programme schedule. All KPIs were achieved but one (the change required by the Programme introducing a new configuration of the GSMC equipment (GSMC EMC) to be prepared through a Delta OVRR in 2016. It has to be noted that the GSMC has been able to cope with this unforeseen request, including the GSMC support to the preparation of Galileo Initial Services declaration for which the GSMC EMC is an important asset.
2.	GSF Operations Readiness Review (ORR) ⁴	<ul style="list-style-type: none"> Acceptance by the programme of the GSMC evidence that GSMC is able to operate the GSF equipment to meet the operational requirements of the GSMC. 	GSMC ORR successfully passed in line with the Programme Schedule.	Activity postponed to 2016 due to a Programme decision to introduce a new configuration of the GSMC equipment. The delivery of this equipment took place in December 2015
3.	GSF Operations Service Readiness Review (OSRR)	<ul style="list-style-type: none"> Validation of the KPIs applicable to the GSMC operations. Declaration by the programme that the GSMC is fully operational 	GSMC OSRR successfully passed in line with the Programme Schedule.	The Agency postponed this activity to 2016 due to a Programme decision to introduce a new configuration of the GSMC equipment. The delivery of this equipment took place in December 2015. Nevertheless some KPIs have already been achieved in 2015, including the preparation of KPIs applicable to GSMC operations.

³ This formal programme review marks the start of the GSF Operations Validation Campaign and represents the acceptance by the programme of the design of GSMC operations.

⁴ This review occurs after the validation of GSMC operations and marks the start of Service Validation Campaign.



Task	Name	KPI/Deliverable	Timing	Results
4.	Site Accreditation Milestones (SAMS) for GSMC France ⁵	<ul style="list-style-type: none"> This review ends with a formal authorisation of the accreditors and the programme to connect the GSMC France site to the Galileo Operations Chain. 	GSMC France SAMS successfully passed in line with the Programme Schedule	The SAM colocation meeting was achieved in December 2015.
5.	SAMS for GSMC UK ⁶	<ul style="list-style-type: none"> Formal authorisation of the accreditors and the programme to connect the GSMC UK site to the Galileo Operations Chain. 	GSMC UK SAMS successfully passed in line with the Programme Schedule	The GSMC UK Access Control System upgrade was prepared by the GSMC as part of the evidence required for its further accreditation. Nevertheless, this project has been postponed. A new plan shows that a successful SAM will take place around mid-2016.
6.	GSF Equipment Anomaly Reporting	<ul style="list-style-type: none"> Establishment of a GSMC Anomaly Reporting Regime. Report of all anomalies on GSF equipment to the programme to ensure they are patched or corrected in future evolutions. Ensuring the resolution of anomalies reported by CPAs regarding their use of the PRS Service. 	GSMC ORR successfully passed in line with the Programme Schedule	The Agency postponed these activities until 2016 due to a Programme decision to introduce a new configuration of the GSMC equipment. (Until the Initial Services declaration, the European Space Agency (ESA) is in charge of the service)

⁵ This review process will cover the suitability of the GSMC France site infrastructure, local security operations, local hosting operations and site maintenance to allow long-term GSMC operations from this site.

⁶ This review process will cover the suitability of the GSMC UK site infrastructure, local security operations, local hosting operations and site maintenance to allow long-term GSMC operations from this site.



Task	Name	KPI/Deliverable	Timing	Results
7.	GSF Operations	<ul style="list-style-type: none">• Establishment of an associated KPIs Regime• Continuous availability of GSMC operations that meet the KPIs applicable to the GSMC.	GSMC ORR successfully passed in line with the Programme Schedule	<p>This activity was postponed due to a Programme decision to introduce a new configuration of the GSMC equipment (GSMC EMC) in line with a delay of around 6 months in the delivery of the GSF P2.0. Nevertheless some KPIs have already been significantly prepared:</p> <ul style="list-style-type: none">• Deploy modular construction for interim period to new building• Perform the agreed Nucleus operations, with transition of activities to Saint-Germain-en-Laye instead of the Brussels Situation Centre,• Annually reflect on the improved knowledge of GSF Operations practices, including proposals for modifications of procedures, infrastructures, and software and hardware components, in line with GSF Operations SOW requirements,• Establish of a GSMC Anomaly Reporting Regime,• Provide a continuity of hosting services through building maintenance, and extra request management related to the evolution of the facilities



Task	Name	KPI/Deliverable	Timing	Results
8.	GSMC Administration and Classified Systems and Deployment ⁷ and Maintenance ⁷	<ul style="list-style-type: none"> Procurement and configuration of the necessary IT infrastructure so GSMC sites can connect to the Agency's administrative IT networks. Contribution to accreditation and maintenance of GRUE and GSUE systems for processing EUCI. Establishment of an associated KPIs Regime Continuous availability of GSMC Administration and Classified Systems that meet the KPIs applicable to the GSMC. 	GSMC ORR successfully passed in line with the Programme Schedule	<ul style="list-style-type: none"> An unclassified administrative IT network has been procured and configured since 2013. Redundancy and back-up solutions are planned for 2016. The Agency postponed the deployment of GRUE v2 to 2016 mainly due to accreditation constraints. The definition of KPIs has been done, but there is a lack of clarification on the reporting. There was a disruption of the continuity of activities on the administration network due to local civil works near the French GSMC site. There is nothing to report on GRUE and GSUE (respectively on an internal network and stand-alone workstations)
9.	GSMC Staff Training and Certification ⁸	<ul style="list-style-type: none"> Operations Training Needs Analysis document. Operations Training Plan Set up and maintain a Training Management System From GSF OSRR all GSMC Operators are certified within 4 months of arrival From GSF OSRR All GSMC Operators are re-certified annually 	GSMC OSRR successfully passed in line with the Programme Schedule	<ul style="list-style-type: none"> This was postponed due to a Programme decision to introduce a new configuration of the GSMC equipment (GSMC EMC) Procedures were released for EMC Delta-OVRR. These were reviewed for the EMC ORR. The documentation for GSMC staff training and certification was prepared for the EMC ORR All implementation shall take place during the service validation phase

⁷ This work covers the administrative work necessary to setup two centres of the GSMC, a master and a backup

⁸ As part of its role as the operator of the GSMC, the Agency will need to ensure that a suitable training programme is put in place for the GSMC staff. In defining the Operations Training Plan, the Agency shall consider the coordination of operations team training. The Agency shall also consider the participation of personnel from the Commission & ESA, Member State POCs and the GSF Segment Contracts personnel.

1.5 Market Development (WBS 5)

During the reporting period, the Agency continued to pursue a set of very intensive actions to maximise the penetration of the overall EGNSS portfolio of services in target market segments, thus positioning, in the most appropriate way, the most attractive services of EGNOS and Galileo to users. In doing this, the Agency focused on the integration of Galileo within chipsets and receivers and the market entry in priority market segments, where Galileo has a stronger value proposition, such as in automotive (Road User Charging, Advanced Driver Assisted Service and current and future connected navigation), high precision, rail, maritime and for governmental uses. The EGNSS services portfolio market position will be further strengthened via the consolidation of EGNOS market penetration, especially in aviation.

This systematic approach continued along the following lines:

- Vertically by market segment:
 - Engagement with users and decision makers, including the development and implementation of adoption roadmaps.
 - Engagement with key actors in the value chain, i.e., application developers and service providers.
 - Support for the integration of Galileo in receivers in key market segments (especially road and location based services).
 - Support, directly with technical and market expertise, provided to the Commission with on-going regulated applications (e.g. eCall and Digital Tachograph) and new legislative initiatives.
 - Maintenance and improvement of the efficient support provided to stakeholders and users in priority markets to ensure continuous growth of EGNOS adoption.
- Horizontally:
 - Continued to translate user needs into requirements and inputs for Galileo service development with careful monitoring of the user communities and emerging trends in complementary and substitute technology.
 - Continued to provide market and technology monitoring, using socio-economic benefits and cost benefit analysis as the main tools to drive strategic decisions.
 - Conducted a user satisfaction survey for EGNOS and initiated a similar process for Galileo, enabling improvement of the user service experience.



- Updated the EGNSS value proposition, capitalising on knowledge of the market and of the performance at user level, and used this as the basis for communication-related activities about EGNSS.



1.5.1 Tasks

The tasks listed here are all included in the Agency's Annual Work Programme; the task numbers allow for cross-referencing.

Task	Name	KPI/Deliverable	Timing	Results
1.	EGNOS stakeholder and user market development in aviation	<ul style="list-style-type: none"> Support aviation operators regarding EGNOS operational implementation, including Localiser Performance with Vertical Guidance (LPV) 200, performing business cases 	Q4	<ul style="list-style-type: none"> 15 regional and/or business operators were engaged to get EGNOS on-board. Retrofitting activities are completed or ongoing.
		<ul style="list-style-type: none"> Promotion contacts for new operators and airports implementing the procedures and operations 	Q4	<ul style="list-style-type: none"> 102 new aerodromes announced plans for LPV implementation. 68 aircraft/rotorcraft units are covered by aviation grants. 89 aircraft/rotorcraft units were engaged to get EGNOS on board.
		<ul style="list-style-type: none"> Annual update of aircraft database of Satellite Based Augmentation Systems (SBAS) capabilities in the EU, including integration and cross-check with flight plans analysis 	Q4	<ul style="list-style-type: none"> A full revamp of the Agency SBAS database on EGNOS avionics has been completed: <ul style="list-style-type: none"> Conclusions of SBAS/LPV certified units penetration in EU fleet: 20.92% in Business Aviation, 3.41% in Regional Aviation, 7% in Helicopters, 9% in General Aviation in the EU Full EU fleet analysis on LPV capabilities Results validated with Eurocontrol Flight Plans data, tracking full EU traffic Specific details on on-board avionics in 3400 aircraft were tracked
		<ul style="list-style-type: none"> Definition of Galileo market entry strategy as EU contribution to multi-constellation in aviation, including Search and Rescue 	Q4	<p>A task force with the European Aviation Safety Agency (EASA) and the Commission was created on GNSS regulatory matters. The consultation on Galileo Search-and-Rescue (SAR) adoption by beacon manufacturers was completed. The Galileo market entry strategy was used as the source for Automatic Dependent Surveillance-Broadcast. The definition of multi-constellation concept of operations by the International Civil Aviation Organisation (ICAO) was launched. The analysis for airport operations and timing applications is ongoing.</p>



Task	Name	KPI/Deliverable	Timing	Results
2.	Galileo and EGNOS market development in agriculture, with a special focus on Initial Services	<ul style="list-style-type: none"> Adoption status and 2015-2018 forecast in terms of airports, procedures and operators 	Q4	<p>The adoption status for LPV implementation in aircraft equipment was updated. 359 procedures were designed, 245 LPV/Position-in-Space procedures were published and 70 additional EGNOS enabled procedures in Runway ends with Baro. Another 44 LPV procedures designs are completed in Agency funded projects. The target is to have more than 440 EGNOS operational enabled approach procedures by 2018.</p> <ul style="list-style-type: none"> The 2015 report on management and closure of the EGNOS Multimodal adoption plan for all market segments was delivered. There is systematic tracking of objectives and of the 61 tasks (18 aviation, 20 maritime, 7 rail, 14 Agriculture & Surveying, 2 transversal). The 2016 Multimodal adoption objectives and plan was defined, negotiated and delivered to ESSP, the EGNOS service provider
		<ul style="list-style-type: none"> Management of EGNOS Service Provider actions to achieve aviation objectives defined in the multimodal adoption plan 	Q1-Q4	<ul style="list-style-type: none"> A market analysis and market development strategy to support the full adoption of EGNSS in agriculture were defined and their implementation has started.
		<ul style="list-style-type: none"> Overall market assessment of EGNSS in high precision/agriculture; this is already the most mature segment for EGNOS, focusing on the Galileo Open Service (OS) dual frequency and the Commercial Service (CS) which deliver improved accuracy to users 	Q4	<ul style="list-style-type: none"> The strategy of adoption of Galileo by agriculture users is being updated completing the value proposition and leveraging the experience of successful adoption of EGNOS: <ul style="list-style-type: none"> The Common Agricultural Policy regulation analysis on opportunities for EGNSS in Agriculture was started. An analysis on use of Unmanned Aerial Vehicles was launched.
		<ul style="list-style-type: none"> Update of integrated Galileo market entry plan, leveraging the experience gathered on EGNOS, to ensure fast Galileo penetration by market segment e.g. Variable Rate Technology, automatic steering, logistics 	Q4	<ul style="list-style-type: none"> The Agency held workshops, user fora and presentations at multiple events: <ul style="list-style-type: none"> The Role & Contribution of Europe's Agricultural Machinery Industry in Promoting Sustainable Agriculture and Food Security – CEMA (the voice of the European Agricultural Machinery Industry) Geospatial World Forum Agritechnica
		<ul style="list-style-type: none"> Organisation of key technical workshops to promote Galileo with high precision service providers and early adopters 	Q1-Q4	



Task	Name	KPI/Deliverable	Timing	Results
3.	Galileo and EGNOS market development in surveying and mapping, with a special focus on Initial Services	<ul style="list-style-type: none"> Innovative high precision application contest involving young entrepreneurs and researchers to deliver new solutions 	Q3	<ul style="list-style-type: none"> The Agency initiated a new edition of the award Farming by Satellite, including the special Africa prize, for students and young farmers. This promotes the use of EGNSS in agriculture and its benefit to end users.
		<ul style="list-style-type: none"> Report on the high precision service providers, involved in trials, via the Galileo Commercial Service demonstrator 	Q3	The Galileo Commercial Service demonstrator preparations are ongoing.
		<ul style="list-style-type: none"> Management of EGNOS Service Provider actions to implement market-relevant actions defined in the multimodal adoption plan 	Q1-Q4	The multimodal adoption objectives and plan were defined, negotiated and delivered by ESSP.
		<ul style="list-style-type: none"> Cooperation report with public reference network providers in order to push for Galileo adoption convincing them to anticipate investment in network receivers. 	Q4	An Agency survey for the reference network providers was followed up by a workshop on the benefits of Galileo for the reference network providers. The majority is planning to be Galileo-ready by 2017 following continuous dissemination of the necessary programme input.
		<ul style="list-style-type: none"> Overall market assessment of EGNSS in surveying, focusing on Galileo OS dual frequency and CS which deliver improved accuracy to users 	Q3	<ul style="list-style-type: none"> The strategy of adoption of Galileo by Surveying users is being updated completing the value proposition, leveraging the experience of successful adoption of EGNOS: <ul style="list-style-type: none"> EGNSS opportunities in new emerging applications related to uptake of Unmanned Aerial Vehicles and penetration of Geographical Information Systems into new markets. Young Surveyor Prize was awarded at Intergeo for a project proposing an innovative method to use Galileo's high number of carrier frequencies to improve positioning compared to other GNSS. The Agency held workshops, user fora and presentations at multiple events: <ul style="list-style-type: none"> Intergeo conference and trade fair General Assembly of Council of European Geodetic Surveyors GNSS workshop within the European Umbrella Organisation for the Geographic Information Community (EUROGI) and its Positioning Knowledge Exchange Network (POSKEN).





