



European
Global Navigation
Satellite Systems
Agency

CALL FOR PROPOSAL - EXTENSION

GSA/GRANT/01/2016

Development of high-end professional receivers and corresponding antennas

The present call for proposals is composed of a set of Submission Documents, which form an integral part of this call:

A1-A6 Forms
B1-B2 Forms
C1 Form

The terms set out in the call for proposals document shall take precedence over those in the other parts of the Submission Documents

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INTERESTED PARTIES ARE INVITED TO READ CAREFULLY THE BELOW INSTRUCTIONS IN ORDER TO ENSURE THAT APPLICATIONS ARE COMPLETE AND COMPLIANT WITH THE INSTRUCTIONS WHEN SUBMITTED.

1. CONTEXT

1.1. Introduction

The mission of the European GNSS Agency (GSA) is to support European Union's objectives and achieve the highest return on the European GNSS (E-GNSS) investment represented by the EGNOS and Galileo programmes, in terms of benefits to users and economic growth and competitiveness.

EGNOS is the European satellite-based augmentation system that is operational since October 2009 and will continue to provide its services for GPS augmentation and in the future for Galileo. Its open signal is free of charge and the service availability reaches 99% for the total of the EU coverage. EGNOS is able to enhance GNSS performance by offering continuity and an increased accuracy and reliability on the positioning.

The system to be established under the Galileo Programme is a global navigation system under deployment in Europe. It is a civil system under civil control, intended to provide navigation services to users, including highly reliable services for specific user communities. Initial services are planned to start in 2016 and will be based on a number of satellites placed in orbit that can be used in combination with GPS satellites. Already at this stage the user will be able to exploit a significant improvement in terms of signal availability, especially in harsh environments, as in urban canyons, where chances to receive signals from GNSS satellites are limited due to the restricted visibility of the sky. Galileo will provide precise, reliable and robust open service, enabling other desirable properties such as better resistance against multipath.

In addition, Galileo will provide authentication over its Open and Commercial services (CS), a feature which is unique among the various GNSS providers. This will allow users to assess the authenticity of the data provided through the signal in space against spoofing attempts and will contribute to improve the robustness of GNSS for applications in which safety, liability or security aspects matter.

Professional users need high-precision accuracy (cm level and below) to cover market segments such as surveying applications (cadastral, construction, machine control, etc.), precision agriculture (automatic steering, Variable Rate Technologies), oil and gas platform management, etc. The usage of GNSS in these activity domains is complemented by other technologies. There is an increasing demand for highly-accurate positioning, such as semi-autonomous navigation. Typical navigation and positioning requirements in the professional market include high accuracy, high availability, high tracking sensitivity and high performance multipath rejection techniques.

The exploitation of multi-constellation signals at receiver and antenna level, together with the availability of new signals modulations, offer immediate benefits to address these requirements, pushing forward the state-of-the-art of the high-end E-GNSS receivers. Continuous efforts are necessary in the further development of efficient algorithms and innovative hardware solutions to reach the required level of performance in real life operational conditions of a professional-grade receiver.

Mass-market applications are increasingly using high performance receivers and consequently introducing high-quality product lines at competitive prices, further pushing the high-end part of the market to innovate to keep their market position. Furthermore the market demands receivers to be compatible with further enhancements, such as the use of innovative techniques, independent and miniaturised augmentation sensors (inertial sensors, such as MEMS- micro-electro-mechanical systems, cameras, etc.) and radio technologies.

In this context, it is necessary to develop specialised high-end, all-constellation all-frequency receivers and antennas (or upgrade, if applicable) integrating innovative techniques.

Recent FP7 projects (the project portfolio can be accessed here: <http://www.gsa.europa.eu/r-d/gnss-project-portfolio/fp7>) demonstrated that many of the differentiators of European GNSS (e.g. various signal characteristics such as E5 AltBOC, availability of the signal in the Northern Latitudes, regional integrity, etc.) can be essential in the context of high-end professional applications.

1.2. Background of the call

This call is based on the Delegation Agreement concluded between the European Union, represented by the European Commission, and the European GNSS Agency (GSA) on the Exploitation Phase of the Galileo Programme signed on 2 October 2014.

In this framework, and in accordance with the Galileo Grants Plan for 2016 to be published on the GSA website (<http://www.gsa.europa.eu/gsa/grants>), the GSA is launching a call for proposals to increase the integration of Galileo capability in high-end professional receivers and antennas.

2. OBJECTIVES AND APPROACH OF THE CALL

2.1. Scope and Objectives of the call for proposals

The scope of this call is to further advance the GNSS technology for professional applications, investing in E-GNSS differentiators targeting high-precision, ultra-performant, cost-competitive professional receivers and the corresponding antennas and consequently increasing the European industry knowledge and innovation capacity in this field.

With the award of one grant, this Call for Proposal aims to achieve the following objectives:

- (1) The first objective of the call is to develop and test high-end state-of-the-art, all-constellation, all-frequency professional receivers including specific Galileo (and EGNOS whenever possible) differentiators for corresponding use cases scenarios, as described below.
- (2) The second objective of the call is to 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, as described below.
- (3) The third objective of the call is to integrate, test and validate the above-mentioned receivers and antennas into close-to-market products optimised for dedicated use case scenarios, as described below.

The final outcome resulting from the achievement of the above-mentioned objectives shall be three (3) receiver-antennas integrated products, each one optimised for a professional use case scenario.

In order to reach the objectives of this call, the applicants are expected to conduct the research and development (R&D) activities within the scope of this call when awarded as beneficiaries.

2.2. Approach and description of activities

2.2.1. *Approach of the activities*

Related to the three call objectives, the applicants shall start by analysing the possible scenarios of GNSS positioning and navigation required by professional users.

The purpose of this analysis is to:

- identify the critical user requirements and determine the products required by high-end professional market, in terms of environmental and operational constraints;
- identify technological gaps to be closed by R&D activities;
- support the subsequent design and develop of receiver-antenna final products optimised for each one of the selected use case.

A non-exhaustive list of professional use case scenarios is suggested below as a starting point and the applicants are invited to propose additional ones. Once the specificities of each use case scenario have been identified, the applicants shall select three use case scenarios (taking also into account the total budget available for the project) with the goal to develop one receiver-antenna product optimally adapted for each selected scenario.

At the level of the proposal, the applicants shall perform a preliminary analysis in order to identify the expected applications addressed by the envisaged end products, in terms of both identified user requirements and relevant technology gaps, explain how the proposed solutions will address the specificities of each selected use case scenario and list the proposed R&D activities to be performed and a preliminary test plan in order to accomplish the final receiver-antenna product.

Upon the award of the grant, the bidders shall implement the activities described in Section 2.2.2 and develop the proposed three close-to-market receiver-antenna integrated products optimised for each of the three use case scenarios.

Selection of use case scenarios

The following non-exhaustive list of use case scenarios is suggested as a starting point and the applicants are advised to propose additional ones:

- Use case scenario 1)* Centimetre-level precision, high visibility conditions, stationary, physical size power consumption not stringent demands (e.g., oil drilling);
- Use case scenario 2)* Decimetre-level precision, low visibility conditions, dynamic, physical size and power consumptions should be kept to the minimum. (e.g., GIS, mapping under tree canopy);
- Use case scenario 3)* Centimetre-level precision, medium visibility conditions, dynamic, physical size and power consumption not stringent demands (e.g., automated steering);
- Use case scenario 4)* Centimetre-level precision, low visibility conditions, dynamic, physical size and power consumption should be kept to the minimum (e.g., typical cases of RTK usage such as surveying).

The applicants are requested to perform and include already in their proposal a preliminary analysis of all the identified use case scenarios. In particular, for each use case scenario, the applicants shall list (no extensive analysis needed at the level of the proposal):

- user requirements (positioning accuracy to be provided, Time To First Fix (TTFF) for cold/warm start, constraints on the physical size and on the power consumption, etc.);
- environmental constraints during the operations (visibility conditions of the satellites, movement during operation conditions, etc.);
- applications fitting in the use case scenario (oil drilling, manned surveying, high-precision farming, etc.);
- proposed R&D activities implied by the development of the receivers and/or antennas for the use case scenario, focusing on the role of Galileo differentiators both at the receiver and antenna level.

