



European GNSS Supervisory Authority

Seventh Framework Programme of the European Community for Research, Technological Development and Demonstration Activities (2007 to 2013)

'Cooperation' Specific Programme

Theme: Transport (including Aeronautics)

Sub-theme: Support to the European Global Navigation Satellite System (Galileo) and EGNOS

Activity: 7.4.4 Supporting Infrastructure Evolution

Area 7.4.4.3 International co-operation and awareness

Funding Scheme: Collaborative Project and Coordination and Support Action (Coordination Type)

DESCRIPTION OF TOPIC Galileo.2011.4.3-1

International Activities

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Caveat: Final availability of budget for this Call is subject to Commission Decision to delegate the management of the Call to GSA. Whilst this is considered a technical formality, potential applicants are informed that, in the absence of such a Decision, the GSA will not be in a position to award any grant. Therefore, the potential applicants are kindly requested to take this into account in the assessment of their investment in any preparatory work. The GSA expects to get notified of the Commission Decision early next year. As soon as this is the case, a notice of information will be published on the Cordis and Participant Portal websites.

I. INTRODUCTION

I.1. Context

Throughout the history of the European GNSS programmes, the EU has sought the collaboration with 3rd countries for various reasons:

- Industrial and technological cooperation
- Cooperation in research and education
- Building awareness on the Galileo programme
- Establishment of ground stations
- Promotion of international relations and economic development

The topics described in this document will contribute to this collaboration by promoting European GNSS services, applications and standards throughout the world. These topics will in particular contribute to the cooperation agreements which have been established with partner countries worldwide. Activities will provide guidance and support to non-EU countries and regions to set up regional and local facilities to adapt services to local needs and ensure that no unnecessary restriction to the use of the European GNSS is applied.

For this topic, 2 funding mechanisms are foreseen: Collaborative Projects (CP) and Coordination and Support Actions – Coordination Type (CSA-C). As a general rule any proposal that contains at least some RTD and/or technical demonstration activities should apply for the funding mechanism of Collaborative Project. Only proposals that are "pure" Coordination and Support Actions can apply for the dedicated CSA-C funding schemes. More details can be found in the Guide For Applicants for this call and the FP7 guide on Financial Issues.

I.2. Special conditions

At least one of the participants in the consortium shall be from a third country¹. Participants from third countries shall have a significant role in the consortium.

I.3. List of Acronyms

AWU	Annual Working Unit
CP	Collaborative Project
CSA-C	Coordination and Support Action – Coordination Type
EC	European Commission
EDAS	EGNOS Data Access System
EGNOS	European Geostationary Navigation Overlay Service
FP6, FP7	6 th , 7 th Research Framework Programmes
GKMF	Galileo Knowledge Management Facility
GNSS	Global Navigation Satellite System
GSA	European GNSS Supervisory Authority
RTD	Research and Technological Development
SME	Small or Medium Enterprise ²

¹ Third country: not an European Union Member State or an associated country such as Switzerland or Norway. See http://cordis.europa.eu/fp7/who_en.html#countries for more information.

I.4. Note on terms used

The word *shall* is used to indicate mandatory requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted (*shall equals is required to*). The word *should* is used to indicate that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others; or that a certain course of action is preferred but not necessarily required; or that (in the negative form) a certain course of action is deprecated but not prohibited (*should equals is recommended that*). The word *may* is used to indicate a course of action permissible within the limits of the standard (*may equals is permitted to*).

² Please note that the new European SME definition (Commission Recommendation 2003/361/EC) is the legal basis for this topic in order to define an eligible SME. The new European definition of an SME came into force on 1 January 2005 raising the financial ceiling above which a company is no longer classified as SME. To qualify as an SME, a company has to meet four requirements: 1. be an organisation or enterprise engaged in economic activity; 2. have fewer than 250 employees, calculated as annual working units (AWU); 3. have an annual turnover of €50 million or less, or have a balance sheet not exceeding €43 million; and 4. be autonomous in terms of managerial independence and the ownership of its equity. This requirement entails several conditions. Full details of the EU definition can be found at: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm.

II. TOPIC DESCRIPTION

II.1. Scope

This section describes the different objectives addressed by the topic on international activities. In each case the objective is briefly introduced and specific requirements are mentioned. Proposals should address one or more of these objectives.

II.1.1. Extending current FP7 call 1 & 2 to third countries

The aim is to reinforce the cooperation between the European Union and third countries on GNSS. Support will go to the participation of additional (3rd country) partners in on-going FP7 GNSS projects of the 1st and 2nd calls with the aim to increase the level of expertise, broaden the scope and/or speed up developments.

Specific recommendations

- Priority will be given to projects extending their consortium towards countries or regions that are either GNSS or SBAS operators, potential markets for the EU industry or have specific know-how on GNSS technologies, services or applications.
- Funding scheme: CP.

II.1.2. Support to GNSS policy dialogues and strengthening of international cooperation

The objective is to strengthen the international dimension of the EU GNSS programmes by supporting the GNSS policy dialogues jointly established between the European Commission and a number of third countries and regional organisations.

