

## REQUEST FOR QUOTATION NO. RFQ26/03282:

### Supply and Delivery of Communication Modules for Electricity Smart Metering Infrastructure

#### SECTION 1: REQUEST FOR QUOTATION (RFQ)

UNDP through the **Accelerating a Just Energy Transition in the Republic of Moldova Portfolio Programme**, kindly requests your quotation for the **Request for Quotation no. RFQ26/03282: Supply and Delivery of Communication Modules for Electricity Smart Metering Infrastructure** as detailed in line items section of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This RFQ document generated by the online system

Section 2: General Instructions

Section 2: Special Instructions

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4: Technical Responsiveness Table

Annex 5: Format for CV of Proposed Key Personnel

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-01034** 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/faces/PrcPosRegisterSupplier?prcBuld=300000127714247>

**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](mailto: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](mailto: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](mailto: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

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| <b>Introduction</b>                                 | <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 <a href="#">UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement</a></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>   |
| <b>Deadline for the Submission of Quotation</b>     | <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 <a href="http://www.timeanddate.com/worldclock/">http://www.timeanddate.com/worldclock/</a>.</p>   |
| <b>Method of Submission</b>                         | <p>Quotations must be submitted as follows:</p> <p>NextGenERP supplier portal following this link: <a href="http://supplier.nextgenerp.partneragencies.org/">http://supplier.nextgenerp.partneragencies.org/</a> 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><a href="https://estm.fa.em2.oraclecloud.com/fscmUI/redwood/supplier-registration/register-supplier/register-supplier-verification?id=TUW16eK6qsD94MNMxATNMoYCOHny7FmchTkUZsdOqrAW4sy6L5xSAB033Q%3D%3D">https://estm.fa.em2.oraclecloud.com/fscmUI/redwood/supplier-registration/register-supplier/register-supplier-verification?id=TUW16eK6qsD94MNMxATNMoYCOHny7FmchTkUZsdOqrAW4sy6L5xSAB033Q%3D%3D</a></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"> <li>▪ File Format: All attachments must be in PDF format unless otherwise instructed by UNDP.</li> <li>▪ File names must be in Latin alphabet/keyboard and clearly indicate the content of the document to facilitate review.</li> <li>▪ All files must be free of viruses and not corrupted.</li> </ul> |
| <b>Cost of preparation of quotation</b>             | <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>   |
| <b>Supplier Code of Conduct, Fraud, Corruption,</b> | <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 <b>principles on labour, human rights, environment and ethical conduct</b> may be found at: <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a></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 <a href="http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_and_investigation.html#anti">http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_and_investigation.html#anti</a></p>   |

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| <b>Gifts and Hospitality</b>                    | 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.  |
| <b>Conflict of Interest</b>                     | <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> |
| <b>Currency of Quotation</b>                    | <p>Prices shall be quoted only in the currency indicated in the system</p> <p><b>MDL (Moldovan Leu) for local suppliers</b></p> <p>and</p> <p><b>USD (US Dollars) for international suppliers.</b></p> <p>For evaluation purposes, bids submitted in any other currencies shall be recalculated at UN Operational Rate of Exchange on the submission deadline</p> <p><a href="https://treasury.un.org/operationalrates/OperationalRates.php">https://treasury.un.org/operationalrates/OperationalRates.php</a></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>   |
| <b>Joint Venture, Consortium or Association</b> | <p>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.</p> <p>Refer to Clauses 19 – 24 under <a href="#">Solicitation policy</a> for details on the applicable provisions on Joint Ventures, Consortium or Association.</p>   |

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| <b>Only one Bid</b>  | <p>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.</p> <p>Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:</p> <p>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</p> <p>b) they have the same legal representative for purposes of this RFQ; or</p> <p>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;</p> <p>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</p> <p>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.</p> |
| <b>Price variation</b>   | 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.   |
| <b>Alternative Quotes</b>  | 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.   |
| <b>Contact Person for correspondence, notifications and clarifications</b> | <p>Must be submitted directly in the portal using the messaging functionality.</p> <p><b>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.</b></p>   |
| <b>Right not to accept any quotation</b>                                   | UNDP is not bound to accept any quotation, nor award a contract or Purchase Order   |
| <b>Right to vary requirement at time of award</b>                          | 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.   |
| <b>Publication of Contract Award</b>                                       | UNDP will publish the contract awards on the websites of the CO and the corporate UNDP Web site.  |
| <b>Policies and procedures</b>   | This RFQ is conducted in accordance with <a href="#">UNDP Programme and Operations Policies and Procedures</a>  |
| <b>UNGM registration</b>   | 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 <a href="http://www.ungm.org">www.ungm.org</a> . 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 2: SPECIAL INSTRUCTIONS

