Future EO - Permanently Open Call for Proposals (1- 10468)

Background – why a permanently open call?

- Provide an opportunity for industry & research community to propose new activities outside of the standard ESA work-plan
- Total value is 10% of total industrial spend from EOEP5 Block 4/Future EO (PB-EO request)
- Prioritize innovative ideas responding to emerging opportunities. Evaluation criteria prioritize innovative content – focus is on exploitation of EO datasets and implementation of innovative applications.
- Simplified proposal template to ensure:
  - Minimal preparatory effort by bidders on administration – focus on technical development issues
  - Fast turn-around from evaluation to negotiation
- Max contract spend 150k€, 12 months of duration

How does the POC operate

- Make maximum use of standard tools, including:
  - Simplified procurement rules for small contracts (Expro)
  - Single procurement over Future EO – Block 4 domains
- Minimized administrative effort by bidders:
  - Submission of preliminary proposal based on a standard template
  - Maximum proposal size (20 pages)
  - Submit a proposal at any time
- Successfully evaluated bids can be negotiated and started.
- Maintain continuous capability to respond to innovative ideas:
  - Max commitment in any 12 month window ensures availability of funds
  - Rapid proposal evaluation process ensures timely response by ESA

Future EO - Permanently Open Call

Max 12 months, 150K Euro, 5 lines of activity:

1. **Grand Science Challenges**: development and validation of novel EO methods and techniques, original advancements in open science tools and practices, leading-edge short-term studies advancing key areas of Earth system science and maximizing the scientific impact of European EO assets.
2. **EO for a Resilient Society**: transfer of new research and development into public or private sector stakeholder operations, with documented users' engagement, innovative application developments, rapid prototyping and integration of new EO products and services, addressing environmental, social and economic resilience, natural resources and regional stability topics.
3. **Artificial Intelligence for EO**: rapid prototyping of AI approaches for advancing Earth System Science, developing new information products and services or embedding EO data into stakeholder operational working practices, testing innovative concepts to support expanded uptake of AI enabled EO applications.
4. **Regional Initiatives**: new application developments addressing regional priorities, innovative scientific investigations of regional Earth system science processes. Addressing gaps in platform capabilities supporting key regional application and science priorities.
5. **EO for Civil Security**: transfer of EO R&D into pre-operational applications, with documented users' engagement, addressing law enforcement, intelligence and threats assessment, advocacy, support to areas affected by fragility, conflict and violence. Rapid prototyping and integration of new EO products and services. Development and demonstration of new applications and customized new capabilities.

Submitting a proposal – just complete a template

What do you want to develop?

What for?

What will the development do?

What is the innovation you propose?

What is the technical development approach?

What are the technical problems and what will you do about them?

[DETAILED PROPOSAL TEMPLATE]

(Page limit: 20 pages maximum without the required annexes and the table of content)

(Insert table of content)

DETAILED PROPOSAL:

1) PART 1: TECHNICAL PROPOSAL

1.1 PROPOSED DEVELOPMENT
[Provide a summary description of what is to be developed]

1.2 SCIENTIFIC OR TECHNICAL OBJECTIVES:
[Outline the main objective(s) to be achieved and the end goal(s) being targeted. Indicate how the achievement of those objectives will be demonstrated.

1.3 REQUIREMENTS TO BE ADDRESSED BY THE PROPOSED DEVELOPMENT:
[Identify and discuss the technical requirements to be addressed in order to achieve the specific Scientific/Technical Objectives as outlined in section 1.2 above. This should also describe target performance levels to be achieved (eg update frequency, latency, processing times etc) in order to ensure compliance with expectations from target users. When appropriate the requirements shall be associated to a quantitative value. These quantitative values shall be labelled as committing ones or as being to be considered as a goal. The verification approach for each requirement shall be identified. Provide a justification/ reasoning for such requirements]

1.4 INNOVATIVE ELEMENTS WITHIN THE PROPOSED DEVELOPMENT:
[Identify what is the nature of the innovative content of the proposal and explain how this represents an improvement on the current state of the art in the domain being targeted. Describe the expected impact and benefit arising from the proposed development due to the innovative content]

1.5 SCIENTIFIC OR ENGINEERING DEVELOPMENT APPROACH:

1.5.1 Scientific/Technical Steps
[Present and discuss in detail the scientific/technical steps to achieve the objectives and the committing requirements outlined under sections 1.1 to 1.4. This shall include an identification of the main deliverable items to be generated.]

