



REQUEST FOR QUOTATION NO. RfQ26/03261:

Supply of Materials Testing Laboratory Equipment for the Green Tech Hub (TUM)

SECTION 1: REQUEST FOR QUOTATION (RFQ)

The United Nations Development Programme (UNDP) is implementing the Green Transition Project and is seeking quotation from a qualified companies to supply materials testing laboratory equipment for the Green Tech Hub within the Technical University of Moldova (TUM) as detailed in line items section of this **Request for Quotation no. 26/03261 “Supply of Materials Testing Laboratory Equipment for the Green Tech Hub (TUM)”**.

This Request for Quotation comprises the following documents:

Section 1: This RFQ document generated by the online system

Section 2: General instructions

Section 3: Special instructions

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4: Technical Responsiveness Table

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted directly in the system responding to the questions and uploading required documents by the date and time indicated in the online portal. It is your responsibility to ensure that your quotation is submitted before the deadline. Quotations received after the submission deadline outside the online portal, for whatever reason, will not be considered for evaluation.

Quotations must be submitted directly in Quantum NextGenERP supplier portal following the link: <http://supplier.quantum.partneragencies.org> using the profile you may have in the portal (please log in using your username and password).

Follow the instructions in the user guide to search for the tender using search filters, namely **Negotiation ID: UNDP-MDA-00992** and subscribe to the tender in order to get notifications in case of amendments of the tender document and requirements.

In case you have never registered before, follow this link to register a profile:
<https://estm.fa.em2.oraclecloud.com/fscmUI/redwood/supplier-registration/register-supplier/register-supplier-verification?id=TUW16eK6gsD94MNMxATNMoYCOHny7FmchTkUZsdOqrAW4sy6L5xSAB033Q%3D%3D>

Please note that the access link to the Supplier registered profile is sent from Oracle within up to 3 days. In case you have not received the access link after 3 days since registration, you should address for support to UNDP at the email address: sc.md@undp.org. In case you encounter errors with registration (e.g. system states Supplier already is registered), you should address for support to UNDP at the email address: sc.md@undp.org.

Computer firewall could block *oracle* or *undp.org* extension and Suppliers might not receive the Oracle notifications. Please turn down any firewalls on your computers to ensure receipt of email notification.

Do not create a new profile if you already have one. Use the forgotten password feature in case you do not remember the password or the username from previous registration.

Should you require further clarifications on the application through the Quantum online portal, kindly contact the Procurement Unit at sc.md@undp.org. Please pay attention that the bid shall be submitted online through the Quantum system and any bid sent to the above email shall be disqualified.

Should you require further clarifications on the Request for Quotation, Terms of Reference or other requirements, kindly communicate using the messaging functionality in the portal.

Deadline for Submission of Offers (Date and Time), which is visible in the online procurement system will be final. System will not accept submission of any bid after that date and time. It is the responsibility of the bidder to make sure that the bid is submitted prior to this deadline for submission.

Bidders are advised to upload bid documents and to submit their offer a day prior or well before the date and time indicated under the deadline for submission of Offers. Do not wait until last minute. If Bidder faces any issue during submitting offers at the last minutes prior to the deadline for submission, UNDP may not be able to assist on such a short notice and will not be held liable in such instance. UNDP will not accept any offer that is not submitted directly through the System.

Thank you and we look forward to receiving your quotation.

UNDP Moldova



SECTION 2: GENERAL INSTRUCTIONS

Introduction	<p>Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement</p> <p>Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.</p> <p>UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or cancellation of the tender in the online portal.</p>
Deadline for the Submission of Quotation	<p>Deadline is indicated in the online portal.</p> <p>If any doubt exists as to the time zone in which the quotation should be submitted, refer to http://www.timeanddate.com/worldclock/.</p>
Method of Submission	<p>Quotations must be submitted as follows:</p> <p>NextGenERP supplier portal following this link: http://supplier.nextgenerp.partneragencies.org/ using the profile you may have in the portal.</p> <p>Follow the instructions in the user guide to search for the tender using Negotiation ID. In case you have never registered before, follow this link to register a profile:</p> <p>https://estm.fa.em2.oraclecloud.com/fscmUI/redwood/supplier-registration/register-supplier/register-supplier-verification?id=TUW16eK6qsD94MNMxATNMoYCOHny7FmchTkUZsdOqrAW4sy6L5xSAB033Q%3D%3D</p> <p>Do not create a new profile if you already have one. Use the forgotten password feature in case you do not remember the password or the username from previous registration.</p> <ul style="list-style-type: none">▪ File Format: All attachments must be in PDF format unless otherwise instructed by UNDP.▪ File names must be in Latin alphabet/keyboard and clearly indicate the content of the document to facilitated review.▪ All files must be free of viruses and not corrupted.
Cost of preparation of quotation	<p>UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.</p>

<p>Supplier Code of Conduct, Fraud, Corruption,</p>	<p>All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes principles on labour, human rights, environment and ethical conduct may be found at: https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</p> <p>Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</p>
<p>Gifts and Hospitality</p>	<p>Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.</p>
<p>Conflict of Interest</p>	<p>UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified.</p> <p>Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this RFQ.</p> <p>The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFQ, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid.</p>
<p>Currency of Quotation</p>	<p>Quotations shall be quoted in the currency indicated in the portal.</p>

Joint Consortium Association	Venture, or If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture, Consortium or Association. Refer to Clauses 19 – 24 under Solicitation policy for details on the applicable provisions on Joint Ventures, Consortium or Association.
Only one Bid	The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or Association, as the lead entity of such Joint Venture, Consortium or Association. Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following: a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or b) they have the same legal representative for purposes of this RFQ; or c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process; d) they are subcontractors to each other’s Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
Price variation	No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during the validity of the quotation after the quotation has been received.
Alternative Quotes	If alternative quote is permitted, it may be submitted only if a conforming quote to the RFQ requirements is submitted. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative quote. If multiple/alternative quotes are being submitted, they must be clearly marked as “Main Quote” and “Alternative Quote” directly in the portal and in any supporting document as relevant.
Contact Person for correspondence, notifications and clarifications	Must be submitted directly in the portal using the messaging functionality. Any delay in UNDP’s response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

Right not to accept any quotation	UNDP is not bound to accept any quotation, nor award a contract or Purchase Order
Right to vary requirement at time of award	At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.
Publication of Contract Award	UNDP will publish the contract awards on the websites of the CO and the corporate UNDP Web site.
Policies and procedures	This RFQ is conducted in accordance with UNDP Programme and Operations Policies and Procedures
UNGM registration	Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the appropriate level on the United Nations Global Marketplace (UNGM) website at www.ungm.org . The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is selected for Contract award, the Bidder must register on the UNGM prior to contract signature.



SECTION 3: SPECIAL INSTRUCTIONS

General Conditions of Contract	<p>Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to one of the General Conditions of Contract below as applicable in each case specified in the Requirements section</p> <p>Applicable GTC:</p> <p><input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions for Contract.</p> <p>Applicable Terms and Conditions and other provisions are available at https://www.undp.org/procurement/business/how-we-buy</p>
Special Conditions of Contract	<p><input checked="" type="checkbox"/> Cancellation of PO/Contract if the delivery/completion is delayed by 30 days</p> <p><input checked="" type="checkbox"/> Liquidates damages shall be imposed as follows: Percentage of contract price per week of delay: 2.5% up to a maximum of 10%, after which UNDP may opt to terminate the contract.</p>
Duties and taxes	<p>Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise specified in the requirements section.</p> <p>All prices must:</p> <p><input checked="" type="checkbox"/> be exclusive of VAT and other applicable indirect taxes</p>
Eligibility	<p>A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations. Failure to do so may result in termination of any contract or PO subsequently issued to the vendor by UNDP.</p> <p>It is the Bidder's responsibility to ensure that its ultimate beneficial owners, employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.</p> <p>Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative.</p>
Language of quotation	<p><input checked="" type="checkbox"/> English or Romanian or Russian</p> <p>Including documentation including catalogues, instructions and operating manuals.</p>
Quotation validity period	<p>Quotations shall remain valid for 90 (ninety) days from the deadline for the Submission of Quotation.</p>
Partial Quotes	<p><input checked="" type="checkbox"/> Permitted per LOT</p>
Alternative Quotes	<p><input checked="" type="checkbox"/> Not permitted</p>
Payment Terms	<p><input checked="" type="checkbox"/> 100% within 30 days after receipt of goods, services, works (if applicable) and submission of payment documentation.</p>

