

ESA Contract Reference: 4000135331/21/NL/MH/kdj
Reference: BSSC-0221-DOC-A
Issued: 09/02/2023

INVITATION LETTER & APPLICATION PROCESS
TECHNOLOGY TRANSFER
DEMONSTRATOR

Verhaert New Products & Services NV
Hogenakkerhoekstraat 21
9150 Kruiseke
BELGIUM

Kruiseke, 7/03/2023

Dear Sir/Madam,

Verhaert New Products and Services, hereby invites you to submit a proposal for the above subject.

This Open Call has been established and will be processed following a procedure explained below.

The Technology Transfer Program of the European Space Agency, has established initiatives for space technologies to be identified and adapted for non-space use that result in commercially viable products. As ESA Technology Broker Belgium, Verhaert New Products & Services promotes the use of space technologies in Belgium on behalf of the European Space Agency and has set up a National Demonstrator Call.

With the Open Call Q1 2023, ESA Technology Broker Belgium aims to finance a Technology Transfer Demonstrator [hereafter referred to as "Demo"] in order to prove the relevance of a technology/know-how for another application field as well as reduce the risks of the undertaking. Through this call, ESA Technology Broker Belgium invites the Applicants to submit proposals for demonstrator projects regarding the transfer of a space technology into a non-space application/terrestrial application [to be understood as a terrestrial, aerial or maritime application]. It consists in building, deploying and running a complete pilot system in an operational environment, with the objective to assess its operational suitability, and elaborating the implementation plan.

Your proposal is required to conform to the conditions specified in this Invitation Letter and all documents available to support your application, i.e. (draft contract, template for cover letter and detailed proposal).

Your proposal, including annexes, shall be submitted **exclusively in electronic format [PDF] by email to demo@spacesolutions.be**. The application period starts on the publishing date of the open call and will end once a successful submission is received and in no case later than on 26 May 2023 at 23:59 CEST. Applications will be evaluated on a monthly basis.

This call was published on <https://spacesolutions.be> on 7/03/2023 and is issued in English only.

Please find attached hereto the following documents:

- Appendix 1 – Proposal Template [including Cover Letter and Detailed Proposal]
- Appendix 2 – Draft Contract

1) Your attention is drawn to the following:

The present call is open to space and non-space companies [including SMEs], academic and research organizations from ESA Member States and Associate States, which have successfully completed an ESA Proof of Concept activity or have reached a similar result through other actions. The TEB (Tender Evaluation Board) will decide on the achievement of the requirement case by case.

2) The subject of this call is exclusively for Technology Transfer Demonstrators. Technology Transfer refers to the use/exploitation of a space heritage technology into a terrestrial application domain.

A space heritage technology can be hardware, software, know-how, processes, methodologies or systems developed or adapted for space applications. Exploitation of satellite borne data, GNSS signals and satellite communication capacity are not considered as space heritage technologies in the context of technology transfer.

When the technology was not originally developed for space, but adapted and qualified to the space conditions, then the space heritage refers to the technical adaptations made on the terrestrial baseline.

Space heritage should bring clear added value for the proposed terrestrial applications [e.g. size and weight reduction, reliability, performance improvements]. Added-value is understood as benefit[s] in relation to meeting the requirements in the new application domain [as expressed by the receivers], when compared to commercially available solutions and underlying technologies.

The space heritage technology shall significantly contribute to achieving the value proposition in the new application domain.

The technical solution to be demonstrated shall have successfully passed breadboard verification of the critical functions and associated performance requirements [pertaining to the new application], in a relevant environment/ This level of maturity is referred to TRL 5 in the application documents [regardless of other definitions].

Market representative receivers shall be involved for specifying the use case scenario, describing and validating the problem they are facing, for generating user requirements, for integrating the solution in an operational-like environment, for operating, assessing and validating the solution, and for assessing the elements of the business model that have a direct impact on them [e.g. value proposition, channel[s], customer relationship, pricing scheme]. Receivers are end users organizations [i.e. stakeholders who are candidates to operationally use the solution] and preferably also direct customers of the solutions.

The receivers shall be different and independent in any aspect [e.g. organizationally, financially, etc.] from the donor organization which owns the technology to be transferred.

The Demo must be carried out within twelve [12] months from the kick-off meeting. This shall be reflected in the proposal schedule.

The applicant is requested to achieve:

- **Implement the solution & perform the verification testing.**
- **(Together with the end-user organisation) deploy and operate in an operational-like environment & perform the validation testing.**
- **Iterate the implementation to the solutions as required.**

3) The contents of your application will be limited to filling in as necessary the Proposal Template, provided in MS Word format and attached hereto. Please note that the captions in red colour are meant to guide you in correctly filling in the template and that such captions are to be removed from your application once it is ready for submission.

