



EGNOS Grant Plan 2018

Reference:

GSA-EGN-ESP-PL-239137

Issue/Version: 1.0

Date: 22/05/2018

Table of contents

EGNOS GRANT PLAN 2018	1
TABLE OF CONTENTS	2
1 GRANT PLAN	3
2 EGNOS SERVICE PERFORMANCE MONITORING SUPPORT FROM MEMBER STATES	4
2.1 LEGAL BASIS.....	4
2.2 BUDGET LINE	4
2.3 BACKGROUND.....	4
2.4 PRIORITIES, OBJECTIVES PURSUED AND EXPECTED RESULTS.....	5
2.5 DESCRIPTION OF ACTIVITIES TO BE FUNDED UNDER THIS CALL	5
2.6 AWARD CRITERIA FOR THE SPECIFIC GRANT	6
2.7 INDICATIVE TIMETABLE OF THE CALL FOR PROPOSALS AND INDICATIVE AMOUNT OF THE SPECIFIC GRANT.....	6

1 Grant plan

The Agency's 2018 grant plan for EGNOS exploitation contains 1 (one) call for proposal:

- **Service Performance Monitoring Support** from Member States, 3rd Specific Grant Agreement.
A Framework Partnership Agreement was established in 2015 with a Consortium of public national agencies, bodies and institutions within EU Member States to establish, maintain and implement an EGNOS performance monitoring network. The Consortium provides independent analysis and investigations related to EGNOS performance. The 1st Specific Grant was awarded in 2015 for a period of 12 months and it was followed by a 2nd specific grant with a duration of 24 months. This 2nd grant is on-going and will run until 10 November 2018.

2 EGNOS Service Performance Monitoring Support from Member States

2.1 Legal basis

The legal basis for this grant is Regulation (EU) 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 and Delegation Agreement between the European Union, represented by the European Commission and the European GNSS Agency on the Exploitation Phase of the EGNOS Programme signed on 16 April 2014.

2.2 Budget line

The budget line is identified by AIN EEX.0028bis.

2.3 Background

The Commission has delegated tasks related to the EGNOS Exploitation programme to the European GNSS Agency. This agreement entrusts the Agency with the management of operational activities relating to the exploitation of the Programme, including infrastructure management, maintenance and continuous improvement in accordance with the Programme Management Plan.

In line with article 30 of the GNSS Regulation¹ the Agency may have recourse to technical assistance, particularly from national agencies competent in the space sector. It also may have recourse to the assistance of independent experts and bodies capable of providing impartial analyses and opinions on the progress of the programme.

In this framework, the Agency wishes to launch a call for proposals for the establishment of a stable and structured partnership between itself and national agencies, institutions, independent experts and/or bodies from EU Member States, and from third countries participating in the GNSS Programme. These entities shall commit themselves to establish, maintain and implement an EGNOS performance monitoring network. The objective is threefold: (1) to guarantee analysis and investigations independent of the service provider and of other stakeholders; (2) to establish a relationship with not-for-profit partners; (3) to benefit from, and contribute to, long-term key expertise, continuity and competences for the programme. Additionally, this activity takes advantage of past public investments and of existing capacities available at Member States level.

In September 2015 the Agency signed a Framework Partnership Agreement (FPA) with a Consortium coordinated by CNES for a period of 7 (seven) years to establish cooperation between itself and the partners. The first specific grant was signed on 10 November 2015 for a period of 12 months to initiate the activities defined for such cooperation. It was followed by a second specific grant with a duration of 24 months which is on-going and will run until 10 November 2018. Considering the need to ensure continuity of the above activities after this date, the Agency plans to launch the third specific grant during 2018.

¹ Regulation (EU) No 1285/2013 of the European Parliament and of the Council of 11 December 2013 on the implementation and exploitation of the 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, OJ L 347, 20.12.2013.

2.4 Priorities, objectives pursued and expected results

The third Grant shall, in accordance with the FPA's Strategic Plan, address:

- 1) Continuity of the SPMS expertise network.
- 2) SBAS Service and Signal Performance Watch: to monitor and compare SBAS signals and service performance (addressing all available SBAS: EGNOS, WAAS, SDCM, GAGAN, MSAS, etc. and all available services). Some of the parameters to be monitored are: ICAO SARPS compliance, analysis of potential configuration changes in the SBAS or GPS, evaluation of SIS availability, local assessment of accuracy, integrity, availability and continuity, global assessment of the availability and continuity of the different SBAS, etc.
- 3) To investigate abnormalities in EGNOS Service performance (e.g. signal anomalies, service underperformance, etc.)
- 4) To support EGNOS programme activities as per Agency requests (e.g. to contribute to EGNOS service provision technical reviews; to participate in boards and workings groups; to perform specific analysis, simulations or investigations; etc.)