Currency	<p>Moldovan Leu (MDL) for local companies and US Dollars (USD) for international companies</p> <p>For the comparison of the financial offer, at the stage of evaluation, all bids will be transferred to US Dollars based on UN Operational Rate of Exchange on the day of deadline of the competition:</p> <p>https://treasury.un.org/operationalrates/OperationalRates.php</p> <p>UNDP shall not be kept liable for any fluctuations of the exchange market during contract implementation, the Contractor being legally responsible to register any loss/gain of currency exchange resulting from payments against the Contract in accordance with the national legislation.</p>
Liquidated damages	<p>Will be imposed as follows:</p> <p>Percentage of contract price per week of delay: 2.5% up to a maximum of 10% of the Contract value, after which UNDP may opt to terminate the contract.</p>
Conditions for Release of Payment	<p><input checked="" type="checkbox"/> Passing Inspection.</p> <p><input checked="" type="checkbox"/> Complete Installation.</p> <p><input checked="" type="checkbox"/> Commissioning.</p> <p><input checked="" type="checkbox"/> Passing all Testing.</p> <p><input checked="" type="checkbox"/> Completion of Training on Operation and Maintenance (if applicable)</p> <p><input checked="" type="checkbox"/> Written Acceptance of Goods, Services and Works, based on full compliance with RFQ requirements</p>
Clarifications	<p>Bidders must send their inquiries and requests for clarifications using the messaging functionality in the portal.</p> <p>PLEASE PAY ATTENTION: QUOTES SHALL NOT BE SUBMITTED TO ANY EMAIL ADDRESS BUT ONLY THROUGH THE PORTAL.</p> <p>Requests for clarification from bidders will not be accepted any later than 3 (three) days before the submission deadline. Responses to request for clarification will be communicated directly in the portal.</p>
Documents to be submitted	<p><input checked="" type="checkbox"/> Annex 2: Quotation Submission Form duly completed and signed</p> <p><input checked="" type="checkbox"/> Annex 3: Technical and Financial Offer duly completed and signed and in accordance with the Schedule of Requirements in Annex 1</p> <p><input checked="" type="checkbox"/> Annex 4: Technical Responsiveness Table duly completed and signed</p> <p><input checked="" type="checkbox"/> Company Profile, including relevant portfolio/previous corporate experience in similar fields related to the assignment</p> <p><input checked="" type="checkbox"/> Copy of registration documents</p> <p><input checked="" type="checkbox"/> Income Statement and Balance Sheet for the past three years (2022-2024)</p> <p><input checked="" type="checkbox"/> List of completed and/or ongoing contracts for similar goods supplied within the past 2 (two) years including the following information:</p> <ul style="list-style-type: none"> • Name of previous contracts • Client and reference Contact • Contact details, including e-mail • Contract Value and period of activity

	<p><i>Copies of relevant contracts provided might be requested during the evaluation process.</i></p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Product Data Sheet, catalogues and/or brochures for the offered goods, etc. <input checked="" type="checkbox"/> Certificates of quality, where applicable (ISO, CE or equivalents) and statement(s) of country of origin for the offered goods <input checked="" type="checkbox"/> Statement of Warranty for the offered goods in accordance with the Annex 1: Schedule of Requirements <input checked="" type="checkbox"/> List and brief description of qualified technical personnel (roles and qualifications) only where required for the Lot(s) applied for, necessary for activities such as installation, commissioning, calibration, testing and training of operator(s)/end-users. <i>This requirement shall apply only to Lot(s) involving such services</i> <input checked="" type="checkbox"/> Statement of availability of a local representative/dealer/service partner in the Republic of Moldova to handle warranty/hardware repair issues, ensuring comprehensive after-sales services; details such as name and address of the local representative/dealer shall be provided <input checked="" type="checkbox"/> Statement of satisfactory performance/references from at least 2 (two) clients for similar assignments <input checked="" type="checkbox"/> Environmental Compliance Certificates, Accreditations, if any <input checked="" type="checkbox"/> Export/Import Licenses, if applicable <input checked="" type="checkbox"/> Manufacturer's Authorization Form (MAF) or equivalent authorization letter, where the Bidder is not the manufacturer, confirming the Bidder's right to supply the offered goods and ensuring validity of warranty and after-sales support
Evaluation method	<input checked="" type="checkbox"/> The Contract will be awarded to the lowest price substantially compliant offer
Evaluation criteria	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Full compliance with all requirements as specified in Annex 1 <input checked="" type="checkbox"/> Full acceptance of the General Conditions of Contract <input checked="" type="checkbox"/> Be a legally registered entity or a consortium of firms/organizations <input checked="" type="checkbox"/> Minimum of 2 (two) years of experience in the field of supply of similar specialized equipment <input checked="" type="checkbox"/> Minimum 1 similar contract (in terms of type and nature of goods supplied) implemented within the past 2 (two) years <input checked="" type="checkbox"/> Maximum delivery period not to exceed 60 calendar days for Lots 3, 4, 5 and 90 calendar days for Lots 1 and 2 <input checked="" type="checkbox"/> Minimum warranty as determined per each Lot <input checked="" type="checkbox"/> Availability of a local representative/ dealer/ partner to handle warranty/hardware repair issues ensuring the comprehensiveness after-sales services
Type of Contract to be awarded	<input checked="" type="checkbox"/> Contract Face Sheet (Goods and-or Services)
Expected date for contract award	End of June 2026

ANNEX 1: SCHEDULE OF REQUIREMENTS

I. Project Background Information

On 23rd of June 2022, the European Council granted the Republic of Moldova the status of EU candidate country which is a substantial achievement, but which comes with great responsibilities and obligations. One of such obligation is the “Green Agenda and Sustainable Connectivity” which includes Chapters of the environment and climate change acquis. In this sense, meaningful reform is expected in view of European Green Deal targets.

The Green Transition Project takes due account of this endeavor. Hence, it will put in place the enabling conditions for a green transformation in Moldova through a combination of cross-sectorial decision-making in joint stakeholder platforms, capacity building measures, general education and awareness raising, dissemination of best policy practices, information sharing and networking, as well as pilot-testing green-transition related solutions and other activities, to ensure that the green transition concept is well understood and implemented.

The established enabling conditions and the investments into green-transition solutions will respond to the key development challenges that the country is currently dealing with such as climate change, environmental pollution, and the energy crisis.

It is well acknowledged that Moldova is highly vulnerable to climate change, given the limited resources and institutional capacities to address the climate change impacts. It is also due to the heavy reliance on the agricultural sector, water scarcity and other geographical factors. Currently the country is advancing with the national adaptation planning, including in the agricultural sector, aimed at putting in place proper institutional, technical, and budgeting capacities in the context of climate change, however significant gaps remain in embarking of the sectors into achievement of the long-term adaptation targets.

Environmental degradation is also posing a major threat to Moldova’s development agenda as its economy relies greatly on natural resources which leads to their overexploitation and pollution. Inadequate waste management practices and outdated practices and technologies in the key sectors of the economy also contribute to the environmental degradation and pollution. Mainstreaming of the green agenda into the country’s economic activities is taking place slowly.

Moldova is in line with the global trend of continuously growing urbanization, with the proportion of the population living in urban areas expected to rise from 47% in 2010 to 60% in 2030 (UN Habitat). Cities are increasingly and significantly contributing to the main drivers of global environmental degradation. The municipalities have the greatest impact on air quality and are responsible for more than 50% of total air pollution in Moldova.

From energy security perspective – Moldova is highly dependent on imported energy sources and rely mostly on the use of fossil fuels. In addition, inefficient energy supply and consumption across all sectors exacerbate the situation. Until recently being 100% dependent on Russian gas import, the country is actively seeking diversification of energy supplies after the war of aggression in Ukraine. Improvements both in energy efficiency and in the development of domestic resources – including renewable energy resources – for strengthened sustainability, competitiveness, and energy security rank high on the political agenda. Energy sector and the main source of GHG emissions in the country.

Against this background, the Green Transition Project aims to support the Government of Moldova to engage sustainably in a transformative green agenda by enhancing awareness, building capacities, and encouraging investments into low-emission and resource efficient economy.

The target areas of the project are resource efficiency, green and circular economy, cleaner and sustainable energy, and mobility.

The Project is to be implemented under the following three specific components:

1. Socio-economic framework for a gender-responsive and inclusive green transition enabled.
2. Capacity and awareness on the inclusive green transition increased among key stakeholders.
3. Additional funding attracted by promoting and piloting investments in green and innovative technologies, while evidence-based decision-making for green transition is improved by deploying a reliable air quality monitoring system.

The implementation period of the project is 48 months, and the total budget is 10 mln EUR.

The GreenTech Hub is a strategic national initiative designed to accelerate the transition of the Republic of Moldova toward a green, circular, and climate-resilient economy by integrating applied research, education, innovation, and collaboration with the private sector.

Hosted by the Technical University of Moldova and developed with the support of institutional and development partners, the GreenTech Hub is conceived as a platform for testing, validating, and demonstrating sustainable technological solutions in key sectors such as construction, infrastructure, materials, energy, circular economy and climate resilience.

A core component of the GreenTech Hub is the development of modern laboratory capacities for materials testing, structural performance assessment, and evaluation of behavior under real and simulated conditions. In this context, the establishment of a specialized laboratory within the Faculty of Construction, Geodesy and Cadaster is both technically and strategically justified. The faculty has long-standing expertise in construction materials, structural engineering, geotechnics, and infrastructure, making it a natural anchor for applied research, experimental testing, and technology validation activities within the Hub.

The physical and functional proximity of the Faculty of Construction, Geodesy and Cadaster to the Faculty of Urbanism and Architecture creates a unique opportunity for an integrated, interdisciplinary ecosystem. This adjacency enables close collaboration between architecture, urban planning, structural engineering, and materials science, allowing sustainable design concepts to be directly tested, validated, and optimized based on laboratory data. Such an approach strengthens the quality of design and planning processes and supports evidence-based decision-making in the development of resilient and sustainable built environments.

At the same time, the laboratory will directly support the objectives of the green economy by fostering research and innovation in energy-efficient materials, sustainable construction systems, and climate-resilient infrastructure. Advanced testing capacities, including mechanical testing, seismic simulation, non-destructive testing, geotechnical analysis, and 3D scanning, will allow for the assessment of materials

and structures against safety, durability, energy efficiency, and environmental performance requirements, in line with European and international standards.

