



6 Galileo Exploitation 2019 Grant Plan

The 2019 Grant plan with detailed description will be published on GSA website upon EC review and approval.

The list of Galileo grants currently foreseen in 2019 is reported below.

6.1.1 Filling the gaps and emerging E-GNSS receivers technologies (GEX.0206 + GEX.0085)

NB: GEX.0206 had been already approved and published in the frame of 2018 AAP whereas GEX.0085 had been already approved in the frame of 2018 AAP v1.1 but the detailed description was missing. As agreed at working level, it is now proposed to merge the two grants with an overall budget reduction for EC review before the publication on GSA website.

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 and Delegation Agreement between the European Union, represented by the European Commission and the European GNSS Agency on the Exploitation Phase of the Galileo Programme signed on 2 October 2014.

Call for proposals

BUDGET LINES:

3922

BACKGROUND:

- GNSS market and technology is rapidly evolving, following on one hand the pull of increasingly sophisticated technologies and employing of complementary techniques and, on the other hand, the push from the users that have growing demands in terms of positioning accuracy, continuity, availability and interoperability with other systems. Additionally, the prices of the GNSS user equipment is reportedly decreasing
- The Fundamental Elements (FE) scheme is funding the development of E-GNSS-enabled chipsets, receivers and antennas for dedicated user groups and the on-going projects cover



the distinctive GNSS markets such as aviation, maritime, road, rail, LBS, agriculture, surveying and mapping, timing and synchronisation.

- One of the objectives of the FE is to strengthen the European manufacturers, integrators by enlarging the offer of European GNSS products.

Objectives pursued and foreseen results:

- To invest in close-to-market GNSS receivers and associated technologies (Filling the Gaps Technologies) not developed by the FE other projects or in cutting-edge GNSS receiver technologies (Emerging Technologies) that are at the forefront of current R&D and may have or not an immediate adoption in market-ready products.

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

The call for proposals is intended to fund up to six (6) projects with the following activities:

- Development of one or more innovative receiver technologies, close to the market or disruptive, future-looking technologies leveraging Galileo and EGNOS differentiators
- Test and demonstration of the capabilities of the technologies with real Galileo and/or EGNOS Signals in Space
- The receivers and/or associated close to market technologies shall be aligned with the market trends for the specific user segments and target competitive prices and the applicants shall include a business plan detailing on how the developed technologies will be brought into the market
- The disruptive, future-looking technologies shall be based on R&D excellence going beyond the current state-of-the-art and ideally also beyond the current market needs and not necessarily focused on a specific application/segment, identifying only potential areas of applications of the technologies proposed/developed

Essential eligibility, selection and award criteria:

1. Eligibility

- The proposal may be submitted by entities fulfilling all the criteria below:
 - Legal persons established⁴ in and/or natural person(s) who is national of one of the following countries, are eligible:
 - EU Member States
 - Switzerland, Norway,

⁴ Established should be understood as having a registered office, central administration or principal place of business in one of these countries.



- Applicants must correspond to the definition of the following target organisations: active in the development, integration and/or manufacturing of GNSS antennas, components, receivers and/or expert in the field of GNSS Research and development (R&D).

2. Non-exclusion criteria

Article 136 of Financial Regulation shall apply.

3. The applicants must fulfil the following selection criteria:

- The financial capacity of the applicant to perform the proposed activities
- The technical capacity of the applicant to perform the proposed activities

4. Main award criteria:

- Relevance of the proposal to achieve the objectives of the call, credibility of the proposed approach, and innovation of the solutions proposed
- Impact in terms of economic and public benefits derived from the proposal including but not limited to a coherent plan for the exploitation of the results of the grant
- Credible and effective dissemination plan for the results in the best interest of the European Union
- Quality of the implementation: coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources.

Indicative timetable and indicative amount of the call for proposals:

- Allocated budget for the Call for Proposal: € 5,000,000 (up to 6 (six) projects to be granted depending on the quality of the proposals received (indicative))

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q3 2019
b)	Deadline for submitting applications	Q4 2019
c)	Evaluation period	Q1 2020
d)	Information to applicants on the outcome of the evaluation	Q2 2020



e)	Signature of the Grant Agreements	Q3 2020
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Maximum possible rate of co-financing of the eligible total costs:

Up to 70% funding of the eligible total costs.
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6.1.2 GRC Support from MS (GEX.0171)

The Agency's 2019 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. This 1st grant is ongoing and will run until 31 December 2019.