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| <b>General Conditions of Contract</b>    | 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<br>Applicable GTC:<br><input checked="" type="checkbox"/> <a href="#">General Terms and Conditions / Special Conditions for Contract</a> .<br>Applicable Terms and Conditions and other provisions are available at <a href="#">UNDP/How-we-buy</a>   |
| <b>Special Conditions of Contract</b>    | <input checked="" type="checkbox"/> Cancellation of PO/Contract if the delivery/completion is delayed by [30 days]<br><input checked="" type="checkbox"/> <b>Liquidates damages</b> shall be imposed as follows:<br>Percentage of contract price per week of delay: 2.5% up to a maximum of 10%, after which UNDP may terminate the contract.   |
| <b>Duties and taxes</b>                  | 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.<br>All prices must:<br><input checked="" type="checkbox"/> <b>be exclusive of VAT and other applicable indirect taxes</b>  |
| <b>Eligibility</b>                       | 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.<br><br>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.<br><br>Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative. |
| <b>Language of quotation</b>             | <input checked="" type="checkbox"/> <b>English / Romanian</b><br><br>Including documentation including catalogues, instructions and operating manuals (in both languages).  |
| <b>Quotation validity period</b>         | <input checked="" type="checkbox"/> Quotations shall remain valid for <b>90 days</b> from the deadline for the Submission of Quotation.   |
| <b>Partial Quotes</b>                    | <input checked="" type="checkbox"/> Not permitted   |
| <b>Alternative Quotes</b>                | <input checked="" type="checkbox"/> Not permitted   |
| <b>Payment Terms</b>                     | <input checked="" type="checkbox"/> 100% within 30 days after receipt of goods, works and/or services and submission of payment documentation.  |
| <b>Conditions for Release of Payment</b> | <input checked="" type="checkbox"/> Written Acceptance of Goods and Services based on full compliance with RFQ requirements<br><input checked="" type="checkbox"/> Completion of Training on Operation and Maintenance (2 groups)   |

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| <b>Clarifications</b>            | <p>Bidders must send their inquiries and requests for clarifications using the messaging functionality in the portal.</p> <p><b><u>PLEASE PAY ATTENTION: QUOTES SHALL NOT BE SUBMITTED TO ANY EMAIL ADDRESS BUT ONLY THROUGH THE PORTAL.</u></b></p> <p>Requests for clarification from bidders will not be accepted any later than <b>3 days</b> before the submission deadline. Responses to request for clarification will be communicated directly in the portal.</p>   |
| <b>Documents to be submitted</b> | <p>Bidders shall include the following documents in their quotation:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Annex 2: Quotation Submission Form duly completed and signed</li> <li><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</li> <li><input checked="" type="checkbox"/> Annex 4: Technical Responsiveness Table duly completed and signed</li> <li><input checked="" type="checkbox"/> Company Profile, including detailed description of the enterprise (experience, human resources, managerial and technical capacities in the field related to the assignment, etc.)</li> <li><input checked="" type="checkbox"/> Copy of registration documents</li> <li><input checked="" type="checkbox"/> Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country</li> <li><input checked="" type="checkbox"/> Certification or authorization to act as Agent on behalf of the Manufacturer, or Power of Attorney (if Supplier is not the manufacturer). Manufacturer Authorization Form (MAF) or, if manufacturer, clear manufacturer declaration and after-sales support commitment.</li> <li><input checked="" type="checkbox"/> List and value of 3 (three) most relevant projects/contracts completed in the past 5 (five) years including the following information: <ul style="list-style-type: none"> <li>• Name of previous contracts</li> <li>• Client &amp; Reference Contact</li> <li>• Details including e-mail</li> <li>• Contract Value</li> <li>• Period of activity / Delivery period</li> <li>• Types of services undertaken</li> </ul> </li> </ul> <p>Copies of relevant projects/contract might be requested to be provided.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Detailed technical description of the offered goods and related services (including brochures/user manuals, datasheet, configuration guide, security guide, log samples, certificates, hardening checklist, completed matrix)</li> <li><input checked="" type="checkbox"/> Statement of warranty as per Schedule of Requirements in Annex 1</li> <li><input checked="" type="checkbox"/> Statement regarding the availability of an authorized service center to handle warranty/hardware repair issues ensuring the comprehensiveness after-sales services accompanied by: <ul style="list-style-type: none"> <li>• Letter signed by both parties confirming the relationship between the supplier and service provider;</li> <li>• Official documentation stating that the Partner is a registered business in the country;</li> <li>• A detailed profile of the service provider;</li> <li>• Description of procedure and time estimates for service provision.</li> </ul> </li> <li><input checked="" type="checkbox"/> Delivery schedule, including delivery time and production time</li> <li><input checked="" type="checkbox"/> Declaration confirming the availability to provide samples as per Schedule of Requirements in Annex 1</li> <li><input checked="" type="checkbox"/> CVs (signed by the envisaged personnel), together with attestation certificates (if applicable) and training attendance certificates (if applicable/ e.g. diplomas, certifications) (valid at the date of presentation) clearly stipulating the relevant experience which meets the listed requirements, of the Key personnel (mentioned in Annex 1: Schedule of Requirements). Bidder to use Annex 5: Format for CV of Proposed Key Personnel for the presentation of CVs.</li> <li><input checked="" type="checkbox"/> At least 3 (three) Clients' statements confirming satisfactory performance by the Bidder on the 3 (three) contracts of highest value carried out, during the past 3 (three) years</li> <li><input checked="" type="checkbox"/> Latest Audited Financial Statement (Income Statement and Balance Sheet) including: Auditor's Reports (for international companies) or registered Financial Report at the Statistical Bureau (for local companies) for the past three (3) years for the Bidder (2023-2025)</li> </ul> |