The Green Tech Hub 's core objectives are to:

- Develop Green Skills and Applied Education

Strengthen education, training, and upskill in the green economy by integrating GreenTech Hub technologies and laboratories into university curricula, applied learning, and professional training for students, professionals, and public sector actors.

- Enable Applied Research and Technology Validation

Provide modern laboratory infrastructure to support applied research, testing, simulation, and validation of green, circular, and climate-resilient solutions in construction, infrastructure, materials, energy, and environmental technologies.

- Accelerating Green Innovation and Entrepreneurship

Support green startups, SMEs, and solution providers through incubation, acceleration, mentoring, and access to testing facilities, markets, and international networks, fostering sustainable and circular business models.

- Support Green Policy Implementation and Public Sector Innovation

Assist public authorities in piloting green solutions, applying green public procurement and regulatory sandboxes, and advancing sustainable urban development and infrastructure policies aligned with European standards.

From a circular economy perspective, the establishment of a materials testing laboratory within the GreenTech Hub is critical for the evaluation and validation of alternative, recycled, and secondary construction materials. The laboratory will enable testing of mechanical, physical, and durability properties of materials derived from construction and demolition waste, as well as other residual or by-product materials. This capacity is essential for supporting the shift from a linear “take-make-dispose” model to a circular model focused on reuse, recycling, and resource efficiency. By enabling scientific validation and certification-oriented testing, the laboratory will facilitate the market uptake of circular construction materials and contribute to reducing waste and carbon emissions in the construction sector.

By integrating the materials testing laboratory into the GreenTech Hub, the Technical University of Moldova will strengthen the connection between academia, the private sector, startups, public authorities, and international partners. The laboratory will serve not only as an educational and research facility, but also as a shared testing and demonstration platform for companies developing green and circular solutions, pilot projects, and innovative construction technologies. In this way, the GreenTech Hub will act as a catalyst for innovation, skills development, and green job creation, while positioning the Republic of Moldova as an emerging hub for sustainable construction, circular materials, and resilient infrastructure solutions.

II. Objective of the assignment

The United Nations Development Programme (UNDP) Moldova intends to contract a qualified and experienced company/consortium of companies (per each Lot) specialized in the supply, installation, calibration and testing of laboratory equipment (hereinafter referred to as “the Company”) for the establishment and operationalization of a specialized Materials Testing Laboratory within the GreenTech Hub (GTH).

The GreenTech Hub is an applied innovation and research platform designed to promote sustainable construction materials, circular economy solutions, energy efficiency, and green technologies. The laboratory will serve educational, research, and industry collaboration purposes, contributing to strengthening Moldova’s technical capacities in sustainable construction and materials performance testing.

The final direct beneficiary of this endowment is the Technical University of Moldova (TUM), hereinafter referred to as “TUM”. The equipment will be installed and operated within the GreenTech Hub premises located at:

Faculty of Construction, Geodesy and Cadaster, Block 10

Technical University of Moldova
41 Dacia Blvd., Chisinau, Moldova

For the Lot(s) requiring installation and setup, the equipment shall be delivered, installed, commissioned, and made operational in the dedicated space allocated within the Green Tech Hub (GTH). The installation site has already been prepared, and the necessary access and utilities, as applicable, are available and connected to support the installation and operation of the equipment.

III. Implementation, Delivery, Compliance and Acceptance Requirements

The Contractor(s) shall ensure compliance with the technical, safety, warranty, customs, and delivery requirements specified in this RFQ.

The RFQ is organised as five (5) Lots covering seven (7) items. ***Where a lot contains more than one item, bidders shall offer all items within that Lot. Bidders may apply for multiple Lots.***

List of Items and expected delivery:

LOT #	Deliverables, Description of Goods and Related Services	Estimated Delivery
Lot 1: Structural Testing Equipment	1.1 Scale Shake Table System (biaxial), including delivery, installation, commissioning, functional testing, operator training, and handover of manuals, technical documentation, calibration/conformity documentation (where applicable).	up to 90 days from Contract signature

Lot 2: Concrete Testing Equipment	2.1 Automatic Concrete Testing Press – 3000 kN, including delivery, installation, commissioning, calibration / verification, functional testing, operator training, and handover of manuals, technical documentation, calibration/conformity documentation (where applicable).	up to 90 days from Contract signature
Lot 3: Non-Destructive Concrete Testing Equipment	3.1. Rebar Detector / Cover Meter, including delivery, functional demonstration, basic user instruction, and handover of manuals and warranty / conformity documentation. 3.2. Concrete Sclerometer (SCHMIDT Hammer), including delivery, functional demonstration, basic user instruction, and handover of manuals and warranty / conformity documentation.	up to 60 days from Contract signature
Lot 4: LiDAR Scanning System	4.1 Portable LiDAR Scanning System with RTK GNSS, including delivery, setup and configuration, functional testing, user training, and handover of manuals, software access, and technical documentation.	up to 60 days from Contract signature
Lot 5: Geotechnical/lab preparation equipment	5.1. Laboratory Drying Oven, including delivery, basic setup, functional verification, basic user instruction, and handover of manuals and conformity / calibration documentation, where applicable. 5.2 Semi-automatic Liquid Limit Penetrometer, including delivery, basic setup, functional verification, basic user instruction, and handover of manuals and conformity / calibration documentation, where applicable.	up to 60 days from Contract signature

Acceptance, Verification and Handover Procedures:

For all Lots, acceptance shall require:

- Delivery of complete equipment, including all components and accessories
- Submission of required documentation, including, but not limited to:
 - user manuals
 - technical documentation
 - calibration/conformity certificates (where applicable)

- warranty documentation
- software license details and access credentials (where applicable)
- Visual inspection confirming absence of defects, damage or missing parts

Technical confirmation by the designated beneficiary (TUM), where relevant, and acceptance by UNDP Moldova/Green Transition project that the equipment corresponds to the technical specifications.

Lot-specific Acceptance Procedures:

Lot 1: Structural Testing Equipment

1.1 Scale Shake Table System (Biaxial)

Acceptance shall include:

- verification of complete delivery of the system, including components, software, and accessories.
- verification of proper installation and setup.
- successful commissioning of the system.
- functional testing of motion control and data acquisition.
- verification of software operation and access.
- completion of 2 users/operators training.
- submission of manuals, warranty documents, and calibration/conformity documentation, where applicable.

Lot 2: Concrete Testing Equipment

2.1 Automatic Concrete Testing Press

Acceptance shall include:

- verification of complete delivery of the equipment and accessories.
- proper installation and setup.
- successful commissioning and functional testing.
- verification of machine operation, load control, and display/control functions.
- submission of calibration / verification certificate (Class 1).
- completion of 2 users/operators training.
- submission of manuals.
- warranty documents.
- technical documentation.

Lot 3: Non-Destructive Concrete Testing Equipment

3.1. Rebar Detector / Cover Meter

Acceptance shall include:

- verification of complete delivery of the device and accessories.
- functional demonstration of the device, if applicable.
- verification of included software/app, if applicable.

- submission of factory calibration and/or conformity certificate.
- submission of manuals and warranty documentation.

No installation or commissioning is required. Basic functional demonstration at handover shall be sufficient.

3.2. Concrete Sclerometer (Schmidt Hammer)

Acceptance shall include:

- verification of complete delivery of the device and accessories.
- functional demonstration of the device, if applicable.
- verification of the reference test anvil, where included/applicable.
- submission of factory calibration and/or conformity certificate.
- submission of manuals and warranty documentation.

No installation or commissioning is required. Basic functional demonstration at handover shall be sufficient.

Both items (3.1. and 3.2.), under Lot 3, shall be accepted together; partial acceptance is not foreseen.

Lot 4: LiDAR Scanning System

4.1 Portable LiDAR Scanning System with RTK GNSS

Acceptance shall include:

- verification of complete delivery of the system, including hardware, RTK-related components, software, batteries, chargers, cables, and accessories.
- successful setup and configuration of the system.
- demonstration of scanning functionality and sample data acquisition.
- verification of data export in required formats (LAS / LAZ / XYZ / DXF).
- verification of software access, license validity, and basic operational functionality.
- completion of user/operator training.
- submission of manuals, technical documentation, conformity documents, and warranty documentation.

Lot 5 – Geotechnical / Laboratory Equipment

5.1. Laboratory Drying Oven

Acceptance shall include:

- verification of complete delivery of the oven and accessories.
- basic setup and positioning.
- functional verification of temperature control and general operation.
- submission of conformity and/or calibration documentation, where applicable.
- submission of manuals and warranty documentation.

No commissioning is required. Functional verification at handover shall be sufficient.

5.2. Semi-automatic Liquid Limit Penetrometer

Acceptance shall include:

- verification of complete delivery of the equipment and all accessories, including cone, cups, and related components.
- basic setup and verification of operation.
- functional demonstration of the penetration and measurement system, if applicable.
- submission of calibration and/or conformity certificate.
- submission of manuals and warranty documentation.

No commissioning is required. Functional demonstration at handover shall be sufficient.

Both items (5.1. and 5.2.), under Lot 5, shall be accepted together; partial acceptance is not foreseen.

Handover and Acceptance Documentation:

Upon successful acceptance, the Contractor shall submit:

- Delivery note / handover protocol signed by both parties;
- List of delivered equipment and accessories;
- All required documentation and certificates;
- Training completion confirmation (where applicable).

