



CLARIFICATION No. 1

GSA internal reference: 230067

Grant Procedure GSA/GRANT/03/17 – "Development of SBAS-enabled Shipborne Receivers"

Question #1: Up to now, there is no "maritime" dedicated SBAS service (for EGNOS V2); is it expected to perform an allocation between SIS/SBAS performances and user performances in the frame of this study?

Answer: SBAS is able to fulfil the operational requirements in IMO Res. 1046. The service coverage area needs to be defined by the service provider. It is not an objective of this call for proposals to define nor estimate the SBAS maritime service coverage areas. On the other hand, as listed in Sections 2.1 and 2.2 of the call for proposals, one of the objectives of the call is to perform receiver test campaigns. Tests have to be done with SBAS SIS following the latest version of the draft Guidelines under discussion in RTCM SC-104 SBAS WG or IEC. The results will be used to support the finalisation of the Guidelines and may be used to support the standardisation process at IEC for multisystem shipborne receivers.

Question #2: Is the IALA-like differential station taken into account for broadcasting the SBAS integrity message (knowing that in that case, overall local differential correction would be broadcast)?

Answer: No, the objective is to use SBAS SIS.

Question #3: Are there requirements related to the level of assurance development of the SW and HW?

Answer: As indicated in Section 2.1 of the call for proposals, a TRL-7 prototype is requested, including a receiver firmware update taking into account a minimum set of SBAS messages to be processed and indicated in the Guidelines. Performance will depend on the way this information is processed.

Question #4: The latest version of the RTCM guidelines I found (01-04, 09.09.2016), is not yet complete and in the CFP it is stated that "A new version of the Guidelines will be provided to the contractor by mid-2017". Currently the document explains how to improve the accuracy of your position by using the SBAS correction messages. Is it correct to assume that one of the gaps that will be filled in these guidelines, is the one that explains how HPL (horizontal protection level) is to be calculated, accordingly to what is described in DO229 appendix J?

If not: is it then correct that the guidelines are merely aiming for an improvement of the accuracy, rather than for bringing an approved concept of integrity to maritime applications? (without the need to setup a D-GPS reference/corrections network)

If yes: is the concept about how HPL needs to be calculated expected to be different from what is described in DO229 appendix J?



Answer: No, in fact the RTCM Guidelines focus on the minimum set of messages necessary to be compliant with the operational requirements described in IMO resolution A.1046. HPL is not mentioned in IMO resolution A.1046.

Question #5: Is it acceptable to derive development rules and performances of design already consolidated (certified) in the aeronautic fields?

Answer: The draft RTMC guidelines already refer to some sections of RTCA MOPS DO229. However not all the sections in MOPS are applicable. One of the objectives of the call is to provide recommendations and modifications to the Guidelines looking for a minimum set of SBAS messages to be implemented to be compliant with IMO Resolution A.1046.

Question #6: For an airborne receiver the authorities ask (through TSO-146C) to not only implement DO229 (from which the RTCM guidelines for maritime is derived), but the equipment manufacturer also has to adhere to standards like DO178 (for SW) and DO254 for hardware. Can you confirm no standards are applicable for this particular call? Do you expect that standards similar to DO178/254 will be applicable for the operational end product? If so, which standard do you expect?

Answer: The application of DO178/254 standards is not an objective for the products to be developed under this call. The results of the receiver testing campaigns that are part of this call for proposals (as listed in Sections 2.1 and 2.2) will be used to support the finalisation of the Guidelines and may be used to support the standardisation process at IEC for multisystem shipborne receivers.

Question #7: How will the BIPR be managed, if parts of the receiver already exist on the applicant's side?

Answer: Please refer to Article I.9 'Additional provisions on use of the results (including intellectual and industrial property rights) and Article II.9 'Pre-existing rights and ownership and use of the results (including intellectual and industrial property rights)' of the draft Grant Agreement, which is annexed to the Call for Proposals GSA/GRANT/03/2017; please note that the content of the Articles is identical in both the Grant Agreement for an action with multiple beneficiaries and in the Grant Agreement for an action with one beneficiary.

Attention should be paid, in particular, but without limitation, to:

- Article II.9.2: In case of a written request from the GSA specifying the results it intends to use, the beneficiary has the obligation to establish a list specifying all *pre-existing rights* which are included in those results and provide this list to the GSA at the latest with the request for payment of the balance.

- Article II.9.3: The beneficiary must ensure that the European Commission, representing the European Union has the right to use any *pre-existing rights* included in the results of the *action*. The *pre-existing rights* must be used for the same purposes and under the same conditions as applicable to the rights of use of the results of the *action*, unless specified otherwise in the Special Conditions.

Please note that the EU's rights of use of the results of the *action* are limited to those listed exhaustively in points (a) to (h) under Article II.9.3, which are further specified in points (a) to (e) under Article I.9.3 (e.g. to promote and create awareness of the achieved project results, to showcase and demonstrate the receiver's prototype(s) capabilities for institutional purposes etc.).

Question #8: What is meant by "bank guarantees"? Above which amounts are they required? Do they refer to project amount or financial ratios?

Answer: 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 supporting documents to be submitted with the application by each applicant and affiliated entity (thresholds applying by applicant). On the basis of the documents submitted, if the GSA considers that financial capacity of applicants is not satisfactory and in any other case GSA may deem it appropriate, it may also propose a grant agreement with a pre-financing covered by a bank guarantee.

A pre-financing guarantee for up to the same amount as the pre-financing may be requested, on a case by case basis, 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. 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. For more information, please refer to Chapters 9 (Selection Criteria) and 12 Financial Provisions) of the Call for proposal GSA/GRANT/03/2017.

Question #9: What are eligible indirect costs for this call? Is there a percentage cap?

Answer: A flat-rate amount of 7% of the total eligible direct costs of the action, excluding subcontracting costs, 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. For more information, please refer to Chapter 9 (Selection criteria) of the call for proposal GSA/GRANT/03/2017.

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