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|  | <input checked="" type="checkbox"/> Quality Certificates (ISO, etc., if available) or other quality certification related to scope of the assignment (if available)<br><input checked="" type="checkbox"/> Export/Import Licenses, if applicable<br><input checked="" type="checkbox"/> Environmental Compliance Certificates, Accreditations, if any  |
| <b>Evaluation method</b>                 | <input checked="" type="checkbox"/> The Contract or Purchase Order will be awarded to the lowest price substantially compliant offer   |
| <b>Evaluation criteria</b>               | <p>The evaluation of quotations shall be conducted in accordance with Evaluation criteria listed below. Bidders must meet all these criteria to be deemed technically qualified and responsive. In the case of consortiums, all criteria listed below shall apply towards the Lead Member.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Full compliance with all requirements as specified in Annex 1. As part of the evaluation process to prove compliance with all requirements as specified in Annex 1, Supplier shall provide at least one sample communication module per offered configuration for laboratory testing with the PRIME Alliance 1.4 Certificated Smart Meter Data Concentrators, if requested.</li> <li><input checked="" type="checkbox"/> Full acceptance of the General Conditions of Contract</li> <li><input checked="" type="checkbox"/> Be legally registered entity or a consortium of firms/organizations</li> <li><input checked="" type="checkbox"/> Minimum 5-year experience in providing similar equipment</li> <li><input checked="" type="checkbox"/> Minimum 3 similar (in terms of type and volume of goods) contracts undertaken in the past 5 (five) years</li> <li><input checked="" type="checkbox"/> Possession of a Manufacturer Authorization Form (MAF)</li> <li><input checked="" type="checkbox"/> Availability of an authorized service center to handle warranty/hardware repair issues ensuring the comprehensiveness after-sales services</li> <li><input checked="" type="checkbox"/> Maximum delivery period not to exceed 90 calendar days from the Contract signature date</li> <li><input checked="" type="checkbox"/> Minimum warranty period of 36 months</li> </ul> |
| <b>Type of Contract to be awarded</b>    | <input checked="" type="checkbox"/> <a href="#">Contract Face Sheet</a> (Goods and-or Services)  |
| <b>Expected date for contract award.</b> | 03 August 2026   |

## ANNEX 1: SCHEDULE OF REQUIREMENTS

### I. BACKGROUND:

Under the "Accelerating a Just Energy Transition in the Republic of Moldova" (JET) Programme, UNDP has been supporting the Government of Moldova, under the leadership of the Ministry of Energy, in piloting Advanced Metering Infrastructure (AMI) as a foundational measure for energy efficiency, rational consumption, evidence-based tariff reform, and alignment with EU energy legislation.

This support is anchored in two key national policy frameworks: the National Integrated Energy and Climate Plan (NECP) 2025–2030, which under Policy Measure PM\_EE5 explicitly quantifies smart metering as a binding energy efficiency measure and directly references the UNDP pilot as the national implementation reference; and the National Programme for Digital Transformation of the Energy Sector 2026–2030, approved by the Government of Moldova in October 2025, which sets a binding target of 500,000 smart meters deployed by 2030, covering at least 40% of residential consumers. Both frameworks are further underpinned by Moldova's legal obligation under the Electricity Law No. 164/2025, which fully transposes EU Directive 2019/944/EU on the internal electricity market and establishes a national smart metering rollout target in the future.

Under the First Financing Arrangement (2024–2025), funded by the Government of Italy, UNDP implemented an initial Smart Metering Pilot Phase covering more than 40,000 electricity consumers across Moldova's two licensed Distribution System Operators (DSOs) — Premier Energy Distribution (south-central grid area) and RED Nord (northern grid area).

Building on this operational evidence base, the Pilot has been scaled up under additional Financing Arrangements with the Government of Italy (2025–2028), supporting the deployment of smart metering to an additional 65,000 consumers across both DSOs, applying the validated technical architecture and sampling methodology developed during the Pilot Phase. This scale-up is expected to reach at least 100,000 consumers by 2027, achieving 20% of the national target established under the National Programme for Digital Transformation of the Energy Sector 2026–2030.

The reliable real-time exchange of consumption data between smart meters, data concentrators, and the Head-End System is contingent on the performance and interoperability of the underlying communication infrastructure. Communication modules are a critical hardware component of the AMI architecture, enabling meter data transmission. The procurement of communication modules under RfQ26/03282 directly supports the technical integrity and scalability of the smart metering deployment under the expanded Pilot.