The results of this preliminary analysis shall be summarised in the following table (pre-filled as a sample), to be completed as part of B1 Form and included in the proposal:

Table 1: A non-exhaustive list of use case scenarios and proposed approach

Use case scenario	Accuracy to be provided [cm]	Cold / Warm TTFF [min]	Power consumption constraint (Yes/No)	Size constraint (Yes/No)	Visibility	Movement during operation? (Yes/No)	Example application	Proposed R&D approach
1)	1-10	15 / 5	No	No	High	No	Oil drilling	-use of Galileo differentiator ... -carrier phase measurements -...
2)	10-20	10 / 3	Yes	Yes	Low	Yes	GIS/ Mapping	-GNSS-inertial coupling, fusion with other sensors; -...
3)	1-2	10 / 3	No	No	Medium	Yes	Automated Steering	...
4)	1-10	15 / 5	Yes	Yes	Low	Yes	Typical RTK use cases (e.g., Surveying)	...
5)

The applicants shall provide in their proposal the justification of their choice of use case scenarios, covering at least the following aspects:

- optimal use of the Galileo (and EGNOS whenever possible) differentiators;
- level of the innovation;
- complementarity with other technologies;
- identified demands of the high-precision market;
- competitiveness of the envisaged final commercial product (please provide a simplified cost-benefit analysis).

The applicants are advised to include in their argumentation any other aspects they might consider relevant.

2.2.2. *Description of activities*

In order to reach the objectives of this call, based on the selected three use case scenarios, the applicants shall conduct the following main activities when awarded as beneficiaries:

(1) Identify the user requirements.

The beneficiaries shall conclude the initial analysis performed at the level of the proposal and identify the complete set of user needs, shall express them in terms of user requirements to be met for each of the three selected use case scenarios and include them in the user requirements document (one document for all the receivers/antennas/final products). As in the initial proposal, these user requirements shall be expressed at least in terms of accuracy to be provided, Time To First Fix for cold/warm start conditions, constraints on the physical size and on the power consumption, etc.), environmental constraints during the operations (visibility conditions of the satellites, movement, etc.). The beneficiaries shall identify all the additional user requirements specific for each use case scenario.

For each use case scenario, the beneficiaries shall include a complete list of the applications for which the envisaged receiver-antenna products could be used.

From the market perspective, the beneficiaries shall foresee how the receivers, antennas and final integrated products to be developed will meet the current demand and further improve the current offer for the high-end users, including a detailed cost-benefit analysis (CBA). The outcomes of this analysis (market demand to be met, CBA, etc.) shall serve as input for the definition and implementation of the business plan.

(2) Derive the system and technical requirements.

The beneficiaries shall derive the system and technical requirements for the three final receiver-antenna products tailored for optimal performance in the selected use case scenarios and include them in the system requirements documents (one document including technical and the system requirements for all the receivers/antennas/subsystems/final products). The beneficiaries shall explain how the system and technical requirements accurately address the identified user requirements for the corresponding use case scenario. The detailed R&D approach to achieve and implement these requirements shall be described, providing three general receiver-antenna product architecture descriptions in support of the next design, development and integration phases.

(3) Design and develop/upgrade the (close to market) receivers.

The beneficiaries shall complete the design and implement the developing steps for the proposed three all-frequency all-constellations professional receivers according to the technical requirements. The receivers shall be optimised for the corresponding three use case scenarios proposed and selected in accordance with the user and system requirements for the use case scenarios addressed.

The optimal employment and processing of the Galileo (and EGNOS whenever possible) signal in the all-constellation all-frequency approach and products' role to improve the offer on the high-end market should be analysed for each use case scenario identified above taking into account the following high-level requirements:

- the availability of E-GNSS signals, which have wider bandwidths and are broadcasted at multiple carrier frequencies away from E1 and the benefits of using the three frequencies, i.e., E1/E5/E6 signals;
- the benefit of pilot tone data-less channels which reduce the long integration times and ultimately provide higher sensitivity and channel separation than L1 C/A;
- the prospect of an authentication service on Open Service E1 (the activity to be carried out with other GSA and European Commission projects related to Open Service Authentication);
- the potential use of satellite based real-time Precise Point Positioning (PPP) products, such as the High Accuracy service foreseen in the Galileo Commercial Service;
- the prospect use of an authentication service on Commercial Service (E6);
- other differentiators that may be identified by the applicants in their proposal and/or initial analysis.

Along with an optimised processing of the Galileo signal in the all-constellation all-frequency approach, in the context of the products' role to improve the offer on the high-end market, at least the following topics should be analysed:

- new concepts for signal processing;
- smart implementation of multi-constellation multi-frequency signal combination and processing;
- carrier phase-based positioning and advantages of Galileo's signals;
- optimised Time To First Fix (TTFF - proposed combination for the first fix: GPS + Galileo);
- coupling with other sensors and other non-GNSS positioning techniques for reliability enhancement, increased navigation capabilities, etc. (e.g.: Wi-Fi, MEMS, etc.);
- coupling and hybridisation with other GNSS positioning techniques such e.g., RTK, PPP, etc.;
- improvement in acquisition techniques and interference cancellation and non LOS filtering techniques;
- multipath mitigation techniques and other techniques to improve performance in urban/natural canyons (if applicable for the selected use case scenarios);
- usage software algorithms that are highly-sensitive taking into account the low-visibility scenarios, including but not limited to smart signal combination, in-band interference

cancellation and non-filtering techniques, beam forming techniques, signal selection for tracking only satellites with high N/O signal-to-noise ratio, etc.;

- real-time quality control and integrity monitoring techniques (including innovative Software Defined Radio approaches);
- the prospect to develop an anti-jamming receiver and the subsequent use of the known anti-jamming best practices.

All the developed receivers shall be self-standing and compatible with other high-end receiver components and technologies; they shall be individually marketable (result in commercial, close-to-market products).

The beneficiaries may leverage the technologies, subsystems, software, etc. developed for one use case for the other use cases, always within the constraints mentioned above, i.e., optimisation for each use case, individually marketable solution, etc., and providing that such approach is fully justified.

(4) Design and develop/upgrade the antennas.

The beneficiaries shall design all-frequency all-constellation smart antenna(s)¹ supporting the receivers. The antennas, to be intended as part of the final products, shall contribute to fill the technology gaps enabling interference detection and the other selected requirements, within the environmental constraints of the use case scenarios addressed. The antenna should receive the Galileo (and EGNOS whenever possible) signal in the all-constellation all-frequency approach.

Along with an optimised processing of the Galileo signal in the all-constellation all-frequency approach, at least the following topics should be analysed:

- real multiple-elements antenna (CRPA) or synthetic array techniques;
- the prospect to develop an anti-jamming antenna; the subsequent use of the known anti-jamming best practices; all-frequencies wideband antennas (frequency agility from one frequency to another in case of jamming).

All the developed/upgraded antennas shall be self-standing and compatible with other high-end receiver components and technologies; they shall be individually marketable (result in commercial, close-to-market products).

(5) Integrate the receivers and antennas in the final products.

The beneficiaries shall integrate the receivers with the smart antennas and all the additional subsystems according to the system requirements in order to obtain the three final products. To this end, the receiver-antenna integrated final products shall:

- be optimised towards each identified use case scenario;
- foresee a broad bandwidth for tracking all constellations and all frequencies;

¹ In principle the beneficiaries are requested to develop or upgrade (starting from existing models) three antennas, based on the technical requirements derived for each selected use case scenario. However the same antenna, can be also used for more than one use case scenario, shall it be feasible and optimally adapted.

- foresee an adequate level of data storage on board required by data fusion and hybridisation with the other sensors;
- use the Galileo constellation by default (no need to select it manually);
- foresee a competitive physical size and power consumption on the high-end receiver market for each use case scenario;
- foresee a competitive cost scheme on the high-end receiver market.

(6) Test the individual receivers, antennas, subsystems and the integrated products.

The testing shall be performed in three phases: for the individual receivers/antennas, integrated receivers-antennas products and at the last phase, the performance verification of the final products.

The beneficiaries shall test individually, whenever possible, the receivers and antennas aiming at the verification of the compliance with the individual receiver and antenna requirements. Additionally, the beneficiaries are requested to test the integrated three receiver-antenna final products, including all the subsystems (software, additional hardware, etc.). The test phase shall demonstrate that the user and system requirements are met at the receivers/antenna/subsystem level, aiming at the verification of the compliance with the users' and receiver-antenna product requirements. As the last testing phase, a performance verification shall be implemented, which shall explore the achieved performance, both in simulated and real use case scenarios, with real Galileo (and EGNOS, when applicable) signals.

The applicants shall describe a preliminary test plan, test cases and procedures - already in their proposal, providing information on how this plan can be further detailed during the implementation of the project before it is finally submitted to the GSA for approval at later project phases.