Task	Name	KPI/Deliverable	Timing	Results
4.	Galileo and EGNOS market development in road applications, with a special focus on Early Services	<ul style="list-style-type: none"> Implementation report of integrated E-GNSS market penetration by sub-segment in i.e. EGNOS in mapping and Galileo in surveying (e.g. geodesy, construction, machine control) 	Q4	<ul style="list-style-type: none"> The status of E-GNSS penetration by the various mapping and surveying sub-segments covered and presented in market-specific deliverables
		<ul style="list-style-type: none"> Analysis of EGNOS mapping applications in international markets 	Q4	<ul style="list-style-type: none"> Activities on this action were initiated at the General Assembly of Council of European Geodetic Surveyors. The way forward and the approach are being consolidated. International workshops for EGNOS adoption beyond Europe were organised together with Commission resulting in accelerating implementation decisions.
		<ul style="list-style-type: none"> Management of EGNOS Service Provider actions to implement market-relevant actions defined in the multimodal adoption plan 	Q1-Q4	The multimodal adoption objectives and plan were defined, negotiated and delivered by ESSP.
		<ul style="list-style-type: none"> Provision of necessary inputs and assistance to the delegated acts or technical annexes for on-going regulatory processes (i.e. eCall and Enhanced Digital Tachograph), as well as to market/users consultations 	Q1-Q4	<ul style="list-style-type: none"> In 2015, the European Parliament finally approved the eCall regulation which confirmed adoption of E-GNSS in every new car sold in the EU from April 2018. The Agency provided all technical support that was requested during the decision process. The final version of the EGNSS test specifications in the EU regulation delegated act have been prepared and were presented to Member States and to industry in the Commission's Working Group for Motor Vehicles. Technical inputs were provided to the Commission for the preparation of the Digital Tachograph technical annex for the EGNSS role and architecture.
		<ul style="list-style-type: none"> Technical support to the In Vehicle Devices manufacturers for the qualification of their Galileo and EGNOS compatible solutions. 	Q1-Q4	An analysis was provided to automotive industry on how to optimise the timing needed to test the EGNSS compatibility in eCall devices.
		<ul style="list-style-type: none"> Technical and market EGNSS awareness with public authorities and industry on new GNSS tolling schemes 	Q1-Q4	<ul style="list-style-type: none"> In October, Bulgarian authorities announced the development of a nationwide tolling scheme based on GNSS technology (following the Agency demonstration of benefits). In May, the German operator TollCollect announced Galileo readiness in its new GNSS on-board unit.



Task	Name	KPI/Deliverable	Timing	Results
5.	Galileo and EGNOS market development in maritime applications with special focus on Early Services	<ul style="list-style-type: none"> Key implemented actions for adoption of Galileo in advanced driver assistance systems and new safety applications based on connected vehicles 	Q4	<ul style="list-style-type: none"> Technical specifications and relevant performances for an EGNSS-based engine for safety (e.g. advanced driver assistance system) and liability critical road applications were prepared and made public. These specifications were the basis for the launch of two grants to support the development of EGNSS based devices.
		<ul style="list-style-type: none"> Hold three technical sessions with decision makers and bodies influencing the market to promote EGNSS in Intelligent Transport Solutions, Advanced Driver Assistance Services and Road User Charging 	Q1-Q4	<ul style="list-style-type: none"> A special session was held at the Connected Car Conference together with dedicated user fora. Two special sessions on EGNSS for tolling were organised at the ASECAP⁹ Days and the Road User Charging Conference. A well-attended special session and live demonstrators on EGNSS were organised during the ITS World Conference and Exhibition. This is the industry's major annual event.
		<ul style="list-style-type: none"> Management of EGNOS Service Provider actions to implement market-relevant actions defined in the multimodal adoption plan 	Q1-Q4	<ul style="list-style-type: none"> A successful EGNOS demonstration on multimodal logistics was held in Rotterdam in collaboration with ESSP.
		<ul style="list-style-type: none"> Provision of required inputs and assistance to the Commission during the last phase of recognition of Galileo by the International Maritime Organisation, and related standardisation process of multi-constellation receivers 	Q1-Q4	<ul style="list-style-type: none"> The Agency provided all the requested contributions to the Commission. As a result, in March the International Maritime Organisation (IMO) Navigation Communication and SAR Committee positively considered Galileo recognition. The final decision will be taken by the IMO's Maritime Safety Committee in May 2016.
		<ul style="list-style-type: none"> Hold a technical session with decision makers and bodies influencing the market to increase market uptake of Galileo Search and Rescue 	Q1-Q4	<ul style="list-style-type: none"> The Agency conducted a survey and interviews with the main beacon manufacturers to foster the return link service in SAR beacons. The Agency attended the Marine Equipment Tradeshow (METS 2015) where beacon manufacturers were interviewed. The Agency also started preparing a workshop on Galileo SAR for the European Space Solutions conference 2016.

⁹ European Association of Operators of Toll Road Infrastructures.



Task	Name	KPI/Deliverable	Timing	Results
6.	Galileo and EGNOS market development in rail applications with special focus on Early Services	<ul style="list-style-type: none"> Preparation of campaign to increase market uptake of Galileo/EGNOS in recreational and leisure sub-segment 	Q1-Q4	The Agency analysed penetration of SBAS in maritime receivers and contacted the main manufacturers to promote the EGNOS brand in receivers sold in Europe. The Agency attended METS explaining the benefits of EGNSS to receiver manufacturers.
		<ul style="list-style-type: none"> Management of EGNOS Service Provider actions to implement market-relevant actions defined in the multimodal adoption plan 	Q1-Q4	The Agency managed the actions on maritime agreed in the EGNOS multimodal adoption plan 2015 and agreed with ESSP the actions on maritime for 2016.
		<ul style="list-style-type: none"> Contribution to the virtual balise definition: methodology, specification and start-up of GNSS performance testing in a typical, European Rail Traffic Management System (ERTMS) -ready railway environment 	Q3-Q4	<ul style="list-style-type: none"> The Horizon 2020 project STARS was setup to provide performance testing in a typical ERTMS-ready railway environment. It started in Q1 2016. The Agency provided technical support to the project Next Generation Train Control (NGTC), in which the rail defines the preliminary specification of virtual balise.
		<ul style="list-style-type: none"> Support to the Commission in Shift 2 Rail activities for the inclusion of GNSS in European Rail Traffic Management System evolution and low-density lines. 	Q1-Q4	<ul style="list-style-type: none"> The Agency agreed on an action plan with the Commission's DG GROW, DG MOVE and the European Railways Agency (ERA). EGNSS is now part of ERA's plans as a key development for ERTMS and Shift2Rail will further support its uptake. The action plan is implemented within a group under the lead of the Commission's DG GROW. Coordination meetings are expected until EGNSS is adopted in Technical Specification for Interoperability – Command and Control Systems.
		<ul style="list-style-type: none"> Implementation of actions of EGNSS in asset management roadmap defined in 2014 	Q4	The Agency delivered two presentations at international conferences related to asset management and supply chain visibility to raise awareness about the E-GNSS capabilities in this sub segment.
		<ul style="list-style-type: none"> Hold two technical sessions with decision makers and bodies influencing the market to increase market uptake of EGNSS in the rail sector 	Q4	The Agency held four technical sessions with rail segment representatives within 2015 in frame of the collaboration with NGTC and UNISIG (an industrial consortium to develop ERTMS/ETCS technical specifications).
		<ul style="list-style-type: none"> Management of EGNOS Service Provider to implement market-relevant actions defined in the multimodal adoption plan 	Q1-Q4	The relevant actions in the 2015 multimodal adoption plan were successfully implemented.

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Task	Name	KPI/Deliverable	Timing	Results
7.	Stakeholders & user market development for governmental applications (PRS)	<ul style="list-style-type: none"> Implementation of the Galileo adoption plan for PRS, following approval by the Commission, as a result of the work carried out in the frame of a specific contract on a PRS roadmap definition in 2014 Support provided to the Commission in preparation of Galileo use in critical infrastructure and for security related applications 	Q4	The Agency consulted with CPAs to seize market opportunities and to consolidate a common adoption approach. Results do not clearly demonstrate Member States' willingness to have a common strategy for adoption at this point. Follow-up with CPAs is in progress.
		<ul style="list-style-type: none"> Co-marketing activity with one key mass market chipset manufacturer towards telecom operators and final users 	Q2	During 2015, information and support to the Commission was provided upon request. The Agency also prepared for Galileo use in critical infrastructures by participating to the Critical communications world conference.
		<ul style="list-style-type: none"> Technical sessions for LBS application developers to stimulate innovative solutions 	Q1	The cooperation was launched with all top mass-market manufacturers, including Qualcomm, Broadcom, Mediatek, STM and uBlox. Several co-marketing actions were put in place, including a workshop organized together with Broadcom to highlight their mass market Galileo-enabled chipset.
8.	Galileo stakeholders and user market development in Location Based Services (LBS)	<ul style="list-style-type: none"> Sponsor initiatives identifying innovative application developers (e.g. Galileo Master), taking part in the selection process of EGNSS solutions, and support small businesses via the funding guide Identification of Galileo market champions among smartphone manufacturers Support provided to the Commission to prepare Galileo and EGNOS use in E112 	Q4	The Agency has also targeted the application developer community with a dedicated technical workshop called Galileo Power Hour. This was organized at Mobile World Congress for around 400 developers.
			Q4	Additional awareness was achieved by sponsoring the Galileo Masters prize. This was won by the open navigation platform Kynéo. The idea was to enable Galileo use in the fast growing market of Internet of Things.
			Q4	Several consultations were performed with global smartphone manufacturers, such as Samsung, Sony and Nokia. In 2015, the first Galileo smartphones appeared in the market, however with disabled Galileo functionality due to the constellation status. The activation of the service is the challenge for the coming months.
			Q4	The Agency provided support to the Commission concerning the tender preparation, evaluation and management of the Help112 pilot project, which will demonstrate Galileo's added value in emergency caller location in Europe.
9.	Integrated EGNSS user and value chain based market approach	<ul style="list-style-type: none"> EGNSS value proposition by market and by service, identifying key differentiators and benefits for communication to users and the value chain 	Q4	The value proposition and communication including Galileo First Operational services key messages was developed.



Task	Name	KPI/Deliverable	Timing	Results
10.	EGNSS user satisfaction independent monitoring process	<ul style="list-style-type: none"> Conduct EGNSS user satisfaction independent monitoring process by market segment (e.g. aviation, rail, maritime, high precision, rail) Analyse user satisfaction monitoring process results and identify areas for improvement for EGNSS services 	Q1-Q4 Q4	<ul style="list-style-type: none"> The 2015 EGNOS User Satisfaction survey was completed covering all market segments and services provided. The analysis of user responses was completed. Based on the analysis of user responses an action list was developed proposing improvements in EGNOS service support and recommendations for evolution.
11.	Galileo User Management	<ul style="list-style-type: none"> GNSS Service Centre Nucleus monthly performance reports Ensure availability of market and information to users and the value chain responding to the requests emerging in customer contact Track the user and value chain EGNSS experience in all contacts of the service cycle with the GSC Nucleus 	Q1-Q4 Q4	<p>The Agency provided a monthly report in addition to the yearly GSC user satisfaction survey.</p> <p>All the user requests have been handled; the time-to-reply has been tracked and meets the KPIs.</p>
12.	Technological scan and cooperation with GNSS receiver manufacturers	<ul style="list-style-type: none"> Annual monitoring of Galileo penetration in chipsets and devices per market segment Monthly digest on technical news for Agency newsletter Coordination of annual meetings with receiver manufacturers Management of testing with receivers and clarification on technical issues Co-marketing with chipset and receiver manufacturers 	Q1-Q4 Monthly Q3 Q1-Q2 Q1-Q4	<p>GNSS users and the value chain interaction were initially tracked starting with Agriculture and Mapping/Surveying during various events as well as their follow-up activities (e.g. Agritechnica, Intergeo), leveraging support by the GSC.</p> <p>The Galileo and EGNOS penetration monitoring report was updated for the top 30 manufacturers, representing more than 95% of the global supply. The Agency published results of the analysis in the Market Report issue 4.</p> <p>The monthly digest on technical news was delivered each month as planned and shared internally.</p> <p>The third annual workshop with receiver manufacturers took place in November 2015 at the Agency's Headquarters attracting 37 companies, including main market leaders.</p> <p>Galileo performance was demonstrated in the testing campaign with 7 professional manufacturers and 5 mass-market ones. The Agency published a video and article promoting the results on its website.</p> <p>Several co-marketing activities were put in place with receiver manufacturers, including joint workshops, articles and awareness actions.</p>



Task	Name	KPI/Deliverable	Timing	Results
13.	Market monitoring and forecasting process	<ul style="list-style-type: none"> Annual update of Market Monitoring and Forecasting Process database Publication of Market Report issue 4 Provision of specific analysis on request of the Commission and member states, including support to impact assessment of policies 	<ul style="list-style-type: none"> Q2 Q2 Q1-Q4 	<ul style="list-style-type: none"> The Market Monitoring and Forecasting Tool was updated and delivered in Q2. The Market Report issue 4 was published in March 2015. There were almost 30 000 downloads by the end of 2015. The Agency also prepared dedicated analyses, supported the Commission's policies and conducted impact assessments, on request of the Commission.
14.	OS authentication preparation	<ul style="list-style-type: none"> Technical and market analysis in support of the Commission implementation Preparation of enablers for adoption of OS authentication in the domains identified in the market study of 2013-2014 (only specific activities will be outsourced) Consolidation of business case for CS (High Precision and authentication) after feasibility confirmation (e.g. uplink capacity, real-time interface latency) 	Q2	The benefits calculation have been performed and shared with the Commission and Member States as part of the EGMR Cost Benefit Analysis.
15.	CS early services preparation	<ul style="list-style-type: none"> Preparation of enablers for adoption of OS authentication in the domains identified in the market study of 2013-2014 (only specific activities will be outsourced) Consolidation of business case for CS (High Precision and authentication) after feasibility confirmation (e.g. uplink capacity, real-time interface latency) Involvement of Service Providers in real-time testing of the CS signal via the GNSS Service Centre 	Q4	The technical content for the implementing act recommending OS Authentication in Digital Tachograph has been developed.
16.	Support to mission evolution (EGMR)	<ul style="list-style-type: none"> Gathering of market inputs to mission evolution strategy Market sizing and quantifications of socio-economic benefits for different options of system evolutions Validation of system evolution concept with users. 	Q3	A consolidated business case has been provided in the CS informational note was presented to the Member States in November. In addition, a new specific contract was launched to further detail the service provision approach.
		<ul style="list-style-type: none"> Gathering of market inputs to mission evolution strategy Market sizing and quantifications of socio-economic benefits for different options of system evolutions Validation of system evolution concept with users. 	Q4	The availability of the GNSS Service Centre has been delayed due to new Security Requirements added during the Preliminary Design Review, so real time tests have not been executed. As a work around, the CS Demonstrator has been accepted as a test environment.
		<ul style="list-style-type: none"> Gathering of market inputs to mission evolution strategy Market sizing and quantifications of socio-economic benefits for different options of system evolutions Validation of system evolution concept with users. 	Q1	The main market trends relevant for Galileo evolution have been analysed and presented to Working Group Evolution.
		<ul style="list-style-type: none"> Gathering of market inputs to mission evolution strategy Market sizing and quantifications of socio-economic benefits for different options of system evolutions Validation of system evolution concept with users. 	Q1	A complete report, including full analysis of benefits for all evolution directions, as well as multi-criteria analysis, was finalized and delivered to the Commission.
		<ul style="list-style-type: none"> Gathering of market inputs to mission evolution strategy Market sizing and quantifications of socio-economic benefits for different options of system evolutions Validation of system evolution concept with users. 	Q3-Q4	The benefits calculation has been validated with representatives of user communities.



1.6 Communications (WBS 1.03)

In 2015, the Agency achieved the following Communications objectives:

1.6.1 EGNOS and Galileo sector-specific Market Communication and Promotion (WBS 1.03.01)

The Agency supported the achievement of the EGNOS Programme's overall objectives as defined in the Regulation No 1285/2013 on the implementation and exploitation of European satellite navigation systems.

To this end, the Agency:

- Raised the overall positive awareness of the existence and high performance of EGNOS and its benefits as a confidence-building measure for EGNSS in general;
- Positioned EGNOS as the first successful step in the evolution of EGNSS with Galileo poised to add another dimension of increased service for users.
- Increased the awareness and understanding of EGNOS now, and Galileo soon, as a useful feature/enabling technology for application developers requiring more precise and reliable Positioning, Navigation and Timing information.
- Promoted participation in Horizon 2020 research and raised awareness of the results of EU GNSS Framework Programme Research and how it supports the growth of GNSS-powered business in Europe in general, and target industry sectors in particular.

1.6.2 Sector-specific objectives—supporting the Agency's Market Development Strategies (WBS 1.03.01)

- Aviation: Increased the awareness, credibility, support and acceptance of the benefits that EGNOS has for aviation in Europe, encouraging its further uptake by the community.
- Road: Increased awareness of, and interest in, what EGNOS brings today, and what Galileo will soon bring, to road applications to support adoption in the sector. (Focus on Road User Charging (RUC), eCall, Advanced Driver Assistance Services and Pay per Use Insurance.
- High Precision: Increased awareness of, and encouraged adoption of, EGNOS (and EDAS) today, and Galileo soon, by organisations relying on high precision information (focus on precision agriculture, mapping, and surveying).