### II. SCOPE OF PROCUREMENT:

Supply, delivery, configuration support and warranty for 495 Communication Modules for Smart Meter PRIME 1.4 Data Concentrators, including LTE/UMTS cellular backhaul, Ethernet/LAN connectivity, VPN/security functions, antennas, power accessories, documentation and compatibility testing with the certificated PRIME 1.4 Data Concentrators and HES.

Installation, site works, and Head-End System (HES) implementation are excluded from this procurement and are addressed under separate arrangements.

### III. TECHNICAL SPECIFICATION:

| ID     | Category | Requirement   | Evidence required                          |
|--------|----------|---|--|
| CM-001 | Scope    | The communication module shall provide secure WAN/backhaul connectivity between the PRIME 1.4 Data Concentrator and HES/MDMS. | Exact brand/model and datasheet reference. |

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| CM-002 | Architecture          | The module shall be compatible with DC PRIME 1.4 deployments and shall not limit the DC's PRIME PLC functions, meter registration, scheduled reads, event delivery, or remote commands.  | Compatibility statement with PRIME 1.4 certificated DC and HES. |
| CM-003 | Main WAN Ethernet     | Minimum 1 x WAN Ethernet port 10/100 Mbps, auto-negotiation, auto MDI/MDIX.  | Datasheet.  |
| CM-004 | LAN ports             | Minimum 2 x LAN Ethernet ports 10/100 Mbps.  | Datasheet.  |
| CM-005 | Serial interface      | Minimum 1 x RS-485 serial interface, EIA/TIA-485 compliant, 300 bps to 115200 bps or wider, ESD protection +/-15 kV.   | Datasheet and pinout.   |
| CM-006 | Cellular backhaul     | Integrated 4G LTE modem supporting European/EMEA operator bands. Minimum LTE-FDD bands B1, B3, B7, B8, B20 and B28.  | Datasheet and regional modem variant.                           |
| CM-007 | SIM redundancy        | 2 physical SIM slots. SIM voltage 1.8 V and 3 V supported; M2M/industrial SIM form factor (2FF/3FF)  | Datasheet.  |
| CM-008 | Antenna               | <p>The hardware must provide double antenna industrial connectors. Supplier shall provide suitable external LTE antennas and required cables.</p> <p>Antenna RF cable shall be low-loss coaxial type suitable for LTE communication.</p> <p>The default RF cable length shall be a minimum 2 meter -maximum of 3 meters, and the communication module must support antenna cable extensions without any hardware modifications. The antenna must feature a minimum peak gain of <math>\geq 3</math> dBi and a VSWR of <math>\leq 1.5</math> (with a maximum absolute limit of 2.0) across all supported frequency bands.</p> <p>Cable shall be UV-resistant and suitable for industrial outdoor usage. Cable and connectors shall be mechanically protected against vibration and environmental impact. Connector type shall be compatible with the offered communication module/router.</p> | Datasheet.  |
| CM-009 | IP protocol support   | TCP/IP, UDP/IP, DHCP client/server as applicable, DNS, NTP, IPv4 and IPv6 support.   | Datasheet.  |
| CM-010 | Routing/NAT/ firewall | The system shall support static routing, dynamic OSPF routing, and Network Address Translation (NAT). Additionally, it must feature  | Datasheet and configuration guide.                              |

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|        |                     | an integrated stateful firewall with support for port filtering, as well as IP and MAC address-based filtering policies.   |                                    |
| CM-011 | VPN                 | Support secure VPN using IPsec and/or OpenVPN/WireGuard; IPsec for utility APN/VPN integration. GRE/L2/L3 tunnel supported.  | Datasheet and configuration guide. |
| CM-012 | Private APN         | Support private APN configuration and operator-specific cellular profiles.   | Configuration guide.               |
| CM-013 | TLS/HTTPS           | Communications in transit must be protected using the TLS 1.3 protocol. The use of TLS 1.2 is permitted solely as a backward compatibility (fallback) mechanism. The use of SSLv2, SSLv3, TLS 1.0, and TLS 1.1 is strictly prohibited, and these protocols must be explicitly disabled.  | Security guide.                    |
| CM-014 | SSH/SFTP            | Secure CLI/file transfer over SSH/SFTP or equivalent secure mechanism. Telnet/FTP shall be disabled by default.  | Configuration guide.               |
| CM-015 | Central management  | Vendor shall provide central management capability or compatibility with a standard NMS/SNMP/Syslog  | Description.                       |
| CM-016 | SNMP/Syslog         | The system must support SNMPv3 and remote Syslog exporting. For monitoring purposes, the provided enterprise SNMP MIB must expose objects for RF signal quality (RSSI, RSRP, RSRQ, and SINR), serving Cell ID, assigned IP address, APN, Bit Error Rate (BER), and data usage counters. A detailed MIB definition file must be delivered with the equipment. | Datasheet.                         |
| CM-017 | Watchdog            | Built-in hardware/software watchdog and automatic recovery after cellular or WAN loss.   | Datasheet.                         |
| CM-018 | Reboot scheduler    | Configurable scheduled reboot and remote reboot function.  | Configuration guide.               |
| CM-019 | Firmware management | Remote and local firmware upgrade, signed firmware or vendor-authenticated packages, rollback or recovery mechanism. Secure Boot Firmware Verification: If either the firmware digital signature or the configuration data integrity check fails, the device shall refuse to boot the tampered image and shall transition to a secure recovery state.        | Security guide.                    |
| CM-020 | Access control      | The device shall enforce role-based access control (RBAC) with unique credentials for administrative and service accounts, prohibit the use of shared default production credentials, and mandate a password change upon first use of the unique, factory-provisioned password that was securely delivered to the Beneficiary out-of-band.                   | Security guide.                    |
| CM-021 | Audit logs          | The device shall maintain a local, integrity-protected audit log and support real-time remote export for system events—including user authentications, configuration modifications, VPN and cellular status changes, system reboots, firmware updates, and security incidents—utilizing a non-volatile   | Log sample.                        |