At the final stage of implementation of the project, the process of validation and acceptance of the products developed during the project will be tested against the pre-set requirements and following the agreed and approved test plan. The tests for validation and acceptance shall be performed in collaboration with the Joint Research Centre (JRC) at the European Microwave Signature Laboratory of the European Commission in Ispra, Italy. There are no additional costs for the awarded beneficiaries related to these testing and validation activities for what concerns the use of the JRC facilities and the involvement of the JRC experts. However, the awarded beneficiaries shall take into account the travel and transportation costs in their proposal.

In addition, before the validation and acceptance will start, the awarded beneficiaries may also have access to the JRC facilities in order to perform additional tests which are part of the project development, if the beneficiaries would consider this opportunity useful.

For these tests, the access to the facilities will be free of charge but the JRC support will be limited to assist in the use of the facilities. Should the awarded beneficiaries consider this option, an agreement should be established with JRC for access and use of their facilities.

(7) Execute a demonstration campaign.

A demonstration campaign shall be executed by the beneficiaries, showcasing the performance in the use case scenarios at a final demonstration event. The demonstration campaign shall be proposed for at least one use case scenario and agreed with GSA. The campaign, based on environmental and real E-GNSS Galileo (and EGNOS, when applicable) signals, shall be designed to demonstrate that the user requirements have been met, to highlight the user benefits brought up by the developed receivers-antennas final products and consequently to promote the technology adoption. As a final step of the project the awarded beneficiary shall also train the GSA staff in order to enable GSA to reproduce the demonstration thereafter.

(8) Perform dissemination activities.

The beneficiaries shall disseminate the achievements of the project among relevant stakeholders in the appropriate phases of the project. The dissemination plan shall define the strategy to engage those stakeholders with the aim of fostering the innovation created in the frame of the action and creating market awareness of the project's results. The integrated product demonstration shall be a fundamental step of the dissemination path and the beneficiary is encouraged to involve all the main stakeholders and key players in order to optimise the benefit resulting from its execution. In support of the dissemination strategy, expected channels to be used include: specialized magazines and sector press, presentations, leaflets and brochures, public event(s), promotional video(s), websites, social networks, etc.

(9) Implement the business plan.

The beneficiaries shall define a business plan at the beginning of the project describing the strategy to exploit the results and ensure their adoption by the market. It shall identify actions that the beneficiaries shall take already at the early stage of the implementation of the action. The goal is to involve the potential business partners and engage them in the evolution of the project and consequently be ready to move to the commercialisation phase as soon as the project objectives are reached.

2.3. Deliverables

The applicants shall define in their proposal (in the B1 form) the planning for deliverable submission as well as their nature and the format (document, product, multimedia, etc.).

The list of deliverables shall include at least the following:

- (1) Work plan (including project workflow)
- (2) User requirements document
- (3) System requirements document
- (4) Preliminary technical architecture, design guidelines and new concepts of the receivers focusing on identified R&D approach
- (5) Six spare receivers and six spare antennas, two for each selected use case scenario
- (6) Six integrated receiver-antenna final products, two final products for each selected use case scenario
- (7) Detailed architecture of the products
- (8) Test plan, cases and procedures
- (9) Test reports
- (10) Demonstration campaign of the integrated receiver-antenna product in real scenarios (at least one use case scenario to be proposed by the applicants and agreed with GSA)
- (11) Report on the demonstration activities
- (12) Demonstration kit, as described below in this section
- (13) Dissemination plan and business plan
- (14) Report about the status of implementation of the business plan and dissemination plan
- (15) Dissemination documents and multi-media
- (16) Demonstration training material

Additionally to the final products to be delivered as described in point (5) and (6) above, the beneficiaries shall provide to the GSA a fully functional demonstration kit including at least one of the three receiver-antenna mature products, additional hardware/software, IPRs licencing, if necessary, and any related

documentation in order to be able to reproduce the demo after the completion of the project at GSA or other EU institutions, bodies or agencies' premises.

GSA reserves the right to timely inform (e.g. at the Kick-Off meeting) the beneficiary about the place of delivery of each prototype (either the GSA or other EU institutions).

The draft grant agreement is specifying the conditions of the ownership and right to use policy of the above deliverables.

3. TIMETABLE

Scheduled start-up date for the action: **October 2016**, unless the applicants can demonstrate the need to start the action before the agreement is signed.

Maximum duration of the action **2 (two) years**

This call for proposals shall be conducted according to the following indicative timetable:

	Stages	Date/time or indicative period
a)	Publication of the call	2 nd of March 2016
b)	Deadline for request for clarifications	30th of May 2016
c)	Publication of the clarifications	6th June 2016
d)	Deadline for submitting applications	20th of June 2016
e)	Evaluation period	June to July 2016
f)	Information to applicants on the outcome of the evaluation	August to September 2016
g)	Signature of the Grant Agreement	October 2016

4. EU FINANCING

Maximum budget allocated for EU financing under this action: EUR 4.300.000

Number of projects: 1

Maximum EU financing amount: EUR 4.300.000

Maximum EU financing rate of eligible costs: **60 %**

GSA reserves the right to award a grant of less than the amount requested by the applicant. In such a case, the applicant will be asked either to increase his co-financing, propose other co-financing means or to decrease the total costs without altering the substance of the proposal. Grants will not be awarded for more than the amount requested.

Publication of the call does not guarantee the availability of funds for the above action and it places no obligation on the GSA to award grants to any applicant.

5. ADMISSIBILITY REQUIREMENTS

APPLICATIONS MUST COMPLY WITH ALL OF THE ADMISSIBILITY REQUIREMENTS SET OUT IN THIS SECTION.

Applications must comply with the following conditions in order to be admissible, i.e. to pass the proposal to the evaluation stage:

- Applications must be sent no later than the deadline for submitting applications referred to in section 16,
- Applications must be submitted in writing, using the submission set described in section 15,
- Applications must be drafted in one of the EU official Languages with a preference to English,
- Applications must respect the maximum rate for EU co-financing,
- Applications must respect the maximum amount for EU co-financing.

In this context, any project directly or indirectly contrary to EU policy or against public health, human rights or against citizen's security will be rejected.

6. ELIGIBILITY CRITERIA

APPLICATIONS MUST COMPLY WITH ALL OF THE ELIGIBILITY CRITERIA SET OUT IN THIS SECTION.

6.1 Eligible applicants

Applications from legal persons established² in and/or natural person(s) who is national of one of the following countries, are eligible:

- EU Member States
- Switzerland, Norway

² 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 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.

6.1.1 Structure of the consortium

Only applicant consortia shall be eligible to participate in this call – proposals by single legal or natural person shall not be admissible.

The proposal consequently must be submitted by a consortium composed of **at least two (2) entities** out of which:

- the coordinator shall be a legal person formed;
- the co-applicant(s) can be either legal and/or natural person(s).

6.1.2 Additional requirements

The consortium must submit a joint proposal. For that purpose, they should choose within their midst a lead organisation, referred to as the coordinator.

All co-applicants in the same consortium shall agree upon appropriate arrangements between themselves for the proper performance of the action. In particular by submitting their joint proposal, they shall accept joint and several financial responsibility of the debt of a defaulting beneficiary up to the value of the contribution that the beneficiary held liable is entitled to receive, as stipulated in the General Conditions of the draft grant agreement.

The coordinator and all co-applicants forming the consortium must satisfy the eligibility criteria.

Legal persons having a legal or capital link with applicants, which is neither limited to the action nor established for the sole purpose of its implementation, may take part in the action as affiliated entities³, and may declare eligible costs. For that purpose, applicants shall identify such affiliated entities in the application form. **The affiliated entities will have to comply with the same eligibility and non-exclusion criteria as those applying to the co-applicants and submit the same forms.**

6.1.3 Supporting documents proving compliance with the eligibility criteria

The applicants and any affiliated entities shall provide the following supporting documents as further detailed in section **Error! Reference source not found.** to establish their eligibility:

³ Affiliated entities can be:

- (a) several legal persons forming together one legal person or 'sole beneficiary' which may, or may not, have been specifically established for carrying out the action (e.g. groupings, joint ventures).
- (b) legal persons having a legal or capital link with a beneficiary or co-beneficiary, which is neither limited to the action nor established for the sole purpose of its implementation (e.g. networks, federations, trade-unions).

- **private legal person(s)**: extract from the official journal, copy of articles of association, extract of trade or association register or certificate of liability to VAT (if, as in certain countries, the trade register number and VAT number are identical, only one of these documents is required);
- **public legal person(s)**: copy of the resolution or decision establishing the public company, or other official document establishing the public legal person;
- **individual(s)**: photocopy of identity card and/or passport.