- Maritime: Continued to raise awareness of how EGNOS today, and Galileo soon, can benefit the sector. The Agency focused on the benefits it can offer specific segments of the market (focus on commercial and leisure coastal and inland waterway navigation).
- Rail: Continued to raise awareness of how EGNOS today, and Galileo soon, can benefit the sector.
- LBS/Consumer applications: Continued to raise awareness of how EGNOS today, and Galileo soon, can benefit the sector.

1.6.3 Supporting Galileo Exploitation and Early Services Communications (WBS 1.03.01)

- Supported the European Commission in raising awareness and confidence in Galileo Early Services.

1.6.4 PRS Awareness-building (WBS 1.03.01)

- Stimulated interest and enhanced knowledge of PRS and PRS pilot projects among potential participants.
- Increased understanding of the future PRS service, how it will work, and why it is needed.
- Raised awareness of why and how potential users, and related industry, should prepare now for PRS.

1.6.5 GSA Corporate Communications (WBS 1.03.02)

- Defined and clarified the evolving role and responsibilities of the Agency.
- Raised positive awareness of the Agency, its activities and achievements.
- Increased and improved internal communications within the Agency.



1.6.6 Tasks

Task	Name	KPI/Deliverable	Timing	Results
1.	Continue to support and expand EGNOS branding and identity, using the 'EGNOS. It's there, use it' campaign umbrella.	Branding used on all materials	Q1-Q4	Branding is fully integrated on all Agency communications
2.	Support the Galileo Early Services message and branding into all communications.	Branding used on all materials	Q1-Q4	This task has been postponed to 2016 'Initial Services support'
3.	Update/reprint EGNOS/EGNSS sector-targeted leaflets as required	4 revisions & reprints	Q4	The Agency updated and reprinted EGNSS Sector-specific brochures
4.	Update sectorial advertising as necessary and run in trade magazines associated with sector-specific event sponsorship packages.	5 target specific ad insertions	Q4	<ul style="list-style-type: none"> The Agency advertised in: <ul style="list-style-type: none"> (Aviation) ENAC Guide, Aero Friedrichshafen programme, European Regional Aviation Magazine, Eurocontrol magazine. (Road) RUC magazine. (Mapping/Surveying): Geospatial World and Geoconnexion.
5.	Create a new video showing the benefits that EGNOS offers for rail applications that can be shown at relevant conferences, events and meetings and distributed via Internet channels	1 new EGNOS sector video (long & short version)	Q4	<ul style="list-style-type: none"> The Rail video was postponed to 2016. Instead, the Agency created a new promotional video "Message received Ensuring that Navigation Devices are ready for Galileo" The video was viewed 4 000 times in





Task	Name	KPI/Deliverable	Timing	Results
6.	Update existing EGNOS-Galileo sector-specific videos as needed	2 updates	Q4	<p>2015. (aired first time in September as part of the launch video transmission)</p> <ul style="list-style-type: none"> ○ New video: EGNOS LPV-200 Lands in Europe (aired for first time in December as part of the launch video transmission) ○ New video clip: LBS – Precise infrastructure localization 8,100 views in 2015 (This was premiered at 2015 Mobile World Congress) ○ New video clip: LBS – Faster fix, Improved localization 8 000 views in 2015 (This was premiered at 2015 Mobile World Congress) ○ New video clip: LBS – Location Based Advertising 9 000 views in 2015 (This was premiered at the Mobile World Congress) ○ New video clip: LBS – Precise positioning, Time matters. 7 900 views in 2015 (This was premiered at the Mobile World Congress)
7.	Leverage 'video-friendly' EGNOS/EGNSS milestones, such as flight trials and new application demonstrations by producing and distributing small videos of the achievements to relevant target user sectors	Film 3-4 new video-friendly demos	Q4	<ul style="list-style-type: none"> • The Agency created a video for the EGNOS flight event held in June. • The Agency recorded video coverage of 12 user interviews.
8.	Cover EGNOS/Galileo sector-focused success stories, project results and milestones as regular and timely news stories on the EGNOS Portal and the GSC site	4-6 new news stories per month	Q4	<ul style="list-style-type: none"> • The Agency added 120 news articles in 2015 (10 Agriculture, 21 Aviation, 15 LBS, 8 Mapping/Surveying, 11 Maritime, 7 Rail, 18 Road, 30 other)

Task	Name	KPI/Deliverable	Timing	Results
9.	Add, update and refine new relevant information, tools and helpful features on the Agency's websites	8-10 updates per month	Q4	<ul style="list-style-type: none"> The Agency created a new Image Gallery, providing access to over 200 free high-resolution images. A special mini-site was created for the Market report: There were 28 500 downloads of the Report. The Research and Development section was rebuilt and organised. The Web portal revamp project was kicked off. All of this results in an increased use of the Agency's sites: <ul style="list-style-type: none"> Website access increased 100% over 2014 144 504 unique visitors with 595 494 page views 35 798 unique visitors to EGNOS Portal 58% more unique visitors to the GSC site.
10.	Leverage social media tools (Twitter, Facebook, LinkedIn) to increase awareness of EGNOS and Galileo within the specific sectors	4 – 8 updates per month	Q4	<ul style="list-style-type: none"> The Agency continued to promote itself and its activities via social media tools (Facebook, Twitter, LinkedIn, YouTube and SlideShare) In 2015: <ul style="list-style-type: none"> Twitter: @EU_GNSS Followers +203 %, @EGNOSPPortal Followers +24 % Facebook: Likes +57 %, Linked in: Followers +43 % YouTube: Subscribers +75 % SlideShare: An average of. 3 presentations per month
11.	Publish regular electronic targeted newsletters based on content from the EGNOS Portal and GSC websites	Quarterly newsletters	Q4	Production and distribution of 8 'GSA Today' eNewsletters with a mailing list of almost 10 000 and a brand new look. This took place in February, April, July, September, November & an end of year message, plus 2 special topic newsletters targeting Aviation and Road users
12.	Leverage mailing lists to send targeted communications on EGNSS and Horizon 2020.	Quarterly targeted mailings	Q4	The Agency sent out two Horizon 2020 mailings.



Task	Name	KPI/Deliverable	Timing	Results
13.	Raise awareness of key sector-related EGNOS and Galileo success stories, results, milestones, Horizon 2020/FP7 project results and demonstrations, European Satellite Navigation Competition (ESNC) EGNSS prize winning applications, etc. amongst relevant media via on-going press releases, web stories and event contacts	5-6 targeted press releases	Q4	<ul style="list-style-type: none"> The Agency drafted, distributed and encouraged media uptake of 5 press releases: <ul style="list-style-type: none"> 23 March: New GNSS Market Report 2 September: EGNOS services ensured for the long term, thanks to SES-5 GEO satellite 9 September: The Agency launches research and development support for the advancement of European GNSS chipset and receiver technologies. 29 September: EGNOS LPV-200 enables Safer Aircraft Landings. 21 October: 2015 Agency Special Prize Highlights the Role of GNSS in the Internet of Things.
14.	Leverage event participation and advertising placement to negotiate positive coverage of EGNOS and EGNOS applications in associated sector-focused media channels	On-going leverage of EGNOS Portal news stories Related event coverage in 4-5 event media channels	Q4	For more information about these results, see tasks 4 and 17.
15.	Build and maintain comprehensive sector-specific and relevant national, Europe-wide and international media lists in order to deliver timely well-directed messages to key media information multipliers.	Full, updated media contact list by sector accessible via email database.	Q2	<ul style="list-style-type: none"> The Agency expanded and maintained an active list of 800 contacts. The Agency conceived and organised the 1st EGNOS Flight Event (Aviation Press Event) in Toulouse with journalists and aviation stakeholders
16.	Leveraging the list above, deliver sector and market-related news on a regular basis on EGNOS and Galileo to the relevant media channels	8 press releases and 2 video news releases delivered	Q4	For more information about these results, see tasks 6, 8 and 13



Task	Name	KPI/Deliverable	Timing	Results
17.	Promote EGNOS and Galileo with exhibition stands and other promotional initiatives at a range of key events	Support of 10-12 EGNOS and Galileo sector-specific events	Q4	<p>The Agency participated in over 30 events, built Galileo/EGNOS stands and organised communications activities at:</p> <ul style="list-style-type: none"> • European Space Policy Conference (Brussels), 27-28 January • Mobile World Congress (Barcelona), 2-5 February • World Air Traffic Management Congress (Madrid), 10-12 March • Satellite Navigation Summit (Munich), 24 - 26 March • AERO Friedrichshafen (Friedrichshafen), 15-18 April • EBACE 2015 (Geneva), 19 - 21 May • ASECAP Days (Lisbon), 27 - 29 May • Connected Cars World (Amsterdam), 24 - 25 June • Space & Society Conference: (Brussels), 29 June • Intergeo (Stuttgart), 15 - 17 September • ITS World Congress (Bordeaux), 5 - 9 October • Helitech International (London), 6 - 8 October • European Regional Aviation General Assembly (Berlin), 15 October • SatMasters Conference (Berlin), 20 - 22 October • Aerodays (London), 20 - 23 October • Agritechnica (Hannover), 08 - 14 November <p>The Agency coordinated with ESSP and Eurocontrol communications where relevant. In addition a full promotional campaign for Research and Development results was implemented:</p> <ul style="list-style-type: none"> • Horizon 2020 2nd call launch workshop, 14 January • The 1st Agency smartphone app: "Satellite Navigation: from Research Applications to Market" (which has over 900 downloads) • EGNSS Day at the Satellite Master Conference, October • EU GNSS research and development results video which has been viewed more than 2 000 times • Coordination of Horizon 2020 Project Communications activities • Design, printing and distribution of FP7 Results brochure



Task	Name	KPI/Deliverable	Timing	Results
18.	Continue support of the ESNC, leveraging this communications and networking tool and continue awarding the annual ESNC Special Topic Prize	Agency sponsorship of 2015 contest and the awarding of an annual Agency Special Topic Prize	Q4	The Agency implemented, promoted and leveraged the 2015 ESNC Special Topic Prize (The Agency received the highest number of submissions for all prizes.) The winner is KYNEO: an open innovation platform for the GNSS Internet of Things
19.	Continue to support the European Space Expo, in cooperation with the Commission, leveraging its communications potential for EGNSS	Update existing and create 1 new application kiosk as well as support the successful placement of the Expo at key locations across Europe	Q1-Q4	Continued to support the European Space Expo project: <ul style="list-style-type: none"> Planning, staffing and promotional support for 8 installations in 2015, (Luxembourg, Milan, Oslo, Zagreb, Stockholm, Riga, Ljubljana, and Athens) including: <ul style="list-style-type: none"> Production and printing of tailored multilingual guides for each installation Ongoing maintenance of a dedicated web page Revisions/translations as needed for Application Kiosks Special communications focus and demos organised for Milan
20.	Organise, in cooperation with the Commission, the annual European Space Solutions Conference	Organisation, support and promotion	Q4	The European Space Solutions was moved to 30 May – 3 June 2016. Work began on this event in Q3 2015
Supporting Galileo Exploitation and Early Services Communications				
21.	Placement of the Galileo Early Services message and branding into all communications.	Branding used on all materials	Q1-Q4	This task has been postponed to 2016 'Initial Services support'
22.	Update promotional materials for the European GNSS Service Centre	Revision of GSC leaflet	Q1	The Agency updated the brochure and the GSC is promoted in all relevant communications materials and events
23.	Continue to add relevant content & tools to the GSC website	6-8 updates per month	Q4	New documents, functionalities and news are added each month
24.	Leverage articles and content on the other Agency managed websites to send the Initial Services message	On-going references	Q1-Q4	This task has been postponed to 2016 'Initial Services support'
25.	Leverage mailing and media lists to raise awareness of Galileo Initial Services message.	Creation/distribution 2-3 info mailings	Q4	This task has been postponed to 2016 'Initial Services support'
26.	Communicate Galileo Initial Services message at all events where the Agency participates in 2015	Approximately 15-20 events during the year	Q4	This task has been postponed to 2016 'Initial Services support'
27.	Produce and distribute a video promoting Galileo Initial Services	1 Galileo Initial Services Video (long and short version)	Q4	This task has been postponed to 2016 'Initial Services support'

Task	Name	KPI/Deliverable	Timing	Results
PRS Awareness-building (All of these activities involve working jointly with the Commission)				
28.	Production of promotional material (print and audio-visual) on PRS, in close cooperation with the Commission	<ul style="list-style-type: none"> Revise and reprint brochure Production of 5-7 minute video in English. 2-4 updates per month Creation/distribution 2-3 newsletters 	Q1-Q4	No new PRS communications materials were implemented in 2015
29.	Promotion of PRS in selected events, in close cooperation with the Commission	Promote the PRS at 2-3 events during the year	Q4	The PRS was promoted in approved events throughout the year as relevant
Agency Corporate Communications				
30.	Incorporate new logo and branding into all Agency documents, signage & presentation templates as needed	Refined, consistent, evolved look for the Agency	Q1-Q4	<ul style="list-style-type: none"> The Communications Plan was drafted, published and distributed at the 1st Board meeting in 2015, in line with the Work Programme and was fully implemented in 2015 Agency branding was included in all communications in 2015
31.	Regular direct contact with key institutional stakeholders to present and explain who the Agency is, and what it does	Refinement and distribution of an Agency fact file	Q4	<ul style="list-style-type: none"> Two successful events were organised with MEPs. A breakfast was organised in Strasbourg, and the Parliament's ITRE Delegation visited the Agency's headquarters. Ongoing exchange/awareness raising with relevant MEPs relevant to the Agency's work and the smooth flow of the Agency's 2014 discharge
32.	Refinement of the Agency Information/Presentation File for institutional partners	Refinement and distribution of an Agency fact file	Q4	<ul style="list-style-type: none"> Ongoing preparation of targeted Agency presentations Design and production of the 2014 Annual Report and the creation of 2014 overview brochure
33.	Continue to update and to publish regular news and information on Agency activities on the Agency website	1 Agency news story and 4 – 6 info updates per month	Q4	For more information on these results, see task 8
34.	Leverage social media tools (Twitter, Facebook, LinkedIn) to increase awareness of Agency activities in key areas	3-5 updates per month	Q4	For more information on these results, see task 10



Task	Name	KPI/Deliverable	Timing	Results
35.	Refine and regularly distribute an electronic news bulletin on Agency activities and updates to key Agency stakeholders (i.e. Member States, relevant MEPs, Commission partners, etc.)	Text, layout and distribution of 3 newsletters	Q4	For more information on these results, see task 11
36.	Seize opportunities with relevant media – via press releases, advertising, meetings and contacts, and the Internet – to raise awareness and understating of the Agency, its role, the activities it is involved in, and the results it is achieving	3-4 Agency press releases	Q4	<ul style="list-style-type: none"> Editorial support and placement of a range of media articles promoting the Agency, its work and team (including Parliament Magazine, Geospatial World, GPS World feature, Inside GNSS, Coordinates Magazine, Space News, European Voice, Airport Magazine, AIN Journal, Skyways, Geoconnexion, Air Traffic Management, Flight Global) (There were 63 known 2015 media pickups in English in 2015) For more information on these results, see tasks 8 and 13
37.	Leverage event participant to increase Agency visibility	Agency promotion at its communication events	Q4	<ul style="list-style-type: none"> For the first time, the Agency had a communications presence at a Galileo launch (Agency videos were used during launch video transmissions. The Agency also prepared a VIP gift, provided Kourou staff with an Agency t-shirt, provided the Agency team with clean room suits, and was present in launch press conferences. For more information on these results, see task 17.
38.	Implement Agency Internal Communications Plan	Internal communications actions as defined in 2015 plan	Q4	<p>The Internal Communications Plan was included in the 2015 Communications Plan (see task 30). Actions included:</p> <ul style="list-style-type: none"> Weekly newsletter. Regular update of information to staff by e-mail. Organisation of launch events for staff. Regular communications support for staff (conference support, speeches, briefings, meeting organisation, etc.) Supported update of web pages for departments (legal, procurement and HR web sections. Revise/reprint of Quality Management brochure

1.7 Agency Administration (WBS 1.01)

1.7.1 IT and Logistics (WBS 1.01.05, WBS 1.01.06)

Following the stabilisation of the Agency's IT systems in the Prague headquarters, the Agency focused on improvements, new features and projects supporting the business. Reflecting the increased importance that the Agency assigns to this function, three of the four tasks listed below are security related:

- Task 1 delivered a new communication system allowing classified communication between the headquarters and the GSMC sites. The system is currently pending security accreditation.
- Task 2 was related to business continuity and was put on hold due to budget constraints.
- Task 3 is a project requested by the HR department to implement online recruitment and to improve the daily management of routine activities. There is little satisfaction with Allegro, the current system, and it is not possible to use the Commission's system SYSPER2. Therefore, the Agency decided to implement the HR tool provided by the European Defence Agency. Implementation and customization of the tool is ongoing. The tool should be fully operational in Q3 2016.
- Task 4 provided improvements in the security of unclassified information systems.