1.5.2 Implementation aspects
[Present the logic behind the proposed development approach, with a first iteration of the concept and the baseline design/approach. The baseline design covers for instance the system architecture and a functional decomposition presented in block diagrams, providing also internal and external interfaces. Discuss the current state of the art and the trade-offs that need to be taken into account and show the overall logic of the work being proposed including any key review and decision points.]

1.6 SCIENTIFIC/TECHNICAL FEASIBILITY, PROBLEM AREAS AND DEVELOPMENT RISK:
[Provide evidence as to the feasibility of meeting the objectives and requirements identified in sections 1.2 to 1.4. Identify, present and discuss the main technical problem areas and key development risks that may be expected during the execution of the activity in order to address the requirements and target performance levels identified in sections 1.2 to 1.4. Propose mitigation and preventative actions to reduce the likelihood and potential impact of such risks/problems and discuss credible alternative design or implementation solutions to avoid identified potential technical problems becoming showstoppers]

Evaluation Criteria

EVALUATION CRITERIA		Weighting Factors in %
1	Background and experience related to the particular fields concerned of the company (ies) and staff, adequacy of required resources	15%
2	Understanding of objectives including the demonstrated innovative nature of the proposed activity and the demonstrated compliance with the following requirements: • For proposals addressing "Grand Science Challenges" – demonstrated scientific excellence • For proposals addressing "EO for a Resilient Society" – demonstrated stakeholders engagement • For proposal addressing "Artificial Intelligence for EO" – demonstrated innovative and meaningful developments and new methodologies • For proposals addressing "Regional Initiatives" - demonstrated users engagement and innovative R&D • For proposals addressing "EO for Security" - relevant stakeholders engagement and demonstrated innovative developments Discussion of problem areas and elaboration of effective response measures	35%
3	Quality and suitability of the proposed programme of work including the adequacy of the proposed scientific or technical approach	30%
4	Adequacy of management approach; credibility of the cost estimation and proposed schedule	10%
5	Compliance with the administrative tender conditions and acceptance of contract conditions	10%

Elements of Proposal Assessment

Background and Experience (Criterion 1)

- Does the available experience and expertise cover the required capabilities to get the work done?
- Are the right people doing the right things?
- Are the required stakeholders involved?
- Is the access to needed resources demonstrated?

Innovation and Impact (Criterion 2)

- Is this a significant advance beyond previous projects? Not "more of the same”?
- Is there a clearly delineated innovative component?
- Is there a credible process for the proposed innovation to generate impact?
- Is there a clear elaboration of problems to be addressed and how to address them?

Programme of Work (Criterion 3)

- Is the proposal clear on the technical objectives to be achieved (i.e. what is being developed)?
- Does the technical work description ensure that the stated requirements are addressed?

How it works

Submit proposal by deadlines : announced on ESA-STAR (ITT clarifications) and on EO4Society website

Two things can happen:

1) Your proposal is immediately successful — You receive a request for negotiation

2) Your proposal is marked below “fair” — You receive a “regret letter”

- Letters of support from users are usually necessary (mandatory for activity lines 2 and 4, recommended for activity line 5)
- Letters from your national delegations are not required

Useful links

- The tender template, documentation and latest clarifications are accessible at the following link: https://esastar-publication-ext.sso.esa.int/ESATenderActions/details/6872 (Tender 1-10468)
- Any questions to the Agency relating to this ITT shall be made via the dedicated function in “esa-star”.
- PSS guide: https://esamultimedia.esa.int/docs/business_with_esa/PSSA-2_Guide_Final.pdf
- For additional info on pss forms submission process please contact: pss@esa.int

- **Examples of successful open call projects:**

https://eo4society.esa.int/category/special-initiatives/permanently-open-call/