6.1.4 Coordinator (lead applicant)

Each consortium shall appoint a lead applicant which will act as the coordinator between several applicants (co-applicants) submitting a joint proposal. The coordinator will submit the application on behalf of the consortium and will be the intermediary for all communication between the co-beneficiaries and the GSA as well as responsible for supplying all documents and information to the GSA in due time upon request.

6.1.5 Co-applicants

Co-applicants act in a consortium, and submit a joint proposal through their coordinator. Each co-applicant will be considered as co-beneficiary if the proposal is successful. Before signature of the grant agreement co-applicants in a consortium shall agree upon appropriate arrangements between themselves for the proper performance of the specific actions. They shall in particular agree on joint and several liabilities for any amount due to the GSA by anyone of them.

They shall immediately inform the coordinator of any event liable to substantially affect or delay the implementation of the action, who will communicate with the GSA subject to grant agreement as well as clauses ensuring compliance with the requirements on ownership and usage rights of results and any pre-existing rights towards the GSA and the European Union as specified in the draft grant agreement. For sake of clarity, the term “applicant”, referred to in this call, shall encompass co-applicants and coordinator as appropriate.

When a grant is awarded, the co-beneficiaries forward to the coordinator in a timely manner all the data needed to draw up the reports, the financial statements and other documentation required by the grant agreement.

6.2 Eligible activities

Types of eligible activities under this call for proposals shall include at least:

- Design, development, testing and demonstration of high-end accurate E-GNSS receiver components, antenna, additional subsystems and associated integrated receiver-antenna product;
- Dissemination of the results and other additional activities linked with the exploitation of results.

6.3 Outputs expected from the implementation of activities

Proposals shall aim to achieve the objectives of the action.

All the deliverables (as listed in section 2.3), will be used by EU and GSA in accordance with Article II.8 of the Grant Agreement.

6.4 Respecting maximum budget

Proposals have to respect the maximum ceiling for EU financing subject to this call to be eligible. Proposals exceeding the applicable maximum co-financing for this call shall not be considered further and will be rejected.

7. EXCLUSION CRITERIA

APPLICATIONS MUST COMPLY WITH ALL OF THE EXCLUSION CRITERIA SET OUT IN THIS SECTION.

7.1 Exclusion from participation

Exclusion criteria are specified in the standard **Declaration of Honour (A5 Form)** of this call.

The same exclusion criteria apply to all affiliated entities.

7.2 Exclusion from award

Applicants will not be granted financial assistance if, in the course of the grant award procedure, they:

- are in an exclusion situations established in the A5 form;
- have misrepresented the information required by the GSA as a condition of participation in the grant award procedure or fail to supply this information;
- were previously involved in the preparation of call for proposal documents where this entails a distortion of competition that cannot be remedied otherwise.

The same exclusion criteria apply to affiliated entities.

Administrative and financial penalties may be imposed on applicants that are guilty of misrepresentation.

7.3 Supporting documents proving compliance with exclusion criteria

All applicants and any affiliated entities must sign and submit a **Declaration of Honour (A5 Form)**.

Please note that according to this **A5 Form** successful applicants will be required to send a number of supporting documents related to aspects of the Declaration of Honour before the respective grant agreement can be signed. Collecting these supporting documents may take some time and applicants shall ensure timely availability for performing this requirement accordingly. Applicants shall approach the GSA in

due time in case they are of the opinion that certain points of the declaration are not applicable to them e.g. due to their legal structure.

8. SELECTION CRITERIA

APPLICATIONS MUST COMPLY WITH ALL OF THE SELECTION CRITERIA SET OUT IN THIS SECTION.

8.1 Financial capacity

Applicants must have stable and sufficient sources of funding to maintain their activity throughout the period during which the action is being carried out. The applicants' financial capacity will be assessed on the basis of the following supporting documents to be submitted with the application by each applicant and affiliated entity:

- a declaration on their honour (A5 form).
- the table provided for in the application form (A6 form), filled in with the relevant statutory accounting figures, in order to calculate the ratios as detailed in the form. For newly created legal persons, the business plan might replace the above documents, and
- an audit report produced by an approved external auditor certifying the accounts for the last financial year available.

On the basis of the documents submitted, if GSA considers that financial capacity is not satisfactory and in any other case GSA may deem it appropriate, it may:

- request further information;
- propose a grant agreement without pre-financing;
- propose a grant agreement with a pre-financing paid in instalments;
- propose a grant agreement with a lower percentage of a pre-financing;
- propose a grant agreement with a pre-financing covered by a bank guarantee;
- reject the application.

The verification of the financial capacity **shall not apply to public bodies, international organisations or no-profit organisations.**

8.2 Operational capacity (B2 form)

The bidding consortia shall demonstrate a balanced expertise in areas like: development, integration, manufacturing, distribution of GNSS components, GNSS receivers and antennas, GNSS based devices and/or providing expertise in the field of GNSS R&D.

Applicants must show they have the **operational (technical and management) capacity** to complete the activities to be supported by this Call for Proposal and must **demonstrate their capacity to manage the activities** corresponding to the size of the project for which the grant is requested.

In particular:

- The team responsible for the activities must have an eminent technical competence;
- Applicants must have a high degree of specialisation in areas relevant for the activities subject to the proposal;

- Applicants must prove that they are able to develop the necessary components of high-end receivers and develop/upgrade the antennas;
- Applicants must prove that they have at their disposal technical infrastructures (relevant design and validation tools and/or hardware/software tools) necessary to perform the implementation.

In this respect, applicants have to submit in addition to the Declaration of Honour (A5 Form) the following elements:

- description of the profile of the individuals⁴ primarily responsible for managing and implementing the activities;
- a description of the technical equipment, tools or facilities at the disposal of the applicant;
- description of the role of each applicant (coordinator and co-applicants) in the organisational structure in general and regarding the performance of activities subject to grant agreement.

In the case of affiliated entities taking part in the project, the above requirements apply to each affiliated entity.

As an indicative example of an expected consortium (which is non exhaustive and does not intend to limit any other alternative compositions): an established GNSS manufacturer (component/receiver/device) complemented by other legal and/or natural person(s) being expert in development and/or integration of receivers and antennas, supported by R&D centre(s) and/or company(s) specialised in hardware/software solutions supporting the GNSS capability, potentially complemented with a distributor.

⁴ To highlight the relevant competencies for this Call for Proposal please use the Europass CV template which can be accessed from: <https://europass.cedefop.europa.eu/de/documents/curriculum-vitae/templates-instructions>

9. AWARD CRITERIA

Eligible applications will be assessed on the basis of the following criteria. When assessing the below award criteria, the evaluation committee generally pays attention to the elements indicated below for each criterion. Please note that these elements, which are indicative and non-exhaustive, are given on the basis of transparency and in order to help applicants to improve their applications.

AWARD CRITERIA AND KEY ELEMENTS LIKELY TO BE ASSESSED BY THE EVALUATION COMMITTEE	MAX. SCORE
1. Level of relevance of the proposal to achieve the call's objectives and credibility of the proposed approach to reach the objectives:	50
<i>Relevance of the proposal to the objectives of the Call for Proposals</i>	
<i>Overall quality of the proposal in terms of deliverables, their content and structure and methodology for use case/ user requirements definition, development, integration and testing of the developed products</i>	
<i>Feasibility of the proposal targeting market implementation</i>	
<i>Representation of companies with their global headquarters based on an EU Member State including Norway and Switzerland</i>	
<i>Innovation of the solutions proposed</i>	
2. Impact in terms of economic and public benefits derived from the proposal:	20
<i>Maximisation of the benefits to citizens by the immediate adoption of the results in the market</i>	
<i>Coherent business plan for the commercialisation of the results of the grant</i>	
<i>Credible and effective dissemination plan for the results in the best interest of the EU</i>	
3. Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources:	30
<i>Appropriateness of the management structures and procedures, including risk and innovation management</i>	
<i>Coherence of the work plan in terms of activities' definition, schedule, effort and cost, including justification of the resources to be committed</i>	
<i>Appropriateness of the distribution of the tasks among the proposed resources</i>	
<i>Feasibility of the proposed work plan and appropriateness of the use case scenarios</i>	
<i>Active involvement in the consortium of the main key stakeholders and their complementarity within the consortium</i>	
Maximum total score	100

If a total score lower than **60** points or a score lower than **60% for any of the above three criteria** is obtained, the proposal will not be evaluated further and will be rejected.

