**TECHNICAL PROPOSAL - DESCRIPTION OF THE WORK PLAN (ACTION) – FORM B1**

1. Concept and approach (max 30 pages)
   1. **Concept**

Please describe how the project is relevant for the main objectives of the call and in particular describe:

* the process to identify the target application(s) and the specific user need, in terms of challenges and gaps to be filled according to their existing solutions;
* based on the user needs, select and justify the choice of the technology proposed to be implemented, namely either both the proposed GNSS features (OS-NMA and I/NAV improvements) or one of them;
* preliminary description of the user requirements;

*in case OS-NMA is selected for the proposed solution the following must also be included:*

* a preliminary risk assessment demonstrating the need for OS-NMA and the final effect of increasing the GNSS robustness.
  1. **Approach**

Applicants shall include a detailed description of the proposed implementation of the project, including, as minimum:

1. The overall approach and methodology, at least including:

* Description of and reasoning for the selected development approach, such as (but not limited to) one of the four options listed in section 2.2

*With regard to OS-NMA (if applicable)*

* the description of the process to design, develop and verify the OS-NMA algorithm and user terminal/receiver
* the description of the approach to implement an independent source of time loosely synchronised with Galileo System Time and ensure the integrity of the OS-NMA data to be stored in the terminal/receiver.
* Methodology needed for assessment of additional anti-spoofing capability beyond OS-NMA.
* Approach to demonstrate the solution in real conditions.

*With regard to I/NAV improvements (if applicable)*

* The description of the process to design, develop and verify the enhanced GNSS data processing in compliance with the new features introduced in the Galileo OS SIS ICD issue 1.4.
* Approach to demonstrate the solution in real conditions.

1. The expected maturity level proposed to be achieved by the receiver and/or user terminal, either TRL 7 or beyond, in the frame of the project.

The applicants shall pay attention to the **IMPORTANT NOTES** included in section 2.2 of the Call for Proposal, where some main topics may be highlighted to be addressed when preparing the proposal.

In addition the applicants shall include in the proposal a number of preliminary versions of deliverables (as per Call for Proposal section 2.4):

* Work plan (as part of section 3 below)
* Risk assessment (if OS-NMA is selected for the proposed solution)
* User requirements document
* Receiver/Terminal Functional verification and performance validation plan
* Business plan (as part of section 2 below)
* Dissemination Plan (as part of section 2 below)

1. Expected Impact (max 10 pages)
2. Describe how your project will contribute to the maximisation of the benefits to citizens by the adoption of the proposed solution in the market;
3. Elaborate a preliminary *Business plan* for the commercialisation of the results after the project completion;
4. Provide a preliminary *Dissemination plan* for the results in the best interest of the European Union.
5. Implementation (MAX 20 pages)
   1. **Work plan**

Please provide the following:

* + 1. **Overall structure of the work plan**
* brief presentation
  + 1. **Timing of the different WPs and their components**
* Gantt chart or similar
  + 1. **List of work packages.**

The proposals must also include a major sub-division of the proposed project into work packages, numbered 1 through ‘n’ (this might include the indication of part of the activities subcontracted or carried out by third parties).

Please provide the list of work packages, using the table below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **List of work packages** | | | | | | |
| **Work package No** | **Work Package Title** | **Lead Participant No** | **Lead Participant Short Name** | **Man-days** | **Start Date\***  **(T0 + X)** | **End Date\***  **(T0 + Y)** |
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**\*Please do not indicate specific calendar months; instead use the format T0 + X/Y, where T0 is the month on which the project will be kicked-off and X/Y is the number of months from the date on which the project was kicked off.**

* + 1. **Work package description**

Please provide the description of each work package listed above, using the table below.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Work package description** | | | | | | | | | |
| **Work package number** |  | | **Start Date or Starting Event** | | | |  | | |
| **Work package title** |  | | | | | | | | |
| **Participant number** |  |  | |  |  |  | |  |  |
| **Short name of participant** |  |  | |  |  |  | |  |  |
| **Man-days per participant:** |  |  | |  |  |  | |  |  |

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| --- |
| **Objectives** |

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| --- |
| **Description of work** (where appropriate, broken down into tasks), coordinator and role of co-applicants. |

|  |
| --- |
| **Deliverables of the WP** (brief description and month of delivery) |

* + 1. **List of deliverables**

A deliverable refers to a distinct and tangible output of the project, meaningful in terms of the overall objectives, generally related to a specific objective and related set of activities and constituted by a report, tool, prototype, etc. The following table must list all planned deliverables with a short description of the content and its link with the project plan and the expected delivery periodicity. For each deliverable a dissemination level (public or confidential) shall be added.

Please provide the list of deliverables (**in compliance with section 2.4 of the Call for Proposals**), using the table below.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Deliverables** | | | | | | | |
| **ID** | **ID as per Call for Proposal**  (section 2.3) | **Title** | **Short description** | **Periodicity**  (a) | **Type**  (b) | **Distribution**  (c) | **WP Ref.**  (d) |
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Notes:

* 1. Periodicity may include: Annual, Quarterly, Monthly, ad-hoc, etc.
  2. R = Report; SP = Specification, T= Tool, O = Other.
  3. P = Public, open for public dissemination (public deliverables shall be of a professional standard in a form suitable for print or electronic publication);

CO = Confidential, restricted under conditions to be set out in the Specific Grant Agreement. Irrespective of the status, all reports and deliverables must be made accessible to the other project participants, and to the GSA.