|        |                        |   |                              |
|--------|------------------------|---|------------------------------|
|        |                        | circular buffer that retains a minimum of the latest 100 security events and mitigates log-flooding deletion.   |                              |
| CM-022 | Time sync              | NTP client support with configurable servers; local RTC.  | Datasheet/<br>configuration. |
| CM-023 | LED indicators         | LEDs for power, cellular network/service, signal level or quality, WAN/LAN activity and VPN/online status where available.  | Datasheet.                   |
| CM-024 | Power supply           | The device shall operate on a nominal input voltage of 12 VDC or 24 VDC and include integrated overvoltage, transient, and surge protection on the power input to safeguard internal circuitry. When not powered directly by a native DC source, the supplier shall provide a compatible DIN-rail industrial power supply capable of delivering this regulated voltage.   | Datasheet.                   |
| CM-025 | Power consumption      | Low-power industrial design. Bidder shall state idle, typical and peak consumption. Target: $\leq 3$ W idle and $\leq 10$ W typical/peak during transmission; deviations allowed if justified by integrated features such as multiple LTE modules or SFP.   | Datasheet.                   |
| CM-026 | Mounting               | The device shall be housed in a rugged industrial enclosure designed for standard DIN-rail mounting, with wall or panel mounting permitted only if the necessary DIN-rail adapter is included by the supplier. The enclosure shall provide a minimum ingress protection rating of IP51 in accordance with the IEC 60529 standard.   | Datasheet.                   |
| CM-027 | Environment-al         | Industrial enclosure suitable for DIN-rail mounting; wall/panel mounting accepted only if DIN-rail adapter is included.   | Datasheet.                   |
| CM-028 | EMC/ESD                | Industrial EMC compliance; RS-485 ESD protection $\pm 15$ kV; CE/EMC declaration for EU/EEA market or equivalent.   | Certificates.                |
| CM-029 | Cyber hardening        | The device shall be delivered in a secure-by-default configuration with all unused services, ports, and protocols disabled by default, accompanied by a documented security hardening checklist to guide deployment. The supplier shall maintain a transparent vulnerability disclosure policy and a documented security update process to ensure timely patching and long-term maintenance of the device throughout its operational lifecycle. | Hardening checklist.         |
| CM-030 | Compatibility evidence | Bidder shall provide a compatibility matrix with the offered DC PRIME 1.4 model, HES/APN/VPN setup and any required cable/power accessories.  | Completed matrix.            |

|        |                              |   |   |
|--------|------------------------------|---|---|
| CM-031 | Sample testing               | Bidder shall provide at least one sample communication module per offered configuration for laboratory testing with the PRIME 1.4 certificated DC, if requested by the UNDP.  | Sample commitment.                              |
| CM-032 | Warranty                     | The bidder shall provide a minimum 36 months hardware warranty supported by a documented, authorized service and repair pathway, including a defined Return Merchandise Authorization (RMA) and repair turnaround Service Level Agreement (SLA). To ensure long-term operational sustainability, the bidder must deliver a declared product End-of-Life (EOL) policy, a comprehensive spare-parts list, and a binding commitment to provide security-update support for a minimum period of 5 to 7 years from the date of purchase.   | Warranty statement and service center evidence. |
| CM-033 | Delivery                     | Bidder shall deliver the goods in up to 90 calendar days after Contract signature.  | Delivery plan.                                  |
| CM-034 | Manufacturer authorization   | Bidder shall provide manufacturer authorization or, if manufacturer, clear manufacturer declaration and after-sales support commitment.   | Authorization letter.                           |
| CM-035 | Documentation                | The bidder shall provide a comprehensive technical documentation package including data sheets, wiring diagrams, recommended antenna and cable installation instructions, a complete Command Line Interface (CLI) reference set (terminal commands), and any applicable configuration software utilities. This package must feature a user manual, a configuration guide, and a dedicated security hardening guide, all delivered natively in the Romanian language, or as bilingual English and Romanian editions. All equipment must be accompanied by its official compliance certificates to validate technical and regulatory standards. | Documents.                                      |
| CM-036 | Interoperability/non-lock-in | The module shall support standard IP networking and shall not impose proprietary lock-in preventing use with other PRIME-certified DCs or HES platforms, subject to interface compatibility.  | Declaration.                                    |
| CM-037 | Power-fail / last-gasp       | The module shall detect loss of input power and transmit a final (last-gasp) notification to the HES, with internal hold-up (super-capacitor or battery) sufficient to send the message and flush logs - minimum 120 s of hold-up availability.   | Datasheet                                       |