10. LEGAL COMMITMENTS⁵

Applicants are reminded:

The successful applicants shall be bound by the Special and General Conditions of the draft grant agreement. Submission of a grant application (proposal) by the consortium implies the acceptance of these Special and the General Conditions. Which also includes the obligation of the provision of accurate, sincere and complete information within the context of this grant procedure including but not limited to filling out the provided forms with true, correct and complete data representing the real status of the applicant.

In the event of a grant awarded by the GSA following this call, a grant agreement drawn up in euro and detailing the conditions and level of funding, will be sent to the coordinator of the consortium, alongside a description of the procedure in view to formalise the obligations of the parties.

The coordinator representing the awarded consortium shall sign two (2) copies of the original agreement on behalf of the consortium and shall then return it to the GSA for countersignature. Coordinators will sign on behalf of the other co-applicant(s) on the basis of duly provided powers of attorney.

The GSA reserves the right to cancel the award and/or signature process of the grant agreement and re-allocate the budget in case the documents required below to be made available before the grant agreement signature are not submitted within the relevant deadlines, being:

- (1) Submission of all supporting documents pertaining to the Declaration of Honour (A5 form) for each co-applicant at latest 2 (two) months after the receipt of information letter on the outcome of the evaluation by the coordinator of the successful applicant.
- (2) Submission of the grant agreement signed by the coordinator with authorisation (i.e.: Mandate - Annex IV of the Grant Agreement) for each co-applicant at latest 1 (one) month after the coordinator's receipt of the grant agreement for the signature process.

Applicants are reminded to begin with the collection of the supporting documents for the relevant points in the Declaration of Honour in a timely manner, bearing in mind that particularly for large consortia, the collection of documents may be very time consuming.

11. FINANCIAL PROVISIONS

11.1 General principles

Non-cumulative award

Each action may give rise to the award of only one grant from the budget to any one consortium.

In no circumstances shall the same costs be financed twice by the European Union budget.

Applicants have to inform the GSA immediately of any multiple applications and multiple grants relating to the same action. The applicants shall inform about sources and amounts of EU funding received or applied for the same action or for part of the action. Applicants shall indicate if they receive EU funding for their functioning during the financial year in which the action takes place.

⁵ Art. 121 FR, 174 RAP

Non-retroactivity

No grant may be awarded retrospectively for actions already completed.

A grant may be awarded for an action which has already begun, provided the applicant can demonstrate the need to start the action before the grant agreement is signed. In such cases, costs eligible for financing may not have been incurred prior to the date of submission of the grant application.

Co-financing

Grants shall involve co-financing, which implies that the resources necessary to carry out the action shall not be provided entirely by EU contribution. EU financing may not cover 100% of the total costs of the action.

Co-financing of the action may take the form of:

- the awarded beneficiary's own resources,
- income generated by the action,
- financial contributions from third parties.

Co-financing may also take the form of in-kind contributions from third parties, i.e. non-financial resources made available free of charge by third parties to the awarded consortium. The corresponding costs are not eligible.

No-profit rule

EU grant may not have the purpose or effect of producing a profit within the framework of the action.

For this purpose, **profit is defined as a surplus of the receipts over the eligible costs incurred by the beneficiary**, when the request is made for payment of the balance. Where such a surplus occurs, the GSA is entitled to recover the percentage of the profit corresponding to the EU contribution to the eligible costs actually incurred by the beneficiary to carry out the action.

Balanced budget⁶

The estimated budget of the action is to be attached in excel format to the application form following the model provided in the Form C1.

It must have revenue and expenditure in balance. The amounts must be expressed in **Euro** with maximum two decimals. Applicants foreseeing that costs will not be incurred in Euro are invited to use the exchange rate published in the Official Journal of the European Union for the purpose of drafting the estimated budget of the action.

During the execution of the grant agreement, costs which have been incurred in other currencies than the Euro shall be converted according to the provisions of the grant agreement.

⁶Art. 196.2 RAP

Applicant organisations in countries where the Euro is not the national currency are asked to use the official EU exchange rates that can be found on the following website:

<http://ec.europa.eu/budget/inforeuro/index.cfm?fuseaction=countries&Language=en>

For awarded projects, the final payment will be based on the final financial report at the end of the project and supporting documents, taking into account any previous pre-financing and payment.

Implementation contracts/subcontracting⁷

Where the implementation of the action or the technical proposal (B1-B2 forms) requires the award of subcontracts (implementation contracts), the beneficiary must award the contract to the bid offering best value for money or the lowest price (as appropriate), avoiding conflicts of interests and retain the documentation for the event of an audit. Entities acting in their capacity of contracting authorities in the meaning of Directive 2004/18/EC⁸ or contracting entities in the meaning of Directive 2004/17/EC⁹ shall abide by the applicable national public procurement rules.

Subcontracting, i.e. the externalisation of specific tasks or activities which form part of the action as described in the proposal must satisfy the conditions applicable to any implementation contract (as specified above) and in addition to them the following conditions:

- a. it may only cover the implementation of a **limited part of the action** and shall in no case cover the core activities;
- b. it must be justified having regard to the nature of the action and what is necessary for its implementation;
- c. it must be clearly stated in the proposal.

Subcontracting does not in any way limit the responsibility of beneficiaries for the implementation of the action. Please note that the beneficiaries should have the necessary capacity to perform the project. Only tasks that are not core activities can be sub-contracted.

It is not necessary to have already selected subcontractors at the time the proposal is submitted. However, cost of contractors not selected in accordance with the rules referred to in this section will not be eligible.

Financial support to third parties

The applications for this action may not envisage provision of financial support to third parties.

11.2 Funding form

Mixed financing grants are calculated on the basis of a detailed estimated budget indicating clearly the costs that are eligible for EU funding. The grant amount may neither exceed the eligible costs nor the amount requested. Amounts are indicated in Euros.

➤ **Maximum amount requested**

⁷ Art. 137 FR, 209 RAP

⁸ Directive 2004/18/EC on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts.

⁹ Directive 2004/17/EC coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

The EU grant is limited to a maximum co-funding rate of 60% of eligible costs incurred in the implementation of the specific actions taking into account the maximum grant amount referred to in section 4.

Consequently, part of the total eligible expenses entered in the estimated budget must be financed from sources other than the EU grant.

➤ **Eligible costs of the grant**

Eligible costs are costs actually incurred by the beneficiary of a grant which meet all the following criteria:

- ✓ they are incurred during the duration of the action, as indicated in the grant agreement, with the exception of costs relating to preparation of the final reports and audit certificates;
- ✓ they are indicated in the estimated budget of the action;
- ✓ they are necessary for the implementation of the action, in accordance with the description of the action, attached to the grant agreement;
- ✓ they are identifiable and verifiable, in particular being recorded in the accounting records of the beneficiary and determined according to the applicable accounting standards of the country where the beneficiary is established and according to the usual cost accounting practices of the beneficiary;
- ✓ they comply with the requirements of applicable tax and social legislation;
- ✓ they are reasonable, justified, and comply with the principle of sound financial management, in particular regarding economy and efficiency.

The beneficiary's internal accounting and auditing procedures must permit direct reconciliation of the costs and revenue declared in respect of the action/project with the corresponding accounting statements and supporting documents.

The same criteria apply to the affiliated entities.

Please note that the exact scope of the eligibility of costs is defined in the grant agreement, which will be signed with the successful applicant(s).

➤ **Eligible *direct costs***

The eligible direct costs for the action are those costs which, **with due regard for the conditions of eligibility set out above**, are identifiable as specific costs directly linked to the performance of the action.

