

Fundamental Elements Industry Day Workshop: Implementation of quasi-pilot G2G signals

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Agenda



Introduction to FE R&D funding
Scope of the call
Proposal submission
Evaluation Process
Costs and Payment arrangements
Q&A

Introduction



This webinar aims to present an overview of the **Open call for proposal** of the **Second FE programme** underlying the scope of the call, the objectives as well as the foreseen results in terms of technologies readiness of the solutions and their benefits to the related market segment. Details on the budget and the planned maximum number of projects to be awarded is also provided.

An overview of the main Financial and Legal rules to bear in mind for the correct submission of the proposal is also presented, helping the participants during the submission process.

Attendees can submit questions to the Q&A tool during the webinar. Questions will be answered during the webinar if possible. All of them will be addressed and published on the EUSPA website in the upcoming days after the webinar.

Fundamental Elements 2 - continues the successful work of FE1



New development of receivers, antennas and enabling users' technology:



Continue to be **driven by user needs** and **oriented for a commercial use**:

- Priorities on specific segments driven by market needs, consultation with Users, with MS, with Industry/Academia
- Clear-cut from prototype receiver developments needed to leverage new services



Operational **implementation of current differentiators**:

- E.g. OSNMA and HAS, multi frequency



Prepare for commercial implementation of **new differentiators**:

- Early Warning Service, CAS, ARAIM, ...



Develop **emerging, disruptive technologies**:

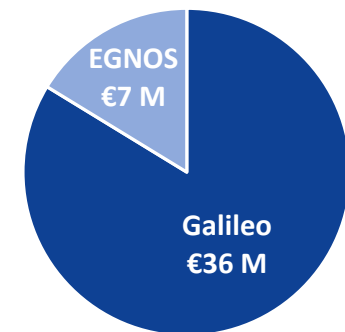
- E.g. leveraging Machine Learning and Artificial Intelligence



Explore **synergies with other space systems** on user technology:

- E.g. Copernicus, SatCom

Allocated EC budget for FE2
€43* million
2021-2027



* Indicative budget

Additional info on FE calls at: <https://www.euspa.europa.eu/opportunities/procurement-grants/grants>

Scope of the call



Foreseen result

Receiver or terminal with Galileo 2nd Generation quasi pilot signal capability.

Scope

The applicants are requested to propose a solution that reaches this objective by fulfilling the following subobjectives:

- (1) 1.a. Identification of use cases and relevant user requirements (e.g. acquisition time and time to first fix) that can benefit from the implementation of G2G QP signals; and 1.b. Selection of the target application area for development;
- (2) Design, development, and testing of a receiver or terminal with Galileo 2nd Generation quasi-pilot signal capability based on the Technical Note of the G2G ICD;
- (3) Assessment and validation of the solution in laboratory using an upgraded GNSS Simulator with G2G QP signals implemented;
- (4) The developed solution, integrating G2G QP Signal, shall be cost efficient and designed with its commercialization in mind in the short- to mid-term, and shall be designed in compliance with the specific application constraints.

Indicative number of projects:
up to 2
Maximum budget: **2M€**
Duration: **24 Months**
Deadline: **14/04/2025**

More info at:

<https://www.euspa.europa.eu/opportunities/procurement-grants/grants/implementation-quasi-pilot-g2g-signals>



Tasks and core activities



1

Task 1: Technology and Application selection: Description of the target application for the use of Galileo G2G QP signals (e.g. IoT, LBS, emergency beacons, buoys, drones, others) and the type of receiver or terminal to be developed (hardware and software). Justify the choices made in terms of market sizing, revenues, technological breakthrough, commonalities between different applications, etc. The applicant shall describe the challenges and barriers identified to assess the technical viability and market uptake potential. For the identified market segment(s) and type(s) of receiver or terminal, the applicant shall define and quantify the requirements, e.g. related to time-to-first fix and/or related to number of satellites in view.

2

Task 2: Design and development: The receiver or terminal with Galileo G2G QP signals shall include, as minimum, a Galileo based chipset that will use the Galileo G2G QP signals for the acquisition of the Galileo signals and may integrate other additional GNSS constellations and/or other Galileo differentiators, e.g. RLS and OSNMA capability, if needed or beneficial for the intended application.

3

Task 3: Test, verification and validation: The receiver or terminal shall be tested at least in laboratory, using GNSS simulators that also need to generate the new G2G QP signals. In addition, the real SIS shall be used if it is available during the test campaign in the laboratory.

The tests shall include:

- a. Performance assessment against the intended operation requirements in laboratory with the definition of testing scenarios.
- b. Duration and set up of the tests with a scenario defined according to the conditions of the operation. The tests report shall include the results of the contribution of G2G QP signals for the acquisition of Galileo signals. The added value of G2G QP signals shall be duly documented in relevant deliverables, to reach the best performance for the target application.