Rejection and Remedy:

If the equipment does not meet the required specifications or fails to demonstrate proper functionality:

- UNDP reserves the right to **reject the equipment**
- The Contractor(s) shall, at their own cost:
 - repair, replace, or adjust the equipment
 - ensure compliance within a reasonable timeframe agreed with UNDP

IV. Institutional Arrangements

The Contractor(s) shall coordinate all activities under the Contract(s) with the Green Transition Project Business Development Manager, under the overall supervision of the Green Transition Project Manager, UNDP Moldova. The Green Transition Project, shall provide all available and relevant background documentation, facilitate initial contacts, support communication with relevant stakeholders, and ensure access to project sites, as required.

The Contractor(s) shall ensure the availability of adequate human resources, technical capacity, equipment, and working materials necessary for the timely and high-quality delivery of goods and correlative services at all stages of the assignment.

Prior to delivery and/or commencement of the related services, the Contractor(s) shall participate in a coordination meeting with representatives of UNDP Moldova / Green Transition Project and TUM, as applicable, to confirm the implementation arrangements, delivery schedule, site readiness, coordination mechanisms and other aspects related to a successful delivery of the equipment and correlative services.

Financial Arrangements:

Payments shall be made upon delivery and acceptance of the goods and related services specified in **Annex 1: SCHEDULE OF REQUIREMENTS**.

Payment for the goods and related services shall be made upon satisfactory delivery of the goods and related services specified in Annex 1, and upon certification by the Green Transition Project Manager that the goods and related services have been satisfactorily delivered and performed.

All goods and related services envisaged under the Contract(s) shall be subject to review, coordination, and acceptance in accordance with the Acceptance, Verification and Handover Procedures. Such review and acceptance shall be carried out by the Business Development Manager and further endorsed by the Project Manager within 14 calendar days from the date of submission.

Technical Specifications for Goods:

In relation to all goods below listed it is expected that delivery transport costs, unloading at the delivery site, installation, commissioning, testing, training (where applicable) etc. will be provided by the Bidder/Contractor.

Note on tolerances and equivalents: where physical dimensions, weights or non-functional parameters are stated as fixed values, they shall be interpreted as indicative with a tolerance of $\pm 10\%$ unless otherwise specified. Where parameters are stated with the qualifier “ \geq ” (greater than or equal to) or “ \leq ” (less than or equal to), the stated value is a strict minimum or maximum respectively. Equivalent products meeting or exceeding the functional requirements shall be accepted; the bidder shall justify equivalence in Annex 4 (Technical Responsiveness Table).

Item	Requirements / Specifications	Unit	Qty	
Lot 1: Structural Testing Equipment				
1.1	Scale Shake Table System (Biaxial)	set	1	
General Description	Laboratory seismic simulation system designed to reproduce seismic and dynamic motions acting on structural models for research, validation, and academic training. The system shall be suitable for use in civil/structural engineering laboratories and for simulation of real earthquake records and user-defined waveforms.			
System Components	<ul style="list-style-type: none">• Mobile testing platform• Actuation system: servo electromechanical• Digital controller for seismic signal generation• Acceleration and displacement sensors• Control and data acquisition software (with unlimited validity no mandatory subscription for basic functionality)			
Minimum Functional Requirements	<ul style="list-style-type: none">• Controlled motion along at least two horizontal axes• Adjustable operating frequency• Load capacity suitable for structural models• Capability to simulate real earthquake accelerograms• PC interface for programming and data analysis			

<p>Technical Specifications</p>	<ul style="list-style-type: none"> • Configuration: Biaxial • Table size: minimum 500 × 500 mm • Payload capacity: minimum 50 kg • Stroke: minimum ±100 mm • Operational frequency: minimum 20 Hz • High-precision linear guideway (low friction) • Earthquake simulation – arbitrary user-defined waveforms • Standard waveforms (Sine, Triangle, etc.) • Integrated digital controller • Control & data acquisition software included • Power supply: 220–240 V, 50 Hz • Plug & play operation • Industrial-grade, low maintenance
<p>Standards & Compliance</p>	<p>The system shall be designed, manufactured, and tested in accordance with applicable international good practice for laboratory vibration and dynamic testing equipment, including but not limited to:</p> <ul style="list-style-type: none"> • The equipment shall be designed in accordance with recognized machinery safety and risk-reduction principles, such as ISO 12100, or equivalent. • The electrical and control components of the system shall comply with applicable safety and EMC requirements for laboratory and measurement equipment, such as IEC 61010-1 and/or IEC 61326-1, or equivalent. • Where accelerometers, displacement sensors, or other vibration transducers are included, such sensors shall be factory calibrated in accordance with recognized manufacturer procedures and/or applicable international standards for vibration transducers, such as the ISO 16063 series, where applicable. • The manufacturer shall operate under a certified quality management system (e.g. ISO 9001). Equivalent internationally recognised standards shall be accepted. • The shake table system shall be suitable for use in laboratory environments, including those operating in accordance with ISO/IEC 17025, where applicable
<p>Calibration & Verification</p>	<p>Included sensors (e.g. accelerometers, displacement sensors), where applicable, shall be factory calibrated by the manufacturer. Calibration certificates and/or conformity documentation shall be provided upon delivery, where applicable. Functional verification shall be carried out during installation/ commissioning.</p>
<p>Additional Requirements</p>	<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • On-site or remote installation and commissioning included • On-site training for 2 users/operators included (Romanian/ Russian - for minimum 1 day, on-site): system operation, safety procedures, data acquisition and analysis, basic maintenance • User and operation manual(s), technical documentation (incl. maintenance guidelines if applicable) in English/Romanian/ Russian • Delivery, installation, commissioning, testing and training included in price

	<ul style="list-style-type: none"> Performance curves indicating the relationship between payload, stroke, and frequency to be provided (maximum values are not required to be achieved simultaneously).
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Item	Requirements / Specifications	Unit	Qty	
Lot 2: Concrete Testing Equipment				
2.1	Automatic Concrete Compression Testing Press – 3,000 kN	pcs	1	
General Description	Equipment for compressive strength testing of concrete, mortar and other construction materials in accordance with international standards, in laboratory conditions.			
System Components	<ul style="list-style-type: none"> Rigid compression frame Hydraulic loading system Automatic load control system Digital display and electronic control unit Safety and overload protection system 			
Minimum Functional Requirements	<ul style="list-style-type: none"> Load Capacity: minimum 3,000 kN Accuracy $\pm 1\%$ (Class 1 calibration) Automatic loading-rate control Digital display of load and test parameters Compatibility with testing of concrete cubes and cylinders PC connectivity and data acquisition, storage export capability 			
Technical Specifications	<ul style="list-style-type: none"> Capacity: minimum 3000 kN Accuracy $\pm 1\%$ (Class 1 calibration) or better Vertical clearance: minimum 330 mm Horizontal clearance: minimum 270 mm Compression platens: minimum \varnothing 250 mm Maximum piston stroke: minimum 50 mm Power: 220–240 V, 50-60 Hz <p>Digital control unit with automatic load rate control, touchscreen display, data acquisition and storage capability, minimum 2 USB ports, and PC connectivity / data export functionality</p>			
Standards & Compliance	<p>The offered concrete compression testing machine shall comply with the applicable internationally recognized standards for compression testing machines and force verification, including: EN 12390-4 – Compression testing machines for concrete; EN ISO 7500-1 – Verification of force-measuring systems, and/or equivalent internationally recognized standards. The force-measuring system of the machine shall be verified and calibrated in accordance with the applicable standard and shall demonstrate Class 1 accuracy.</p> <p>A valid calibration / verification certificate shall be provided upon delivery and/or commissioning.</p> <p>Where applicable, the manufacturer shall operate under a certified quality management system, such as ISO 9001, or equivalent.</p>			
Calibration & Verification	<p>Factory calibrated. Calibration certificate (Class 1 accuracy) shall be provided upon delivery. Functional verification shall be carried out during commissioning.</p>			

Additional Requirements	<ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • On-site installation and commissioning included • User manual, technical documentation, calibration certificate, and warranty certificate included, in English/Romanian/ Russian • On-site training for 2 users/operators included (Romanian/ Russian) • Delivery, installation, commissioning, testing and training included in price
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Item	Requirements / Specifications	Unit	Qty	
Lot 3: Non-Destructive Concrete Testing Equipment				
<i>Lot 3 contains two (2) items. Bidders shall offer both items 3.1 and 3.2 together; partial offers within Lot 3 will not be accepted.</i>				
3.1	Rebar Locator / Profometer (Cover Meter)	pcs	1	Lot 3
General Description	Portable non-destructive testing device used to locate reinforcement bars in concrete, measure cover depth, and estimate bar diameter.			
System Components	<ul style="list-style-type: none"> • Electromagnetic / eddy-current scanning unit • Detection probe • Digital display (high-contrast, e.g. OLED or equivalent) • Analysis /data handling software and/or app 			
Functional Requirements	<ul style="list-style-type: none"> • Determination of reinforcement depth • Estimation of bar diameter • Portable operation • Data storage and export • High measurement accuracy 			
Technical Specifications	<ul style="list-style-type: none"> • Technology: eddy-current or equivalent electromagnetic detection technology • Measurement depth: minimum 180 mm • Measurement accuracy: ± 1 mm to ± 4 mm (depending on depth) • Rebar diameter detection depth: minimum 60 mm • Rebar diameter measurement accuracy: \pm one rebar size • Encoder accuracy: ± 0.5 mm or $\pm 0.5\%$ of measured length (whichever is greater) • Maximum scanning speed: minimum 0.5 m/s • Maximum line scan distance: minimum 1 km • Connectivity: wireless (Bluetooth) and/or wired • Ingress protection: IP54 • Data export to PC and/or mobile device • Rechargeable and/or replaceable battery • Suitable for indoor and outdoor use under standard site conditions 			
Standards & Compliance	The offered rebar locator / cover meter shall comply with applicable internationally recognized standards and guidance for electromagnetic determination of reinforcement location and concrete cover, including BS 1881-204:1988, or equivalent. The equipment shall be supplied with a valid calibration and/or conformity certificate, issued by the manufacturer. Equivalent internationally recognized standards shall be accepted.			