#### IV. SAMPLES

Bidder shall provide at least one sample (1) communication module per offered configuration for laboratory testing with the PRIME 1.4 certificated DC, if requested by the UNDP. The sample shall be provided free of charge and is non-returnable. All shipping and transportation costs shall be borne by Bidder. UNDP is exempt from VAT, customs duties and any related charges in accordance with its privileges and immunities. Date and time for the receipt of samples will be communicated to the shortlisted bidders via the Quantum messaging functionality. Samples must be delivered within **seven (7) calendar days** from the date of notification. When submitting the samples should be marked with the RFQ number and bidder name.

If a bidder fails to provide samples or documents requested by UNDP in a timely manner, UNDP may declare the bid unsuccessful.

**Delivery address:** 127, 31 August 1989 Street (Maib Park), Chisinau, Republic of Moldova.

#### V. DELIVERY REQUIREMENTS:

|  |  |
|--|--|
| <b>Delivery date and time</b>                          | Bidder shall deliver the goods in up to 90 calendar days after Contract signature.   |
| <b>Delivery Terms (INCOTERMS 2020)</b>                 | DDP, Delivery duty-paid  |
| <b>Customs clearance (must be linked to INCOTERMS)</b> | <input checked="" type="checkbox"/> Supplier/bidder<br>UNDP shall provide a Tax Exemption letter for Customs clearance if necessary.   |
| <b>Exact Address(es) of Delivery Location(s)</b>       | The items are to be delivered to the direct beneficiaries, i.e., two electricity distributors, located at the following addresses: <ul style="list-style-type: none"> <li>• “Premier Energy Distribution” – 272 units<br/>Republic of Moldova, Chisinau: 4, Andrei Doga Street, and,</li> <li>• “RED NORD S.A.” – 223 units<br/>Republic of Moldova, Balti: 180 A, Stefan cel Mare Street</li> </ul>   |
| <b>Training on Operation and Maintenance</b>           | <input checked="" type="checkbox"/> At beneficiary’s premises in 2 locations – 2 (two) Electricity Distributors, 1 (one) day per distributor upon delivery of goods.<br><br>Language: Romanian, translation costs and organization/logistics should be covered by bidder.<br><br>Training shall be done offline at the premises of the beneficiary. Training should be held during the work week, after the delivery of the equipment to the addresses stated in this RfQ.<br><br>Training should be provided by the company’s specialized staff (please provide CVs).<br><br>The End User is responsible for organizing training premises.<br><br>The Supplier should cover trainers fee, travel costs to and from Moldova (if Bidder is not local), accommodation costs (if any) during the training as well as the transportation costs from Chisinau to beneficiaries for trainer(s).<br><br><input checked="" type="checkbox"/> Two electricity distributors, located at the following addresses: <ul style="list-style-type: none"> <li>• Republic of Moldova, Chisinau: 4, Andrei Doga Street,</li> </ul> |

|   |  |
|---|--|
|   | <ul style="list-style-type: none"> <li>• Republic of Moldova, Balti: a) 180 A, Stefan cel Mare</li> </ul>  |
| <b>Warranty Period</b>                                      | Minimum 36 months  |
| <b>After-sales service and service support requirements</b> | <p>Availability of an authorized service center to handle warranty/hardware repair issues ensuring the comprehensiveness of after-sales services.</p> <p><u>Documents to establish compliance:</u> Statement regarding the availability of a representative to handle warranty/hardware issues, including:</p> <ul style="list-style-type: none"> <li>• Letter signed by both parties confirming the relationship between the supplier and service provider;</li> <li>• Official documentation stating that the Partner is a registered business in the country of delivery;</li> <li>• A detailed profile of the service provider;</li> </ul> <p>Description of procedure and time estimates for service provision.</p> |

## 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:  | RFQ26/03282                      | 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<br>If yes, insert UNGM Vendor Number |
| Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):  | <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? (If yes, provide a Copy of the valid Certificate):  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                      |
| Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)  | <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 (If yes, provide a Copy) | <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.<br>Bank Address: Click or tap here to enter text.<br>IBAN: Click or tap here to enter text.<br>SWIFT/BIC: Click or tap here to enter text.<br>Account Currency: Click or tap here to enter text.<br>Bank Account Number: Click or tap here to enter text. |                |                    |                                |
| <b>Previous relevant experience:</b>  |   |                |                    |                                |
| <b>List and value of 3 (three) most relevant projects/ contracts (in terms of type and volume of goods) completed for the past 5 (five) years</b> |   |                |                    |                                |
| Name of previous contracts  | Client & Reference Contact Details including e-mail   | Contract Value | Period of activity | Types of activities undertaken |
|   |   |                |                    |                                |
|   |   |                |                    |                                |
|   |   |                |                    |                                |