1.7.2 Human Resources (WBS 1.01.03)

The HR Department contributed to the achievement of the Agency's goals and challenges by providing services that promote a work environment characterized by fair treatment, solid moral attitude, effectiveness, flexibility, transparency, trust and mutual respect in the context of principles and rules of the European Union.

The main priorities set and achieved in 2015 were the implementation and compliance with the regulatory framework related to the 2014 revision of the staff regulations, the introduction of a comprehensive assessment of candidates during the hiring process and the consolidated provision of relocation support services to staff and their families. Team building events, networking activities and internal communication features were also implemented with the aim of fostering the Agency's corporate spirit and increasing the retention of the workforce.



1.7.3 Legal and Procurement (WBS 1.01.02)

The Agency's Legal and Procurement Department was responsible for providing legal, procurement and contract management services for the Agency, for both its core and delegated tasks. During 2015 the main challenges related to the management of legal and procurement issues relating to the various Delegation Agreements in place (See section 1.8 for a full list of Delegation Agreements in effect during the reporting period), together with the stabilisation of the Legal and Procurement Department.

1.7.4 Project Control (WBS 1.01.07, WBS 1.02.01)

The Agency's Project Control department, alongside its main EGNOS Exploitation and Galileo Exploitation tasks, was responsible for ensuring the effective management of the Administrative Board and associated programming documents, in particular the Annual Work Programme and Annual Activity Report, in cooperation with the Legal Department.

1.7.5 Finance (WBS 1.01.04)

The Agency's Finance department was responsible for all financial management, budgeting, reporting and controls. It processed more than 4 000 financial transactions in 2015 with average payment times of 13 days, well below the 30 days prescribed by the Financial Regulation. The Agency's entire core budget was committed by the end of 2015. The Finance Department continued to report on all financial transactions to both internal and external stakeholders.

1.7.6 Tasks

1.7.6.1 IT and Logistics (WBS 1.01.05, WBS 1.01.06)

Task	Name	KPI/Deliverable	Timing	Results
1.	Implement an internal communication system between the headquarters and the GSMC up to Secret UE	Working system	Q4-2015	The system was delivered and is pending security accreditation.
2.	Disaster recovery site	Working site in case of major failure at the headquarters	Q4-2015	This task was not completed due to budget constraints. The necessary hardware could not be purchased.
3.	New HR system replacing Allegro (provided that Sysper2 is not made available by the Commission)	New system working (or migration to Sysper2)	Q2-2015	Following careful examination of the options, the Agency is implementing and customizing an HR system provided by the European Defence Agency. The system should be operational in Q3 2016.
4.	Improvements in IT Security	Intrusion detection and prevention systems in place	Q4-2015	The intrusion detection and prevention system is in place and a Baseline configuration has been done.

1.7.6.2 Human Resources (WBS 1.01.03)

Task	Name	KPI/Deliverable	Timing	Results
1.	Conduct a yearly analysis of learning and development needs and offer a variety of development opportunities, enabling staff to maintain and expand the skills, competences and experience necessary to effectively contribute to the achievement of individual, divisional and organisational goals and the Agency's expectations.	<ul style="list-style-type: none"> Learning and Development Framework 2015 drafted and implemented Agency and department development activities as well as personal learning and development maps implemented effectively and efficiently. 	Q1-4	<ul style="list-style-type: none"> These objectives were achieved. A Learning & Development needs analysis was carried out and activities were implemented accordingly.
2.	Competency management - Develop a map of existing competences	<ul style="list-style-type: none"> Agency competencies mapped 	Q4	This objective was re-prioritised
3.	Implement HR software fully in order to improve efficiency in HR processes management such as recruitment, absences, probation period, personal files, job profiles etc.	<ul style="list-style-type: none"> First modules of HR software implemented, Agency staff trained to use it. Gradual implementation of new modules. Appropriate automation for every HR task and function. Streamlined management of personnel files. Improved compliance and secure, instant access to information offered. Support of the decision processing with the accurate, timely, and accessible data needed to enable informed judgment. Integration of all HR processes to minimize redundancy. 	Q4	The objective was partially achieved. Various modules were implemented (e.g.: Appraisal, Flexitime) Preparatory work was initiated for the remaining HR modules



Task	Name	KPI/Deliverable	Timing	Results
4.	Efficient workforce planning Efficiently recruit new posts and replace vacant positions	<ul style="list-style-type: none"> 80% execution of Establishment Plan Send a job offer to successful candidates within 4 months from publication or after staff members leave. Succession planning Audit on workload Compliance with the Agency grade harmonisation plan Introduction of psychometric tests Introduction of Assessment Centres 	Q1- Q4	<ul style="list-style-type: none"> 97% execution achieved Average length of procedures 5 months – replacement of departed staff within 3 months The succession planning programme was re-prioritised Audit workload completed and new posts allocated accordingly New recruitments aligned with grade policy Psychometric tests introduced Assessment Centres for managerial positions introduced
5.	Relocation support services	<ul style="list-style-type: none"> Complying with legal requirements stemming from the Host Agreement (Identity and car registrations) Practical support Home search School and nursery search Utilities support Removals advice Continued support after the move Support programmes for family members (job search support, language courses, networking etc.) 	Q1-Q4	<ul style="list-style-type: none"> Objectives achieved Relocation support services consolidated Requirements stemming from the Host Agreement respected Planned services provided
6.	Performance management	<ul style="list-style-type: none"> All annual appraisal reports, annual objectives reports, probation period objectives reports and staff reclassification exercises completed 360 degree evaluation 	Q2	<ul style="list-style-type: none"> The performance management processes was completed. The 360 degree evaluation was re-prioritised.
7.	Organise Agency social and well-being activities and events	<ul style="list-style-type: none"> Activities and events carried out Social audit 	Q1-Q4	<ul style="list-style-type: none"> Social and well-being activities offered

Task	Name	KPI/Deliverable	Timing	Results
8.	Contract management	<ul style="list-style-type: none"> Medical services in Prague Medical advisor in Prague Provision of interim services in Prague HR consultancy services All contracts drafted, amended, signed and processed accurately in a timely manner 	Q1- Q4	<ul style="list-style-type: none"> Objective partially achieved Provision of interim services implemented Provision of medical services not fully implemented HR consultancy - objective re-prioritised
9.	Internal communication	<ul style="list-style-type: none"> An internal communication plan developed and implemented. Activities and events organised, initiatives supported. 	Q1-Q4	Internal communication activities and initiatives organised and supported
10.	Grade policy	<ul style="list-style-type: none"> Strategy on harmonisation of grades within the Agency drafted and approved 	Q4	Grade policy established
11.	Career policy	<ul style="list-style-type: none"> Career path policy and staff development strategy. Career development advisor services. 	Q4	Objective re-prioritised
12.	HR regulatory framework implementation	<ul style="list-style-type: none"> Flexitime policy introduction and implementation. Reclassification policy. Agency policy protecting the dignity of the person and preventing psychological and sexual harassment and its implementation through confidential counsellors' network. Agency policy on administrative enquiries and disciplinary procedures. Health and safety policy and its implementation. 	Q4	<ul style="list-style-type: none"> Flexitime policy introduced and guidance to staff on implementation provided Reclassification policy fully implemented Remaining policies – being processed in cooperation with the European Commission

1.7.6.3 Legal and Procurement (WBS 1.01.02)

Task	Name	KPI/Deliverable	Timing	Results
1.	Provide legal advice and support for all Agency tasks.	Ensure overall legal coverage.	Q1-Q4	The Agency ensured overall legal coverage for all its activities.
2.	Provide legal support to the Administrative Board.	Effective running of Administrative Board.	Q1-Q4	The Agency ensured the effective running of the Administrative Board during the reporting period



Task	Name	KPI/Deliverable	Timing	Results
3.	Substantially contribute to inter-institutional relations (Commission, ESA)	Effective cooperation with other institutions.	Q1-Q4	The Agency maintained effective cooperation with other institutions. It is to be noted that the EGNOS Exploitation GSA-ESA Working Agreement was signed. The process to have a Galileo Exploitation GSA-ESA Working Agreement was kicked off during the reporting period.
4.	Stabilise the legal and procurement team.	Balanced work distribution	Q1-Q4	The Agency has largely been able to stabilise its legal and procurement team. New recruits who started in the Agency in Q4 of the reporting period are being integrated into the team. Their training is ongoing.
5.	Achieve planned procurements and flexibility for additions.	Contracts signature and budget execution	Q4	The Agency achieved 100% of its plans; while it had flexibility for changing requirements, it is difficult to quantify this into meaningful results.
6.	Stabilise procurement processes and templates and complete integration of full admin procurement.	Streamlined (high-standard) working methods	Q4	All the Agency's procurement processes are stable. The necessary templates are updated on a regular basis as part of the Agency's continuous improvement programme.
7.	Earlier planning and conduct of procurements.	Planning initiated in N-1 and increased commitments in first half of year.	Q1-Q2	The Agency's planning was initiated as expected. Procurement processes are dependent on the needs and circumstances of the operational departments and consequently the Agency feels that there is room to improve the coordination required to increase its commitments earlier in the calendar year.



1.7.6.4 Project Control (WBS 1.01.07, 1.02.01)

Task	Name	KPI/Deliverable	Timing	Results
1.	Prepare Administrative Board and associated programming documents in cooperation with Legal.	Effective running of Administrative Board.	Q1-Q4	The Agency organised three successful Administrative Board meetings during the reporting period and supported the Board with timely provision of relevant documents for meetings and for written procedures. The Agency created the programming documents for the reporting period in a timely fashion and submitted them to the Board for approval in accordance with statutory deadlines.
2.	Establish new Project Control team, especially in support of EGNOS Exploitation and Galileo Exploitation tasks	Effective team organisation put in place	Q1-Q4	During the reporting period, the Project Control team was properly established and staffed, especially to provide the requisite support to the EGNOS Exploitation and Galileo Exploitation tasks.

1.7.6.5 Finance (WBS 1.01.04)

Task	Name	KPI/Deliverable	Timing	Results
1.	Managing & processing about 4 000 transactions (commitments, payments, recovery orders, transfers, reimbursements, cash requests, etc.)	All transactions documented properly and processed within the appropriate operational and legal deadlines	Q1-Q4	A total of 4 267 financial transactions were processed in 2015 with an average payment time of 13 days, well below the Commission's 30 days prescribed limit and 20 days target.
2.	Implementing, in cooperation with other departments, Activity Based Budgeting and Activity Based Reporting	System in place during Q1	Q1	It was not possible to implement Activity Based Budgeting completely although Activity Based Costing is implemented in ABAC, the financial system in use.
3.	Budgetary and statutory external and internal reporting	All reports delivered on time	Q1-Q4	All internal monthly budget reports and statutory external quarterly and annual financial reporting were delivered on time.
4.	Management of all administrative, financial and contractual provisions for Horizon 2020, FP-7, FP-6 and any other grant schemes	Grant processes handled on time and with a high degree of quality. No observations from the European Court of Auditors or the Internal Audit Service in relation to grant management	Q1-Q4	There were no observations from the European Court of Auditors. Observations from the Internal Audit Service were resolved before year-end. Improvements are necessary on payment times for grants and this will be a focus of 2016.



Task	Name	KPI/Deliverable	Timing	Results
5.	Grants ex-post audits launched and concluded on time in order to provide assurance to our external auditors	All audit reports finalised before the Agency's financial statements are closed. Grants error rate to remain below the Commission average	Q2	<ul style="list-style-type: none">• Audit reports were finalised before the closing of the Agency's financial statements.• Coverage from ex-post controls in FP-6 and FP-7 was 17.59%• Representative error rate was 1.49% compared with the Commission's representative error rate of 4.99%.
6.	Management of all internal control functions, including relations with the Internal Audit Service and implementation of the Anti-Fraud Strategy	No critical observations raised by the Internal Audit Service or the European Court of Auditors	Q1-Q4	The internal control function was fully handed over to the new Internal Control Coordinator.



1.8 Delegated Tasks

There were various delegation agreements in place during the reporting period to cater for specific activities. The list below shows which delegation agreements were in force:

1. The FP-7 delegation agreement, signed in 2011.
2. The PRS delegation agreement, signed in 2011.
3. The Exploitation Preparation Delegation Agreement signed in 2012.
 - Tasks related to Programme Exploitation.
 - Tasks related to the Action Plan on GNSS Applications.
 - Tasks related to Communications Activities.
 - Tasks related to developing the PRS and related security activities.
4. The EGNOS Exploitation Delegation Agreement signed in 2014.
5. The Galileo Exploitation Delegation Agreement signed in 2014.
6. The Horizon 2020 delegation agreement, signed in 2014.

1.8.1 Delegation Agreement for the Seventh Framework Programme for Research and Development of the European Union (FP7)

The European Union's 7th Framework Programme for Research and Innovation, after successfully completing the period 2007-2013 with impressive achievements in all areas, paved the way for its successor, the Horizon 2020 Programme. The Commission delegated to the Agency the responsibility to manage projects regarding GNSS applications and the FP7 grants allocated to this domain. The Agency managed (in three calls) 86 projects with funds coming up to 66.5 million EUR.

Overall, 18 projects were funded in the first call, 29 in the second call and 39 in the third one. The projects covered all key market segments, such as aviation, maritime, LBS, rail, road, agriculture, surveying and mapping, PRS, education, international cooperation.

All FP7 proposals strongly supported the adoption of the European GNSS bringing tangible results:

- 49 commercial products,



- 80 working prototypes,
- 14 patents/trademarks registered,
- 115 trials/demos.

In 2015, the Agency did not start any new activities under this delegation agreement. The following projects were still on-going and were managed in 2015:

- GNSS Education Network For Universities And Industries (GENIUS)
- Strengthening User Networks For Requirement Investigation And Supporting Entrepreneurship (SUNRISE)
- Countering GNSS High Accuracy Applications Limitations Due To Ionospheric Disturbances In Brazil (CALIBRA)
- Integrated Professional Mobile Radio and GALILEO PRS Receiver Architecture (PRS4PMR)

All projects are technically closed and only one is on going from a contractual point of view.

1.8.2 Delegation Agreement for Public Regulated Service (2011)

During the reporting period, the Agency continued to provide the management of the P3RS2 project for the development of the first generation of PRS pre-operational receivers that was kicked-off in December 2013 for a duration of 42 months. The project's mid-term review was successfully completed in the third quarter of 2015 and the qualification review for the project is expected in mid-2016. Delivery of the initial 20 PRS receivers is foreseen in 2016.