Calibration & Verification	Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. No on-site calibration required; the Contractor shall demonstrate proper functioning during delivery or handover (on-site or remotely).			
Additional Requirements	Additional Requirements: <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Software/app included; no mandatory subscription for basic functionality • Basic user instruction or demonstration (on-site or remotely in Romanian/ Russian) • User manual, technical documentation, warranty certificates included in English/Romanian/ Russian • Delivery, user instruction and demonstration included in price 			
3.2	Concrete Sclerometer (Digital Schmidt / Rebound Hammer)	pcs	1	
General Description	Portable non-destructive testing instrument used to estimate the compressive strength of concrete by measuring surface hardness (rebound).			
System Components	<ul style="list-style-type: none"> • Spring-driven impact mechanism • Digital rebound reading system • Robust housing for field/site use • Calibration / verification capability compatible with reference test anvil 			
Functional Requirements	<ul style="list-style-type: none"> • Wide measurement range • High repeatability • Compliance with EN / ASTM standards • Automatic result correction and/or impact-angle independent operation • Portable operation • Data storage and export capability 			
Technical Specifications	<ul style="list-style-type: none"> • Display: digital with backlight • Impact energy: 2.207 N-m (N-type) or equivalent applicable energy • Compressive strength range: minimum 10 to >100 N/mm² • Instrument memory: minimum 20,000 impacts • Data export to mobile and/or PC device • Connectivity: Bluetooth and/or USB • Automatic series validity verification; • Battery: standard rechargeable and/or replaceable battery • Operating temperature: minimum 0° to 50°C • User interface /Language support: English (Russian and/or Romanian preferred) 			
Standards & Compliance	The equipment shall comply with EN 12504-2 (Testing concrete – rebound hammer) and ASTM C805 (Rebound number of hardened concrete). Equivalent internationally recognised standards shall be accepted. Where applicable, the equipment may also support related standards and guidance for interpretation or use, such as EN 13791, BS 1881-202, or ISO 1920-7, provided that the core compliance with EN 12504-2 and/or ASTM C805 is maintained.			
Calibration & Verification	Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. The device shall include or be compatible with a reference test anvil (or equivalent) for verification of measurement accuracy. The Contractor shall demonstrate proper functioning during delivery or handover.			

Additional Requirements	Additional Requirements: <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Basic user instruction or demonstration (on-site or remote in Romanian/ Russian) • User manual, technical documentation, warranty certificate, calibration certificate(s) included in English/Romanian/ Russian • Delivery and user instruction included in price • Software/app included where required for full functionality; no mandatory subscription for basic operation
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Item	Requirements / Specifications	Unit	Qty	
Lot 4: LiDAR Scanning System				
4.1	Portable LiDAR Scanning System with RTK GNSS	pcs	1	
General Description	Three-dimensional LiDAR scanning system combining Laser Imaging Detection and Ranging (LiDAR) technology with high-precision RTK GNSS positioning, suitable for mapping, 3D modelling, surface analysis, infrastructure monitoring, volumetric analysis, and environmental assessment. The system shall be portable and capable of pedestrian, vehicle and/or UAV mounting.			
System Components	<ul style="list-style-type: none"> • Portable LiDAR scanning module for generating 3D point clouds • GNSS receiver with RTK corrections for centimeter-level positioning • Integrated Inertial Measurement Unit (IMU) • Data storage and transfer system • Processing and export software (no mandatory subscription for basic functionality) • Accessories: batteries, chargers, cables and required connection accessories 			
Functional Requirements	<ul style="list-style-type: none"> • Real-time point-cloud generation • User-defined scanning profiles or equivalent scan configuration capability • Built-in or supported calibration/alignment workflow • Portable operation • Data export to standard industry formats • Compatibility with GIS, CAD, and BIM workflows • Plug-and-play operation 			
Technical Specifications	<ul style="list-style-type: none"> • Technology: laser scanning LiDAR` • Positioning system: integrated GNSS with RTK support • GNSS: multi-constellation (GPS, GLONASS, Galileo, BeiDou) • RTK corrections: supported (e.g. NTRIP or equivalent) • Absolute positional accuracy (RTK): $\leq \pm 30$ mm • Laser accuracy: $\leq \pm 20$ mm, or better where supported by manufacturer documentation • Point rate: minimum 200,000 points/second • Scanning range: minimum 300 m • Field of view: $\geq 360^\circ$ horizontal • Integrated IMU with roll, pitch and yaw compensation • Supported export formats: LAS, LAZ, XYZ, DXF, DEM, 3D mesh (or equivalent) • Export compatibility: GIS, CAD, BIM • Data storage: internal storage with export capability 			

	<ul style="list-style-type: none"> • Operation modes: portable/handheld mandatory; vehicle-mounted and/or UAV-mounted compatibility may be accepted where supported • Operating conditions: indoor and outdoor use • Protection: splash- and dust-resistant or equivalent • Power supply: rechargeable battery • External charging: 220 V AC
Standards & Compliance	<p>The offered equipment shall comply with applicable international recognized standards and interoperability frameworks relevant to geospatial data acquisition, positioning, and data exchange, including ISO 19100 series (Geographic Information) and OGC interoperability standards, where applicable.</p> <p>The LiDAR system shall comply with IEC 60825-1:2014 (or latest applicable version) and shall be classified as Class 1 (eye-safe).</p> <p>The manufacturer shall operate under ISO 9001 or equivalent, and the equipment shall comply with CE marking requirements, where applicable.</p> <p>The LiDAR system shall comply with IEC 60825-1:2014 (or latest applicable version) for laser safety and shall be classified as Class 1 (eye-safe).</p> <p>CE marking required. Equivalent internationally recognised standards shall be accepted.</p>
Calibration & Verification	Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. The Contractor shall demonstrate proper functioning during delivery or handover, including successful acquisition and visualisation of sample data.
Additional Requirements	<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Software for data acquisition, processing, visualisation and export to standard formats included; no mandatory subscription for basic functionality. Any optional advanced features or cloud-based services requiring additional licensing shall be clearly indicated in the financial proposal • Documentation and manuals (English/ Romanian/ Russian) • Initial setup and configuration (on-site or remotely) included • Delivery, setup, commissioning, training (in Romanian/ Russian) and testing included in price

Item	Requirements / Specifications	Unit	Qty
Lot 5: Geotechnical/laboratory preparation equipment			
<i>Lot 5 contains two (2) items. Bidders shall offer both items 5.1 and 5.2 together; partial offers within Lot 5 will not be accepted.</i>			
5.1	Laboratory Drying Oven	pcs	1
General Description	Laboratory drying oven used for drying, thermal conditioning, and stabilization of material samples including construction materials, soils, aggregates, and laboratory specimens. Used for moisture determination and thermal stability testing.		
System Components	<ul style="list-style-type: none"> • Thermally insulated heating chamber • Electronic temperature control system 		

	<ul style="list-style-type: none"> Forced air ventilation system Digital display for temperature and time Adjustable and/or removable shelves 			
Functional Requirements	<ul style="list-style-type: none"> Uniform and controlled drying of laboratory samples Adjustable temperature control Forced air circulation for uniform heat distribution Digital monitoring of temperature and time Over-temperature protection Automatic shut-off 			
Technical Specifications	<ul style="list-style-type: none"> Type: Forced-air laboratory drying oven Temperature range: from ambient up to 200°C minimum Temperature control: digital (PID controller or equivalent) Temperature accuracy: $\pm 1^\circ\text{C}$ Internal volume: minimum 120 litres Interior material: corrosion-resistant steel Shelves: adjustable and/or removable Power supply: 220–240 V AC / 50-60 Hz 			
Standards & Compliance	<p>The equipment shall comply with applicable laboratory equipment safety standards, such as: EN 61010-1, or equivalent, and may provide oven performance consistent with ASTM E145, or equivalent, where applicable. Equivalent internationally recognized standards shall be accepted. The oven shall be suitable for laboratory procedures carried out in accordance with EN 932-5, EN 1097-5, ASTM C127, ASTM C136, ASTM D698, ASTM D1557, BS 1377, UNE 103300, or equivalent.</p>			
Calibration & Verification	<ul style="list-style-type: none"> The equipment shall be factory calibrated by the manufacturer A certificate of conformity and/or calibration shall be provided upon delivery Functional verification of temperature control shall be demonstrated during delivery or handover 			
Additional Requirements	<ul style="list-style-type: none"> Minimum 12 months warranty Basic on-site setup included Basic user training/ instruction or demonstration (on-site or remotely in Romanian/Russian) shall be provided User manual, technical documentation, warranty certificates included in English/Romanian/ Russian Delivery, basic setup, user instruction and demonstration, functional verification included in price 			
5.2	Semi-automatic Liquid Limit Penetrometer	pcs	1	
General Description	Equipment used to determine the liquid limit of soils according to geotechnical standards. Essential for soil classification and evaluation of soil behaviour in construction.			
System Components	<ul style="list-style-type: none"> Controlled penetration system Automatic loading mechanism Penetration depth measuring device Digital display Sample accessories 			
Functional Requirements	<ul style="list-style-type: none"> Determination of liquid limit using the cone penetration method Controlled and repeatable cone release Digital measurement of penetration depth 			

