

Request for Quotations

Call for service; providing technical services to start-ups & SMEs – NEX-LABS Testing Vouchers
Reference number: RSS/NEX-LABS/003/2023

1 OVERVIEW

This request for quotation does not commit the Contracting Authority to award the contract. In no event shall the Contracting Authority be liable for any damages whatsoever including, without limitation, damages for loss of profits, in any way connected with the closing of this request without awarding the contract or implementing the activities.

REFERENCE NUMBER: RSS/NEX-LABS/003/2023

Budget allocated: 5,000 EUR/voucher

2 PROJECT DESCRIPTION

NEX-LABS aims to support the implementation of clean technologies for sustainable and resilient increase of agri-food sector production based on a more efficient use of energy (renewable/solar solutions) and water (wastewater treatment, water harvesting or reuse solutions) in MPC region thanks to the contributions of ICT such as blockchain technology, Internet of the Things (IoT), Artificial Intelligence (AI), Machine Learning and Big Data.

NEX-LABS will contribute to the creation of a sustainable and resilient agro food sector based on NEXUS driven Open Living Labs (NDOLL) approach, thus strengthening technology transfer, cooperation industry-academia, increasing commercialisation opportunities and innovation-driven growth.

3 PURPOSE OF THE CONTRACT

Implementation of Testing Vouchers activity within the activities of NEX-LABS Project. The objective of the service provider is to:

- Provide WEF-NEXUS beneficiaries (SMEs, startups, entrepreneurs, researchers) with testing facilities, laboratories, industries, and universities. The aim of this collaboration is to support researchers and innovators in access to physical infrastructure and knowhow required to properly and objectively test their NEXUS related products and validate them.
- Conduct Needs assessment of technological and industrial viability, technological developments of processes, products and services. Recruit laboratories, testing facilities or physical infrastructure providers to provide a space for testing and validating the product.

- As a proof of service completion, the service provider should develop with the beneficiary a narrative report including summary of testing activities conducted, beneficiary's interpretation of results, the anticipated impact both qualitatively and quantitatively and an activity assessment, including how was the visibility of NEX-LABS contribution ensured.

4 SCOPE OF ACTIVITY AND REQUIREMENTS

Technical specifications and requirements:

1. Accelerated Stress Test for Panels

1.1 Description:

Conducting an accelerated stress test for panels, including the preparation of testing panels, running the robot for 5000 cycles, and performing EL and flash tests.

The actual testing process involves subjecting the panels to an intense cycle of stress, simulating the demanding conditions of robotic operation over an extended period. The robotic system is rigorously run through 5000 cycles, mirroring the wear and tear expected over 25 years of continuous use. This stress testing phase is closely monitored to identify any signs of material fatigue, degradation, or potential weaknesses that could impact the panels' long-term performance.

Post-testing, a comprehensive assessment is conducted to evaluate the panels' structural integrity and material resilience. Detailed analyses are carried out on any observed wear or stress points. The assessment is performed before and after the operations of the robotic system.

1.2 Testing Process

Preparing testing panels.

Running the robot 5000 times.

Conducting EL and flash tests.

Generating a comprehensive report.

2. Electrical Safety Test Report

2.1 Description:

Conducting electrical safety tests to ensure human safety during the operation of solutions.

This test involves testing the electrical components, ensuring a comprehensive assessment of the safety features inherent in the system. Checks are conducted to verify the sample's conformity to relevant safety standards and regulations.

The actual testing process involves subjecting the sample to a battery of rigorous electrical safety assessments. This includes evaluating insulation resistance, checking for potential leakage currents, and verifying the effectiveness of grounding systems.

Any anomalies or deviations from safety standards are thoroughly investigated. The comprehensive data collected during the test is compiled into a detailed Electrical Safety Test Report.

3. IP65 Testing

3.1 Description:

Ensuring product performance and suitability for outdoor applications exposed to dust, moisture, or water. IP65 testing, an International Electrotechnical Commission (IEC) to assess the degree of protection provided by enclosures for electrical equipment against the ingress of dust, water, and moisture. The IP65 rating specifically indicates the level of protection against solid objects (like dust) and liquid ingress (water) that an enclosure provides.

IP (Ingress Protection): This is a standard followed by the IEC to classify the level of protection provided by enclosures.

6 (Solid Particle Protection): The first digit (6 in this case) represents the level of protection against solid objects. A rating of 6 means the enclosure is dust-tight, offering complete protection against the ingress of dust or any solid particle.

5 (Liquid Ingress Protection): The second digit (5 in this case) indicates the level of protection against liquids. A rating of 5 means the enclosure is protected against water jets from all directions. While it's not completely waterproof, it can withstand water projected by a nozzle (with limited ingress permitted).