**Bidder's Declaration**

| Yes                      | No                       |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Requirements and Terms and Conditions:</b> 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.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Ethics:</b> 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 : <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a> and acknowledge that it provides the minimum standards expected of suppliers to the UN.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Conflict of interest:</b> 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 Organisation's Point of Contact.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Prohibitions and Sanctions:</b> 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"/> | <b>Bankruptcy:</b> 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.   |

| Yes                      | No                       |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Offer Validity Period:</b> 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 authorised 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

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:  | RFQ26/03282                      | Date: Click or tap to enter a date. |

**Currency of Quotation: MDL (Moldovan Leu) for local suppliers / USD (US Dollars) for international suppliers.**

| INCOTERMS: DDP   |  |      |                      |   |   |
|--|--|------|----------------------|---|---|
| Ref  | Description  | Q-ty | Unit price, (VAT 0%) | Transportation, insurance and other charges, (VAT 0%) | Total price (please insert currency) (VAT 0%) |
| 1.   | COMMUNICATION MODULES FOR PRIME 1.4 DATA CONCENTRATORS | 495  |                      |   |   |
| 2.   | TRAINING OF THE DISTRIBUTORS STAFF (2 groups)          | 2    |                      |   |   |
| Incoterms charges, including transportation/delivery costs |  |      |                      |   |   |
| Warranty   |  |      |                      |   |   |
| <b>Total Final and All-inclusive Price</b>                 |  |      |                      |   |   |

#### Compliance with 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 90 days from signature of the contract | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text.                    |
| Training on Operation and Maintenance                     |                          |                          |   |
| Warranty: minimum 36 months                               | <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.                    |
| Other requirements [pls. specify]                         | <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>Authorized Signature: _____</p> <p>_____</p> <p>Date: Click or tap here to enter text.</p> |
|--|---|

**Phone No.:** Click or tap here to enter text.

**Email Address:** Click or tap here to enter text.

**Name:** Click or tap here to enter text.

**Functional Title of Authorised Signatory:** Click or tap here to enter text.

**Email Address:** Click or tap here to enter text.

**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:  | RFQ26/03282                      | 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 design and Technical Data Sheets (including photos).

| ID     | Requirement   | Evidence required   | Conformity (Yes/No) | Offered Brand, Model and Exact characteristics<br><i>(Technical characteristics should not be less/worse than those listed in Annex 1: Schedule of Requirements)</i> |
|--------|---|---|---------------------|--|
| CM-001 | The communication module shall provide secure WAN/backhaul connectivity between the PRIME 1.4 Data Concentrator and HES/MDMS.   | Exact brand/model and datasheet reference.                      |                     |  |
| CM-002 | The module shall be compatible with DC PRIME 1.4 deployments and shall not limit the DC's PRIME PLC functions, meter registration, scheduled reads, event delivery, or remote commands. | Compatibility statement with PRIME 1.4 certificated DC and HES. |                     |  |
| CM-003 | Minimum 1 x WAN Ethernet port 10/100/1000Base-T, auto-negotiation, auto MDI/MDIX.   | Datasheet.  |                     |  |
| CM-004 | Minimum 2 x LAN Ethernet ports 10/100 Mbps.   | Datasheet.  |                     |  |

|        |  |                                       |  |  |
|--------|--|---------------------------------------|--|--|
| CM-005 | Minimum 1 x RS-485 serial interface, EIA/TIA-485 compliant, 300 bps to 115200 bps or wider, ESD protection +/-15 kV.   | Datasheet and pinout.                 |  |  |
| CM-006 | Integrated 4G LTE modem supporting European/EMEA operator bands. Minimum LTE-FDD bands B1, B3, B7, B8, B20 and B28.  | Datasheet and regional modem variant. |  |  |
| CM-007 | Minimum 1 physical SIM slot. eSIM shall be accepted as equivalent/additional capability but not mandatory if physical SIM is provided.   | Datasheet.                            |  |  |
| CM-008 | <p>The hardware must provide double antenna industrial connectors. Supplier shall provide suitable external LTE antennas and required cables.</p> <p>Antenna RF cable shall be low-loss coaxial type suitable for LTE communication. Minimum RF cable length shall be 5 meters. Extension of antenna cable shall be possible without modification of the communication module.</p> <p>Cable shall be UV-resistant and suitable for industrial outdoor usage. Cable and connectors shall be mechanically protected against vibration and environmental impact. Connector type shall be compatible with the offered communication module/router.</p> | Datasheet.                            |  |  |
| CM-009 | TCP/IP, UDP/IP, DHCP client/server as applicable, DNS, NTP, IPv4 and IPv6 support.   | Datasheet.                            |  |  |
| CM-010 | Support static routing, NAT, stateful firewall rules, port filtering and IP/MAC filtering.   | Datasheet and configuration guide.    |  |  |
| CM-011 | Support secure VPN using IPsec and/or OpenVPN/WireGuard; IPsec for utility   | Datasheet and configuration guide.    |  |  |