ER = External restricted (eg. Members, stakeholder groups or other particular target

groups)

* 1. Corresponding to the specific WP ID they refer to.
     1. **Graphical presentation of the components showing how they inter-relate.**
* Presented in PERT chart or equivalent.
  1. **Management structure and procedures**
     1. **Organisational structure and related milestones**

Describe the organisational structure and the decision-making (please include a list of milestones as in the table below). Explain why the organisational structure and decision-making mechanisms are appropriate to the complexity and scale of the project. Describe, where relevant, how effective innovation management will be addressed in the management structure and project plan.

| **Milestones** | | | | |
| --- | --- | --- | --- | --- |
| **Milestone number** | **Milestone name** | **Related work package(s)** | **Estimated date** | **Means of verification** |
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* + 1. **Risks and mitigation measures**

Describe any critical project risks[[1]](#footnote-2), relating to project implementation, that the stated project objectives may not be achieved. Detail any risk mitigation measures. Please provide the following risk register table with critical risks identified and mitigating actions.

|  |  |  |
| --- | --- | --- |
| **Risks** | | |
| **Description of risk** | **Work package(s) involved** | **Proposed risk-mitigation measures** |
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* 1. **Consortium as a whole**

Describe the consortium. How will it match the project’s objectives? How do the members complement each other (and cover the value chain, where appropriate)? In what way does each of them contribute to the project? How will they be able to work effectively together? Please note that the individual members of the consortium are described in the form A4. There is no need to repeat that information here. In case of single applicant, please limit the above questions to how the single applicant is able to cover the project`s objectives and how will cover the value chain (if appropriate).

Describe the industrial/commercial involvement in the project to ensure exploitation of the results and explain why this is consistent with and will help to achieve the objectives of the Business plan.

* 1. **Resources to be committed**

Please make sure the information in this section matches the costs as stated in the budget table in form C1 of the administrative forms, and the number of man-days, shown in the detailed work package descriptions.

Please provide the following:

1. **Summary of planned staff effort**

Proposals must include an aggregated overview of planned efforts, described as number of man-days over the whole duration of the planned work, for each work package, for each participant. Identify the work-package leader for each WP by showing the relevant man-day figure in bold.

Please follow the structure below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Planned Staff Effort** | | | | | | |
| **Work package No** | **Work Package Title** | **Co-ordinator** | **Participant 2** | **Participant 3** | **…** | **Total**  **man-days** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Total Man-days** | |  |  |  |  |  |

1. **Other direct costs**

Provide justification of the other direct cost items (travel, equipment, goods and services, etc.) for all applicants (as stated in cost category 2 of their C1 form).

|  |  |  |
| --- | --- | --- |
| **Other direct costs** | | |
| ***Applicant Name: […]*** | **Cost (€)** | **Justification** |
| ***Travel*** |  |  |
| ***Equipment*** |  |  |
| ***Goods and services*** |  |  |
| ***…*** |  |  |
| **Total** |  |  |

1. **Subcontracting**

Provide list of subcontractors involved in the project including the company to be subcontracted (if known), description of subcontracted activities and estimated budget. If an applicant is planning to use more than one subcontractor each one should be listed separately.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of applicant** | **Subcontractor company name (if known)** | **Estimated costs** | **WP** | **Description of subcontracted activities** |
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1. **Unit costs**

In case the direct personnel costs are going to be budgeted as unit costs please fill in the below table. One example is provided – please delete it when filling in the table.

If no unit costs are budgeted, please leave the table blank.

|  |  |  |  |
| --- | --- | --- | --- |
| **Country of the beneficiary for which the unit costs apply** | **Estimated number of units/hours to be worked on the project** | **Unit rate (taken from Annex IX of this Call for Proposals)** | **Total costs in EUR (no. of units \* unit rate)** |
| *<Italy>* | *<240>* | *<35.63>* | *<8,551.20>* |
|  |  |  |  |
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| **Total[[2]](#footnote-3):** | | |  |

1. TECHNICAL ANNEXES

|  |  |  |  |
| --- | --- | --- | --- |
| **Section 1 - Consortium / Company Details. (**Do not include subcontractors but include affiliated entities (if any)) | | | |
| **No.** | **Company name** | **Company category**  (select one of the options below) | **Country** |
| **Coordinator n. 1** |  |  |  |
| **Co-Applicant n. 2** |  |  |  |
| **Co-Applicant n. 3** |  |  |  |
| **Co-Applicant n. 4** |  |  |  |
| **Co-Applicant n. 5** |  |  |  |
| **Co-Applicant n. 6** |  |  |  |
| **Co-Applicant n. 7** |  |  |  |
| **Co-Applicant n. 8** |  |  |  |
| **…** |  |  |  |
| **Company categories:** | | | |
| 1. GNSS receiver/chipsets manufacturer 2. Software Development company 3. System integrator | | 1. Research & Development institute 2. Other (please specify) | |

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| --- | --- |
| **OPERATIONAL CAPACITY – Form B2** | |
| **Organisation Legal Name** |  |
| **Short Name** |  |
| **Legal Status** |  |

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| --- |
| Description of the profile of the people primarily responsible for managing and implementing the activities including description of its relevant competences, previous experience (according to their profiles or CVs), previous experience in similar projects and describing the ability to carry out the objectives of this Call of Proposals. |
| Description of the technical equipment, tools or facilities at the disposal of the applicant |

1. The project risk analysis is not to be confused with the risk assessment requested in section 1.II, which instead refers to GNSS threats. [↑](#footnote-ref-2)
2. This total should appear in C1 form in category 1.3 [↑](#footnote-ref-3)