

**Galileo Exploitation  
Grant Plan 2016**

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# Galileo Exploitation 2016 Grant Plan

## 1 Fundamental Elements Grants

### 1.1 Advanced RAIM Multi-constellation Receiver

#### 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.

Call for proposals
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#### BACKGROUND:

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| <ul style="list-style-type: none"><li>○ Integrity is one of the essential qualities of service to be provided by the Galileo safety of life service. Advanced (A) RAIM (Receiver Autonomous Integrity Monitoring) is a possible concept to which much effort is being devoted with the intention to provide a global integrity service based on multiple satellite constellations.</li><li>○ In this respect, cooperation with the United States of America was formally established through the creation of a specific EU-US ARAIM Technical Sub-Group (TSG) in Working Group C of the EU-US cooperation agreement. The ARAIM TSG has been developing the concept with a focus on Civil Aviation, including possible architectures for its implementation as well as the reference user algorithm to be implemented at the airborne receivers.</li><li>○ ARAIM has different characteristics compared to current SBAS such as: using of the dual-frequency ionosphere-free pseudorange combination, not using differential corrections, enabling the use of all GNSS constellations that provide a reliable and proven Integrity Support Message (ISM).</li><li>○ Two constellations are compulsory to meet minimum availability requirements globally for LPV-200 using ARAIM, which is the initial target considered by the ARAIM TSG. In addition, the possibility to achieve a less stringent performance to support Horizontal navigation only, and which can be implemented in shorter term is also being analysed.</li></ul> |
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### Objectives pursued and foreseen results:

- The main objective of the project is to develop an Advanced RAIM (Receiver Autonomous Integrity Monitoring) prototype, following the lines as defined by the ARAIM TSG.
- The developed prototype may be used in a demonstration campaign (more details to be clarified at a later stage).
- The second objective<sup>1</sup> of the project is to assess ARAIM in:
  - Aviation Domain: enabling global Horizontal Navigation as well as Vertical (LPV-200) operations including threat allocation and mitigation.
  - Maritime Domain: enabling marine global general navigation providing integrity, especially when the receiver is outside coverage of IALA Beacon Differential GNSS transmissions.
- The third objective of the projects is to test the performance in number of test scenarios for safety critical applications<sup>2</sup> (aeronautical, maritime, rail and road).

#### Foreseen results:

- The expected result is a prototype enabling the ARAIM capability fulfilling all the above mentioned requirements. The prototype will have to be accompanied by the corresponding documentation.

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

The call for proposals is intended to fund one-two (1-2) project(s)<sup>3</sup>.

The project(s) will include the following activities:

- analysis of already defined operations ARAIM concepts and resulting needs in terms of on-board prototype architecture definition of ARAIM scenarios (at least for aeronautical, maritime, rail and safety critical road users) with and without Galileo SIS modifications,
- development of ARAIM receiver prototype:
  - for aviation horizontal navigation and LPV-200 operations
  - for marine general navigation<sup>4</sup>
- execution of a demonstration campaign,
- assess the receivers' performance in the different test scenarios,
- provide inputs for the development of GNSS receiver standards and test specifications that include A-RAIM
  - For aviation: ICAO, RTCA
  - For maritime domain: IMO, IEC, RTCM

### Essential eligibility, selection and award criteria:

<sup>1</sup> To be decided further if the awarded applicant(s) shall do both the aviation and maritime depending on the split of the call.

<sup>2</sup> To be decided further if the awarded applicant(s) shall do any market domain depending on the split of the call.

<sup>3</sup> To be decided.

<sup>4</sup> To be decided further if the awarded applicant(s) shall do both the aviation and maritime depending on the split of the call.

1. Eligibility and non-exclusion criteria
  - The proposal may be submitted by entities fulfilling all the criteria below:
    - o Legal persons established 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);
    - o Corporate bodies must be properly constituted and registered under the law. When an applicant does not have legal personality, a physical person must be designated to provide the legal responsibility.
2. 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
3. Main award criteria:
  - Relevance of the proposal to 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 linked to a minimum passing requirement;
  - Work plan Coherence and effectiveness, appropriateness of tasks and resources allocation.

**Indicative timetable and indicative amount of the call for proposals:**

- Total allocated budget: € 2,500,000 for a Call for Proposal, with one-two (1-2) projects to be granted (with an allocation of budget to be confirmed at a later stage)

	<b>Stages</b>	<b>Planning</b>
a)	Publication of the call	February 2016
b)	Deadline to submit applications	19 May 2017
c)	Evaluation period	June-July 2017
d)	Information to applicants on outcome of evaluation	August-September 2017
e)	Signature of the Grant Agreements	October 2017

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

Up to **70%** funding of the eligible total costs.