1.8.2.1 Tasks

Task	Name	KPI/Deliverable	Timing	Results
1.	Follow up design implementation as defined in the Critical Design Review (CDR) and qualification	<ul style="list-style-type: none"> Design and justification files 	Q1-Q4	<ul style="list-style-type: none"> Update of all the CDR documentation following CDR close-out report Midterm review completed (report in July 2015)
2.	Following equipment evaluation and accreditation	<ul style="list-style-type: none"> Security target and protection profile and justification files 	Q1-Q4	<ul style="list-style-type: none"> The security accreditation and certification plan was updated and presented (with no objections) to the GNSS Security Board. It is currently being implemented The updated Protection Profile and Security target was developed in cooperation with the relevant national Authorities The Agency kicked off the evaluation activities for the two Security Modules
3.	Implementation of additional P3RS2 activities (such as the purchase of additional receiver boxes and/or additional receiver units or the implementation of additional tasks) if required)	<ul style="list-style-type: none"> Additional receiver boxes and/or additional receiver units as required Technical deliverables associated to the specific tasks 	Q1-Q4	<ul style="list-style-type: none"> Ten additional boxes and cables were purchased. A negotiation took place of Contract Change Notices on the implementation of RINEX functionality in support of Pilot Project



1.8.3 Delegation Agreement for the Preparation of the Exploitation Phase

In 2015, the Agency did not commit any funds under this agreement. However, ongoing activities continued until 31 December 2015 when the period of execution of this delegation agreement ended.

1.8.3.1 PRS Pilot Projects definition and implementation and General Support to the Commission on PRS User Segment

The Agency continued to provide support to the European Commission in PRS user segment-related activities including:

- Logistical, technical and secretarial support to the GNSS Security Board and associated Working Groups (WG) in particular to WG-PRS and WG-NET (with additional support to WG-CSI for PRS related issues).
- Provision of general technical assistance to the Commission for PRS user segment implementation
- Support to the Commission to maintain GNSS Security Board documentation (e.g. PRS Implementation Plan and annexes), and of PRS User Segment documentation (in coordination with ESA)
- PRS Pilot Project implementation support including (but not limited to) support in the implementation of the call for engagement launched by the GNSS Security Board in March 2013, support the coordination of "engaged" PRS Participants, liaison with new PRS participants, organisation of workshops and awareness sessions on PRS, lessons learnt, etc.
- Acting as the main interface with PRS end-users and industry (in liaison with Competent PRS Authorities)

These tasks were continued and completed by additional tasks included under the new Galileo exploitation delegation agreement (section 1.8.5)

1.8.4 Delegation Agreement for the EGNOS Exploitation

The EGNOS Exploitation Delegation Agreement between the Commission and the Agency was signed on 16 April 2014, delegating 1 450 million EUR to the Agency for undertaking EGNOS Exploitation tasks over the period 2014-2020, which include the provision of the Open Service, Safety of Life Service and EDAS to users. This agreement defines the Commission-Agency link for EGNOS Exploitation as foreseen in the GNSS Regulation, and was complemented in 2015 by the GSA-ESA Working Arrangement, also foreseen in the GNSS Regulation. This Working Arrangement addresses future system upgrades coming after the V2.4.1M, V2.4.1P



and V2.4.2 Phase B activities being completed under the existing EC-ESA EGNOS Delegation Agreement, and the V3 activities.

The full detail of these tasks are contained within the relevant delegation agreements and related documentation.

The following represents a summary of the main topics and activities covered in 2015:

- This was the second full year of the EGNOS Exploitation Delegation Agreement since it was signed on 16 April 2014.
- In 2015, the EGNOS Service Provision trend was very positive. At the beginning of 2015, EGNOS performances continued to be affected by high ionospheric activity, but since the second quarter performance improved significantly, marked by lower solar and geomagnetic activity. In the third quarter, performance was amongst the best ever achieved, with very good coverage in particular in the south – south-western region. The reasons for this are more favourable ionospheric conditions and good performance of the system evolutions developed within EGNOS System Release 2.4.1M which had been broadcasting since the end June. The fourth quarter performance continued to be very good. Small degradations are however systematically seen in the north over Iceland as well as over Finland. This is linked to the geomagnetic effect on EGNOS that is expected to be mitigated by EGNOS System Release 2.4.2B.
- The Agency has ensured a smooth transition of System Evolution activities performed by ESA, from the EC-GSA Delegation Agreement to the GSA-ESA Working Arrangement. A temporary agreement with ESA has been put in place to ensure continuity of ESA activities over the second quarter of 2015. The Agency concluded and signed the GSA-ESA Working Arrangement in July.
- The Agency's requests for proposal for EGNOS Service Release 2.4.2 Phase C/D and for EGNOS v3 Phase C/D were released to ESA, following successful scrutiny by the Commission.
- The GEO-3 services procurement process was launched with the publication of a Request to Participate in December 2015.
- The EGNOS Safety Management System within the Agency's Integrated Management System was achieved. The processes and procedures were set up to reflect the agreed safety responsibilities within the Agency's organisation.



- The Agency actively participated in Security Analysis (PCIP-6) tasks in support of ESA and ESSP and provided direct contributions to the EASA Coordination Meeting. The Agency also contributed to the GSAP/GF5 activities.
- The Budget Implementation Plan 2016 was prepared and delivered, clearly identifying and quantifying the necessary additional budget to be considered in the revision of the EC-GSA Delegation Agreement for EGNOS in 2016, providing all elements for the Commission to prepare such revision.
- In terms of adoption in Civil Aviation, by the end of December 2015, 245 Radio Navigation Performance Approaches down to LPV minima were operational in 149 airports. In addition, Approach Procedures with Vertical Guidance (APV Baro) for 70 additional runway ends can be flown with EGNOS vertical guidance. In total, 174 airports/heliports in 19 countries have EGNOS based operations implemented.
- Thirteen projects were funded through the call for proposals to foster EGNOS adoption in Civil Aviation (GSA/GRANT/EGNOS/03/2014).
- Following the publication at the above website, the EGNOS Service Performance Monitoring Support "SPMS" (GSA/GRANT/EGNOS/01/2014) call for proposals, a Framework Partnership Agreement was signed with the consortium led by Centre National d'Etudes Spatiales (CNES).
- Following the invitation for the support to the continuous development of EGNOS and Galileo programmes in the field of Aviation (GSA/GRANT/EGNOS/02/2014), a Framework Partnership Agreement was signed with EUROCONTROL.
- All grants identified in the EGNOS Annual Grant Plan were published on the Agency's website. The Agency supported the Commission in the creation of an SBAS Exploitation subgroup of Working Group C in coordination with the US Federal Aviation Authority and in preparation of the EU-ASECNA cooperation agreement.
- The Agency has both organised and hosted a visit of Ukrainian delegation at its headquarters that informed its Ukrainian partners about EGNOS, and to prepare the hosting of a new EGNOS Ranging and Integrity Monitoring Station in Kiev.

Pursuant to the transparency principle laid down in Article 128 of the Financial Regulation, the Agency published all calls for proposals¹⁰ on its website.

¹⁰ In line with Article 30 of the GNSS Regulation, the European Commission (through the assistance of GSA – Articles 14.2 and 14.3) "may have recourse to necessary technical assistance, in particular to the capacity and expertise of the national agencies competent in the space sector, or the assistance of independent experts and bodies capable of providing impartial analyses and opinions on the progress of the Galileo and EGNOS programmes." Since EUROCONTROL possesses unique knowledge



The Agency informed all applicants (including the awarded, rejected proposals as well as the candidates placed on the reserve lists) on time and signed the grant agreements on time.

However, in the case of one Aviation 2014 grant procedure (GSA/GRANT/EGNOS/03/2014), a 3-month delay occurred regarding the signature of all grant agreements. This was due to the large number of proposals received and awarded in one procedure, the need to refine the provision related to the ownership of the Intellectual Property Rights (IPR) in order to comply with aviation specific regulations, and the summer period.

1.8.5 Delegation Agreement for Galileo Exploitation

The Galileo Exploitation Delegation Agreement between the Commission and the Agency was signed on 2 October 2014. This agreement provides a framework and budget for the development of services and operations through 2021 and serves as an initial step towards the full Galileo Exploitation Phase. Specifically, the Agency's responsibilities include:

- Provision and marketing of the services;
- Management, maintenance, continuous improvement, evolution and protection of the space and ground infrastructure;
- Research and development of receiver platforms with innovative features in different application domains;
- Development of future generations of the system;
- Cooperation with other GNSS;
- All other required activities to ensure the development and smooth running of the system.

The European Commission remains responsible for the overall programme supervision, while ESA is entrusted with the deployment phase. This delegation agreement will be completed by the GSA-ESA Working Arrangement. The GSA-ESA Working Arrangement will in particular address future system upgrades.

The Galileo exploitation phase will be progressively rolled out starting in 2017, with full operability scheduled for 2020. The implementation period of the Agreement runs until 2021, with a comprehensive review of its functioning before the end of 2016. The maximum current EU contribution amounts to EUR 490 million, which covers procurement and grant activities, including the GSA-ESA working arrangements and a

about E-GNSS system, and based on its specific technical competence and high degree of specialisation, EUROCONTROL was invited to submit a proposal following an exceptional procedure in accordance with Article 190(1)(f) RAP.

programme management reserve, along with related research and development activities. The financing of the full exploitation phase will be confirmed during a mid-term review before the end of 2016.

The following represents a summary of the main topics and activities covered in 2015:

- The preparatory activities for the Galileo Exploitation phase intensified ahead of the start of the full exploitation phase in January 2017. This was especially the case related to the Galileo Service Operator (GSO) procurement.
- An intensive activity took place to organize the performance of the delegated tasks, to start or ramp up preparatory activities, to initiate the transfer of contracts from the Commission to the Agency, where relevant, to restart activities of the Early Services Task Force into an Initial Services Task Force, to submit working plans, to report on activities undertaken, and finally to submit tender data packages for the Commission to exercise its veto rights.
- The Agency's internal Galileo Exploitation organization, the assignment of responsibilities within the Agency and a clear allocation of tasks has been completed and documented in the Galileo Exploitation Management Plan. The methodologies to manage schedule, cost, risk, configuration and documentation, derived from EGNOS have been implemented over the year and enable a sound management of the programme activities. Detailed schedules now cover all delegated activities, with the high level schedule securing the coordination between activities. A full risk management process, which also involves the Commission, has been put in place.
- The ramp up of operational preparatory activities continued during 2015 with the formal start of the GSO tender and the submission of the tender information package to the EU Official Journal on 24 December 2014. During 2015, the GSO Phase-I with the evaluation of the preliminary proposals was completed and the competitive dialogue (Phase-II) initiated. A tremendous effort was made to respect the tight schedule of this critical procurement. The Galileo Reference Centre (GRC) procurement preparation continued and the final publication of the GRC Invitation to Tender and the GRC grant took place in February 2016. After the transfer of the GSC contracts from the Commission to the Agency, the latter managed the execution of these contracts and the deployment of the initial GSC version started at the end of 2015 in the GSC in Madrid. Regarding Initial Services preparation, the successful launches in March, September and December 2015 comforted the capability of the programme to deliver initial services in 2016 and a tremendous effort was undertaken to establish a master schedule with a planned service declaration date in October 2016.



- The call for proposals for Development of E-GNSS engine for safety-critical multiapplications in road transportation (GSA/GRANT/02/2015) and a call for proposals for Development of E-GNSS engine for liability- and payment -critical multi-applications in road transportation (GSA/GRANT/02/2015) were published on the Agency's dedicated grants web page.
- All grants were identified in the Galileo Annual Grants Plan and all call for proposals were published on the Agency's dedicated grants web page.
- Finally, the Agency delivered all required reports and documents, in particular the twelve Monthly Status Reports from January till December, the four Quarterly Implementation Reports, the Annual Implementation Report 2014, an updated version of the 2015 Galileo Budget Implementation Plan and the 2016 Budget Implementation Plan and Grant plan. Related meetings took place with agreed actions and way forward.

1.8.6 Delegation Agreement for Horizon 2020

The Commission delegated to the Agency the implementation of Horizon 2020 - Framework programme for research and innovation, based on the Delegation Agreement signed in April 2014.

According to the general provisions of this Agreement, the Commission entrusted the Agency with the implementation of tasks under the following part of the Commission's 2014-2015 Work Program implementing the Horizon 2020 Specific Programme: Galileo-related activities within the activity "Space" of the specific objective "Leadership in Enabling and Industrial Technologies" of the pillar "Industrial leadership".

During the reporting period, the Agency's main tasks included the management of grant award procedures for the call for proposals. Moreover, the Agency managed all of the stages in the lifetime of actions supported by grants awarded under a transfer of funds agreement.

In the second quarter of 2015, thanks to additional available budget, the Agency was able to invite 2 proposals from the reserve list for the Grant Agreement preparation phase. Both projects have signed the Grant Agreement and started during the same quarter. These proposals were the following:

- BELS: Building European Links toward South East Asia in the field of GNSS
- 5 LIVES: Search, Challenge, Fight, Care, Rescue for Lives

Overall, 27 projects are funded in the first call covering all key market segments, such as aviation, maritime, LBS, rail, road, agriculture, surveying and mapping, timing and synchronization, GNSS awareness raising and capacity building. All Horizon 2020 first call projects strongly support the adoption of the European GNSS and are already bringing tangible results. The main outcome in 2015 was:

- 2 commercial products,
- 4 patents/trademarks registered,
- 223 papers released,
- 123 events organized/attended.

The list of projects that the Agency managed in 2015 is:

Acronym	Title
SAT406M	An EGNSS application providing an end-to-end solution based on the SAR/Galileo service and particularly using the Return-Link-Message , to improve the mobility and safety of citizens
GMCA	GNSS Monitoring for Critical Applications
mapKITE	EGNOS-GPS/GALILEO-based high-resolution terrestrial-aerial sensing system.
PARADISE	Precise and Robust Navigation enabling Applications in Disturbed Signal Environments
G MOTIT	Galileo-Enhanced MOTIT: an electric scooter sharing service for sustainable urban mobility
MISTRAL	Monitoring of Soil moisture and water-flooded Areas for agriculture and Environment
MAGNIFIC	Multiplying In Africa European Global Navigation Initiatives Fostering Interlaced Cooperation
COREGAL	Combined Positioning-Reflectometry Galileo Code Receiver for Forest Management
LARA	LBS Augmented Reality Assistive System for Utilities Infrastructure Management through Galileo & EGNOS
ERSAT EAV	ERTMS on SATELLITE – Enabling Application Validation
GALENA	Galileo-based solutions for urban freight transport
DEMETRA	Demonstrator of EGNSS Services based on Time Reference Architecture
FOSTER ITS	First Operational, Secured and Trusted galileo Receiver for ITS
ELAASTIC	European Location As A Service Targeting International Commerce
e-Airport	Increase airport capacity, safety and security using European GNSS
UKRAINE	Ukraine Replication, Awareness and Innovation based on EGNSS
GHOST	Galileo Enhancement as Booster of the Smart Cities
GEO VISION	GNSS driven EO and Verifiable Image and Sensor Integration for mission-critical Operational Networks
spyglass	Galileo-Based Passive Radar System For Maritime Surveillance
E-KnoT	E-GNSS Knowledge Triangle
JUPITER	Joint European Project for International ITS/EGNSS awareness Raising
GNSS.asia2	Industrial cooperation across continents
BEYOND	Building EGNSS capacity On EU Neighbouring multimodal Domains.
POSITION	Polish Support to Innovation and Technology Incubation
CaBiAvi	Capacity building for aviation stakeholders, inside and outside the EU
5LIVES	Search, Challenge, Fight, Care, Rescue for Lives
BELS	Building European Links toward South East Asia in the field of GNSS



Regarding the H2020 2nd call, the deadline for submission of proposals was set on 8 April 2015. The total indicative budget for the call was 25 million EUR. According to the call for proposals, the submission of proposals was done in one stage, i.e., submission of complete proposals.

Following the evaluation, 13 proposals were invited to the Grant Agreement preparation phase and 14 proposals were placed on the reserve list.