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. The 1st SG was signed on 29 June 2018 for a period of 18 months to initiate the activities defined for such cooperation. Considering the need to ensure continuity of the above activities after this date, the Agency plans to launch the 2nd SG during 2019.



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 € 500,000;
- Indicative duration: 18 months.

	Stages	Planning
a)	Send 2 nd SG Invitation to submit Proposals to the beneficiary/partner	July 2018
b)	Proposal submission and Evaluation	October 2018
c)	Signature of 2 nd SG	December 2018

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

Up to 60% funding of the eligible total costs.



6.1.3 Receiver technologies for high-precision in mass-market (GEX.0332)

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 and Delegation Agreement between the European Union, represented by the European Commission and the European GNSS Agency on the Exploitation Phase of the Galileo Programme signed on 2 October 2014.

Call for proposals

BUDGET LINE:

3922

BACKGROUND:

- The prices of professional grade receivers are continuously decreasing and high precision techniques are more and more employed in the mass market devices.
- Emerging market needs driven by automotive in general, and autonomous vehicles in particular, are requiring enhanced performances in terms of high precision: this is becoming a major driver influencing all the mass-market domain, including both consumer and automotive devices.
- For this reason, many augmentation techniques are increasingly used, such as PPP (Precise Point Positioning). However most of the current solutions have been conceived for the professional market and are not seamless applicable for mass market including autonomous driving.
- PPP will also be provided by the Galileo High Accuracy Service (HAS). Galileo will in fact disseminate such corrections for free directly via Signal-in-Space transmitted by its satellites' constellation on the E6 band and thus is well positioned to become a central part of high accuracy for mass market users.
- Advanced GNSS-based techniques leading to high precision also exist, which rely on deployed terrestrial infrastructure (Real Time Kinematic – RTK).
- In the frame of past and ongoing EU funded R&D (Fundamental Elements and H2020) both PPP and RTK based techniques have been investigated to reach high accuracy, particularly in automotive applications. However they have been mainly proposed separately as alternative approaches so far.



- Recent initiatives and market announcements demonstrated PPP and RTK complementarity that might be exploited to further strengthen each other and mitigate their respective weaknesses.
- In addition, the broadband connectivity and the upcoming 5G will enable the exchange of large amount of information, such as 3DMaps, assistance data, common data from surrounding vehicles/pedestrians/infrastructure elements, etc., which can be exploited to further increase the positioning performance.

Objectives pursued and foreseen results:

- Development and demonstration of real-time GNSS receiver algorithm(s) based on a hybrid solution making use of Galileo HAS/PPP, RTK algorithms and connectivity (e.g. 5G/LTE, Wi-Fi V2V/V2X, etc).
- The solution shall be suitable for mass-market applications, including either consumer devices or automotive systems, and shall be able to operate in environmental (e.g. urban and/or suburban) and dynamic conditions (e.g. pedestrian and/or car driving) typical for the selected application. The developed algorithm(s) shall enable optimal global performance in terms of high accuracy, fast convergence time and ubiquity.
- Stimulate European competitiveness in the field of highly accurate PVT leveraging hybridisation of PPP and RTK techniques.

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

- The call for proposals is intended to fund one (1) project with the following activities:
- Design, development, test and demonstration of GNSS algorithm(s) and technology (-ies) suitable for mass-market receivers based, as minimum, on Galileo HAS/PPP and leveraging complementary with RTK techniques enabling ubiquitous very high accurate and fast converging PVT solution.
 - The algorithm(s) shall be tailored for a receiver close to market, computationally compatible with mass-market devices and cost competitive.



Essential eligibility, selection and award criteria:

5. Eligibility

- The proposal may be submitted by entities fulfilling all the criteria below:
 - o Legal persons established⁵ in and/or natural person(s) who is national of one of the following countries, are eligible:
 - EU Member States
 - Switzerland, Norway,
 - o Applicants must correspond to the definition of the following target organisations: active in the development, integration and/or manufacturing of GNSS components, receivers, antennas and/or expert in the field of GNSS Research and development (R&D)

6. Non-exclusion criteria

Article 135 and article 136 of Financial Regulation shall apply.