## 1.2 High-end receiver core technology development

### 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.

Call for proposals

### BACKGROUND:

- High-end GNSS applications cover high-precision (cm level and beyond positioning accuracy) market segments such as Surveying applications (cadastral, construction, machine control, etc.), precision agriculture (automatic steering, Variable Rate Technologies), oil and gas platform management, etc. , and are complementary to other technologies for innovations in professional markets.
- The availability of several GNSS constellations pushes forward the state-of-the-art of the high-end E-GNSS receivers allowing to reach improved performances in terms of interference resilience, sensitivity, availability and accuracy. Furthermore the employment of innovative techniques and independent augmentation sensors and radio technologies would also provide such this enhanced receiver with higher reliability.
- In this scenario, it is necessary to develop and/or upgrade high-end state-of-the-art, all-constellation, all-frequency professional receivers and corresponding antennas including Galileo (and EGNOS whenever possible) differentiators for corresponding use cases scenarios for the professional market segment, taking into account its stringent constraints in terms of performance, power consumption and cost.
- This project aims to achieve a transversal technological development by increasing the industry knowledge and innovation capacity in core technology of professional market receiver development and investing on E-GNSS differentiators for this segment.

### Objectives pursued and foreseen results:

The call for proposals is intended to fund one (1) project.

Objectives of the project:

- Development and test a high-end state-of-the-art, all-constellation, all-frequency professional receivers, including specific Galileo (and EGNOS whenever possible) differentiators for corresponding use case scenarios. Develop or upgrade existing versions and test the corresponding high-end state-of-the-art, all-constellation, all-frequency professional antenna including specific Galileo (and EGNOS whenever possible) differentiators for corresponding use cases scenarios. Assemble, test and validate the above mentioned receivers and antennas into commercial-graded prototypes for dedicated use case scenarios.

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

The call for proposals is intended to fund one (1) project.

The activities to be funded under this call for proposal shall encompass:

- Development of a high-end, multi-purpose, multi-frequency, multi-constellation (including

- Galileo and other constellations) receiver and its technical building blocks;
- o Development of a demonstration kit targeted at application developers;
- o Producing requirements for a multi-frequency, multi-purpose, multi-constellation antenna for supporting this receiver.

**Essential eligibility, selection and award criteria:**

1. Eligibility and non-exclusion criteria
  - The proposal may be submitted by entities fulfilling all the criteria below:
    - o Legal persons established 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);
    - o Corporate bodies must be properly constituted and registered under the law. When an applicant does not have legal personality, a physical person must be designated to provide the legal responsibility.
2. 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
3. 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 linked to a minimum passing requirement;
  - 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 1 (one) project: € 4,300,000

	<b>Stages</b>	<b>Planning</b>
a)	Publication of the call	February 2016
b)	Deadline for submitting applications	May 2016
c)	Evaluation period	June to Sept. 2016

d)	Information to applicants on the outcome of the evaluation	October 2016
e)	Signature of the Grant Agreements	November 2016

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

Up to 60% funding of the eligible total costs.
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## 1.3 Low-end receiver core technology development

### 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.

Call for proposals
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### BACKGROUND:

- |   |
|---|
| <ul style="list-style-type: none"><li>○ Low-end applications cover several market segments such as Location Based Services (LBS), Internet of Things, Machine to Machine and Road and have a significant effect on the quality of life of many millions of people.</li><li>○ The availability of several means complementing the state-of-the-art of the low-end E-GNSS receivers allows to reach improved performances in terms of interference resilience, sensitivity, availability and accuracy. Furthermore the use of innovative techniques and independent augmentation sensors and radio technologies would also provide such this enhanced receiver with higher reliability.</li><li>○ In this scenario, it is necessary to develop key technological building blocks aiming at the exploration of a low-end, multi-constellation, dual frequency receiver integrating innovative techniques, oriented at the development of core technologies for the mass market segment, taking into account its stringent constraints in terms of power consumption, size, weight and cost.</li><li>○ This project aims to achieve a transversal technological development by increasing the industry knowledge and innovation capacity in core technology of mass-market receiver development and investing on E-GNSS differentiators for this segment.</li></ul> |
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### Objectives pursued and foreseen results:

The call for proposals is intended to fund one (1) project.