The following categories of costs can be considered as eligible direct costs:

1. Personnel costs

1.1 the **costs of personnel** working under an employment contract with the beneficiary or an equivalent appointing act and assigned to the action (including civil servants and other personnel of national administrations to the extent that they relate to the cost of activities which the relevant public authority would not carry out if the project concerned were not undertaken), comprising actual salaries plus social security contributions and other statutory costs included in the remuneration, provided that these costs are in line with the beneficiary's usual policy on remuneration. Those costs may also include additional remunerations, including payments on the basis of supplementary contracts regardless of the nature of those contracts, provided that they are paid in a consistent manner

whenever the same kind of work or expertise is required, independently from the source of funding used;

1.2 The **costs of natural persons working under a contract with the beneficiary other than an employment contract** (in-house consultants) may be assimilated to such costs of personnel, provided that the following conditions are fulfilled:

- the natural person works under the instructions of the beneficiary and, unless otherwise agreed with the beneficiary, in the premises of the beneficiary;
- the result of the work belongs to the beneficiary; and
- the costs are not significantly different from the costs of staff performing similar tasks under an employment contract with the beneficiary;

2. Other direct costs

2.1 **costs of travel** and related subsistence allowances, provided that these costs are in line with the beneficiary's usual practices on travel;

2.2 **for equipment and other assets** (new or second-hand) **procured** specifically for the action and in accordance with Article II.10 of the Grant Agreement **[not-applicable to this call]**

a) **the full purchase costs** provided that they are treated as capital expenditure in accordance with the tax and accounting rules applicable to the beneficiary and are recorded in the fixed assets account of its balance sheet OR the purchase in itself is the purpose of the action **[not-applicable to this call]**

or

b) **the respective depreciation costs** provided that the asset has been purchased in accordance with the conditions applicable to implementation contracts and that it is written off in accordance with the international accounting standards and international financial reporting standards, IAS/IFRS, regardless whether the beneficiary has to apply them or otherwise has diverging accounting practices. **[not-applicable to this call]**

2.3 **costs for equipment or other assets** (new or second-hand) not procured specifically but **directly used** for the action in **proportion to the usage for the action and only during its duration** as **depreciation costs** recorded in the accounting statements of the beneficiary over the period of implementation of the action, provided that the asset is written off in accordance with the international accounting standards and the usual accounting practices of the beneficiary,

2.4 **the costs for rental or lease of equipment or other assets only to the portion of use and limited to the duration of the action**, provided that these costs do not exceed the depreciation costs of similar equipment or assets and are exclusive of any finance fee;

2.5 when **using technical facilities or laboratories** the above rules (2.2) to (2.4) for eligibility of costs apply accordingly;

2.6 **costs of consumables and supplies**, provided that they are purchased in accordance with the conditions applicable to the award of contracts necessary for the implementation of the action and are directly assigned to the action;

2.7 **costs arising directly from requirements imposed by the grant agreement** (dissemination of information, specific evaluation of the action, audits, translations, reproduction), including the costs of requested financial guarantees, provided that the corresponding services are purchased in accordance

with the conditions applicable to the award of contracts necessary for the implementation of the action;

- 2.8 costs **relating to a pre-financing guarantee lodged by the beneficiary of the grant**, where required;
- 2.9 **costs entailed by subcontracts**, concluded for the externalisation of specific tasks or activities which form part of the action **as described in the proposal**, provided that the conditions applicable to implementation contracts are met;
- 2.10 **costs of financial support to third parties** within the meaning of Article II.12 of the grant agreement provided that the conditions laid down in that article are met **[not-applicable to this call]**;
- 2.11 **duties, taxes and charges** paid by the beneficiary, notably non-deductible value added tax (VAT), provided that they are included in eligible direct costs, and unless specified otherwise in the Agreement. In particular, **ONLY** non-deductible VAT is eligible, except for the activities which the beneficiaries that are public bodies engage in as public authorities (prerogatives of public powers under national law).

➤ **Eligible indirect costs**

A flat-rate amount of 7% of the total eligible direct costs of the action minus subcontracting costs¹⁰ is eligible under indirect costs, representing the beneficiary's general administrative costs which can be regarded as chargeable to the action/project.

Indirect costs may not include costs entered under another budget heading.

Indirect costs are not eligible for beneficiaries that receive an operating grant.

➤ **Non-eligible costs**

In addition to any other costs which do not fulfil the conditions set out above, the following costs shall not be considered eligible:

- a. return on capital;
- b. debt and debt service charges;
- c. provisions for losses or debts;
- d. interest owed;
- e. doubtful debts;
- f. currency exchange losses;
- g. bank costs charged by the beneficiary's bank for transfers from the Agency;
- h. costs declared by the beneficiary in the framework of another action receiving a grant financed from the EU budget (including grants awarded by a Member State and financed from the EU budget and grants awarded by the European Commission or other EU bodies than the GSA for the purpose of implementing the EU budget); in particular, indirect costs shall not be eligible under a grant for an action awarded to a beneficiary which already receives an operating grant financed from the EU budget during the period in question;
- i. contributions in kind from third parties;
- j. excessive or reckless expenditure;
- k. deductible VAT;
- l. participation by any staff of the European Union institutions in the action.

¹⁰ Indirect costs = 7% * (total eligible direct costs - subcontracting)

➤ **Calculation of the final amount of the grant arrangement**

The final amount of the grant to be awarded to the consortium is established after completion of the action, and upon approval of the request for payment containing the following documents¹¹ *[including relevant supporting documents where appropriate]*:

- a final report providing details of the implementation and results of the action;
- the final financial statement of costs actually incurred,
- *[where applicable, a certificate on the financial statements of the action and underlying accounts¹²]*

The draft grant agreement annexed to this call for proposals specifies the calculation of the final grant and the payment arrangements.

Your attention is in particular drawn to the General Conditions of the draft grant agreement, where the eligibility conditions of costs are described.

11.3 Payment arrangements

Pre-financing payment arrangements corresponding to 30% of the grant amount will be further detailed in the grant agreement.

An interim payment shall be paid to the coordinator (who receives it on behalf of the consortium) and is intended to cover the consortium's expenditure on the basis of a request for payment when the action has been partly carried out. The interim payment shall not exceed 40% of the maximum grant amount. The interim payment shall be subject to the case when the eligible costs are already incurred to the amount of at least 30% of the total grant amount.

GSA will establish the amount of the final payment to be made to the coordinator (who receives it on behalf of the consortium) on the basis of the calculation of the final grant amount (see section 11.2 above). If the total of earlier payments is higher than the final grant amount, the consortium (represented by the coordinator) will be required to reimburse the amount paid in excess by the GSA through a recovery order¹³.

Please refer to the grant agreement for the terms and conditions of the final payment.

11.4 Pre-financing guarantee

A pre-financing guarantee for up to the same amount as the pre-financing may be requested in order to limit the financial risks linked to the pre-financing payment. The financial guarantee, in euro, shall be provided by an approved bank or financial institution established in one of the Member State of the European Union. When the beneficiary is established in a third country, the authorising officer responsible may agree that a bank or financial institution established in that third country may provide the guarantee if he considers that the bank or financial institution offers equivalent security and characteristics as those offered by a bank or financial institution established in a Member State. Amounts blocked in bank accounts shall not be accepted as financial guarantees.

¹¹ Art. 135 FR

¹² Art. 207.3 RAP

¹³ Art. 109, 110 RAP

The guarantee may be replaced by a joint and several guarantee by a third party or by a joint guarantee of the beneficiaries of an action who are parties to the same grant agreement.

The guarantee shall be released as the pre-financing is gradually cleared against interim payments or payments of balances to the beneficiary, in accordance with the conditions laid down in the grant agreement.

12. PUBLICITY

12.1 By the Beneficiaries

Beneficiaries must clearly acknowledge the European Union's contribution in all publications or in conjunction with activities for which the allocated grants are used.

In this respect, beneficiaries are required to give prominence to the name and emblem of the GSA and if the European Union on all their publications, posters, programmes and other products realised under the grant agreement.

If this requirement is not fully complied with, the grant may be reduced in accordance with the provisions of the grant agreement.

12.2 By the GSA

The GSA will publish the following information:

- a. name of the awarded consortium and its beneficiaries;
- b. address of the beneficiary (legal persons) or reference to the region (natural persons);
- c. subject of the grant agreement;
- d. amount awarded.

Upon a reasoned and duly substantiated request by the awarded consortium (represented by the coordinator), the publication shall be waived if such disclosure risks threatening the rights and freedoms of individuals concerned as protected by the Charter of Fundamental Rights of the European Union or harm the commercial interests of the beneficiary.

13. OWNERSHIP

The ownership of the results generated by the action is specified in the grant agreement.

14. DATA PROTECTION

The reply to any call for proposals involves the recording and processing of personal data (such as name, address and CV). Such data will be processed pursuant to Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. Unless indicated otherwise, the questions and any personal data requested are required to evaluate the application in accordance with the specifications of the call for proposals will be processed solely for that purpose by the GSA. Applicants / beneficiaries are entitled to

obtain access to their personal data on request and to rectify any such data that is inaccurate or incomplete. Applicants / beneficiaries shall address queries concerning the processing of personal data to the GSA. Applicants / beneficiaries have the right of recourse at any time to the European Data Protection Supervisor for matters relating to the processing of their personal data.

Details concerning the processing of personal data are available on the privacy statement at:

http://ec.europa.eu/dataprotectionofficer/privacystatement_publicprocurement_en.pdf.

Applicants are informed that for the purposes of safeguarding the financial interest of the European Union, personal data may be transferred to internal audit services, to the European Court of Auditors, to the Financial Irregularities Panel and/or to the European Anti-Fraud Office (OLAF).