7. The applicants must fulfil the following selection criteria:

- The financial capacity of the applicant to perform the proposed activities
- The technical capacity of the applicant to perform the proposed activities

8. Main award criteria:

- Relevance of the proposal to achieve the objectives of the call, credibility of the proposed approach, and innovation of the solutions proposed;
- Impact in terms of economic and public benefits derived from the proposal including but not limited to a coherent business plan for the exploitation of the results of the grant;
- Credible and effective dissemination plan for the results in the best interest of the European Union;
- Quality of the implementation: coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources.

⁵ Established should be understood as having a registered office, central administration or principal place of business in one of these countries.



Indicative timetable and indicative amount of the call for proposals:

- Allocated budget for the Call for Proposal: € 1,500,000 (1 (one) project to be granted, depending on the quality of the proposals received)

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q3 2019
b)	Deadline for submitting applications	Q4 2019
c)	Evaluation period	Q1 2020
d)	Information to applicants on the outcome of the evaluation	Q2 2020
e)	Signature of the Grant Agreements	Q3 2020

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

Up to 70% funding of the eligible total costs.



6.1.4 Development of a drone-borne double frequency Galileo receiver (GEX.0333)

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 and Delegation Agreement between the European Union, represented by the European Commission and the European GNSS Agency on the Exploitation Phase of the Galileo Programme signed on 2 October 2014.

Call for proposals

BUDGET LINE:

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BACKGROUND:

- Drones will grow to outstrip any other user base in aviation and in order to navigate efficiently and safely, drones generally require GNSS support.
- To ensure the free circulation of drones and a level playing field within the European Union EASA has developed common European rules. They contribute to the development of a common European market while ensuring safe operations and respecting the privacy and security of EU citizens.
- Since 28 February 2019 Europe is one step closer to harmonised rules for safe drone operation. The EASA Committee voted unanimously to approve the European Commission's proposal for an Implementing Act to regulate the operations of Unmanned Aircraft Systems (UAS) in Europe and the registration of drone operators and of certified drones.
The Implementing Act is accompanied by a Delegated Act, which defines the technical requirements for drones. It was adopted by the European Commission on 12 March 2019 and sent to the EU Parliament and to the EU Council for the mandatory 2 months scrutiny period.



The operations of UAS in Europe will be classified in 3 main categories:

- the 'open' category is a category of UAS operation that, considering the risks involved, does not require a prior authorisation by the competent authority nor a declaration by the UAS operator before the operation takes place;
- the 'specific' category is a category of UAS operation that, considering the risks involved, requires an authorisation by the competent authority before the operation takes place, taking into account the mitigation measures identified in an operational risk assessment, except for certain standard scenarios where a declaration by the operator is sufficient or when the operator holds a light UAS operator certificate (LUC) with the appropriate privileges;
- the 'certified' category is a category of UA operation that, considering the risks involved, requires the certification of the UAS, a licensed remote pilot and an operator approved by the competent authority, in order to ensure an appropriate level of safety. The proposed regulation is focusing on the open and specific categories.
- In addition, EUROCAE WG-105 and JARUS (Joint Authorities for Rulemaking of Unmanned Systems) are developing SORA (Specific Operations Risk Assessment), a risk assessment methodology to establish a sufficient level of confidence that a specific operation can be conducted safely.
- Most drones, consumer 'high-end consumer' drones and also platforms used for some 'professional use', under open and specific categories use low-cost single frequency GNSS receivers, often integrated with INS, and designed for LBS devices.
- There is a strong need for accurate, reliable information on the drone position, especially in the urban canyon in order to meet the technical and operational requirements described above and necessary to obtain approval from EASA and/or the competent National Authority, to implement the target operation.
- In this regard, Galileo can provide a significant added value through exploitation of its differentiators, like multi-frequency and Open Service Navigation Message Authentication (OS-NMA).
- In fact, low-cost double-frequency multi-constellation receivers may become a powerful enabler for specific drone functions that will be required in the future U-Space, such as to implement e-identification, geo-awareness, detect and avoiding order to deliver commercial operations, meeting safety requirements specified by National Authorities (requested for 'high-end' open category' and in SORA (Specific Operations Risk Assessment) specific category drones).
- Dual frequency receivers offer significant advantages over single frequency ones, in terms of achievable accuracy but also for better resistance to jamming. A clear trend in L1/E1 and L5/E5 receivers appeared on the mass market in 2017-18.
- Authentication features are a Key Enabling Technology for drones based applications in urban, semi-urban areas and for the practical implementation of U-Space.
- Implementation of Galileo OS-NMA for drones-borne receiver may become key in order to mitigate security risks identified in current UAS (Unmanned Aircraft System) and future UTM (Unmanned Aircraft System Traffic Management) operations so that the residual risk level is under a specific acceptable threshold.