Specific recommendations

- Include the organisation of events synchronised with policy dialogue meetings, providing input for example on common GNSS priorities, opportunities and challenges.
- Include the identification and analysis of GNSS policy and research priorities - including long term perspectives - in third countries which are aligned with the priorities of the EU and the provision of recommendations for future co-operation initiatives (including the identification of matching counterpart funding).
- Target countries/regions: U.S.A., China, Russia, South Africa (current dialogues) and Japan, India (dialogues under preparation).
- Funding scheme: CSA-C.

II.1.3. Applications

The objective is to support new projects consisting of demonstrators of applications, adaptations of applications to a local context and the implementation of applications benefiting from multiple constellations, including Galileo.

Projects without a critical international component should apply to the part of the call dedicated to applications.

Specific recommendations:

- The project should result in the development of an application or a part of an *application* that can be integrated rapidly in an existing application. GNSS should be used as the primary positioning technology in the application and positioning should be a key enabler of the application.

- The consortium should have a clear intention to *commercialise* the project results as demonstrated by a realistic business plan.
- The proposed application should be *innovative*. The project should propose research that goes beyond the current state of the art or apply available technology in an innovative way. The latter could mean the application of technologies such as Galileo, EGNOS or EDAS to new markets for these technologies, to new applications within existing markets or in support of new business models.
- The project should contribute to the adoption of *Galileo, EGNOS or EDAS* e.g., early Galileo signals are used³, EGNOS or EDAS technologies are applied in new ways, the application facilitates wide adoption of EGNOS, the application leads to an increased understanding of the market or user requirements in fields that are particularly relevant for Galileo, the project contributes to the identification and resolution of obstacles for the adoption of Galileo and EGNOS.
- The project should aim at developing applications providing *public benefits* e.g., reducing carbon emissions, increasing safety.
- The project should aim to strengthen the community of GNSS developers by releasing useful tools (function libraries, sample code, algorithms etc.), preferably with free open source license.
- The project should take into account, to the extent feasible, relevant standards and regulations on safety, security and other aspects.
- The project should use, to the extent feasible, iterative/incremental development methodologies which enable early demonstration of results.
- The consortium may employ *PhD students* to carry out RTD activities.
- Funding scheme: CP.

11.1.4. Support to the uptake of European GNSS research results in developing economies

The objective is to facilitate the widest diffusion and local exploitation of European GNSS research results, through the piloting and testing of solutions adapted to local infrastructures, service needs, users, culture, and business and social structures. This could include the provisioning of public services as well as business-related applications

Specific recommendations:

- Analyse and test the application of relevant technology as well as business models with a particular focus on socio-economic impacts and aspects such as affordability, deployment and local exploitation opportunities
- Facilitate transformation of research results into local innovation, through the networking of relevant technology developers with local academia, incubators, SMEs, representatives from civil society as well as local authorities, notably for the provision of public services, best practices and technology through the establishment of self-sustainable partnerships and collaborative initiatives.
- Funding scheme: CP or CSA-C.

11.1.5. Support the competitiveness of EU industry by identifying strategic partners and by developing international policy objectives and market development priorities

The aim of this action is to extend the constituency of the European GNSS community to key partners in third countries. This can include activities such as the identification and assessment of relevant centres of competence in relevant countries or regions, the organisation of workshops and the exchange of best practices. This can also include the undertaking of comparative studies contributing to

³ Potentially using IOV satellites launched in 2011/2012, simulators and/or test environments.

the assessment of the international positioning of European GNSS technology strategies and the formulation of policy objectives.

Specific recommendations:

- Funding scheme: CSA-C.

II.2. General requirements and recommendations

Participants should take into account the following requirements and recommendations to the extent possible.

- [1] The majority of the activities should be carried out in one or more third countries.
- [2] There should be a clear *rationale* for the involvement of the specific 3rd countries or region of 3rd countries (e.g., the project addresses a field of supra regional interest, there is a clear value add from technical cooperation or market opening, the 3rd country is in a strategic location for EGNOS coverage extension).
- [3] Participants should *collaborate with existing initiatives* and are encouraged to seek funding from other sources such as European and 3rd country initiatives, international organisations, national and regional initiatives to the extent feasible.
- [4] Whenever relevant, the project should focus on *implementation* as opposed to analysis. The project should e.g., directly reach out to target communities such as GNSS research institutions, regional/national authorities and GNSS user communities.
- [5] The proposal should propose *verifiable objectives* that are quantified as much as possible e.g., number of companies reached, number of events organised, number of demonstrations organised and expected attendance per demonstration.

II.3. Deliverables

The project should provide at least the following outputs during its lifetime.