4

Task 4: Exploitation and dissemination: Definition of a business plan; definition of a proper dissemination plan (including set of appropriate tools and timing of approaching the right stakeholders).

Award criteria



AWARD CRITERIA	MAX. SCORE
1. Relevance of the proposal to the objectives of the call, credibility of the proposed approach and innovation level of the solution proposed;	60
<i>Comprehensiveness of the critical assessment and validation of the user requirements pertaining to the solution (notably acquisition time and time-to-first-fix) needed to enable the target application</i>	10
<i>Level of innovation and the actual role of G2G QP Signals in the proposed solution</i>	25
<i>Approach to design, development and testing of the proposed solution, including assessment and validation of the performance in laboratory</i>	25
2. Impact in terms of economic and public benefits derived from the proposal including but not limited to a coherent business plan;	30
<i>Effectiveness, coherence and viability of the business plan including plan for the commercialisation of the results, and management of IPR and business risk assessment</i>	30
3. Appropriateness of the allocation of tasks and resources - the level of the effort involved and its distribution within the proposed tasks and consortium participants, including complementarity of the proposed resources' skills	10
Maximum total score	100

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

Indicative Timetable



Stages		Date/time or indicative period
a)	Publication of the call	21 December 2024
b)	Deadline for submitting NDU	10 March 2025
b)	Deadline for request for clarifications	17 March 2025
c)	Publication of the clarifications	31 March 2025
d)	Deadline for submitting applications	14 April 2025
e)	Evaluation period	April-July 2025
f)	Information to applicants on the outcome of the evaluation	August 2025
g)	Signature of the Grant Agreement	October 2025

Indicative duration of the action under grant agreement: **two years**

Starting date for the action is the first day of the month following the signature of the Grant Agreement.

Proposal submission - forms



FORM	CONTENT	SINGLE APPLICANT/ CO-ORDINATOR	CO-APPLICANT(S)	Affiliated entity(ies)	
A1	CONSORTIUM COMPOSITION	X] ADMIN PROPOSAL
A2	COORDINATOR PROFILE	X			
A3	CO-APPLICANT PROFILE		X		
A4	DECLARATION OF HONOUR	X	X	X	
A5	FINANCIAL CAPACITY	X	X	X	
FIF and supporting documents		X			
LEF and supporting documents		X	X	X	
] TECHNICAL PROPOSAL
B1	TECHNICAL PROPOSAL	X			
B2	OPERATIONAL CAPACITY	X	X] FINANCIAL PROPOSAL
C1	PRELIMINARY BUDGET	X	X	X	

Means of submission (section 17.1 CfP)



Proposal can be submitted in 2 ways:

1. In a paper version
2. In electronic version

Paper submission:

- Regular paper submission in a sealed envelope as described in section 17.3 CfP
- At least 2 copies of electronic storage devices (USB) containing the full set of documents

Electronic submission (preferred):

- Submission only electronically on at least 3 storage devices (USB, CD-ROM, DVD) containing full set of documents
- Paper print-out of the hashes of the submitted files (in the form of algorithm MD5, SHA-256 or higher)
- Submitted in a sealed envelope as described in section 17.3 CfP

Signature (CfP section 17.2)



Only **A4 form** is required to be submitted with original signature.

2 ways to sign:

- Blue ink on paper -> submission on paper (see slide above)
- Qualified Electronic Signature (QES)

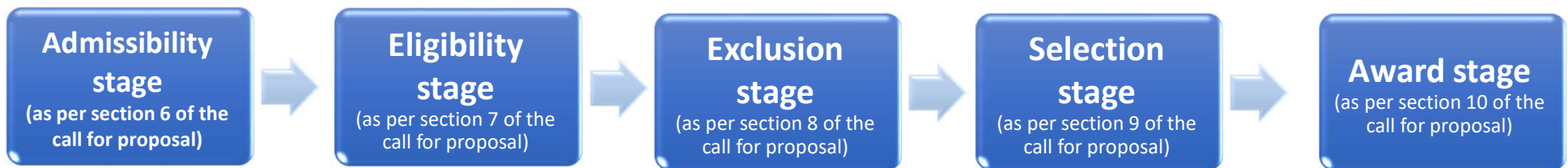
Qualified Electronic Signature:

- Only QES within the meaning of Regulation (EU) No 910/2014 (eIDAS Regulation) will be accepted
- Recommended to check here if the signature is QES: <https://ec.europa.eu/digital-building-blocks/DSS/webapp-demo/validation>

Evaluation process



Assessment of the call for proposal is done in sequential stages:



- Deadline
- Submission set
- Language
- Max. rate of co-financing

- Eligible applicants (EU MS, Switzerland, Norway)
- Structure of the consortium (at least 2 entities)