The list of proposals invited to the Grant Agreement preparation phase is:

Acronym	Title
BLUEGNSS	Promoting EGNSS Operational Adoption in BLUEMED FAB
STRIKE3	Standardisation of GNSS Threat reporting and Receiver testing through International Knowledge Exchange, Experimentation and Exploitation
MOBNET	Mobile Network for people's location in natural and man-made disasters
SKYOPENER	SKYOPENER - establishing new foundations for the use of Remotely-Piloted Aircraft Systems for civilian applications.
InDrive	Automotive EGNSS Receiver for High Integrity Applications on the Drive
AUDITOR	Advanced Multi-Constellation EGNSS Augmentation and Monitoring Network and its Application in Precision Agriculture
RHINOS	RHINOS - Railway High Integrity Navigation Overlay System will define a GNSS-based system to support the localization of trains respecting the challenging requirements of the railway safety standards.
EASY Pv	EGNSS high Accuracy SYstem improving Photovoltaic plants maintenance
STARS	Satellite Technology for Advanced Railway Signalling
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
HELIOS	Second Generation Beacon for GALILEO/EGNOS EGNSS Search And Rescue applications
GRICAS	Galileo MEOSAR RLS Improvement for Better Civil Aviation Security



2 Management

2.1 Management Board

The Agency has an Administrative Board that is described in section 2.1.1. It also has a separate Security Accreditation Board, which is responsible for accreditation matters, described in section 2.1.2

2.1.1 The Administrative Board

The Administrative Board brings together representatives of the Member States, EU Institutions, Norway and the European Space Agency. The Administrative Board is responsible for defining the Agency's priorities, establishing the budget and monitoring the Agency's operations.

2.1.1.1 Composition

Voting Members	EU Member States (28 representatives) and European Commission (4 representatives) A detailed list of Board Members is available on the Agency website .
Non-Voting Members	European Parliament (1 representative), Norway
Observers	Chair of the Security Accreditation Board High Representative for Foreign Affairs and the Security Policy (1 representative) European Space Agency (1 representative)
Chair	Ms Sabine Dannelke (Germany)
Deputy Chair	Mr Christian Gaisbauer (Austria)

2.1.1.2 List of Administrative Board Decisions

The Administrative Board met three times in March, June and November. These meetings, numbered 41 through 43, decided upon the following items:



Mtg	Date	Reference:	Title
41	05 Mar	GSA-AB-41-15-03	Budget 2015 (Inscription)
41	05 Mar	GSA-AB-41-15-03-05-07	Anti-Fraud Strategy and Action Plan
42	04 Jun	GSA-AB-42-15-06-02	Rules of Procedure for the Administrative Board. This decision is an update to the existing rules of procedure.
42	04 Jun	210515	Shared Internal Audit Capability with the Chemicals Agency
43	30 Oct	15-10-30-02	Extension of the term of office of the Director
43	30 Oct	15-10-30-05	Engagement and use of Temporary Agents 2f
43	30 Oct	15-10-30-04	Model decision for unpaid leave
43	30 Oct	15-10-30-03	Internal Audit Capability work plan 2015-2016
43	30 Oct	15-10-30-06	Social Measures for the Agency. With this decision, the Agency is implementing a set of social measures to help maintain its attractiveness as an employer in a highly competitive and technical market. More information about this can be found in section 2.4.

Additionally, the Administrative Board also took the following decisions based upon written procedures, namely (numbered 44 to 54):

#	Date	Title
44	30 Jun	Annual Accounts 2014
45	30 Jun	Annual Activity Report 2014
46	07 Aug	Amending budget 2015
47	07 Aug	Amending draft budget 2016
48	15 Oct	Appraisal of Temporary Agents
49	15 Oct	Appraisal of Contract Agents
50	24 Sep	Delegation of Appointing Authority powers to the Executive Director
51	24 Sep	Delegation of Appointing Authority powers to the Chair of the Security Accreditation Board
52	24 Sep	Policy on the prevention and management of conflicts of interest.
53	24 Sep	Rules of Procedure
54	15 Oct	Appointment of an Accounting Officer from the Commission

2.1.2 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 Executive Director and the Administrative Board of the Agency. All the security accreditation decisions related to the GNSS systems are of its sole competence.



The SAB is responsible for the security accreditation of the European GNSS systems, i.e. to verify that they comply with the applicable security rules and regulations as established by the Council and the European Commission. Security accreditation decisions adopted by the SAB entail inter alia the following:

- 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;
- the 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.

2.1.2.1 Composition

The SAB brings together representatives of the Member States, the European Commission, the High Representative for Foreign Affairs and the Security Policy, the European Space Agency and Norway

Members	EU Member States (28 representatives) European Commission (1 representative) High Representative for Foreign Affairs and the Security Policy (1 representative)
Non-voting Members	Norway (1 representative)
Observers	European Space Agency (1 representative)

The decisions taken by the SAB are classified.

2.1.2.2 Chairmanship

The SAB chair Mr Jeremy Blyth (United Kingdom) and the deputy chair Mr Bruno Vermeire (Belgium) were elected for another period of two years, showing the SAB's support to the current SAB management and its approach towards security accreditation.

2.1.2.3 Support provided by the Agency

According to Article 11(10) of the Regulation, the Agency provides the appropriate human and material resources required to the SAB to enable it and its sub-ordinate bodies to perform their tasks independently.



In particular, the Agency conducts security accreditation activities defined in chapter III of the Regulation, ensuring the technical and administrative secretariat to the SAB, providing the underlying security assurance to enable the SAB to take proportionate, appropriate and cost effective security accreditation decisions at the Programme milestones.

The Agency plays also an important management and coordination role for the SAB subordinate bodies, the European GNSS Security Accreditation Panel and the SAB CDA Task Force.

2.2 Major Developments

Over the reporting period, several programmatic and administrative developments took place in the Agency:

- The fourth, fifth and sixth Galileo launches were approved by the SAB. The launches took place successfully.
- The Operations Validation Readiness Review (OVR) of the Agency's GSMC took place successfully in line with the programme schedule.
- The fourth Market Monitoring report was issued.
- The Agency ensured a smooth transition of System Evolution activities performed by ESA, from the EC-GSA Delegation Agreement to the GSA-ESA EGNOS Working Arrangement. The Agency concluded and signed the GSA-ESA EGNOS Working Arrangement in July 2015.
- The Agency carried out Phase-I of the GSOp tender by completing the evaluation of preliminary proposals and initiating the competitive dialogue (Phase-II)
- The second call for proposals under the Horizon 2020 research programme was managed by the Agency.
- Work under the Delegation Agreement for the Preparation of the Exploitation Phase completed successfully.

2.3 Budgetary and financial management

The Agency's own executed budget in 2015 was EUR 27 606 415 representing 100% budget execution in terms of commitments. In addition to the annual subsidy, in 2015 the Agency managed a delegated budget from the Commission of EUR 116 067 789.51 in terms of new commitments for contracts and grant agreements and EUR 183 108 199 in payments.

In terms of budget breakdown, the total expenditure on staff costs was EUR 12 961 487; other administrative costs amounted to EUR 6 035 337; and expenditure on operational costs was EUR 8 609 589.

Furthermore, during this reporting period:

- There were two amendments to the budget within the course of the year, one of which was to reduce payment appropriations on Title 3 by 4,821,368.48 EUR to 3,788,221 EUR. The level of commitment appropriations did not change.
- Budget execution for the year was 100% in commitment appropriations and 100% in C1 payment appropriations when taking into account the non-automatic carry-forward in order to maintain the Agency's payment capacity on existing legal obligations.
- Two amending budgets were approved one of which was to reduce payment appropriations on Title 3 by 4 821 368.48 EUR to 3 788 221 EUR. The second Amending Budget covered a reduction in the total number of payment appropriations on Title 3 following a revision of operational payment schedules in the third quarter. There were also minor reallocations of non-differentiated appropriations on staff and administrative budget lines.
- The Agency continued to manage a large amount of delegated budget for the EGNOS Exploitation delegation agreement, the Galileo Exploitation delegation agreement and the Horizon 2020 delegation agreement. An amendment to the Galileo Exploitation delegation agreement was signed at the end of the reporting period, assigning a further 300 million EUR to the Agency. A total of 116 067 789.51 EUR delegated budget was committed and 183 108 199.00 EUR made in payments.
- The Agency carried out 424 commitments and modification of commitments; 3 760 payment requests; 75 recovery orders and 8 internal transfers. All in all, 4 267 financial transactions were processed (representing a 24% increase on the previous financial year)
- Payment appropriations for an amount of 3 418 099.45 EUR were carried over on Title 2 (automatic carry-over) from 2014 to 2015, representing 54% of the total Title 2 budget. Payment appropriations for an amount of 2 521 163.85 EUR were carried over on Title 2 (automatic carry-over) from 2015 to 2016, representing 42% of the total Title 2 budget and a significant decrease in the carry-over of previous years.
- Payment appropriations for an amount of 5 340 257.12 EUR on Title 3 were carried over (nonautomatic carry over) from 2014 to 2015 to maintain the Agency's payment capacity on existing legal obligations. Payment appropriations for an amount of 83 568.48 EUR were carried over on Title 3 (nonautomatic carry over) from 2015 to 2016 for the same reason.



- The Agency paid 21 871.52 EUR in late interest to suppliers. This is a decrease of 24% in comparison to 2014.
- The Agency's Legal and Procurement Department completed 267 procurement procedures of which 5.9% (16) were framework contracts, 49% (131) were specific contracts or order forms, 38.9% (104) were direct contracts and 5.9% (16) were amendments to existing items.

Further Details of the implementation of the budget for the reporting period can be found in the [Report on Budgetary and Financial Management in 2015](#) on the Agency's website. Statistical information is also available in Annex II of this document.

The entire Agency revenue for the reporting period comes from the EU budget and EFTA contribution. No other sources of funding were available.

2.4 Human Resources Management

At the beginning of the reporting period the Agency employed 96 Temporary Agents (TA), 33 Contract Agents (CA) and 2 Seconded National Experts (SNE) which totals 131.

At the end of the reporting period, the Agency employed 99 TAs, 36 CAs and 4 SNEs bringing the staff complement up to 139

In 2014, the Agency had offered 3 people new TA posts but these were eventually declined in 2015. The Agency had approval for 6 new TA posts for the reporting period. There also were 5 TA resignations during the year which, in total, meant that the Agency had 14 TA vacancies to fill during the reporting period. Five of these were filled by internal staff but this staff movement implied vacancies elsewhere bringing the total recruitment procedures for Temporary Agents to 19. The Agency managed to fill 16 of them, hence the execution of the 2015 establishment plan was 97%.

The Agency also received 5 CA resignations and established 3 new CA posts. All 8 CA posts have been filled. During the reporting period, the Agency received 1 SNE resignation and 1 SNE was successfully recruited for another TA post, so 2 SNE posts needed to be filled. Additionally the Agency established 2 new SNE posts; it managed to fill all 4 vacant SNE posts during the reporting period.

Most of the staff who left were replaced within their notice period, but the high number of resignations and internal movements through selection procedures did not allow HR to keep a strong focus on recruitment for new vacant TA posts, as planned. The Agency struggled to attract the higher number of quality candidates

it needed to manage 22 recruitment procedures, process over 1 100 applications, conduct over 140 interviews and send 38 job offers, out of which notably 7 were declined (18%) in order to fill 28 posts (16 TA, 8 CA and 4 SNE posts).

The Agency also hired 14 trainees on a one-year traineeship in a function that corresponds to their academic background.

To further improve the quality and effectiveness of selection procedures, the Agency introduced work-related personality questionnaires and assessment centres for managerial positions.

A job and workforce allocation analysis was carried out with the help of an external contractor in order to ensure a balanced and activities-related distribution of tasks and resources among departments. The new posts planned for 2016 were allocated according to the analysis results. This exercise is different to the benchmarking exercise championed by the network of Agencies as the Agency started to participate in the relevant working groups in 2016. However, the Agency's work on developing its Work Breakdown Structure will prove to be a crucial input for such exercises in the future.

In 2015, the contract for the provision of temporary agency workers was effectively managed with the result of harmonising and regulating the use of interim agents across all departments and providing support during peak activity periods, temporary replacement of absent staff, and support for special projects requiring specific skills or temporary assistance for Agency events.

The Agency's staff management services smoothly accommodated the growing number of staff in terms of comprehensive induction trainings, payroll, performance management, leave administration and other core HR functions. There was some additional workload connected to the relocation of some staff members from Prague to the Toulouse office. Tailored relocation services to newcomers, expat staff and their families were introduced in line with the requirements stemming from agreements with hosting countries as originally planned and including practical support to staff and family members.

5 additional implementing rules were adopted, or applied by analogy where relevant, and the Agency managed their smooth implementation. In addition, the Agency developed and streamlined policies and processes in various areas such as flexitime and reclassification. Policies on administrative enquiries and disciplinary procedures as well as on protecting the dignity of the person and preventing psychological and sexual harassment shall be introduced in 2016 in line with the Agencies model decision and following the Commission's ex ante agreement.



As part of a continuous effort to support the achievement of the Agency's strategic goals and to contribute to enhancing individual and departmental performance and effectiveness, 60 learning and development events were organised in Prague and St. Germain-en-Laye (covering, among others, negotiation skills, management and leadership courses, GNSS topics, quality management and financial and administrative subjects). In addition, staff members participated in 127 external learning activities following identified needs in line with their annual objectives. Through the introduction of in-house language courses, staff were given the opportunity to develop their language skills further. The average number of training days per staff member was more than the targeted 6 per year and the average rating of the quality of training reached almost 8.9 out of 10.

Continued attention was paid to the organisation of social and well-being activities and events focused on staff member networking, inter-departmental communication, and the creation of a common Agency culture as well as providing opportunities to improve health/physical conditions of staff.

Some HR plans and objectives had to be adjusted in line with internal capacity and availability of staff and following re-prioritisation at agency and management level.

Overall, the HR department kept the course of moving from delivering standard administrative support services towards becoming a strategic business partner.

In 2014, the Agency noted its loss of attractiveness as an employer. The comparatively high turnover and the difficulty in finding the right highly qualified people meant that the Agency was at risk of failing to retain and hire managers and senior technical experts. The Agency created a working group within the EU Network of Agencies to study the roots of the problem and propose potential solutions that centered around a proposed reform of the EU Correction Coefficient that is applied to duty stations outside of Brussels and Luxembourg. A dialogue initiated with the Commission failed to obtain any substantial result despite the fact half of the EU Agencies had joined this working group.

In mid 2015, the Agency presented the situation to its Administrative Board which decided to create a think tank to discuss considering a set of social measures that the Agency could implement. These measures were intended to help the Agency recover its attractiveness as an employer in a very competitive and technical labor market niche. The recommendations were presented to the Board in 2015. The Board agreed on the provision of a set of social measures to be designed and implemented from 2016 onwards. These measures are temporary in nature and the Agency will pursue other long term structural measures as well.

2.5 Assessment by Management

Based on the control procedures performed by the Agency, a positive conclusion on the legality and regularity of transactions can be drawn. Internal control is defined in Art 30.2 of the GSA Financial Regulation 2014 as a process applicable at all levels of management and designed to provide reasonable assurance of achieving the following objectives:

- effectiveness, efficiency and economy of operations;
- reliability of reporting;
- safeguarding of assets and information;
- prevention, detection, correction and follow-up of fraud and irregularities;
- adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned.

The responsibilities of the Agency are quickly expanding due to the consolidation of its operational role in EGNOS and its rapidly evolving role in Galileo. This is demonstrated by the exponential growth in resources, mostly delegated, that the Agency handled in 2015. Though the Agency started reinforcing its control functionality with the addition of an Internal Audit Capability (IAC) in 2015 and upgraded its Internal Control Coordination function and certain technical control aspects for the handling of Contract Change Management in EGNOS and Galileo, it still sees the need for further developments on control management aspects over the next two years.

The Agency is, in general, compliant with the Commission's Internal Control Standards (ICS), improving in its overall internal assessment rating in 2015, the Agency is fully aware of its weakness in relation to some specific standards and intends to overcome key shortfalls in the course of 2016-2017. Clearly, the ongoing operational ramp up in the Agency, boosted by increased responsibilities under key Delegation Agreements, will mean a continuous adaptation effort by support functions and corresponding controls.

Specifically in relation to the implementation of its Anti-Fraud Strategy, an Anti-Fraud Strategy and Action Plan was adopted by the Agency's Administrative Board on 5 March 2015 (GSA-AB-41-15-03-05-07). Based on the fraud risk assessment the Agency performed prior to the formulation of the strategy, it had identified ten strategic objectives covering the whole cycle of fraud prevention, detection, investigation, recovery and sanction. In order to implement the Anti-Fraud Strategy covering the period from 2015 to 2017, the action



plan was developed based on those objectives. Overall, this plan is composed of 40 actions focused on communication, supporting tools and guidance, ethics, fraud-proofing in legal documents, conflict of interest, favouritism, monitoring of GSA inventory and invoicing, recovery and sanctions, and the exception procedure. On 24 September 2015, the Administrative Board adopted the General GSA Policy on the Prevention and Management of Conflicts of Interest.