Objectives pursued and foreseen results:

- Development of a drone-borne low-cost double-frequency Galileo multi-constellation receiver, integrated with INS (inertial navigation system) and other sensors, at a sufficient technology level of maturity (i.e. TRL 7) and validated in a representative environment, targeting operations under specific category (typically those used for 'professional applications') and with more stringent technical and/or operational requirements (e.g. such as 'high end consumer drones' with geo-awareness requirements).
- Deliver robust navigation performances complying with the safety and operational requirements defined by the relevant national authorities for the target application authority and implement/or EASA
- Implement suitable mitigations techniques based on GNSS to tackle the applicable risks as defined in SORA and/or EASA standard scenarios.

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

The call for proposals is intended to fund up to two (2) projects with the following activities:

- Development of a low-cost Galileo-enabled dual frequency drone-borne receiver. The receiver will have the following features: double frequency E1/E5, usage of OS-NMA for authentication function, INS sensor integration
- Demonstration and testing of the receiver in a drone platform (proving the tight multi-sensor integration) in operational mode in different scenarios (including urban canyons) for application defined within the Open and/or Specific category, as defined by EASA Opinion 01/2018.
- Development of the related safety case for the target application (following SORA methodology or EASA requirements for standard scenarios in the specific category, as applicable) and acceptance of the receiver and target operation by the relevant Civil Aviation Authority.
- Contribution to define navigation performances and E-GNSS contribution in standardization activities, ongoing in EUROCAE WG-105.



Essential eligibility, selection and award criteria:

9. Eligibility

- The proposal may be submitted by entities fulfilling all the criteria below:
 - o Legal persons established⁶ in and/or natural person(s) who is national of one of the following countries, are eligible:
 - EU Member States
 - Switzerland, Norway,
 - o Applicants must correspond to the definition of the following target organisations: active in the development, integration and/or manufacturing of GNSS components (either HW or SW) and/or GNSS receivers and/or antennas and/or expert in the field of GNSS Research and development (R&D)

10. Non-exclusion criteria

Article 135 and article 136 of Financial Regulation shall apply.

11. The applicants must fulfil the following selection criteria:

- The financial capacity of the applicant to perform the proposed activities
- The technical capacity of the applicant to perform the proposed activities

12. Main award criteria:

- Relevance of the proposal to achieve the objectives of the call, credibility of the proposed approach, and innovation of the solutions proposed;
- Impact in terms of economic and public benefits derived from the proposal including but not limited to a coherent business plan for the exploitation of the results of the grant;
- Credible and effective dissemination plan for the results in the best interest of the European Union;
- Quality of the implementation: coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources.

Indicative timetable and indicative amount of the call for proposals:

- Allocated budget for the Call for Proposal: € 1,500,000 (up to 2 (two) projects to be granted, depending on the quality of the proposals received)

⁶ Established should be understood as having a registered office, central administration or principal place of business in one of these countries.



	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q3 2019
b)	Deadline for submitting applications	Q4 2019
c)	Evaluation period	Q1 2020
d)	Information to applicants on the outcome of the evaluation	Q2 2020
e)	Signature of the Grant Agreements	Q3 2020

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

Up to 70% funding of the eligible total costs.



6.1.5 Shipborne double frequency multi-constellation receiver (E1/E5) (GEX.0331 and EEX.0056)

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 and Delegation Agreement between the European Union, represented by the European Commission and the European GNSS Agency on the Exploitation Phase of the Galileo Programme signed on 2 October 2014.