Personal data may further be registered in the Early Warning System (EWS) only or both in the EWS and Central Exclusion Database (CED) by the Accounting Officer of the European Commission, should the applicant or beneficiary be in one of the situations mentioned in:

- the Commission Decision 2008/969 of 16.12.2008 on the Early Warning System

(for more information see the Privacy Statement on:

http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm),

or

- the Commission Regulation 2008/1302 of 17.12.2008 on the Central Exclusion Database (for more information see the Privacy Statement on http://ec.europa.eu/budget/explained/management/protecting/protect_en.cfm)

Any entity entered into the database has the right to be informed of the data concerning it, upon request to the accounting officer of the European Commission.

15. PREPARATION OF PROPOSALS

Proposals shall be prepared in accordance with the scope of the Call (section Error! Reference source not found.), with clear definition of the roles (Form A1), demonstrating that the consortium is composed of all the necessary competencies needed to achieve the objectives of the Call (section 2.1).

Proposals must be submitted in accordance with the formal requirements and by the deadline set out under section 16.

No modification to the application is allowed once the deadline for submission has elapsed. However, if there is a need to clarify certain aspects or for the correction of clerical mistakes, the GSA may contact the applicant for this purpose during the evaluation process.

Applicants will be informed in writing about the results of the selection process.

15.1 Structure of the Proposal

Proposals shall be prepared along the following structure:

Administrative Proposal (A1-A6):

A1 – Proposal Overview

A2 – Proposal Summary

A3 – Coordinator profile including:

- a) Legal Entity Form (LEF) together with supporting documents as described in Section 15.3
- b) Financial Identification Form signed by the applicant plus signed and stamped by the bank OR a bank statement relating to the bank account

A4 – Co-Applicant profile (+ LEF) together with supporting documents as described in Section 15.3

A5 – Declaration of honour

A6 – Financial capacity ratios (form A6 shall not apply to public bodies and international organisations)

Technical Proposal (B1-B2):

B1 – Technical proposal (additional documents can be annexed to this form to complement the information)

B2 – Operational capacity

Financial Proposal:

C1 – Preliminary Budget

The technical proposal (B1-B2 forms) should be submitted by way of a template provided with this call, consisting of a list of headings. Follow this structure when presenting the technical content. The template is designed to highlight those aspects that will be assessed against the evaluation criteria. It covers, among other things, the nature of the proposed work, the participants and their roles in the proposed project, and the impact that might be expected to arise from the proposed work. Additional information or descriptive document may be provided by applicants as an annex.

The C1 form shall be submitted in excel (.xls) format.

Overview of Forms (as presented below in the table) shall be **submitted by the coordinator** and every **related actor is responsible to fill them** duly in (coordinator and/or co-applicants and/or affiliated entity). The table below reflects on who has to fill out what kind of forms. Please note each applicant (including the coordinator and the co-applicants) has to fill certain forms as described below in the table, and this information shall be reflected in the A1 form prepared by the coordinator.

Responsibility / Forms	Coordinator	Co-applicant/ affiliated entity
A1 – A2 – A3 – B1	X	
A4		X
A5 – A6 – B2 – C1	X	X

15.2 Entities involved in the activities subject to the proposal

The proposal shall clearly identify all the (legal and/or natural) persons to be involved in the activities subject to the proposal, being the applicants (including coordinator and co-applicants) as well as any third parties, such as affiliated entities and subcontractors and their contributions to the implementation of the proposal under the grant agreement. Parties' participation in the project will be subject to the requirements as laid down in this call.

15.2.1 Affiliated entities

The applicant will have to indicate its participating affiliated entities in the proposal. The affiliated entities will each have to comply with eligibility and non-exclusion criteria.

15.2.2 Subcontractors

Sub-contracting refers to contracts concluded for the externalisation of specific tasks or activities which form part of the action. Only a limited part of the project may be subcontracted. The beneficiaries remain solely responsible for the implementation of the action.

Sub-contractors are not beneficiaries to the grant, nor affiliated entities. The costs of subcontracting can be eligible under the conditions indicated in the grant agreement. The proposal should clearly specify the activities that will be subcontracted and the contract should be awarded in accordance with the conditions set in the grant agreement.

15.3 Evidence of legal status and financial identification form

A Legal Entity Form (LEF) and evidence of the applicant's legal status has to be provided at the stage of submission.

In order for the form to be valid it must be signed by the applicant's representative and the company's stamp must be applied.

A specific form in all official languages of the EU is available at the following internet page (use of the English forms is preferred):

http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm

For public persons, the Legal Entity Form(s) shall be duly filled in, signed and accompanied by the relevant evidence:

- 1) a copy of the resolution, law, decree or decision establishing the entity in question. As an alternative, any other official document attesting to the establishment of the entity by the national authorities may be submitted.
- 2) an official VAT registration document, where applicable.

For private legal persons, the Legal Entity Form(s) shall be duly filled in, signed and accompanied by the relevant evidence:

- 1) a copy of some official document (official gazette, company register etc.) showing the name of the legal entity, the address of the head office and the registration number given to it by the national authorities.
- 2) A copy of the VAT registration document (if applicable)

For natural persons, the Legal Entity Form(s) shall be duly filled in, signed and accompanied by the relevant evidence:

- 1) a legible photocopy of the identity card or passport
- 2) an official VAT document if applicable.

The Financial Identification Form must be duly filled in by the lead applicant (coordinator) only, who will be receiving payments on behalf of the consortium of beneficiaries. The lead applicant (coordinator) will be responsible for distributing payments to the co-beneficiaries.

The form can be downloaded from the following website:

http://ec.europa.eu/budget/contracts_grants/info_contracts/financial_id/financial_id_en.cfm

In order for the form to be valid it must be duly filled in and signed by the Company's representative and both signed and stamped by the representative of the bank. Instead of the signature and stamp of the bank a relevant bank statement may be provided.

15.4 Budget requested for the proposal

When preparing their proposal, applicants shall observe the elements described in the following sub-sections for calculating the required budget for the implementation of their project.

15.4.1 Personnel costs

All the salaries and costs entering in the remuneration (group insurances, advantage in kind ...) shall be taken into account. The social security charges must also be taken into account.

The Working time is the time actually worked (excluding holidays, bank holidays, weekends and illness). If it is necessary for carrying out the project, time spent on internal meetings, studying general information, training, etc. can also be deducted from the working time. If this is done, time spent on these activities may under no circumstances be charged to the project nor may it be included in the calculation of overheads. Furthermore, the time deducted for this purpose needs to be justified with reliable statistics or time recording.

An example of the calculation of working time:

Total days in a year	365
Weekends	-104
Annual holidays	- 21
Statutory holidays	- 15
Illness/Others	- 05
Working days in a year	220

The amount per day will be calculated by dividing the yearly salary by the working days. The yearly salary can be estimated by using total individual annual staff costs for the last financial year and by applying an estimated salary increase for the period under which the project will be implemented, if necessary.

The total personnel costs will result from multiplying the daily/hourly amount rate by the number of days/hours of work.

Important:

Activities that **cannot** be deducted for the calculation of the working time and that cannot be charged to the project are: Sales and marketing; Preparation of proposals; Administrative time (often means "unsold" time).

In the above example, staff working full-time will be considered for verification purposes to be working 220 days per year, half-time staff 110 (one hundred ten) days per year. Any substantial deviation from this

indicative working time needs to be justified and explained in the proposal, on basis of accounting evidence or a time recording system.

15.4.2 Travel and Subsistence Costs

Only the costs for the staff's travel and subsistence allowances should be introduced in the budget form. Travel costs of external service providers, if applicable, are to be included in their contracts.

Subscription fees to conferences or events, where relevant, should be included in B2 form – section 2.6 costs of consumables and supplies.

Reimbursement of travel costs can be requested for meetings, European conferences, etc. provided that they are in line with the usual practices of the beneficiary and pre-approved by the GSA. The travel policy of the beneficiary must be made in writing and apply to all business trips of the organisation. Alternatively, in case when a beneficiary has not formalised an internal travel policy or established travel practice, they should not exceed the scales approved annually by the European Commission. These European Commission rates can be consulted on this address:

<http://ec.europa.eu/europeaid/sites/devco/files/perdiem-rate-20150318.pdf>

In all cases, the costs reported should comply with the the principle of economy and efficiency, meaning that travelling should be performed by the most direct and most economic route;

Please note that tips will not be considered as eligible costs.