Objectives of the project:

- (1) to support industry to develop the knowledge and innovation capacity in core technologies of receiver development for the “premium consumer” mass market, through the development and test of a prototype that integrates key technology building blocks;
- (2) to incentivise industry to invest on specific E-GNSS differentiators in the segment of “premium consumer”.

The final outcome resulting from the achievement of the two above-mentioned objectives shall be a low-end, multi-constellation, multi-frequency receiver

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

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

The activities to be funded under this call for proposal shall encompass:

- Identification of “premium consumer” mass market user needs,
- Design, development, integration of innovative core technologies in a low-end, multi-frequency, multi-constellation (including Galileo) receiver;
- Demonstration of the receiver in a real scenario.

### Essential eligibility, selection and award criteria:

#### 1. Eligibility and non-exclusion criteria

- The proposal may be submitted by entities fulfilling all the criteria below:
  - Legal persons established in and/or natural person(s) who is national of one of the following countries, are eligible:
    - EU Member States
    - Switzerland, Norway
  - 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);
  - Corporate bodies must be properly constituted and registered under the law. When an applicant does not have legal personality, a physical person must be designated to provide the legal responsibility.

#### 2. 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

#### 3. Main award criteria:

- Relevance of the proposal to 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;
- 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:**

- Total allocated budget for two (2) projects to be granted: € 8,500,000

	<b>Stages</b>	<b>Planning</b>
a)	Publication of the call	February 2016
b)	Deadline for submitting applications	May 2016
c)	Evaluation period	June to Sept. 2016
d)	Information to applicants on the outcome of the evaluation	October 2016
e)	Signature of the Grant Agreements	November 2016

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

Up to 60% funding of the eligible total costs.

## 1.4 MEOSAR Beacon prototyping

### 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.

Call for proposals

### BACKGROUND:

- MEOSAR which will add Search and Rescue (SAR) capability to constellation of Galileo satellites. MEOSAR will enable an instantaneous and worldwide coverage, with distress beacons that will be detected and located more quickly and accurately than nowadays.
- In this context, it is necessary to develop and demonstrate a Galileo-enabled MEOSAR beacon prototype.
- This project aims to achieve the technological development by increasing the European industry's innovation capacity and investing on E-GNSS differentiators for MEOSAR.

### Objectives pursued and foreseen results:

The call for proposals is intended to fund one (1) project.

Objectives of the project:

- Secure the availability of commercial products from European manufacturers of MEOSAR Beacons compatible with the Return Link Service capabilities implemented by Galileo.
- Develop and test of Galileo based MEOSAR beacons (ELT, EPIRB and PLB) with at least the following capabilities:
  - independent location accuracy
  - cancellation function
  - better encoded location
  - improved location accuracy, availability and TTF
  - return Link Service (RLS)
  - additional data encoded in beacon message
  - automatic ELT activation on indication of emergency

## 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:

The activities to be funded under this call for proposal shall encompass:

- Development of the Galileo-based MEOSAR beacon and its technology building blocks;
- Testing and demonstrating the prototype's capabilities.
- Development of a demonstration kit platforms targeted at application developers.

## Essential eligibility, selection and award criteria:

### 1. Eligibility and non-exclusion criteria

- The proposal may be submitted by entities fulfilling all the criteria below:
  - Legal persons established in and/or natural person(s) who is national of one of the following countries, are eligible:
    - EU Member States
    - Switzerland, Norway
  - 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);
  - Corporate bodies must be properly constituted and registered under the law. When an applicant does not have legal personality, a physical person must be designated to provide the legal responsibility.

### 2. 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

### 3. Main award criteria:

- Excellence: relevance of the proposal to 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 linked to a minimum passing requirement;
- 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 one (1) project: € 4,000,000

	<b>Stages</b>	<b>Planning</b>
a)	Publication of the call	February 2016
b)	Deadline for submitting applications	31 May 2017
c)	Evaluation period	June 2017
d)	Information to applicants on the outcome of the evaluation	July 2017
e)	Signature of the Grant Agreements	September 2017

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

Up to 70% funding of the eligible total costs.