	<ul style="list-style-type: none"> • Timed penetration test cycle • Suitable for routine geotechnical laboratory testing
Technical Specifications	<ul style="list-style-type: none"> • Test Method: Cone penetration method for determination of liquid limit • Cone assembly: 80 g, 30° cone, or equivalent standard configuration • Penetration measurement range: minimum 0–40 mm • Resolution: 0.01 mm • Repeatability: ≤ 0.1 mm • Release / penetration system: semi-automatic or electronically controlled • Timing system: automatic timer, 5 seconds standard • Display: digital display of penetration depth • Accessories: minimum 3 test cups, cone assembly, and sample preparation accessories • Power supply: 220–240 V AC / 50 Hz
Standards & Compliance	<p>The equipment shall comply with internationally recognized standards for determination of liquid limit of soils using the cone penetration method, including: EN ISO 17892-12, BS 1377-2, and NF P94-052-1, or equivalent.</p> <p>The equipment shall:</p> <ul style="list-style-type: none"> • Be designed and manufactured to perform tests in accordance with the above standards • Include components (cone, penetration mechanism, timing system) consistent with standard requirements • Ensure repeatability and accuracy as defined by the applicable standards.
Calibration & Verification	<ul style="list-style-type: none"> • The equipment shall be factory calibrated by the manufacturer. A certificate of calibration and/or conformity shall be provided upon delivery. • The Contractor shall demonstrate proper functioning of the penetration mechanism and measurement system during delivery or handover.
Additional Requirements	<ul style="list-style-type: none"> • Minimum 12 months warranty • Basic on-site setup included • Basic user instruction or demonstration (on-site or remote in Romanian/ Russian) shall be provided, including operation, test procedure, basic maintenance • User manual, technical documentation, warranty certificate, calibration certificate(s) included in English/Romanian/ Russian • Delivery, basic setup, functional verification, and user instruction included in price

Delivery Requirements

Delivery Requirements	
Delivery date and time	The Bidder shall deliver the goods within the delivery period specified for the respective Lot, namely 60 or 90 calendar days from the date of Contract signature.
Delivery Terms (INCOTERMS 2020)	DDP – Chisinau, Republic of Moldova
Customs clearance (must be linked to INCOTERM)	<input checked="" type="checkbox"/> Supplier/Bidder UNDP shall provide a Tax Exemption letter for Customs clearance.
Exact Address(es) of Delivery Location(s)	Technical University of Moldova, block 10, 41 Dacia Blvd, Chisinau, Republic of Moldova
Warranty Period	Minimum 12 months (from successful commissioning where applicable)
Training	English/ Romanian/ Russian
Local Service Support	Availability of local representative/partner to handle warranty/hardware repair issues (including the name, address and contact details)

ANNEX 2: QUOTATION SUBMISSION FORM

Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	RfQ26/03261: Supply of Laboratory Equipment for the Green Tech Hub (TUM)	Date: Click or tap to enter a date.

Company Profile

Item Description	Detail
Legal name of bidder or Lead entity for JVs	Click or tap here to enter text.
Legal Address, City, Country	Click or tap here to enter text.
Website	Click or tap here to enter text.
Year of Registration	Click or tap here to enter text.
Legal structure	Choose an item.
Are you a UNGM registered vendor?	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, insert UNGM Vendor Number
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) <i>(If yes, provide a Copy of the valid Certificate):</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? <i>(If yes, provide a Copy of the valid Certificate):</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
Does your Company have a written Statement of its Environmental Policy? <i>(If yes, provide a Copy)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No

Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues <i>(If yes, provide a Copy)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Is your company a member of the UN Global Compact	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Bank Information	Bank Name: Click or tap here to enter text. Bank Address: Click or tap here to enter text. IBAN: Click or tap here to enter text. SWIFT/BIC: Click or tap here to enter text. Account Currency: Click or tap here to enter text. Bank Account Number: Click or tap here to enter text.			
Previous relevant experience: Minimum 1 (one) contract in the field of supply of testing laboratory equipment completed in the past 2 (two) years				
Name of previous contracts	Client & Reference Contact Details including e-mail	Contract Value <i>(please insert currency)</i>	Period of activity <i>(month/ year)</i>	Types of activities undertaken

Bidder's Declaration

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Requirements and Terms and Conditions: I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
<input type="checkbox"/>	<input type="checkbox"/>	I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Ethics: In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ ;has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.
<input type="checkbox"/>	<input type="checkbox"/>	I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct : https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN.
<input type="checkbox"/>	<input type="checkbox"/>	Conflict of interest: I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organization’s Point of Contact.
<input type="checkbox"/>	<input type="checkbox"/>	Prohibitions and Sanctions: I/We hereby declare that our firm, ultimate beneficial owners, affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization.
<input type="checkbox"/>	<input type="checkbox"/>	Bankruptcy: I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future.
<input type="checkbox"/>	<input type="checkbox"/>	Offer Validity Period: I/We confirm that this Quote, including the price, remains open for acceptance for the Offer Validity.
<input type="checkbox"/>	<input type="checkbox"/>	I/We understand and recognize that you are not bound to accept any Quotation you receive, and we certify that the goods offered in our Quotation are new and unused.
<input type="checkbox"/>	<input type="checkbox"/>	By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorized by the Organization/s to make this declaration on its/their behalf.

Signature: _____

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Date: Click or tap to enter a date.

ANNEX 3: TECHNICAL AND FINANCIAL OFFER - GOODS

Bidders are requested to complete this form, sign it and return it as part of their bid along with Annex 2: Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	RFQ26/03261: Supply of Laboratory Equipment for the Green Tech Hub (TUM)	Date: Click or tap to enter a date.

Bidders must include all costs related to the performance of the services in their quotation price (delivery of all goods and equipment, transport costs, unloading at the delivery site, installation, calibration, testing, user instruction etc.)

Bidders shall fill out the financial offer table for all the items they are applying to.

Currency of the Quotation: Moldovan Leu (MDL) for local companies and US Dollars (USD) for international companies

INCOTERMS DDP Chisinau

LOT 1: Structural Testing Equipment

Item No	Description	UOM	Qty	Unit Price <i>[please insert currency]</i>	Total <i>[please insert currency]</i>
1.	Scale Shake Table System (Biaxial)	set	1		
Transportation, Insurance, and other Costs					
Installation, commissioning, user training and testing					
Total Final and All-inclusive Price					

LOT 2: Concrete Testing Equipment

Item No	Description	UOM	Qty	Unit Price <i>[please insert currency]</i>	Total <i>[please insert currency]</i>
2.	Automatic Concrete Compression Testing Press – 3,000 kN	pcs	1		
Transportation, Insurance, and other Costs					
Installation, commissioning, user training and testing					
Total Final and All-inclusive Price					

LOT 3: Non-Destructive Concrete Testing Equipment

Item No	Description	UOM	Qty	Unit Price <i>[please insert currency]</i>	Total <i>[please insert currency]</i>
3.1	Rebar Locator / Profometer (Cover Meter)	pcs	1		
3.2	Concrete Sclerometer (Digital Schmidt / Rebound Hammer)	pcs	1		
Transportation, Insurance, and other Costs					
Installation, user training and testing					
Total Final and All-inclusive Price					

LOT 4: LiDAR Scanning System

Item No	Description	UOM	Qty	Unit Price <i>[please insert currency]</i>	Total <i>[please insert currency]</i>
4.	Portable LiDAR Scanning System with RTK GNSS	pcs	1		
Transportation, Insurance, and other Costs					
Installation, user training and testing					
Total Final and All-inclusive Price					

LOT 5: Laboratory and Geotechnical Equipment

Item No	Description	UOM	Qty	Unit Price <i>[please insert currency]</i>	Total <i>[please insert currency]</i>
5.1	Laboratory Drying Oven	pcs	1		
5.2	Semi-Automatic Liquid Limit Penetrometer	pcs	1		
Transportation, Insurance, and other Costs					
Installation, user training and testing					
Total Final and All-inclusive Price					

Compliance with Requirements

Requirements	You Responses		
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter - offer
Minimum Technical Specifications	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Delivery Term (INCOTERMS): DDP	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.

Delivery Lead Time: 60 or 90 calendar days, depending on the respective Lot.	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Warranty: • 12 months (from successful commissioning where applicable)	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Validity of Quotation: 90 days	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.
Payment terms	<input type="checkbox"/>	<input type="checkbox"/>	Click or tap here to enter text.

I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted.

<p><i>Exact name and address of company</i></p> <p>Company Name: Click or tap here to enter text.</p> <p>Address: Click or tap here to enter text.</p> <p>Phone No.: Click or tap here to enter text.</p> <p>Email Address: Click or tap here to enter text.</p>	<p>Authorized Signature: _____</p> <p>_____</p> <p>Date: Click or tap here to enter text.</p> <p>Name: Click or tap here to enter text.</p> <p>Functional Title of Authorised Signatory: Click or tap here to enter text.</p> <p>Email Address: Click or tap here to enter text.</p>
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ANNEX 4: TECHNICAL RESPONSIVENESS TABLE

Bidders are requested to complete this form, sign it and return it as part of their bid along with Annex 2: Quotation Submission Form and Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	RFQ26/03261: Supply of Laboratory Equipment for the Green Tech Hub (TUM)	Date: Click or tap to enter a date.