Call for proposals

Budget lines

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NB: € 500,000 are funded through ref. EEX.0056 included in the EGNOS 2019 grant plan (GSA-EGN-PM-PL-244825_1.0_Grant Plan 2019) while € 2,000,000 are funded through ref. GEX.0331 included in the GAL 2019 grant plan below: the activity is the same and it is reported in both grant plans for the sake of transparency and traceability. It is to be launched and published as a single common grant split exclusively in terms of budget funding.



Background:

This activity is reported in both grant EGNOS and GALILEO plans for the sake of transparency and traceability, however it is to be launched and published as a single common grant split exclusively in terms of budget funding.

- IMO resolution MSC.401(95) and MSC.432 adopted performance standards for multi-system shipborne radio navigation receivers. The resolution states that the equipment should use at least two independent GNSS recognised by IMO as part of the World Wide Radio navigation System (WWRNS) and should have the facilities to process augmentation data.
- Galileo is recognised by IMO.
- Galileo Open Service (OS) will be augmented via SBAS L5/E5.
- The current shipborne receivers for SOLAS vessels are single frequency L1/E1.
- The development of a dual frequency L1/E1 – L5/E5 maritime receiver is a pre-requisite to enable the augmentation of Galileo OS data.
- There is a need to adapt aviation standards for SBAS L1/L5 for maritime use.
- There is a need to explore the operational benefits of using authenticated positioning via the Open Service Navigation Message Authentication (OS-NMA) to provide an additional mechanism to detect a potential spoofing attack.

Priorities, objectives pursued and expected results

- Development of a double-frequency shipborne multi-constellation open service receiver including Galileo OS E1/E5 and preparation of Guidelines for the implementation of SBAS L1/L5.



Description of activities to be funded under this call for proposals

The call for proposals is intended to fund up to two (2) projects with the following activities:

1. Galileo

- Develop and test of a dual frequency E1/E5 shipborne multi-constellation receiver based on Galileo, compliant with IMO resolutions MSC.401, MSC.432 and taking into account for Galileo multi-frequency receiver the IMO resolution MSC.233 and the IEC standard 61108-3.
- Get type approval for Galileo receiver following IEC standard 61108-3.
- Implement the algorithms to use the OS NMA to support Resilient PNT in maritime navigation (optional).

2. SBAS/EGNOS (funded by EGNOS Budget – please refer to the EGNOS 2019 Grant plan):

- Prepare Guidelines for shipborne manufacturers for the implementation of SBAS L1/L5 open service.
- Develop firmware to process Galileo augmentation messages provided by SBAS L5.



Essential eligibility, selection and award criteria

Eligibility

The proposal may be submitted by entities fulfilling all the criteria below:

1. Legal persons established⁷ in and/or natural person(s) who is national of one of the following countries, are eligible:

- EU Member States;
- Switzerland, Norway.

2. Applicants must correspond to the definition of the following target organisations: active in the development, integration and/or manufacturing of GNSS antennas, components, receivers and/or expert in the field of GNSS Research and development (R&D).

Non-exclusion criteria

Article 135 and article 136 of Financial Regulation shall apply.

Selection criteria

The applicants must fulfil the following selection criteria:

1. The financial capacity of the applicant to perform the proposed activities;
2. The technical capacity of the applicant to perform the proposed activities.

Award criteria

1. Relevance of the proposal to achieve the objectives of the call, credibility of the proposed approach, and innovation of the solutions proposed;
2. Impact in terms of economic and public benefits derived from the proposal including but not limited to a coherent business plan for the exploitation of the results of the grant;
3. Credible and effective dissemination plan for the results in the best interest of the EU;
4. Quality of the implementation: coherence and effectiveness 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 amount: 2,500,000 EUR (up to 2 (two) projects to be granted depending on the quality of the proposals received). They will be funded as follows: 500,000€ are funded through ref. EEX.0056 included in the EGNOS 2019 grant plan while 2,000,000€ are funded through ref. GEX.0331 included in the present Galileo 2019 grant plan.

Indicative duration: due to the budget availability, EGNOS budget shall cover the activities undertaken before 31 December 2021.

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q2 2019
b)	Deadline for submitting applications	Q3 2019
c)	Evaluation period	Q4 2019
d)	Information to applicants on the outcome of the evaluation	Q1 2020
e)	Signature of the Grant Agreements	Q2 2020

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

⁷ Established should be understood as having a registered office, central administration or principal place of business in one of these countries.