## 1.5 Commercial Service user terminal

### 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.

Call for proposals
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### BACKGROUND:

- High-end GNSS applications such as surveying applications (cadastral, construction, machine control, etc.), precision agriculture (automatic steering, Variable Rate Technologies), civil protection and emergency services need cm-level positioning accuracy.
- Avoiding spoofing (i.e., unauthorised use of legitimate identification to mimic satellite signals and data) is a constant challenge for various applications, such as civil protection and emergency services.
- Galileo's Commercial Service (CS) aims to provide service which goes beyond that of the Open Service. It shall offer added-value service that can be used/benefitted via a revenue-sharing mechanism with private sector. CS will offer two services High Accuracy and Authentication:
  - High Accuracy is understood as a receiver positioning accuracy with an error below one decimeter, improving navigation performances offered by the Galileo Open Service. The key feature proposed for the CS, with respect to other GNSS, is the capability to broadcast external data in real time across the globe (PPP- Precise Point Positioning),
  - Authentication is the ability to provide a level of guarantee to users in that they are utilising signals and data from actual satellites and not from any other source, therefore preventing spoofing. The purpose of this service is to satisfy the demand of GNSS users and applications for a trusted navigation solution provided by GNSS systems.
- In this context, it is necessary to develop CS user terminals and receivers specifically being capable of exploiting High Accuracy corrections delivered through the E6 channel and to use the Authentication service to avoid spoofing.
- This project aims to achieve commercial-grade CS miniaturised receivers/terminals.

## Objectives pursued and foreseen results:

The call for proposals is intended to fund two (2) projects.

Objectives of the project:

- Development and test of a Commercial Service user terminals and receivers;
- Such receivers should be able to use the added-value services part of the CS, specifically being capable of exploiting High Accuracy corrections delivered through the E6 channel and to use the Authentication service to avoid spoofing;
- Concerning High Accuracy, the receivers shall include flexible Navigation Message decoding function in order to cope with potential different High Precision service provider formats;
- For Authentication, the devices need to have cryptographic capabilities in order to process the keys that will be delivered by the Authentication Service Provider via the E6 channel and will need to be certified;
- Innovative receivers capable of combining both services to produce “Authenticated High Precision” should be developed.

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

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

The activities to be funded under this call for proposal shall encompass:

- Development, testing commercial-grade and demonstration of miniaturised CS receivers/terminals.
- Development of a demonstration kit platforms targeted at application developers.

## Essential eligibility, selection and award criteria:

### 1. Eligibility and non-exclusion criteria

- The proposal may be submitted by entities fulfilling all the criteria below:
  - Legal persons established in and/or natural person(s) who is national of one of the following countries, are eligible:
    - EU Member States
    - Switzerland, Norway
  - 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);
  - Corporate bodies must be properly constituted and registered under the law. When an applicant does not have legal personality, a physical person must be designated to provide the legal responsibility.

### 2. 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

### 3. Main award criteria:



- Excellence: relevance of the proposal to 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 linked to a minimum passing requirement;
- 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:**

- Total allocated budget: € 4,500,000 for a Call for Proposal for two (2) projects to be granted (with an allocation of budget to be confirmed at a later stage)

	<b>Stages</b>	<b>Planning (possible subject to updates)</b>
a)	Publication of the call	July 2016
b)	Deadline for submitting applications	October 2016
c)	Evaluation period	November 2016 to January 2017
d)	Information to applicants on the outcome of the evaluation	February 2017
e)	Signature of the Grant Agreements	March 2017

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

Up to 60-70% funding of the eligible total costs.

## 2 Member States support

### 2.1 GRC Support from EU Member States

#### 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.

Call for proposals

#### BACKGROUND:

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 formalise such contribution and support the GSA intends to establish long-term cooperation with the selected beneficiaries in the form of Framework Partnership Agreements (hereafter "FPA"). The activities of the FPA(s) shall be implemented through Specific Grants (hereafter "SG").

**Priorities of the call, objectives pursued and expected results:**

**Priorities of the call:**

- 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.

## Essential eligibility, selection and award criteria for the Framework Partnership Agreement:

### 1. Eligibility and non-exclusion criteria

- The proposal may be submitted by entities fulfilling all the criteria below:
    - o Legal persons established in and/or natural person(s) who is national of one of the following countries, are eligible:
      - EU Member States
      - Switzerland, Norway
  - Applicants must correspond to the definition of the following target organisations:
    - o - non profit national agencies
    - o - research institutes
    - o - similar organisation/bodies.
- ### 2. 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
  - The applicant has no conflict of interests in connection with the grant and in relation to activities performed for the Galileo System Operator and in particular those related to service performance monitoring and provision of timing and geodetic products
- ### 3. Main award criteria:
- Relevance and credibility of the proposed contributions to achieve the objectives of the Call
  - Coherence and effectiveness of the Strategic Action Plan, including appropriateness of the allocation of tasks and resources
  - Cost-effectiveness and impact in terms of programme benefits