Bidders shall supplement the information provided in the tables below with detailed description of the offered goods, including Product Data Sheet.

Bidders shall fill out the technical responsiveness table for all the items they are applying to.

LOT 1: Structural Testing Equipment		
1.1 Scale Shake Table System (Biaxial)		
Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
General Description: Laboratory seismic simulation system designed to reproduce seismic and dynamic motions acting on structural models for research, validation, and academic training. The system shall be suitable for use in civil/structural engineering laboratories and for simulation of real earthquake records and user-defined waveforms.		Brand / Model: _____
System Components: <ul style="list-style-type: none"> • Mobile testing platform • Actuation system: servo electromechanical • Digital controller for seismic signal generation • Acceleration and displacement sensors • Control and data acquisition software (with unlimited validity, no mandatory subscription for basic functionality) 		
Minimum Functional Requirements:		

<ul style="list-style-type: none"> Controlled motion along at least two horizontal axes Adjustable operating frequency Load capacity suitable for structural models Capability to simulate real earthquake accelerograms PC interface for programming and data analysis 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> Configuration: Biaxial Table size: minimum 500 × 500 mm Payload capacity: minimum 50 kg Stroke: minimum ±100 mm Operational frequency: minimum 20 Hz High-precision linear guideway (low friction) Earthquake simulation – arbitrary user-defined waveforms Standard waveforms (Sine, Triangle, etc.) Integrated digital controller Control & data acquisition software included Power supply: 220–240 V, 50 Hz Plug & play operation Industrial-grade, low maintenance 		
<p>Standards & Compliance: The system shall be designed, manufactured, and tested in accordance with applicable international good practice for laboratory vibration and dynamic testing equipment, including but not limited to:</p> <ul style="list-style-type: none"> The equipment shall be designed in accordance with 		

<p>recognized machinery safety and risk-reduction principles, such as ISO 12100, or equivalent.</p> <ul style="list-style-type: none"> • The electrical and control components of the system shall comply with applicable safety and EMC requirements for laboratory and measurement equipment, such as IEC 61010-1 and/or IEC 61326-1, or equivalent. • Where accelerometers, displacement sensors, or other vibration transducers are included, such sensors shall be factory calibrated in accordance with recognized manufacturer procedures and/or applicable international standards for vibration transducers, such as the ISO 16063 series, where applicable. • The manufacturer shall operate under a certified quality management system (e.g. ISO 9001). Equivalent internationally recognised standards shall be accepted. • The shake table system shall be suitable for use in laboratory environments, including those operating in accordance with ISO/IEC 17025, where applicable 		
<p>Calibration & Verification: Included sensors (e.g. accelerometers, displacement sensors), where applicable, shall be factory calibrated by the manufacturer. Calibration certificates and/or conformity documentation shall be provided upon delivery, where applicable. Functional</p>		

verification shall be carried out during installation/ commissioning.		
Additional Requirements: <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • On-site or remote installation and commissioning included • On-site training for 2 users/operators included (Romanian/ Russian - for minimum 1 day, on-site): system operation, safety procedures, data acquisition and analysis, basic maintenance • User and operation manual(s), technical documentation (incl. maintenance guidelines if applicable) in English/Romanian/ Russian • Delivery, installation, commissioning, testing and training included in price • Performance curves indicating the relationship between payload, stroke, and frequency to be provided (maximum values are not required to be achieved simultaneously). 		

LOT 2: Concrete Testing Equipment		
2.1 Automatic Concrete Compression Testing Press – 3,000 kN		
Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
General Description: Equipment for compressive strength testing of concrete, mortar and other construction materials in accordance with international standards, in laboratory conditions.		Brand / Model: _____
System Components: <ul style="list-style-type: none"> • Rigid compression frame 		

<ul style="list-style-type: none"> • Hydraulic loading system • Automatic load control system • Digital display and electronic control unit • Safety and overload protection system 		
<p>Minimum Functional Requirements:</p> <ul style="list-style-type: none"> • Load Capacity: minimum 3,000 kN • Accuracy $\pm 1\%$ (Class 1 calibration) • Automatic loading-rate control • Digital display of load and test parameters • Compatibility with testing of concrete cubes and cylinders • PC connectivity and data acquisition, storage export capability 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> • Capacity: minimum 3000 kN • Accuracy $\pm 1\%$ (Class 1 calibration) or better • Vertical clearance: minimum 330 mm • Horizontal clearance: minimum 270 mm • Compression platens: minimum \varnothing 250 mm • Maximum piston stroke: minimum 50 mm • Power: 220–240 V, 50-60 Hz • Digital control unit with automatic load rate control, touchscreen display, data acquisition and storage capability, minimum 2 USB ports, and PC connectivity / data export functionality 		
<p>Standards & Compliance: The offered concrete compression testing machine shall comply with the applicable internationally recognized standards for compression testing machines and force</p>		

<p>verification, including: EN 12390-4 – Compression testing machines for concrete ; EN ISO 7500-1 – Verification of force-measuring systems, and/or equivalent internationally recognized standards. The force-measuring system of the machine shall be verified and calibrated in accordance with the applicable standard and shall demonstrate Class 1 accuracy.</p> <p>A valid calibration / verification certificate shall be provided upon delivery and/or commissioning.</p> <p>Where applicable, the manufacturer shall operate under a certified quality management system, such as ISO 9001, or equivalent</p>		
<p>Calibration & Verification: Factory calibrated. Calibration certificate (Class 1 accuracy) shall be provided upon delivery. Functional verification shall be carried out during commissioning.</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • On-site installation and commissioning included • User manual, technical documentation, calibration certificate, and warranty certificate included, in English/Romanian/ Russian • On-site training for 2 users/operators included (Romanian/ Russian) • Delivery, installation, commissioning, testing and training included in price 		

<p>LOT 3: Non-Destructive Concrete Testing Equipment</p>
<p>3.1 Rebar Locator / Profometer (Cover Meter)</p>

Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
<p>General Description: Portable non-destructive testing device used to locate reinforcement bars in concrete, measure cover depth, and estimate bar diameter.</p>		<p>Brand / Model: _____</p>
<p>System Components:</p> <ul style="list-style-type: none"> • Electromagnetic/ eddy-current scanning unit • Detection probe • Digital display (high-contrast, e.g. OLED or equivalent) • Analysis /data handling software and/or app 		
<p>Functional Requirements:</p> <ul style="list-style-type: none"> • Determination of reinforcement depth • Estimation of bar diameter • Portable operation • Data storage and export • High measurement accuracy 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> • Technology: eddy-current or equivalent electromagnetic detection technology • Measurement depth: minimum 180 mm • Measurement accuracy: ± 1 mm to ± 4 mm (depending on depth) • Rebar diameter detection depth: minimum 60 mm • Rebar diameter measurement accuracy: \pm one rebar size • Encoder accuracy: ± 0.5 mm or $\pm 0.5\%$ of measured length (whichever is greater) • Maximum scanning speed: minimum 0.5 m/s • Maximum line scan distance: minimum 1 km • Connectivity: wireless (Bluetooth) and/or wired • Ingress protection: IP54 • Data export to PC and/or mobile device 		

<ul style="list-style-type: none"> • Rechargeable and/or replaceable battery • Suitable for indoor and outdoor use under standard site conditions 		
<p>Standards & Compliance: The offered rebar locator / cover meter shall comply with applicable internationally recognized standards and guidance for electromagnetic determination of reinforcement location and concrete cover, including BS 1881-204:1988, or equivalent. The equipment shall be supplied with a valid calibration and/or conformity certificate, issued by the manufacturer. Equivalent internationally recognized standards shall be accepted.</p>		
<p>Calibration & Verification: Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. No on-site calibration required; the Contractor shall demonstrate proper functioning during delivery or handover (on-site or remotely).</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Software/app included; no mandatory subscription for basic functionality • Basic user instruction or demonstration (on-site or remotely in Romanian/Russian) • User manual, technical documentation, warranty certificates included in English/Romanian/ Russian • Delivery, user instruction and demonstration included in price 		
<p>3.2 Concrete Sclerometer (Digital Schmidt / Rebound Hammer)</p>		

Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
<p>General Description: Portable non-destructive testing instrument used to estimate the compressive strength of concrete by measuring surface hardness (rebound).</p>		<p>Brand / Model: _____</p>
<p>System Components:</p> <ul style="list-style-type: none"> • Spring-driven impact mechanism • Digital rebound reading system • Robust housing for field/site use • Calibration / verification capability compatible with reference test anvil 		
<p>Functional Requirements:</p> <ul style="list-style-type: none"> • Wide measurement range • High repeatability • Compliance with EN / ASTM standards • Automatic result correction and/or impact-angle independent operation • Portable operation • Data storage and export capability 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> • Display: digital with backlight • Impact energy: 2.207 N·m (N-type) or equivalent applicable energy • Compressive strength range: minimum 10 to >100 N/mm² • Instrument memory: -minimum 20,000 impacts • Data export to mobile and/or PC device • Connectivity: Bluetooth and/or USB • Automatic series validity verification; • Battery: standard rechargeable and/or replaceable battery • Operating temperature: minimum 0° to 50°C 		