- Please complete the part of the template labelled “Cover Letter” by filling in the blank spaces and deleting any options which are not applicable or not relevant [all such options are identified in red].
- As part of the submission process, the applicant must sign the cover letter and agree with the following Key Acceptance Factors:
 1. The Applicant confirms, on its behalf and on behalf of its Subcontractor[s] to satisfy the “Eligibility Requirements”;
 2. The Applicant confirms, on its behalf and on behalf of its subcontractors, to fulfill the requirements concerning the proposal;
 3. The Applicant confirms, on its behalf and on behalf of its Subcontractors, to be compliant with the “Non Benefit Requirements”;
 4. The Applicant confirms that the Cover Letter and Detailed proposal contain a binding price;
 5. The Applicant confirms that the Cover Letter and the Detailed Proposal contain a price type compliant with the one requested in this call: Firm Fixed Price;
 6. The Applicant confirms that the proposal is compliant with the budgetary limit applicable for each Demo;
 7. The Applicant confirms that the Cover Letter contains the confirmation of the validity period required in the subject call;
 8. The Applicant confirms that the Cover Letter is signed by the authorized representative[s] of the applicant;
 9. The Applicant confirms that the proposal pertains to the transfer [i.e. the use for a terrestrial application] of a space heritage technology [i.e. the space heritage technology is a piece of hardware, software, know-how, process, methodology or system developed or adapted for space applications]. The applicant confirms that the proposal does not concern the exploitation of satellite borne data, GNSS signals and satellite communication capacity;

10. The Applicant confirms that the Technology Description is fully filled in;
11. The Applicant confirms that a target terrestrial application has been identified [including identification of industry, end-users, and description of use case scenario].
12. The Applicant confirms that the market opportunity has been validated [validation of the problem and of the value proposition], and that the proposal provides evidence of it.
13. The Applicant confirms that the technical solution has reached TRL5 [successful breadboard verification in a relevant environment], and that the proposal provides evidence of it.
14. The Applicant confirms the agreed participation of a non-space receiver in the activity. In case the non-space receiver is not a subcontractor, a Letter of Intent shall provide evidence of its role as described in the work package of the Detailed Proposal Template.
15. The Applicant confirms that the donor of the space heritage technology is independent [organizationally and financially] from the end-user organization involved in the activity.
16. The applicant confirms to exclude activities promoting or being related to alcohol, tobacco, religion, politics, intolerance, violence, firearms, pornography, obscenity, gambling or illegal drugs.

If any of the above Key Acceptance Factors, or if any other element specifically required in the conditions of this call is missing and the omission is such as to render the proposal substantively incomplete, then the proposal shall not be admitted at the TOB for evaluation or shall be eliminated at the TEB during the preliminary assessment.

- Please complete the part of the template labelled “Detailed Proposal” in all its part by filling in the information relevant to the various chapters, sections and subsections [using exactly the same headings, same subject matters, same order, same numbering];
- Your application and all correspondence related to it, shall be in English;
- Please ensure that your application complies with the following essential requirements:
 - i. You are required to clearly state that you accept all terms and conditions stated in the documents expected to form together with the Contract.

The Intellectual Property Rights [IPR] of what is being pursued with the activity must also be considered and explicitly addressed in the proposal.

- ii. Your price quotation shall meet the following conditions:
 1. The maximum project budget is defined at 144.000,00 EURO per application.
 2. The selected activity, after successful negotiation, will result in a firm-fixed-price contract, 100% funded.

- iii. Your application should state a validity period of three [3] months from the time limit from submission.
- iv. The total number of pages shall not exceed 40 pages, excluding the Cover Letter.
- v. Applications must avoid duplications of past, ongoing ESA activities or duplications of activities carried out in EU [or Public] programmes may also not lead to non-admissibility.
- vi. Each Applicant can submit only one [1] proposal.

4) As concerns the evaluation of your application by Verhaert, please note that the quality of your application will be evaluated on the basis of the following criteria and associated Weighting Factors [WFs] :

No.	Weighting Factors [WFs]	Weighting Factors %
1	Suitability of the space heritage technology [space connection, relevance in relation to problem, maturity, feasibility] for the transfer, and quality of presentation thereof in the proposal.	25%
2	Market opportunity and quality of presentation thereof in the proposal.	30%
3	Suitability of the implementation approach; Adequacy of involved resources [key personnel, facilities, receiver] for the execution of the work; Quality of presentation thereof in the proposal	30%
4	Quality of the management plan and financial proposal	15%

- 5) The following steps will be used to evaluate the select proposal:
- Application Opening Board. The proposals which did not include all Key Acceptance Factors and Declarations of Compliance, are rejected and excluded from further evaluation.
 - The evaluation of your proposal is done by Verhaert and ESA's Application Evaluation Board (TEB) according to the Evaluation Criteria and associated Weighting Factors [WF] defined above [see section 4 above]. In the permanent open call scheme, a TEB will be organized within one month after receiving an application.
 - Corresponding marking and recommendations by the TEB.
 - The Application Evaluation Board will select the highest ranked proposal with a minimum overall weighted mark of 60, within the available budget. The evaluation board will be organized ideally within one month after the application date.
 - For the recommended proposal, Verhaert will start the negotiating process to place a contract with the applicant on the basis of the submitted proposal and the comments from the TEB.

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- The Contact person of the Application mentioned in the proposal will be informed in writing of the results of the call after the decision has been taken. If the application has been unsuccessful, the applicant may request Verhaert to advise him of the reasons why the proposal has not been retained in a verbal debriefing.
 - Communications to the application [non-successful proposals] may be expected approximately 3 [three] months after the closing date of this call.
- 6) This Open Call explicitly excludes activities promoting or being related to alcohol, tobacco, religion, politics, intolerance, violence, firearms, pornography, obscenity, gambling or illegal drugs.
 - 7) Any questions relating to this Open Call [clarifications and/or extensions requests] shall be made exclusively by email to techbroker@spacesolutions.be.
 - 8) Your Application and all supporting documents must be submitted not later than 26 May 2023 at 23:59 CEST by email to demo@spacesolutions.be, taking into account that the call will close as soon as the available budget is allocated to successful applicants.
 - 9) Should your application be accepted by Verhaert and the Evaluation board, the negotiation for a contract is envisioned to start within a period of two weeks after the evaluation board.

Your faithfully

Frederik Wouters
Director at Verhaert New Products & Services