- Applicants not in exclusion situation – see for A4
- Misrepresented information
- Involved in preparation of the call
- Are Restricted Person

- Financial capacity
- Operational capacity

- Award criteria

EU funding



Non-cumulative award

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

Non-retroactivity

No grant may be awarded **retrospectively** for actions already completed

Non-profit rule

Where a profit is made, **EUSPA is entitled to recover the percentage of the profit**

Subcontracting

- ✓ Subcontracting shall **in no case cover core activities** and only a limited part of the action
- ✓ The proposal should clearly **specify the activities that will be subcontracted**, and the corresponding **costs must be indicated in the estimated budget**
- ✓ Subcontracting is **not allowed among the beneficiaries** of the proposal

Co-financing

EU financing **may not cover 100% of the total costs** of the action. It may take the form of:

- ✓ Partner's own resources
- ✓ Income generated by the action
- ✓ Contribution from third partners

Balanced budget

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 (and affiliated entities) with general accounts in a currency other than the euro must convert costs incurred in another currency into euro at the average of the daily exchange rates published in the C series of Official Journal of the European Union, determined over the corresponding reporting period.

Eligible costs and payments



Eligible direct costs:

- Cost of personnel working under direct contract
- Costs of natural persons working under a contract with the beneficiaries other than an employment contract
- Unit costs of owners of SMEs who do not receive a salary or natural persons who do not receive a salary
- Cost of travel and related subsistence allowance
- Costs for equipment and other assets specifically procured for the action (only depreciation costs), costs for equipment not procured specifically but used directly for the action in proportion to the usage for the action and only during its duration (depreciation costs)
- Costs of rental / lease of equipment (depreciation costs), costs for use of facilities/laboratories
- 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 is eligible.
- Costs of consumable and supplies
- Costs arising directly from requirements imposed by the grant agreement (audits)
- Duties, taxes and charges (ex: non-deductible VAT)

Eligible indirect costs:

A flat-rate amount of 7% of the total eligible direct costs of the action excluding subcontracting costs, (beneficiary's general administrative costs which can be regarded as chargeable to the action/project.)



Non-eligible costs:

- Return on capital or return generated by an investment
- Debt and debt service charges
- Provisions for future losses or debts;
- Interest owed
- Doubtful debts
- Currency exchange losses
- Bank costs charged by the beneficiary's bank for transfers from the EUSPA
- Costs declared by the beneficiaries 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 EUSPA 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
- Contributions in kind from third parties
- Excessive or reckless expenditure
- Deductible VAT
- Participation by any staff of the European Union institutions in the action
- Costs incurred during the suspension of the implementation of the action
- Cost categories explicitly excluded in the work programme/call.

Subcontracting, equipment and leasing/rental costs



- **Subcontracting** - When the tasks in B1 cannot be done by the consortium
- **Specific Principle:** May only cover a **limited part of the action** and can **not** cover the **core activities**
- **Purchase of equipment** – When achieving the objectives of the action requires the purchase of equipment or the use of equipment already owned by the Beneficiary which is subject to depreciation
- **Leasing or rental costs** – When achieving the objectives of the action requires the use of equipment which is leased or rented
- **Common Principles:**
 - Stated in the proposal (Form C1 and B1)
 - Best value for money or the lowest price
 - No Conflict of Interest
 - Necessary for implementation
 - The Legal Entities signing the Grant Agreement must be the ones who are procuring, implementing and incurring the costs related to the Subcontract, Equipment or Leasing/Rent. **The Grant Agreement does not extend to affiliated entities (Holding Groups, Mother/Sister Companies, Spin-offs), unless they are identified separately as Co-Applicants or Affiliated Entities.**
- **Specific cases**
 - Subcontracting, leasing/renting and purchase of equipment among beneficiaries is not possible
 - Subcontracting, leasing/renting or purchasing equipment from affiliated entities is not possible except in very specific conditions, where the Applicant can prove that the above principles are respected

Payment arrangements



There will be following **payments during the duration of the grant**

- 1 pre-financing payment
- Interim payment(s) linked to the reporting period(s) (please see table below)
- 1 payment of the balance

Pre-financing payment depends on number of reporting periods

- The number of reporting periods depends on the total length of the project
- In general: projects of ≤ 24 months: 1 reporting period, projects of > 24 months: split into reporting periods every 18 months

No of reporting periods	The amount of pre-financing
1 reporting period	80%
2 reporting periods	80%
3 reporting periods	53%
4 reporting periods	40%

- Final arrangements for pre-financing payment will be further detailed in the grant agreement.

Interim payment - **must clear 50%** of the amount of the **pre-financing** payment previously made **AND** cumulative amount of pre-financing and of the interim payment altogether **must not exceed 90%** of the maximum grant amount.