Beneficiaries who want to declare travel costs as eligible costs of the project will have to provide the following information for each travel:

- Names or functions of the people involved;
- Journey and dates (even tentative);
- Purpose of the travel (this must refer clearly to one activity of the project);
- Subsistence costs: total number of days of the travel x flat rate subsistence allowance (per diem) or an estimate of the real costs per day (per person);
- Cost of travel (estimation).

All necessary supporting documents, in accordance with the beneficiary's travel policy, have to be kept from the very beginning of the project (e.g. travel tickets, boarding passes, invoices from the travel agency, etc.) The GSA will require them to verify the validity of the request for payment.

15.4.3 Depreciation Costs

Only depreciation for equipment which is strictly necessary for the purposes of carrying out the action can be charged as direct costs. This thus excludes any computer equipment, office material, furniture, etc. that the applicant needs for his daily activities and that will be normally covered by indirect costs.

Only the portion of the equipment's depreciation corresponding to the duration of the project and the rate of actual use for the purposes of the project can be taken into account by the GSA.

15.4.4 Other Costs

Only costs of those items which are directly linked to the performance of the operation, identifiable and assigned to the action shall be considered under this heading.

Those costs should include the costs of implementation contracts for ancillary services, goods etc. needed to carry out the project (e.g. dissemination of information, specific evaluation, translations, reproduction...), including purchase of consumables and supplies. They do not cover contract that imply any externalisation of activities included in the action described in the proposal, which should be included as subcontracting in the relevant form.

Please note that the fact that the costs are specific to the action is the key factor that makes these costs eligible for European Union funding. More general office supplies, stamps or other stationary is comprised in the indirect costs and cannot be considered under this heading.

All documents supporting the above costs (e.g. invoices) have to be kept from the very beginning of the project. The GSA will require them to verify the request for payment validity.

15.4.5 Subcontracting Costs

Subcontracting refers to contracts concluded for the externalisation of specific tasks or activities which form part of the action as described in the proposal.

Such contracts may only cover the implementation of a limited part of the action and only tasks that are not core activities can be sub-contracted.

Please verify the call for proposals what limitations have been indicated.

Recourse to the award of contracts must be justified having regard to the nature of the action and what is necessary for its implementation. Any justification provided by the beneficiary needs to be pre-endorsed by the GSA and subcontracting shall require GSA's approval which may be considered granted in cases where the subcontracting is already fully described in the proposal and so accepted by the GSA, given that it will then be implemented accordingly.

The tasks concerned must be set out in the description of the action and the estimated costs of subcontracting must be clearly identifiable in the estimated budget.

The beneficiary must award the contract to the bid offering the best value for money or the lowest price (as appropriate), and avoid any conflicts of interest. Public persons should abide by national public procurement rules.

Please note that subcontracting, which is not covered in the proposal, requires the pre-approval of the GSA otherwise will not be reimbursed. Any modifications on an *ad hoc* basis while the action is under way must be presented for ex-ante approval.

16. SUBMISSION OF PROPOSALS

Proposals must be submitted in accordance with the formal requirements and by the deadline set in this section.

No modification to the application is allowed once the deadline for submission has elapsed. However, if there is a need to clarify certain aspects or for the correction of clerical mistakes, the GSA may contact the applicant for this purpose during the evaluation process.

The proposal may be submitted in any of the official languages of the European Union but **English version** would be appreciated. If the proposal is not in English, the applicant should provide a translation of the full proposal or of an extract of it, in particular to the supporting documents requested, such as registry

excerpts etc. Costs incurred by the applicant for providing the translation shall not be subject to reimbursement by the GSA.

The proposal shall always be submitted in a paper version (please see the important note below).

IMPORTANT NOTE: The mandatory physically submitted proposals shall always also contain 2 (two) copies of CD-ROMs/USB storage devices containing the full set of proposal documents in machine readable format (standard Office 2003 and Adobe PDF 2008 or later). In case of doubt or outright divergence between the physically submitted proposal and the content provided in electronic format (on the CD-ROMs/USB-storage devices or via the platform) the physical documents shall always take precedent.

Unless notified otherwise by the GSA, the proposals (including CD-ROMs/USBs) shall be submitted by letter:

- a) either by post or by courier not later than **20/06/2016**, in which case the evidence of the date of dispatch shall be constituted by the postmark or the date of the deposit slip, to the address indicated below;
- b) or delivered by hand not later than **20/06/2016 at 17:00** Prague local time to the address indicated below. In this case, a receipt must be obtained as proof of submission, signed and dated by the GSA official who took delivery.

The GSA is open from 09.00 to 17.00 Monday to Thursday, and from 9.00 to 16.00 on Fridays. It is closed on Saturdays, Sundays and national holidays.

Proposals must be placed inside a sealed envelope. The envelope, addressed as indicated below, should be marked as follows: "CALL FOR PROPOSALS GSA/GRANT/01/2016– NOT TO BE OPENED". If self-adhesive envelope is used, it must be sealed with adhesive tape and the sender must sign across this tape.

CALL FOR PROPOSALS

GSA/GRANT/01/2016

Development of high-end professional receivers and corresponding antennas

GSA – Administration Department

Janovského 438/2

170 00 Prague 7- Czech Republic

17. EVALUATION OF PROPOSALS, AWARD AND SIGNATURE OF THE GRANT AGREEMENT

17.1 Evaluation of Proposals

All applications will be examined and assessed by an evaluation committee. The assessment of each proposal will be based on the information provided by the applicants in the proposal submitted in reply to the call for proposals. In addition, the GSA reserves the right to use any other information from public or specialist sources. The information will be assessed in light of the admissibility, eligibility, exclusion, selection and award criteria set out in the call for proposals.

The evaluation committee may ask an applicant to provide additional information or to clarify the supporting document submitted in connection with the application, in particular in the case of evident material errors.

- At the end of the evaluation, the best proposal will be proposed for award,
- Placed on the reserve list in case of not available funding,
- Rejected, stating the reasons for rejection.

After the completion of the evaluation, applicants will be informed in writing about the results of the evaluation.

17.2 Award of the grant agreement

The GSA may decide to request the applicant, whose proposal has been recommended for award by the evaluation committee, to make minor adaptations to the proposal. In that case, applicant will receive a letter setting out the requested modifications which must stay within the limits of the request. This phase will not lead to a re-evaluation of the proposal. However, a proposal might be rejected if the applicant refuses to ensure a positive follow-up to the request.

On the basis of a recommendation to award of the evaluation committee, a positive outcome of the suggested modifications to the proposal and a verification of additional documentation requested, the grant is awarded and the agreement signed.

A decision to reject an application can be based on the following grounds:

- the application was submitted after the closing date;
- the application is incomplete or otherwise non-compliant with the stated administrative conditions or in any other way does not comply with the eligibility criteria as set out the call for proposals;
- the coordinator or one or more co-applicants are ineligible;
- the technical capacity is considered insufficient;
- the financial capacity is considered insufficient;
- the proposal has not reached the minimum scores as indicated in the award criteria detailed in the call for proposals;
- the score obtained by the proposal is not ranked amongst the best proposal considered for the award.

The GSA's decision to reject an application is final.

17.3 Reserve list

The GSA may place proposals - which were not considered for award of the grant due to inferior score or lack of budget - on a reserve list. Should additional budgetary appropriations become available, the applicants will be informed according to their ranking on the reserve list for potential award of the grant.

18. CONTACTS

Contacts between the GSA and potential applicants can only take place in certain circumstances and under the following conditions only:

Before the final date for submission of proposals,

- At the request of the applicant, the GSA may provide additional information solely for the purpose of clarifying the nature of the call. The requests cannot not be done after 30th of May 2016.
- Any requests for additional information must be made in writing only to the coordinates stated below. The GSA may, on its own initiative, publish corrigenda in case of inaccuracy, omission or other clerical error in the text of the call for proposals. Any additional information including that referred to above will be published on the GSA internet page on which the call for proposals is published.

After the deadline for submission of proposals:

- If clarification is requested or if obvious clerical errors in the proposal need to be corrected, the GSA will contact the applicant provided the terms of the proposal are not modified as a result.
- If the GSA finds that the proposal, chosen for award, could be improved by limited adaptations. In such case, these applicants will receive a formal letter setting out the proposed modifications.

Contact coordinates for the call:

GSA: Administration Department

E-mail address: gnss.grants@gsa.europa.eu

Office address: GSA, Janovského 438/2, 170 00, Prague 7, Czech Republic

REMINDER: when sending any correspondence to GSA, please refer in the subject (of the email or of the letter) to the relevant reference number of the Call: **GSA/GRANT/01/2016** – failure of doing so – might delay the timely response of GSA.