2.5 Description of activities to be funded under this call

The high-level activities are described below:

- 1) Maintenance of the SPMS expertise network established since the first specific grant.

The SPMS network was created to fulfil the FPA objectives. It is now a well-established network of committed experts in the field of GNSS, with the ambition to drive, stimulate and coordinate the EGNOS performance monitoring. The network relies upon individuals with a high level of specific knowledge and expertise in EGNOS performance monitoring who are backed and supported by relevant organisations in the field and/or by national authorities. The SPMS network shall be maintained to the same level to allow the implementation of the objectives of this third specific grant.

- 2) SBAS Service and Signal Performance Watch

To monitor and compare SBAS signals and service performance addressing all available SBAS: (EGNOS, WAAS, SDCM, GAGAN, MSAS, etc.) and all available services. The monitoring shall be based on real data collected from multiple reference stations spread over the coverage area of each SBAS system in a representative way. The network of reference stations shall be independent from EGNOS system.

The monitoring shall address:

- a) Signal/message configuration:
 - Analysis of compliance of the broadcast SBAS messages to the ICAO SARPS and of the GPS navigation message to its Interface Control Document;
 - Analysis of potential changes in the SBAS or GPS.
- b) Service performance:
 - SBAS satellites SiS Availability
 - Local assessments of the accuracy, integrity, availability, continuity, of the different SBAS systems and their OS and SOL services;
 - Global assessment of the availability and continuity of the different SBAS systems and their OS and SOL services over their coverage area.

- c) Surveillance of new GEO-SBAS and issue of warnings and recommendations about potential impacts on EGNOS..
- d) Issue of anomaly reports upon detection of any unexpected result from the monitoring.

3) To investigate EGNOS Service performance abnormal events

The Agency may require independent SPMS investigation of abnormal events in EGNOS Service performance through the activation of specific tasks to be agreed with the consortium (objectives, efforts, schedule, outputs) depending on the particular investigation. Such events may be signal in space anomalies or service underperformances (due to internal system anomalies, due to ionosphere conditions or any other external factor). Sensitivity analysis of the impact of changes in the system or the environment may also be considered under this task (examples: different RIMS configuration, reduction of GPS constellation, etc.).

4) To support EGNOS programme activities as per Agency requests

The Consortium is expected to support the Agency in different EGNOS programme activities when needed. Such activities may include, but are not limited to, the contribution to EGNOS service provision technical reviews, the participation in boards and workings groups and the execution of analysis, simulations or investigations.

5) For the SPMS coordinator, coordination of SPMS activities:

- a) Act as the Agency's interface for all matters related to the grant activities, the submission and publication of deliverables, the organisation of internal checkpoints with the partners, the organisation of progress meetings and of the yearly review, etc.
- b) Administrative and technical supervision of the fulfilment by the partners of their respective role and responsibilities.

2.6 Award criteria for the specific grant

- Understanding the tasks, completeness and credibility of the proposed approach: how adequate is the proposed work plan to reach the objectives of the Framework Partnership Agreement? Are all objectives of the third specific grant completely addressed? To what extent are the activities of the third specific grant clearly defined and ready to start? To what extent does the proposal contain specific elements of added value for the EGNOS Exploitation programme?
- Background and experience of the team proposed and adequacy of facilities: how coherent, appropriate and complete is the team proposed? is the expertise of the proposed personnel adequate for their tasks allocation? how adequate are the allocated the technical facilities allocated? to what extent does the proposed team include specific expertise or specific facilities adding value for the EGNOS Exploitation programme?
- Cost-effectiveness: to what extent is the budget clear and detailed? does the breakdown of the budget (per task and per category of personnel) offer a cost-efficient implementation of the foreseen activities? do the probable results stand in a reasonable relationship to the amount of the EU contribution?

2.7 Indicative timetable of the call for proposals and indicative amount of the specific grant

Indicative amount: EUR 1 000 000



Indicative duration: 24 months

	Stages	Indicative timing
a)	Agency invitation for submissions	May 2018
b)	Deadline for submissions	July 2018
c)	Evaluation period	August-September 2018
d)	Signature of Specific Grant Agreement	October 2018

Maximum possible rate of co-financing of the eligible costs: 70%



End of Document