<ul style="list-style-type: none"> • User interface /Language support: English (Russian and/or Romanian preferred) 		
<p>Standards & Compliance: The equipment shall comply with EN 12504-2 (Testing concrete – rebound hammer) and ASTM C805 (Rebound number of hardened concrete). Equivalent internationally recognised standards shall be accepted. Where applicable, the equipment may also support related standards and guidance for interpretation or use, such as EN 13791, BS 1881-202, or ISO 1920-7, provided that the core compliance with EN 12504-2 and/or ASTM C805 is maintained.</p>		
<p>Calibration & Verification: Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. The device shall include or be compatible with a reference test anvil (or equivalent) for verification of measurement accuracy. The Contractor shall demonstrate proper functioning during delivery or handover.</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Basic user instruction or demonstration (on-site or remote in Romanian/ Russian) • User manual, technical documentation, warranty certificate, calibration certificate(s) included in English/Romanian/ Russian • Delivery and user instruction included in price • Software/app included where required for full functionality; no mandatory subscription for basic operation 		

LOT 4: LiDAR Scanning System		
4.1 Portable LiDAR Scanning System with RTK GNSS		
Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
<p>General Description: Three-dimensional LiDAR scanning system combining Laser Imaging Detection and Ranging (LiDAR) technology with high-precision RTK GNSS positioning, suitable for mapping, 3D modelling, surface analysis, infrastructure monitoring, volumetric analysis, and environmental assessment. The system shall be portable and capable of pedestrian, vehicle and/or UAV mounting.</p>		Brand / Model: _____
<p>System Components:</p> <ul style="list-style-type: none"> • Portable LiDAR scanning module for generating 3D point clouds • GNSS receiver with RTK corrections for centimeter-level positioning • Integrated Inertial Measurement Unit (IMU) • Data storage and transfer system • Processing and export software (no mandatory subscription for basic functionality) • Accessories: batteries, chargers, cables and required connection accessories 		
<p>Functional Requirements:</p> <ul style="list-style-type: none"> • Real-time point-cloud generation • User-defined scanning profiles or equivalent scan configuration capability • Built-in or supported calibration/alignment workflow • Portable operation • Data export to standard industry formats • Compatibility with GIS, CAD, and BIM workflows 		

<ul style="list-style-type: none"> • Plug-and-play operation 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> • Technology: laser scanning LiDAR` • Positioning system: integrated GNSS with RTK support • GNSS: multi-constellation (GPS, GLONASS, Galileo, BeiDou) • RTK corrections: supported (e.g. NTRIP or equivalent) • Absolute positional accuracy (RTK): $\leq \pm 30$ mm • Laser accuracy: $\leq \pm 20$ mm, or better where supported by manufacturer documentation • Point rate: minimum 200,000 points/second • Scanning range: minimum 300 m • Field of view: $\geq 360^\circ$ horizontal • Integrated IMU with roll, pitch and yaw compensation • Supported export formats: LAS, LAZ, XYZ, DXF, DEM, 3D mesh (or equivalent) • Export compatibility: GIS, CAD, BIM • Data storage: internal storage with export capability • Operation modes: portable/handheld mandatory; vehicle-mounted and/or UAV-mounted compatibility may be accepted where supported • Operating conditions: indoor and outdoor use • Protection: splash- and dust-resistant or equivalent • Power supply: rechargeable battery • External charging: 220 V AC 		
<p>Standards & Compliance: The offered equipment shall comply with applicable international recognized standards and interoperability frameworks relevant to geospatial data acquisition, positioning, and data exchange, including ISO 19100 series (Geographic Information) and</p>		

<p>OGC interoperability standards, where applicable.</p> <p>The LiDAR system shall comply with IEC 60825-1:2014 (or latest applicable version) and shall be classified as Class 1 (eye-safe).</p> <p>The manufacturer shall operate under ISO 9001 or equivalent, and the equipment shall comply with CE marking requirements, where applicable.</p> <p>The LiDAR system shall comply with IEC 60825-1:2014 (or latest applicable version) for laser safety and shall be classified as Class 1 (eye-safe).</p> <p>CE marking required. Equivalent internationally recognised standards shall be accepted.</p>		
<p>Calibration & Verification: Factory calibrated by the manufacturer. Certificate of calibration and/or conformity to be provided upon delivery. The Contractor shall demonstrate proper functioning during delivery or handover, including successful acquisition and visualisation of sample data.</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty from successful commissioning • Software for data acquisition, processing, visualisation and export to standard formats included; no mandatory subscription for basic functionality. Any optional advanced features or cloud-based services requiring additional licensing shall be clearly indicated in the financial proposal • Documentation and manuals (English/ Romanian/ Russian) • Initial setup and configuration (on-site or remotely) included 		

<ul style="list-style-type: none"> • Delivery, setup, commissioning, training (in Romanian/ Russian) and testing included in price 		
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LOT 5: Laboratory and Geotechnical Equipment		
5.1 Laboratory Drying Oven		
Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
<p>General Description: Laboratory drying oven used for drying, thermal conditioning, and stabilization of material samples including construction materials, soils, aggregates, and laboratory specimens. Used for moisture determination and thermal stability testing.</p>		Brand / Model: _____
<p>System Components:</p> <ul style="list-style-type: none"> • Thermally insulated heating chamber • Electronic temperature control system • Forced air ventilation system • Digital display for temperature and time • Adjustable and/or removable shelves 		
<p>Functional Requirements:</p> <ul style="list-style-type: none"> • Uniform and controlled drying of laboratory samples • Adjustable temperature control • Forced air circulation for uniform heat distribution • Digital monitoring of temperature and time • Over-temperature protection <p>Automatic shut-off</p>		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> • Type: Forced-air laboratory drying oven • Temperature range: from ambient up to 200°C minimum • Temperature control: digital (PID controller or equivalent) 		

<ul style="list-style-type: none"> • Temperature accuracy: $\pm 1^{\circ}\text{C}$ • Internal volume: minimum 120 litres • Interior material: corrosion-resistant steel • Shelves: adjustable and/or removable • Power supply: 220–240 V AC / 50-60 Hz 		
<p>Standards & Compliance:</p> <p>The equipment shall comply with applicable laboratory equipment safety standards, such as: EN 61010-1, or equivalent, and may provide oven performance consistent with ASTM E145, or equivalent, where applicable. Equivalent internationally recognized standards shall be accepted. The oven shall be suitable for laboratory procedures carried out in accordance with EN 932-5, EN 1097-5, ASTM C127, ASTM C136, ASTM D698, ASTM D1557, BS 1377, UNE 103300, or equivalent.</p>		
<p>Calibration & Verification: The equipment shall be factory calibrated by the manufacturer. A certificate of conformity and/or calibration shall be provided upon delivery. Functional verification of temperature control shall be demonstrated during delivery or handover.</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty • Basic on-site setup included • Basic user training/ instruction or demonstration (on-site or remotely in Romanian/ Russian) shall be provided • User manual, technical documentation, warranty certificates included in English/Romanian/ Russian • Delivery, basic setup, user instruction and demonstration, functional verification included in price 		

5.2 Semi-Automatic Liquid Limit Penetrometer		
Requirement / Specification	Compliance (Yes / No)	Offered Brand, Model & Exact Characteristics (provide datasheets)
<p>General Description: Equipment used to determine the liquid limit of soils according to geotechnical standards. Essential for soil classification and evaluation of soil behaviour in construction.</p>		Brand / Model: _____
<p>System Components:</p> <ul style="list-style-type: none"> Controlled penetration system Automatic loading mechanism Penetration depth measuring device Digital display Sample accessories 		
<p>Functional Requirements:</p> <ul style="list-style-type: none"> Determination of liquid limit using the cone penetration method Controlled and repeatable cone release Digital measurement of penetration depth Timed penetration test cycle Suitable for routine geotechnical laboratory testing 		
<p>Technical Specifications:</p> <ul style="list-style-type: none"> Test Method: Cone penetration method for determination of liquid limit Cone assembly: 80 g, 30° cone, or equivalent standard configuration Penetration measurement range: minimum 0–40 mm Resolution: 0.01 mm Repeatability: ≤ 0.1 mm Release / penetration system: semi-automatic or electronically controlled Timing system: automatic timer, 5 seconds standard Display: digital display of penetration depth 		

<ul style="list-style-type: none"> • Accessories: minimum 3 test cups, cone assembly, and sample preparation accessories • Power supply: 220–240 V AC / 50 Hz 		
<p>Standards & Compliance:</p> <p>The equipment shall comply with internationally recognized standards for determination of liquid limit of soils using the cone penetration method, including: EN ISO 17892-12, BS 1377-2, and NF P94-052-1, or equivalent..</p> <p>The equipment shall:</p> <ul style="list-style-type: none"> • Be designed and manufactured to perform tests in accordance with the above standards • Include components (cone, penetration mechanism, timing system) consistent with standard requirements <p>Ensure repeatability and accuracy as defined by the applicable standards</p>		
<p>Calibration & Verification: The equipment shall be factory calibrated by the manufacturer. A certificate of calibration and/or conformity shall be provided upon delivery. The Contractor shall demonstrate proper functioning of the penetration mechanism and measurement system during delivery or handover.</p>		
<p>Additional Requirements:</p> <ul style="list-style-type: none"> • Minimum 12 months warranty • Basic on-site setup included • Basic user instruction or demonstration (on-site or remote in Romanian/ Russian) shall be provided, including operation, test procedure, basic maintenance • User manual, technical documentation, warranty certificate, calibration certificate(s) included in English/Romanian/ Russian 		

<ul style="list-style-type: none">• Delivery, basic setup, functional verification, and user instruction included in price		
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