Furthermore, the Administrative Board adopted new Rules of Procedure where Article 17 (Prevention and Management of Conflicts of Interest) and an Annex (Declaration of Commitments, Interests and Confidentiality) were added. The Agency is currently still working on the implementation of this Decision.

In the last quarter of 2015 and first semester of 2016 the Agency developed a more detailed assessment identifying up to 80 steps or so required for the full implementation of the Anti-Fraud Strategy that will be gradually developed starting in the fourth quarter of 2016.

In 2015 the Internal Control Coordinator followed up and addressed four requests by staff or contractors in relation to potential conflicts of interest, assumed responsibilities in relation to the maintenance and monitoring of the Gifts and Hospitality register, and started to closely follow the preparation and procurement of the Galileo Operator; this is still ongoing in 2016.

2.5.1 Register of Exceptions

The Agency has a procedure in place for registering exceptions. Its overall objective is to establish appropriate arrangements to ensure that any exceptional circumstance of overriding controls or deviations from the established regulatory framework is well explained, registered and reported in accordance with the principle of transparency. An exception must be documented, justified and approved at the appropriate level before any action is taken.

There were 10 exceptions registered in 2015, none of which affected in a material way the overall sound financial management of the Agency. The exception register has been shared with external auditors.

2.6 Budget implementation tasks entrusted to other services and entities

Not applicable



2.7 Assessment of audit results during the reporting year

2.7.1 Internal Audit Service (IAS) and the Agency's Internal Audit Capability (IAC)

The IAS audited the GSMC in 2015 and made six recommendations for improvement. The Agency already initiated corrective actions in relation to four of the topics and will work on the two remaining ones in the second part of 2016 considering that these will be long-term projects.

A recent letter from the IAS prompted a review of ten outstanding long dated recommendations. The result of this analysis showed that eight of the recommendations had been fulfilled and the remaining two were almost completed and will be finalized in 2016. Our assessment also revealed that Agency staff had not been properly authorised as IAS Issue Track coordinators to monitor the database. The IAS shall resolve this problem shortly.

The Agency's IAC started to operate in 2015. This is a shared resource with the European Chemicals Agency (ECHA), based in Helsinki. It initially focussed its attention on EGNOS, reflecting upon comments recently made by the European Court of Auditors. The IAC audited the EGNOS Contract Change Management process and the handling of the EGNOS Asset Inventory, heavily supported by the Internal Control Coordinator. This audit is still ongoing and will be finalized in 2016.

The Agency will continue implementing the recommendations raised on 2014 activity by the Internal Audit Capability of DG GROW (then ENTR) related to the audit of procurement activities performed by the Agency under delegation from the Commission. Corrective actions will be completed in 2016 except for one topic that will be tackled under a long-term project that will start in 2016.

2.7.2 European Court of Auditors

The Court of Auditors will provide definitive findings at the end of June 2016. As of time of writing, there are no critical recommendations from the Court for the reporting period and the key open issues in relation to last year have been considered in the definition of the IAC's audit scope for 2015-16, whose audit is still ongoing.



2.8 Follow up of recommendations and action plans for audits

The general conclusions and recommendations, drawn from the evaluation by the Commission in 2015, add further to the assurance provided by the Authorising Officer. The reports by internal and external auditors provide a generally positive assessment and perception of the Agency, and provide valuable feedback on the areas to be improved. A brief overview of our analysis about the status of fulfilment of all recommendations received is provided in section 2.7

2.9 Follow up of recommendations from the discharge authority

The discharge authority made no recommendations.

2.10 External Evaluations

No major issues were identified in the three external audits of the Annual Implementation Reports of the EGNOS, Galileo and Horizon 2020 delegation agreements for the reporting period. Two suggestions for improvement were made, for both EGNOS and Galileo. In both cases:

- Auditors recommended implementing general rules as defined by the Financial Regulation into detailed internal guidelines for the Grant Award Procedure;
- Auditors recommended that an IT tool should be developed to control and report on procurement, grants and financial figures. The tool should allow users to produce aggregate tables and track the changes.

The Agency is already well advanced regarding the latter as it had already been working for some time in the development of such complex tool (Budget Management Tool) that will be implemented in 2017. The Agency is committed to develop a Grant Award Procedure for delegated funds based on the existence of a similar one developed in compliance with directions set by Horizon 2020

In relation to the ongoing assessment of the Agency's accounts by external auditors, the Agency does not foresee major issues.



3 Assessment of the Effectiveness of the Internal Control Systems

3.1 Risk management

The Agency currently undertakes risk assessment and monitoring activities at both operational and support department level but lacks an overall corporate risk management policy and procedure.

Operational risk assessments procedures are documented. The outcomes of operational risk assessments are shared with management and reported directly to the Commission for information and/or further consolidation and reporting at the respective program level. Risks within support departments are assessed and individual corrective actions are embedded in daily operations. The Finance Department maintains a Registry of Exceptions mostly fed from activities related to payments and procurements.

Within the ISO 9001 Quality Certification, a registry was set up to capture Non-Conformances and Suggestions for Improvement at corporate level. Non-Conformances relate to any situation where an Agency's stakeholder's requirements are not fulfilled and possibly reflect situations in which a process or procedure has not been properly followed or is missing. The functioning of this registry is defined in the corresponding procedure. Though it does not pretend to be a Risk Register, its introduction has had an early prevention and curative value in relation to risks mostly of a procedural nature. The registry is reviewed and updated periodically.

In 2015, the Agency initiated the development of a corporate Risk Management toolset, which comprises a policy, a procedure and a risk register. An assessment of Risk Management practice at the Agency was executed in 2015 and the corresponding report was finalized early in 2016. The design and implementation of the Agency's Risk Management corporate toolkit should take place in 2016.

3.2 Compliance and effectiveness of Internal Control Standards

The last assessment on compliance with the ICS was carried out in October 2015, showing that the Agency is compliant with the 16 Internal Control Standards but one, "#10 Business Continuity". A corporate business continuity assessment will be initiated before the end of 2016.

Overall, the Agency's level of compliance improved in 2015 in relation to 2014. In our internal assessment of compliance, considering a rating per ICS from 0 to 3, the Agency's average level of compliance improved from 2.31 to 2.63. However, other improvements are expected especially on:



- ICS 2, *Ethical and Organisational Values*: Policies defining the Agency's Antifraud Strategy (and Conflict of Interest) were put in place in 2015 and implementation is ongoing in 2016.
- ICS 3, *Staff Allocation and Mobility*: The Agency has endured a loss of attractiveness in the first half of 2015 with staff departures and a decreasing number of applications, resulting in some vacant positions among heads of departments throughout the year. In agreement with the Commission's DG GROW and its Administrative Board, the Agency worked on the definition and provision of social measures. This was approved by the Administrative Board in March and shall be implemented in 2016.
- ICS 6, *Risk Management process*: The Agency is currently developing its corporate risk management framework. An assessment of existing risk management practices and needs at the Agency was completed in 2015, to be followed by a risk management design phase in 2016 that will comprise implementation of a risk management policy and procedure, and a corporate risk register.
- ICS 11, *Document Management*: The Agency hired a document management officer in 2015, who is currently progressing on the implementation of a document management system.
- ICS 12, *Information and Communication*: Recent departures of staff have severely affected both the Security and IT departments. Consequently, advances on pending documentation in the area have been limited. The Information Security Policy and the Information Security Statement exist in draft versions and need to be finalised, approved and implemented. New Information and IT Security Policies on lower level of governance must be developed.



4 Management Assurance

4.1 Review of the elements supporting assurance

4.1.1 Follow-up of Reservations from Previous Years

The declaration of assurance of the Authorising Officer in the Annual Activity Report 2014 did not contain any reservations.

4.2 Reservations

There are no reservations regarding 2015.

4.3 Overall conclusions on assurance

The Agency provided assurance in 2015 to the Commission's DG GROW on the use of the budget delegated to it by DG GROW confirming that reasonable assurance could be given concerning the legality and regularity of the financial operations including the sound financial management of delegated funds.

No critical shortfalls or weaknesses were identified.

However, it is worth mentioning that the Agency did experience difficulties in retaining and recruiting good candidates to fill some positions relevant for the fulfilment of the objectives of Galileo delegated tasks, in particular in the security field. The Agency initiated corrective actions in this regard with the design and development of a set of social measures that should be fully implemented in 2016 supported by its Administrative Board.

The Agency continued to manage a large number of delegated appropriations by the Commission during the reporting period. The evolution of operations was correctly monitored in close cooperation with the corresponding staff at DG GROW. Advances were properly reported as required by the respective Delegation Agreements.

Financial resources were properly managed, key financial indicators were shared and reported to DG GROW and no observations were made in this field by auditors. The Agency continued to review and improve on its



existing financial procedures. The result of this review produced notable improvements in relation to the treatment of grants and the ongoing development of the Budget Management Tool.

The degree of implementation and effectiveness of the Internal Control Standards (ICS) was assessed during the reporting period, showing that the Agency is compliant with the 16 Internal Control Standards but one - Business Continuity. A corporate business continuity assessment will be initiated before the end of 2016.

The Parliament granted the discharge to the Executive Director (as per the draft Discharge report 2014). The Council was also in favour of granting this discharge.

The Court of Auditors' preliminary observations report for 2014 provided a clean opinion with only three comments related to the amount of carry-overs, the accumulation of overheads in an EGNOS procurement contract and the need to secure insurance coverage for fixed tangible assets. The Agency took actions in relation to the three comments above.



5 Declaration of assurance

I, the undersigned, Carlo des Dorides,

Executive Director of the European GNSS Agency,

In my capacity as Authorising Officer,

- declare that the information contained in this report gives a true and fair view.¹¹
- state that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the internal audit capability, the observations of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

- confirm that I am not aware of anything not reported here which could harm the interests of the Agency.

Prague, 22 June 2016

Carlo des Dorides

¹¹ True and fair in this context means a reliable, complete and correct view on the state of affairs in the service.



Annexes

Annex I – Core business statistics

The measurement of core business activities and the related Key Performance Indicators (KPIs) are listed in section 1.

The Agency wishes to note that section 1.8 refers to tasks that are delegated by the Commission; these tasks are clearly defined together with their KPIs in the relative delegation agreement.

Annex II – Statistics on financial management

II.1 - Rate and type of implementation of appropriations

Budget line	Heading	Commitment Appropriations Budgeted 2015	Commitment Appropriations			
			Executed in 2015	%	Uncommitted	%
Title 1 - Staff expenditure						
1100	Staff expenditure	10,062,855.57	10,062,855.57	100%	0.00	0%
1200	Recruitment costs	85,000.00	85,000.00	100%	0.00	0%
1210	Medical services	18,000.00	18,000.00	100%	0.00	0%
1300	Missions and travel	1,165,830.90	1,165,830.90	100%	0.00	0%
1400	Training expenditure	212,000.00	212,000.00	100%	0.00	0%
1600	Interims & Trainees	510,186.45	510,186.45	100%	0.00	0%
1700	Representation expenditure	1,251.55	1,251.55	100%	0.00	0%
1800	Tuition fees	906,362.71	906,362.71	100%	0.00	0%
	Total for title 1	12,961,487.18	12,961,487.18	100%	0.00	0%
Title 2 - Administrative expenditure						
2000	Rental of buildings	2,444,994.88	2,444,994.88	100%	0.00	0%
2100	Data processing	1,992,369.58	1,992,369.58	100%	0.00	0%
2200	Movable property	183,987.38	183,987.38	100%	0.00	0%
2300	Current administrative costs	1,040,500.00	1,040,500.00	100%	0.00	0%
2400	Postage and telecommunication costs	318,485.50	318,485.50	100%	0.00	0%
2500	Meetings	55,000.00	55,000.00	100%	0.00	0%
	Total for title 2	6,035,337.34	6,035,337.34	100%	0.00	0%
	Total for titles 1 and 2	18,996,824.52	18,996,824.52	100%	0.00	0%

Budget line	Heading	Commitment Appropriations Budgeted 2015	Commitment Appropriations			
			Executed in 2015	%	Uncommitted	%
Title 3 - Operational expenditure						
3100	Expenditure on studies	7,209,589.48	7,209,589.48	100%	0.00	0%
3300	SAB operational expenditure	1,400,000.00	1,400,000.00	100%	0.00	0%
	Total for title 3	8,609,589.48	8,609,589.48	100%	0.00	0%
	TOTAL T1+T2+T3	27,606,414.00	27,606,414.00	100%	0.00	0%

Budget line	Heading	Payment Appropriations Budgeted 2015	Payment Appropriations					
			Paid in 2015	%	Carried Forward	%	Total Executed	%
Title 1 - Staff expenditure								
1100	Staff expenditure	10,062,855.57	10,062,855.57	100%	0.00	0%	10,062,855.57	100%
1200	Recruitment costs	85,000.00	70,832.86	83%	14,167.14	17%	85,000.00	100%
1210	Medical services	18,000.00	4,776.49	27%	13,223.51	73%	18,000.00	100%
1300	Missions and travel	1,165,830.90	1,079,622.27	93%	86,208.63	7%	1,165,830.90	100%
1400	Training expenditure	212,000.00	141,887.36	67%	70,112.64	33%	212,000.00	100%
1600	Interims & Trainees	510,186.45	293,933.56	58%	216,252.89	42%	510,186.45	100%
1700	Representation expenditure	1,251.55	1,223.65	98%	27.90	2%	1,251.55	100%
1800	Tuition fees	906,362.71	649,345.73	72%	257,016.98	28%	906,362.71	100%
	Total for title 1	12,961,487.18	12,304,477.49	95%	657,009.69	5%	12,961,487.18	100%
Title 2 - Administrative expenditure								

Budget line	Heading	Payment Appropriations Budgeted 2015	Payment Appropriations				
			Paid in 2015	%	Carried Forward	%	Total Executed %
2000	Rental of buildings	2,444,994.88	1,999,609.76	82%	445,385.12	18%	2,444,994.88 100%
2100	Data processing	1,992,369.58	608,537.98	31%	1,383,831.60	69%	1,992,369.58 100%
2200	Movable property	183,987.38	33,441.68	18%	150,545.70	82%	183,987.38 100%
2300	Current administrative costs	1,040,500.00	702,245.17	67%	338,254.83	33%	1,040,500.00 100%
2400	Postage and telecommunication costs	318,485.50	131,710.98	41%	186,774.52	59%	318,485.50 100%
2500	Meetings	55,000.00	48,482.57	88%	6,517.43	12%	55,000.00 100%
	Total for title 2	6,035,337.34	3,524,028.14	58%	2,511,309.20	42%	6,035,337.34 100%
	Total for titles 1 and 2	18,996,824.52	15,828,505.63	83%	3,168,318.89	17%	18,996,824.52 100%
Title 3 - Operational expenditure							
3100	Expenditure on studies	2,710,409.48	2,626,841.00	97%	83,568.48	3%	2,710,409.48 100%
3300	SAB operational expenditure	1,077,812.00	1,077,812.00	100%	0.00	0%	1,077,812.00 100%
	Total for title 3	3,788,221.48	3,704,653.00	98%	83,568.48	2%	3,788,221.48 100%
	TOTAL T1+T2+T3	22,785,046.00	19,533,158.63	86%	3,251,887.37	14%	22,785,046.00 100%



II.2 – Information on transfers and amending budgets

Two amending budgets were approved during the reporting period one of which was to reduce payment appropriations on Title 3 by 4 821 368.48 EUR to 3 788 221 EUR. The level of commitment appropriations did not change.

The Agency published the initial budget (less EFTA contribution) in the Official Journal of the EU on 31 March 2015 and published an Amending Budget on 24 April 2015 that took into account the EFTA contribution and a revision of inscribed amounts as approved by the Administrative Board at their meeting in March 2015.