### Informative award criteria for the SGA

- 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:**

- Three (3) to four (4) FPAs with a total ceiling of € 4,000,000

	<b>Stages</b>	<b>Planning</b>
a)	Publication of the call for proposals	09 February 2016
b)	Deadline for submitting applications	29 April 2016
c)	Evaluation period	16 May 2016
d)	Information to applicants on the outcome	27 May 2016
e)	FPA Signature	June-July 2016

- Specific Grants under the FPA, with a budget of approximately € 1,000,000 (with an allocation of Specific Grants to be confirmed at a later stage)

	<b>Stages</b>	<b>Planning</b>
a)	Send 1 <sup>st</sup> SGA Invitation to submit Proposals to the beneficiary/partner	October 2016
b)	Proposal submission and Evaluation	November 2016
c)	Signature of 1 <sup>st</sup> Specific Grant	December 2016

## 2.2 PRS Joint Test Activities with MS for Pilot Projects

### 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.

Call for Proposals
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### BACKGROUND:

- The objective of Public Regulated Service (PRS) Pilot Projects is the end to end validation of PRS service. This includes in particular the performance of PRS Tests and operations involving Member States.
- The programme will support PRS Joint Test Activities carried out by multiple Member States (having designated a Competent PRS authority).
- Through the call for proposals the GSA would like to establish a framework involving the relevant Member States authorities (notably the Competent PRS Authorities - CPAs) to support the implementation of the PRS Pilot Project tests for the achievement of the PRS Pilot Project objectives.
- Decision No 1104/2011/EU of the European Parliament and the Council of 25 October 2011 on the rules for access to the public regulated service applies and will constrain the participation to these activities.

### Priorities for the year, objectives pursued and expected results:

#### Priorities of the Call:

Through this Call for Proposals the GSA is providing a tool to support Member States involvement in PRS Pilot Project by Joint Test Activities to be implemented by groups of Member States.

#### Main Objectives pursued

- Evaluate the Galileo PRS in a representative (e.g. by using real Galileo signals) and suitable testing environment;
- Assess and demonstrate the PRS performance by several PRS Participants and/or stimulate cross fertilisation among PRS participants;
- Provide lessons learnt and feedback to the Programme, the CPAs and PRS PoC;

#### Expected results

- Execution of joint test activities performed by MS;
- Reports and dissemination of the test results to the relevant fora;
- Provision of test data/results for use by the Galileo Programme;
- A final report summarising the work implemented and containing as a minimum the main results achievements and lessons learnt as well as and recommendations for actions to be implemented.

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

- Preparation and Implementation of Joint tests and demonstrations with the aim of contribute to the achievement of the objectives of the Pilot Projects;
- Reporting and/or disseminating to the relevant fora and provision of data related to the performed tests to the Programme;
- Interface with the GSA for all matters related to the grant activities, the submission, approval and dissemination of the deliverables as well as administrative and technical supervision of the fulfilment by the beneficiaries of their respective roles and responsibilities;
- Any other action aiming at improving the knowledge of PRS stakeholders as well as cooperation mechanisms, exchanges of good practices.

**Essential eligibility, selection and award criteria for the grant:**

1. Eligibility and non-exclusion criteria
  - Eligibility and non-exclusion criteria shall comply with the requirements set out with Decision No 1104/2011/EU and CMS.
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2. Main selection criteria:
  - The consortia shall be composed by at least three (3) MSs, of which at least two (2) have designated CPA, and in any case at least have nominated a PRS Point of Contact;
  - The coordinator of each proposal shall be a CPA;
  - Applicant's technical capacity in understanding, reflecting and preserving the needs of PRS and performing the proposed activities;
  - The financial capacity of the applicant to perform the proposed activities.
3. Main award criteria:
  - Impact and relevance towards the achievement of the call's objectives;
  - Coherence and credibility of the proposed activities;
  - Quality of the implementation, including appropriateness of the allocation of resources.

**Indicative timetable and indicative amount of the call for proposals:**

- Total allocated budget: € 2,500,000 for a Call for Proposal, for up to ten (10) projects to be granted (with an allocation of projects to be confirmed at a later stage)

	<b>Stages</b>	<b>Date and indicative period</b>
a)	Publication of the invitation to submit a proposal	Q1 2016
b)	Deadline for submitting applications	Q2 2016
c)	Evaluation period	June 2016
d)	Information to applicants on the outcome of the evaluation	July 2016
e)	Signature of grant agreements	September 2016

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

Up to 60% funding of the eligible total costs.