Final of payment (payment of balance) – payment of amount left to maximum grant amount OR recovery

Admin package – overview of forms



Form A4 & Form A5

FORM A4. DECLARATION OF HONOUR

(TO BE SUBMITTED BY ALL APPLICANTS – INCLUDING AFFILIATED ENTITIES)

- It serves to check the exclusion and selection criteria
- To be filled and submitted by **ALL applicants**
- Generic text used by EU institutions and agencies.
- Consider starting early enough collecting all the evidences; since might be time consuming
- Supporting evidence may be required on the basis of a risk assessment that will be conducted by the EUSPA – possibility for the potential beneficiaries to start collecting all evidence early enough to be assessed by the applicants
- Evidence submitted in another procedure (procurement or grant) less than 12 months before the award of the grant can be re-used (no need of submitting new documents)

FORM A5. FINANCIAL CAPACITY

(TO BE SUBMITTED BY ALL APPLICANTS – INCLUDING AFFILIATED ENTITIES)

Admin package – overview of forms



Form A5: Financial capacity (1/2)

- Filled in with figures from your annual accounts for last 3 years (plus audit report for the last 3 years to be submitted if requested contribution is above 750K EUR) – given the complexity it is recommended to be filled in by a professional accountant / auditor
- EUSPA calculates ratios (e.g. profitability, indebtedness, financial independence)
- Used to assess your financial viability

**Not applicable to:
public bodies, international organisations, natural persons receiving educational support or persons in need, persons or entities receiving interest rate rebates and guarantee fee subsidies for the purpose of reinforcing financial capacity**

Admin package – overview of forms



Form A5: Financial capacity (2/2)

If outcome of the check is not satisfactory and in any other case EUSPA can:

- request further information
- propose a grant agreement without pre-financing
- 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

Admin package – overview of forms



Form C1: Estimated budget

Funding rate of the action (F. Rate)	<p>The Consortium/Single Applicant must choose a funding rate up to the maximum 70%, which applies to all applicants and to the coordinator regardless of their legal form.</p> <p>Applications must respect the maximum rate for EU co-financing (see Admissibility Requirements)</p>			
Estimated eligible costs of the action and EU contribution (Table 1)				
	Estimated eligible direct costs (EUR)	Estimated eligible indirect costs (EUR)	Total estimated eligible costs (EUR)	Total EU contribution (EUR)
	A	B	C = A + B	D = (F. rate) x C
Direct eligible costs (Membering of categories as in "Eligible Costs for the grants" section 12.2 of the Call for Proposals - apply the rates detailed thereafter)		declared on the basis of flat rate of 7% of 1. + 2. without costs of subcontractors, costs of third parties not working on beneficiary premises, and cost of financial support to 3rd parties		
1. PERSONNEL COSTS				
1.1 Personnel under direct empl. contract	0.00	0.00	0.00	0.00
1.2 Personnel under other than under empl. contract (in-house consultants)	0.00	0.00	0.00	0.00
1.3 Unit costs of owners of SMEs who do not receive a salary or natural persons who do not receive a salary	0.00	0.00	0.00	0.00
Sub-total for cost category 1	0.00	0.00	0.00	0.00
2. OTHER DIRECT COSTS				
2.1 Travel costs	0.00	0.00	0.00	0.00
2.2 Costs for equipment and other assets procured for the action	Not applicable in this call for proposals			
2.2 a) Costs for equipment and other assets procured for the action: Full purchase costs	Not applicable in this call for proposals			
2.2 b) Costs for equipment and other assets procured for the action: Depreciation costs	0.00	0.00	0.00	0.00
2.3 Costs for equipment or other assets not procured but used for the action (depreciation costs)	0.00	0.00	0.00	0.00
2.4 Costs for rental or lease of equipment or other assets only to the portion of use and limited to the duration of the action	0.00	0.00	0.00	0.00
2.5 Costs for use of technical facilities or laboratories	0.00	0.00	0.00	0.00
2.6 Costs for consumables and supplies	0.00	0.00	0.00	0.00
2.7 Costs arising directly from requirements imposed by the grant agreement	0.00	0.00	0.00	0.00
2.8 Costs entailed by subcontracts as described in the proposal	0.00	Not applicable	0.00	0.00
2.9 costs of financial support to third parties	Not applicable in this call for proposals			
2.10 Duties, taxes and charges paid by the beneficiary	0.00	0.00	0.00	0.00
Sub-total for cost category 2	0.00	0.00	0.00	0.00
Total direct eligible costs	0.00			
Total indirect eligible costs		0.00		
Total eligible costs			0.00	
5. Total EU contribution				0.00

Any questions?

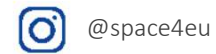
(you can submit your questions in Q&A section)



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