

9 Galileo Exploitation 2021 Grant Plan

The 2021 Grant plan with detailed description will be published on GSA website upon EC review and approval.

9.1.1 GRC Support from MS (GEX.0171.bis)

The Agency's 2021 grant plan for Galileo exploitation contains 1 (one) call for proposal under an existing Framework Partnership Agreement (FPA): GRC Support from EU Member States.

A FPA was established in 2017 with a Consortium of public national agencies, bodies and institutions within EU Member States to establish, maintain and implement Galileo performance monitoring.

The 1st Specific Grant was awarded in 2018 for a period of 18 months. The 2nd grant is ongoing and will run until 14th of August 2021.

Legal basis

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.

Budget line

3922

Background

The primary mission of the Galileo Reference Centre (hereafter “GRC”) is to perform independent monitoring of the Galileo Open Service (hereinafter “OS”) and Commercial Services (hereinafter “CS”) data dissemination performance and report it to the relevant stakeholders. It provides the European GNSS Agency (hereinafter “GSA”), as the service provider, with an independent means of evaluating the quality of the signals in space and the performance of the Galileo Service Operator (hereinafter ‘GSOp’). It is fully independent of the system and the GSOp with respect to both the technical solution (hardware/software, reference products, etc.) and operations.

The GRC’s mission includes the following activities:

- Perform independent monitoring and assessment of OS service provision;
- Perform independent monitoring and assessment of CS data dissemination;
- Integrate data and products from European Union Member States (hereinafter “MS”), as well as third countries such as Norway and Switzerland participating in the Galileo programme (hereinafter jointly with “EU MS” referred to as “MS”), with core GRC products and utilise their relevant expertise;
- Report service performance to the programme;
- Provide service performance expertise to the Programme, including (but not limited to) supporting the Galileo Service Centre (hereinafter “GSC”) on performance-related user requests;
- Support investigations of service performance and service degradations;
- Archive relevant service performance data over the nominal operational lifetime of the system; and
- When feasible, assess the compatibility and interoperability between Galileo and other GNSS.

The GRC comprises a core facility, located in Noordwijk, the Netherlands, and integrates data and products from cooperating entities from MS. Although the GRC core will have stand-alone capability to fulfil the main mission with a minimum required level of performance, achieving full performance and capabilities relies on integration of the MS contributions. These may support everyday operations (e.g. data provided by MS from additional networks, MS generated reference and monitoring products) and specific campaigns (e.g. utilisation of large gain antennas operated by MS, expertise available at MS level). To formalize such contribution and support the GSA established two long-term cooperation agreements with the selected beneficiaries in the form of Framework Partnership Agreements (hereafter “FPA”); the activities of the FPA(s) are implemented through Specific Grants (hereafter “SG”). More specifically, in 2017 the Agency signed a Framework Partnership Agreement (FPA) with a Consortium coordinated by NLR for a period of 4 (four) years to establish cooperation between itself and the partners. Considering the need to ensure continuity of the above activities after this date, the Agency plans to launch the 3rd SG during 2021.

2019 Priorities, objectives pursued and expected results:

Priorities:

- Integrate and steer MS contributions in the areas where the GRC could use support;
- Benefit from existing capacities at MS level, built on significant past public investments;

Objectives pursued:

To establish long-term relationships with beneficiaries to provide access to a range of facilities and expertise at MS' level for Galileo service performance monitoring, taken into account that:

- (1) GRC stand-alone capability is essential: contributions from other entities should be utilised to improve performance, but the GRC should be capable of carrying out its core tasks without these additional inputs;
- (2) supporting activities must be independent from the Galileo system;
- (3) GRC should benefit from but also contribute to maintain the long term competences and expertise at the level of MS;
- (4) Interfaces are defined by the GRC, MS' contributions must comply with these.

Description of the activities to be funded under the call for proposals:

The anticipated support activities are:

- (1) GNSS data provision through national or international networks: data collected with networks of reference stations situated inside MS, regional (covering more than one MS) and international networks (including reference stations outside MS) should continuously be provided to the GRC;
- (2) Provision of products: Products such as KPIs, reference orbits and clocks, ionospheric products generated by the MS should be provided to the GRC, according to agreements on a case-by-case basis;
- (3) Signal in Space Monitoring (SiS): Campaign-based SiS monitoring and analysis using antennas with large aperture;
- (4) GNSS Performance investigations: Campaign-based GNSS performance investigations using other than the above assets available in MS;
- (5) Other support to GRC Activities: Consultation on the definition of GRC products, GRC and MS product comparison, expertise, etc.

Award criteria for the Specific Grant

- Level of relevance of the proposal and credibility of the proposed approach to reach the objectives;
- Cost effectiveness and impact in terms of programme benefits derived from the proposal;
- Coherence of the work plan, including appropriateness of the allocation of tasks and resources.

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

- Indicative budget € 333,000;
- Indicative duration: 12 months.