In practical terms, an IP65-rated device is well-suited for outdoor applications where it might be exposed to dust, rain, or moisture. It ensures that the enclosed electrical components are protected against dust ingress and can withstand water jets, making it suitable for use in challenging environmental conditions.

4. C4 Corrosion Test

4.1 Description:

The C4 Corrosion Test is a specialized assessment undertaken to gauge the material's susceptibility to localized corrosion, particularly in challenging environmental conditions. This testing process is paramount in ensuring the durability and resilience of the material when exposed to corrosive elements. By subjecting the material to the C4 corrosion test, identify any vulnerabilities or weaknesses that could compromise its integrity in demanding settings.

2 TARGET BENEFICIARIES

The targeted beneficiaries are Entrepreneurs from eligible territories in Jordan, willing to test solutions for water, energy, and food sectors or adapt products/services to address NEXUS challenges

3 ACTIVITY OUTCOMES

NEX-LABS Testing Vouchers aim to empower and provide researchers/innovators, entrepreneurs, and start-ups who are working on NEXUS-related technologies with access to physical space for testing and validating their innovations. The prospective beneficiaries will benefit from a needs assessment followed by testing services worth 5,000 euros. This voucher will grant them access to physical infrastructure and knowhow required to properly and objectively test or validate their NEXUS innovations (prototypes, products, services, materials, pilot processes, methods).

The service provider will work closely with the beneficiaries to validate their product by technical testing. the testing may be conducted internally or through other appropriate facilities.

The outcome of the beneficiary/service provider collaboration can be:

- Identification of early failure
- Performance evaluation
- Improved implementation
- Validate product-market fit
- Improve competitiveness

4 SELECTION CRITERIA

The service provider will be selected based on:

- Proposal and methodology suggested 80%
- Cost 20%

5 SPECIFIC TERMS

Contractual Expenses

- The conclusion of the contract will take place by private writing. All eventual expenses and taxes inherent in the stipulation of the contract and any of the contract and its possible registration, will be borne by the contractor.

- The successful bidder is committed to the stipulation of the contract from the moment of submission of the bid, while RSS remains committed from the moment of approval of the final award.
- The Service Provider is required to exercise fairness and confidentiality through the entire management process, with approval from RSS.

Contracting Authority Management

– Responsible body

The implementation of the contract will be under the authority of the Royal Scientific Society.

– Focal point

The sole responsibility for the procedure is Dr. Mohammed Aljafari. This contact person should be consulted in case of any question, or any problem arise during the evaluation process via email: m.aljafari@ipark.io

– Reporting

The services provider will submit to RSS, a final report that includes all carried out activities by the end of the implementation period.

– Application (How to Apply)

You will be kindly requested to submit your offer not later than 10 days from the tender announcement as the following:

- Technical Offer Technical and financial offers shall be submitted via emails: rss.procurement@rss.io, m.aljafari@ipark.io, s.azzam@ipark.io, ahmed.Abughoush@rss.io, malik.araidh@rss.io

– Technical Offer

The technical offer must include the following:

- a. “Technical offer” including the applicant’s reflections on the TOR of the RFQ (not simply repeating the TOR).
- b. Detailed methodology and implementation plan.
- c. Examples of testing capabilities related to the call.
- d. Completed, signed and stamped: “Completed Legal entity file”

– Financial Offer

Detailed and itemised Financial offer signed and dated.

Tenderers are reminded that the maximum budget available for this contract, is 5,000 EUR/voucher. Payments under this contract will be made in EUR currency.

– Personal DATA

1. Any personal data included in the contract shall be processed pursuant to Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. The data shall be processed solely for the purposes of the performance, management and monitoring of the contract by the Contracting Authority without prejudice to possible transmission to the bodies charged with monitoring or inspection in application of EU law. The Contractor shall have the right to access his/her personal data and to rectify any such data. Should the Contractor have any queries concerning the processing of his/her personal data, s/he shall address them to the Contracting Authority. The Contractor shall have right of recourse at any time to the European Data Protection Supervisor.
2. Where the contract requires processing personal data, the Contractor may act only under the supervision of the data controller, in particular with regard to the purposes of processing, the categories of data which may be processed, the recipients of the data, and the means by which the data subject may exercise his/her rights.
3. The data shall be confidential within the meaning of Regulation (EC) No 45/2001 of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data by Community institutions and bodies and on the free movement of such data. The Contractor shall limit access to the data to staff strictly needed to perform, manage and monitor the contract.
4. The Contractor undertakes to adopt technical and organisational security measures to address the risks inherent in processing and in the nature of the personal data concerned in order to: prevent any unauthorised person from having access to computer systems processing personal data.