Nr.	Description	Status ⁴	Objectives ⁵	Dissemination ⁶
1	Detailed project plan including team organisation, contacts;	M	All	C
2	Quarterly progress reports based on a template to be supplied by the GSA;	M	All	C
3	Meeting minutes of all review meetings;	M	All	C
4	Technical feasibility study;	R	1,3	M
5	Commercial feasibility study including market potential assessment (when relevant) and expected economics (relevant cost and revenues);	R	3	M
6	Market study of relevant markets in the 3 rd countries involved.	R	All	M
7	Dissemination plan containing an overview of all events,	M	All	P

⁴ M: Mandatory, R: Recommended, O: optional

⁵ Refers to objectives described in sections II.1.1 – II.1.5

⁶ P: Public, C: confidential - internal to consortium and gsa, M: mixed – contains both a confidential and a public part

Nr.	Description	Status ⁴	Objectives ⁵	Dissemination ⁶
	conferences and exhibitions that will be attended as well as workshops and presentations that will be organised. For each of these the consortium should indicate the relevance of the event, activity of the consortium at the event, target audience and the objectives to be achieved.			
8	Presentation/slide show, report, poster and animated audiovisual presentation on project outcomes that can be disseminated to the general public. These deliverables should be provided in electronic format. Furthermore a project website should be established and gather all public project outcomes. ;	M	All	P
9	Report on market trial including technical and user-experience;	M	1,3	M
10	Rough business and exploitation plan. Building upon the previous deliverables and project outcome, the plan constitutes an assessment of the business potential of the application and how this potential can be captured. Such a plan should contain the following elements: <ul style="list-style-type: none"> a. Concept or product description; b. Assessment of market potential; c. Competition analysis, product positioning and marketing strategy; d. Business model (e.g. make vs. buy, sources of revenues, pricing strategy) and exploitation economics (e.g. break-even analysis); e. Organisation and team; f. High-level implementation plan; g. Rough projected financials (i.e. profit and loss) including assumptions; h. Identification and discussion of main risks. 	M	3	C
11	Analysis of specific aspects : <ul style="list-style-type: none"> a. Value added by EGNOS/EDAS; b. Value added by Galileo; c. Report on the identification and proposes solutions to obstacles for the adoption of Galileo and EGNOS; d. Regulatory and legal aspects of the application; e. Standardisation aspects. 	R	All	M
12	Final report based on GSA template. It should cover all project activities including R&D and exploitation activities; activities related to dissemination, knowledge contribution, FP7 coordination and user fora. The report should include an executive summary.	M	All	M
13	Source code and related documentation of main developments	R	1,3	P

11.4. Schedule and milestones

The total duration of the project shall be less than 36 months. The project shall be split in several phases and several milestones shall be identified.

As a minimum, the following milestones shall be foreseen:

- Kick-off meeting covering at least deliverable 1;
- First review meeting covering e.g., deliverables 4-7
- Second review meeting covering e.g., deliverables 8-11;
- Final review meeting covering deliverables 12-13.

In addition to the above milestones more frequent interactions will most likely be needed. At least once every 3 months an interaction will take place possibly using a conferencing facility.

11.5. Interaction with GSA and the European Commission

The consortium shall appoint one person to be the single point of contact towards the GSA. The consortium should report to GSA whenever requested. The consortium is responsible for organising meetings. Any deviations from the workplan should be communicated to GSA as soon as possible.

The GSA will appoint one or more external experts as project reviewers. One person in the GSA will act as Project Officer and be the first point of contact for technical and general matters. The GSA Contracts Officer will be responsible for administrative, financial and legal aspects of the grant agreement.

Commission staff may be involved in specific activities, especially in dealing with 3rd countries at a more political level.

The GSA and the European Commission or their experts may also provide assistance in the following areas:

- € Technical support in e.g. review of project deliverables, provision of Galileo and EGNOS documentation;
- € Support in networking with other SMEs and participants in other projects of the Galileo Calls;
- € Access to GNSS documentation via GSA's GKMF. The GKMF is the Galileo Knowledge Management Facility that is hosted by the GSA. It contains documents and results from the research activities on Galileo, and allows users to search and retrieve public information on GNSS. The GKMF may also serve as documentation management system and dissemination tool for the projects funded under the Galileo FP7;
- € Facilitating access to GNSS simulators.

III. RECOMMENDATIONS FOR WRITING THE PROPOSAL

Proposals should follow the guidelines as they are explained in the Guide for Applicants for this topic (make sure the correct version is used depending on the funding scheme). Consortia are expected to complete both a part A with administrative and financial information and a part B with the technical proposal. The guide for applicants has clear instructions on both part A and part B.

For this topic we propose some additional recommendations for part B that should be followed as well.

- € Consortia are encouraged to write in a concise and factual style and keep within the page limits mentioned in the guide for applicants.
- € Applicants should describe the rationale for cooperation with the specific 3rd countries addressed in the proposal.
- € Section 1.1 – S/T objectives refers to the project objectives and should be included in sufficient level of detail. These project objectives should be measurable and verifiable e.g., objective: develop application prototype delivering specified functionality, verification: trial. Include a table that summarises the objectives. Note that this section is critical for the evaluation.