	Stages	Planning
a)	Send 3 rd SG Invitation to submit Proposals to the beneficiary/partner	February 2021
b)	Proposal submission and Evaluation	April 2021
c)	Signature of 3 rd SG	June 2021

Maximum possible rate of co-financing of the eligible total costs:

Up to 60% funding of the eligible total costs.

ANNEX 1 : 2021 Galileo Grant Plan modification

Section 8.1.2 is introduced as follows:

8.1.2 GRC SUPPORT FROM MS (GEX.0501)

The 1st Specific Grant with a consortium led by CNES was awarded in 2018 for a period of 12 months. The 3rd grant is ongoing and will run until 31th of August 2021.

Legal basis

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.

Budget line

3922

Background

The primary mission of the Galileo Reference Centre (hereafter “GRC”) is to perform independent monitoring of the Galileo Open Service (hereinafter “OS”) and Commercial Services (hereinafter “CS”) data dissemination performance and report it to the relevant stakeholders. It provides the European GNSS Agency (hereinafter “GSA”), as the service provider, with an independent means of evaluating the quality of the signals in space and the performance of the Galileo Service Operator (hereinafter ‘GSOp’). It is fully independent of the system and the GSOp with respect to both the technical solution (hardware/software, reference products, etc.) and operations.

The GRC’s mission includes the following activities:

- Perform independent monitoring and assessment of OS service provision;
- Perform independent monitoring and assessment of CS data dissemination;
- Integrate data and products from European Union Member States (hereinafter “MS”), as well as third countries such as Norway and Switzerland participating in the Galileo programme (hereinafter jointly with “EU MS” referred to as “MS”), with core GRC products and utilise their relevant expertise;
- Report service performance to the programme;
- Provide service performance expertise to the Programme, including (but not limited to) supporting the Galileo Service Centre (hereinafter “GSC”) on performance-related user requests;
- Support investigations of service performance and service degradations;
- Archive relevant service performance data over the nominal operational lifetime of the system; and
- When feasible, assess the compatibility and interoperability between Galileo and other GNSS.

The GRC comprises a core facility, located in Noordwijk, the Netherlands, and integrates data and products from cooperating entities from MS. Although the GRC core will have stand-alone capability to fulfil the main mission with a minimum required level of performance, achieving full performance and capabilities relies on integration of the MS contributions. These may support everyday operations (e.g. data provided by MS from additional networks, MS generated reference and monitoring products) and specific campaigns (e.g. utilisation of large gain antennas operated by MS, expertise available at MS level). To formalize such contribution and support the GSA established two long-term cooperation agreements with the selected

beneficiaries in the form of Framework Partnership Agreements (hereafter “FPA”); the activities of the FPA(s) are implemented through Specific Grants (hereafter “SG”). More specifically, in 2017 the Agency signed a Framework Partnership Agreement (FPA) with a Consortium coordinated by CNES to establish cooperation between itself and the partners. Considering the need to ensure continuity of the above activities after this date, the Agency plans to launch the 4th SG during 2021.

Priorities, objectives pursued and expected results:

Priorities:

- Integrate and steer MS contributions in the areas where the GRC could use support;
- Benefit from existing capacities at MS level, built on significant past public investments;

Objectives pursued:

To establish long-term relationships with beneficiaries to provide access to a range of facilities and expertise at MS' level for Galileo service performance monitoring, taken into account that:

- (1) GRC stand-alone capability is essential: contributions from other entities should be utilised to improve performance, but the GRC should be capable of carrying out its core tasks without these additional inputs;
- (2) supporting activities must be independent from the Galileo system;
- (3) GRC should benefit from but also contribute to maintain the long-term competences and expertise at the level of MS;
- (4) Interfaces are defined by the GRC, MS' contributions must comply with these.

Description of the activities to be funded under the call for proposals:

The anticipated support activities are:

(1) GNSS data provision through national or international networks: data collected with networks of reference stations situated inside MS, regional (covering more than one MS) and international networks (including reference stations outside MS) should continuously be provided to the GRC;

(2) Provision of products: Products such as KPIs, reference orbits and clocks, ionospheric products generated by the MS should be provided to the GRC, according to agreements on a case-by-case basis;

(3) Signal in Space Monitoring (SiS): Campaign-based SiS monitoring and analysis using antennas with large aperture;

(4) GNSS Performance investigations: Campaign-based GNSS performance investigations using other than the above assets available in MS;

(5) Other support to GRC Activities: Consultation on the definition of GRC products, GRC and MS product comparison, expertise, etc.

Award criteria for the Specific Grant

- Level of relevance of the proposal and credibility of the proposed approach to reach the objectives;
- Cost effectiveness and impact in terms of programme benefits derived from the proposal;
- Coherence of the work plan, including appropriateness of the allocation of tasks and resources.

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

- Indicative budget € 1,000,000;
- Indicative duration: 12 months.

	Stages	Planning
a)	Send 4 nd SG Invitation to submit Proposals to the beneficiary/partner	June 2021
b)	Proposal submission and Evaluation	July 2021
c)	Signature of 4 rd SG	August 2021

Maximum possible rate of co-financing of the eligible total costs:

Up to 60% funding of the eligible total costs.