The second Amending Budget, published on 15 December 2015, covered a reduction in the total number of payment appropriations on Title 3 following a revision of operational payment schedules in the summer of 2015. In addition to this, there were minor reallocations of non-differentiated appropriations on staff and administrative budget lines.

Eight internal transfers were processed in 2015, all of them authorised by the Executive Director as they concerned transfers of amounts either within Titles or below 10% between Titles.

II.3 – Information on interest charged through late payments

Interest on late payment totalling 21 871.52 EUR was paid in 2015, a decrease of 24% in comparison to 2014.

II.4 – Summary information on budgetary operations

The Agency began the reporting period with an initial budget of 27 606 414.54 EUR. There were two amendments to the budget within the course of the year, one of which was to reduce payment appropriations on Title 3 by 4 821 368.48 EUR to 3 788 221 EUR. The level of commitment appropriations did not change.

Budget execution for the year was 100% in commitment appropriations and 100% in C1 payment appropriations when taking into account the non-automatic carry-forward in order to maintain the Agency's payment capacity on existing legal obligations. Payment Appropriations were returned to the parent DG GROW following an Administrative Board Written Procedure in August 2015 in order to reduce cancellation of appropriations.

Average payment times were 13 days, well below the 30 days Commission benchmark and 20 days target. The Agency processed 4 267 financial transactions, representing a 24% increase on 2014.

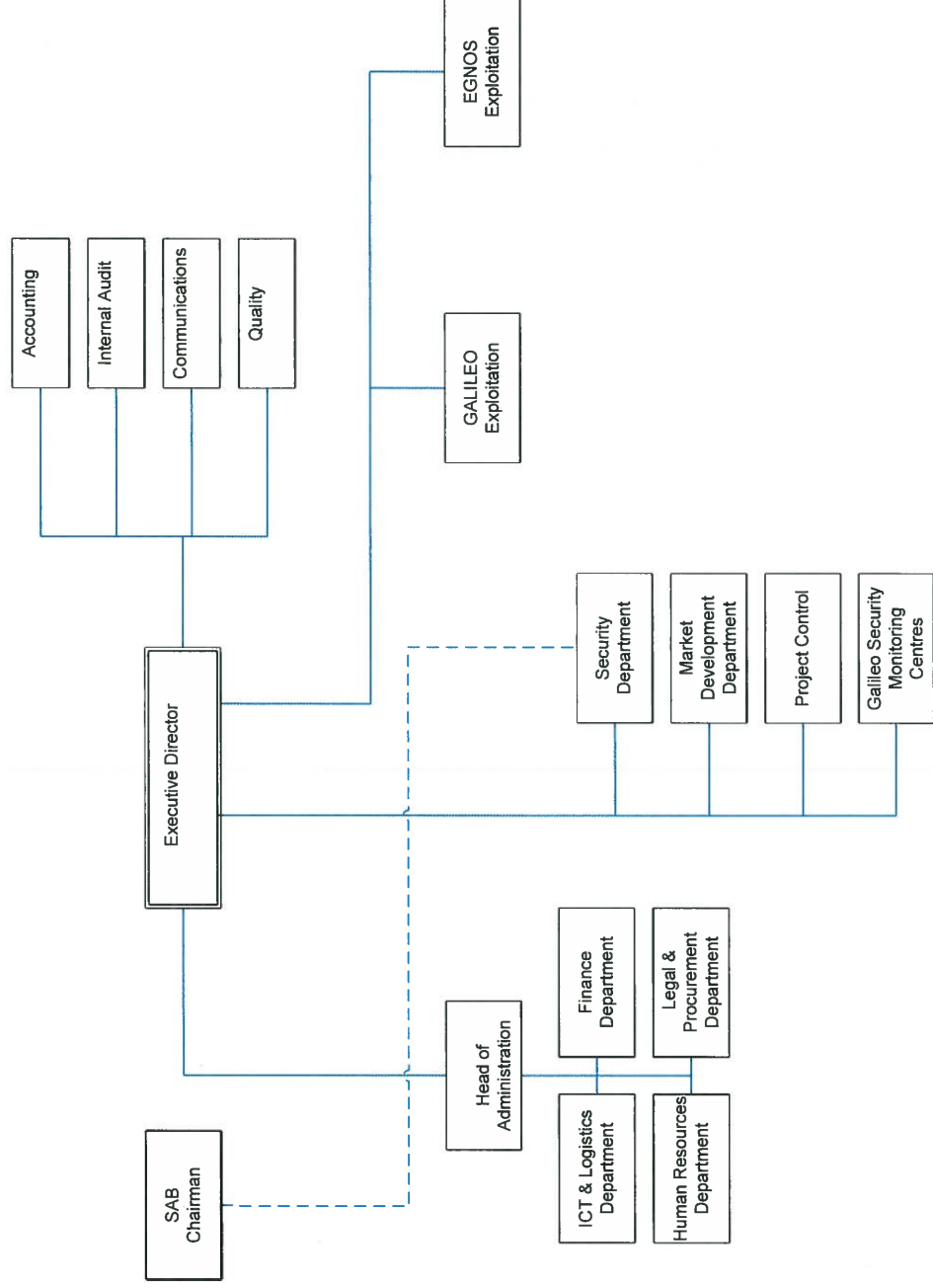


The Agency continued to manage a large amount of delegated budget in 2015 following the signature of three new Delegation Agreements in the course of 2014 for EGNOS Exploitation, Galileo Exploitation and Horizon 2020. An amendment to the Galileo Exploitation Delegation Agreement was signed in December 2015, assigning a further 300 million EUR to the Agency. The Agency committed 116 067 789.51 EUR of delegated budget in 2015 and made 183 108 199 EUR in payments.





Annex III - Organisational Chart



ADOPTED
by the GSA Administrative Board



Annex IV – Establishment Plan

The Agency's Establishment Plan for 2015 was as follows:

Category and grade	Establishment plan in EU Budget 2015		Modifications in 2015 in application of flexibility rule ¹²	
	Officials	TA	Officials	TA
Administrator (AD) 16				
AD 15				
AD 14		1		1
AD 13		1		0
AD 12		4		3
AD 11		5		2
AD 10		11		7
AD 9		10		10
AD 8		25		22
AD 7		32		38
AD 6		6		9
AD 5		2		2
Total AD		97		94
Assistant (AST) 11				
AST 10				
AST 9				
AST 8				
AST 7				
AST 6		1		
AST 5		2		1
AST 4		1		1
AST 3				2
AST 2		1		
AST 1				1
Total AST		5		5

¹² In line with Article 32 (1) of the framework Financial Regulation, the management board may modify, under certain conditions, the establishment plan by in principle up to 10% of posts authorised, unless the financial rules of the body concerned allows for a different percentage rate.



Category and grade	Establishment plan in EU Budget 2015		Modifications in 2015 in application of flexibility rule ¹²	
	Officials	TA	Officials	TA
AST/SC 6				
AST/SC5				
AST/SC4				
AST/SC3				
AST/SC2				
AST/SC1				
Total AST/SC				
TOTAL		102		99

5.1.1 Information on Entry Level Grades for Posts

The Agency has a grading policy that is based on the Commission Decision on types of post and post titles (Commission Decision of 16.12.2013 on types of post and post titles C(2013) 8979 final). The table below refers to Temporary Agents only:

Type of Post	Minimum Entry Recruitment Grade	Highest grade possible	Post Title
Director	AD 14	AD 15	Executive Director
Adviser or equivalent	AD 13 – AD 14	AD 14	Adviser Senior Expert
Head of Division (Management Post)	AD 11- AD 12	AD 14	Head of Division
Head of Department (Management Post)	AD 9 – AD 12	AD 14	Head of Department
Head of Section (Management Post)	AD 7 – AD 10	AD 12	Head of Section
Deputy Head of Department	AD 6 – AD 10	AD 12	Deputy Head of Department
Officer	AD 8 – AD 10	AD 12	Senior Officer* Team Leader
Officer	AD 5 – 7	AD 12	Officer* Team Leader
Assistant	AST 4 – AST 5	AST 9	Senior Assistant Senior Project Assistant
Assistant	AST 1 – AST 3	AST 9	Assistant Project Assistant
Secretary/Clerk	SC 1 – SC 2	SC 6	Secretary/Clerk

The grading information for contract agents is shown below:

Type of Post	Minimum Entry Recruitment Grade	Highest grade possible	Post Title
Administrator, Advisor and equivalent Technical Officer	CA FG IV/16	CA FG IV/18	Senior Technical Officer* Senior Administrator Senior Project Officer Team Leader Technical Officer*
Administrator, Advisor and equivalent Technical Officer	CA FG IV/14	CA FG IV/18	Administrator Project Officer Team Leader
Administrator, Advisor and equivalent Technical Officer	CA FG IV/13	CA FG IV/18	Junior Technical Officer* Junior Administrator*
Executive and Technical Support	CA FG III/8	CA FG III/12	Executive Assistant Project Support Officer
Clerical and Secretarial Support	CA FG II/4	CA FG II/7	Technical Expert Secretary / Clerk
Basic Support	CA FG I/1	CA FG I/3	Manual and Administrative Support Service Clerk

Annex V – Human and financial resources by activity

The 2015 distribution of staff was as follows, split by areas of activity:

		Allocated on 31 Dec 2015		
		TA	CA	SNE
Core tasks	Security accreditation	10	1	
	Security tasks	3	2	2
	GSMC operations	18	5	
	Promotion and marketing of the services	6	4	1
	Strategic Agency Management	4	4	
	General Administration	12	12	
Delegated tasks	EGNOS Exploitation	13	1	
	Galileo Exploitation	28	1	1
	Research & Development (H2020)	5	5	
	Total	99	36	4

These estimated figures are currently under internal review and are subject to possible changes, with the objective to align available resources with new tasks delegated to the Agency in the on-going transition phase.



The financial resources, split by area of activity are:

		Amount (EUR)
Core tasks	Security accreditation	1,400,000.00
	Security tasks	0
	GSMC operations	3,172,305.72
	Promotion and marketing of the services	3,767,581.76
	General Administration	6,035,337.34
Delegated tasks	EGNOS Exploitation	1,354,418,101.44
	Galileo Exploitation	489,169,671.80
	Research & Development (H2020)	67,130,000.00
Total		1,925,092,998.06

Annex VI – Specific Annexes related to part 2

VI.1 GSA Legal Framework (as of 31 December 2015)

Document	Ref.	Issue - Date
Council Decision 2014/496/CFSP of 22 July 2014 on aspects of the deployment, operation and use of the European Global Navigation Satellite System affecting the security of the European Union and repealing Joint Action 2004/552/CFSP	2014/496	22 July 2014
Regulation (EC) No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of European satellite navigation systems and repealing Council Regulation (EC) No 876/2002 and Regulation (EC) No 683/2008 of the European Parliament and of the Council	1285/2013	11 December 2013
Regulation (EU) 912/2010 of the European Parliament and of the Council of 22 September 2010 setting up the European GNSS Agency, repealing Council Regulation (EC) No 1321/2004 on the establishment of structures for the management of the European satellite radio-navigation programmes and amending Regulation (EC) No 683/2008 of the European Parliament and of the Council	912/2010	22 Sep 2010
Council Decision 2013/488/EU of 23 September 2013 on the security rules for protecting EU classified information	2013/488	23 September 2013
Decision No 1104/2011/EU of the European Parliament and of the Council of 25 October 2011 on the rules for access to the Public Regulated Service provided by the Global Navigation Satellite System established under the Galileo programme	1104/2011 (enforced 5/11/2011) on	25 Oct 2011
Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002	966/2012	25 Oct 2012



Document	Ref.	Issue - Date
Decision of the Administrative Board adopting the GSA Financial Regulation of 25 April 2014	WP32	25 April 2014
Commission Delegated Regulation (EU) No 1268/2012 of 29 October 2012 on the rules of application of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union	1268/2012	29 Oct 2012
Decision of the Administrative Board adopting the GSA Financial Regulation Implementing Rules 2014 of 25 April 2014	WP33	25 April 2014
Regulation No 31 (EEC), 11 (EAEC), laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Economic Community and the European Atomic Energy Community	Staff Regulations	6 March 1963

Annex VII – Specific annexes related to part 3

There are no annexes to part 3 for the reporting period.

Annex VIII - Draft Annual Accounts and Financial Reports

The Provisional Annual Accounts for the reporting period were prepared and were sent to the European Commission and the discharge authorities in accordance with the provisions of the Financial Regulation.

In April 2016, the Court of Auditors audited these Accounts. After their final remarks, the Agency will submit the 2015 Final Annual Accounts to its Administrative Board for adoption.

Once approved by the Administrative Board, the Agency will annex these to this report for reference.



Annex IX – The Work Breakdown Structure

European GNSS Agency





Annex X - List of Acronyms

Abbreviation	Definition
AD	Administrator
APV	Approach Procedure with Vertical Guidance
ASECAP	European Association of Tolled Road Infrastructure Operators
AST	Assistant
CA	Civil Aviation
CDA	Crypto-Distribution Authority
CDR	Critical Design Review
CFSP	Common Foreign and Security Policy
CMS	Common Minimum Standards
COMSEC	Communication Security
CPA	Competent PRS Authority
CS	Commercial Service
CSO	Central Security Office
DG	Directorate General
DG GROW	Directorate General Growth
DG MOVE	Directorate-General for Mobility and Transport
EASA	European Aviation Safety Agency
EBACE	European Business Aviation Convention and Exhibition
EC	European Commission
EDAS	EGNOS Data Access System
EFTA	European Free Trade Association
EGMER	EGNSS Mission Evolution Report
EGNOS	European Geostationary Navigation Overlay Service
EGNSS	European Global Navigation Satellite System
EMC	Enhanced Minimum Configuration
ERA	European Railways Agency
ERTMS	European Rail Traffic Management System
ESA	European Space Agency
ESNC	European Satellite Navigation Competition
ESSP	European Satellite Services Provider
EU	European Union
EUCI	EU Classified Information
EURATOM	The European Atomic Energy Community
FKC	Flight Key Cell
FP7	Seventh Framework Programme for Research and Technological Development of the European Union
GCC	Galileo Control Centre
GEO	Global Earth Observation
GMS	Ground Mission Segment
GNSS	Global Navigation Satellite System
GPS	Global Positioning System (USA)
GRC	Galileo Research Centre
GRUE	GSA EU Restricted Network
GSA	European GNSS Agency
GSAP	GNSS Security Accreditation Panel
GSC	GNSS Service Centre
GSF	Galileo Security Facility



Abbreviation	Definition
GSMC	Galileo Security Monitoring Centre
GSOp	Galileo Service Operator
GSUE	GSA EU Secret Network
HR	Human Resources
IAC	Internal Audit Capability
IAS	Internal Audit Service
IATO	Initial Authorisation to Operate
ICAO	International Civil Aviation Organisation
ICS	Internal Control Standards
IMO	International Maritime Organization
IMS	Integrated Management System
ISO	International Standards Organisation
IT	Information Technology
ITRE	Industry, Research and Energy (A European Parliament Committee)
ITS	Intelligent Transport Systems
KPI	Key Performance Indicator
LBS	Location-Based Services
LPV	Localiser Performance with Vertical Guidance
MEP	Member of European Parliament
METS	Marine Equipment Tradeshow
NGTC	Next Generation Train Control
NSA	National Security Agency
ORR	Operations Readiness Review
OS	Open Service
OSRR	Operations Service Readiness Review
OVRR	Operations Validation Readiness Review
POC-P	Point of Contact Platform
PRS	Public Regulated Service
P3RS2	PRS Pilot Project 2
PRS4PMR	Public Regulated Service for Personal Mobile Radio
RUC	Road User Charging
RUE	EU Restricted
SAA	Security Accreditation Authority
SAB	Security Accreditation Board
SAM	Site Accreditation Milestone
SAR	Search And Rescue
SATO	Site Authorisation To Operate
SBAS	Satellite Based Augmentation System
SNE	Seconded National Expert
TA	Temporary Agent
UE	European Union
UK	United Kingdom
UNISIG	Union Industry of Signalling
US	United States (of America)
WBS	Work Breakdown Structure
WG	Working Group
WG-NET	Working Group – National Expert Team