|        |   |                              |  |  |
|--------|---|------------------------------|--|--|
|        | APN/VPN integration. GRE/L2/L3 tunnel supported.  |                              |  |  |
| CM-012 | Support private APN configuration and operator-specific cellular profiles.  | Configuration guide.         |  |  |
| CM-013 | Web interface shall use HTTPS/TLS. Plain HTTP shall be disabled by default or disabled before handover.   | Security guide.              |  |  |
| CM-014 | Secure CLI/file transfer over SSH/SFTP or equivalent secure mechanism. Telnet/FTP shall be disabled by default.   | Configuration guide.         |  |  |
| CM-015 | Vendor shall provide central management capability or compatibility with a standard NMS/SNMP/Syslog platform for inventory, configuration backup, firmware, logs and health status. | Description.                 |  |  |
| CM-016 | SNMPv3 and remote Syslog export support.  | Datasheet.                   |  |  |
| CM-017 | Built-in hardware/software watchdog and automatic recovery after cellular or WAN loss.  | Datasheet.                   |  |  |
| CM-018 | Configurable scheduled reboot and remote reboot function.   | Configuration guide.         |  |  |
| CM-019 | Remote and local firmware upgrade, signed firmware or vendor-authenticated packages, rollback or recovery mechanism.  | Security guide.              |  |  |
| CM-020 | Role-based accounts or at minimum unique admin/service credentials, password policy, credential change at first use, no shared default production credentials.                      | Security guide.              |  |  |
| CM-021 | Local log and remote export for login, configuration change, VPN status, cellular status, reboot, firmware update and security events.  | Log sample.                  |  |  |
| CM-022 | NTP client support with configurable servers; local RTC.  | Datasheet/<br>configuration. |  |  |
| CM-023 | LEDs for power, cellular network/service, signal level or quality, WAN/LAN activity and VPN/online status where available.  | Datasheet.                   |  |  |
| CM-024 | 12 VDC or 24 VDC operation. Supplier shall include DIN-rail industrial power supply if not  | Datasheet.                   |  |  |

|        |   |   |  |  |
|--------|---|---|--|--|
|        | powered directly by the DC. Battery deep-discharge protection.  |   |  |  |
| CM-025 | Low-power industrial design. Bidder shall state idle, typical and peak consumption. Target: <=3 W idle and <=10 W typical/peak during transmission; deviations allowed if justified by integrated features such as multiple LTE modules or SFP. | Datasheet.                                      |  |  |
| CM-026 | Industrial enclosure suitable for DIN-rail mounting; wall/panel mounting accepted only if DIN-rail adapter is included.   | Datasheet.                                      |  |  |
| CM-027 | Operating temperature at least -20 C to +60 C; -30 C to +70 C or wider. Humidity 5% to 95% non-condensing or equivalent.  | Datasheet.                                      |  |  |
| CM-028 | Industrial EMC compliance; RS-485 ESD protection +/-15 kV; CE/EMC declaration for EU/EEA market or equivalent.  | Certificates.                                   |  |  |
| CM-029 | Unused services disabled, secure default configuration, documented hardening checklist, vulnerability disclosure and security update process.   | Hardening checklist.                            |  |  |
| CM-030 | Bidder shall provide a compatibility matrix with the offered DC PRIME 1.4 model, HES/APN/VPN setup and any required cable/power accessories.  | Completed matrix.                               |  |  |
| CM-031 | Bidder shall provide at least one sample communication module per offered configuration for laboratory testing with the PRIME 1.4 certificated DC, if requested by the UNDP.  | Sample commitment.                              |  |  |
| CM-032 | Minimum 24 months warranty; Bidder shall provide authorized service/warranty repair pathway.  | Warranty statement and service center evidence. |  |  |

|        |  |                       |  |  |
|--------|--|-----------------------|--|--|
| CM-033 | Bidder shall deliver the goods in up to 90 calendar days after Contract signature.   | Delivery plan.        |  |  |
| CM-034 | Bidder shall provide manufacturer authorization or, if manufacturer, clear manufacturer declaration and after-sales support commitment.  | Authorization letter. |  |  |
| CM-035 | Bidder shall provide datasheets, user manuals, configuration guide, security guide, certificates, wiring diagrams and recommended antenna/cable installation instructions.                   | Documents.            |  |  |
| CM-036 | The module shall support standard IP networking and shall not impose proprietary lock-in preventing use with other PRIME-certified DCs or HES platforms, subject to interface compatibility. | Declaration.          |  |  |

|   |   |
|---|---|
| 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 <small>Click or tap here to enter text.</small></p> <p>Address: <small>Click or tap here to enter text.</small></p> <p>Phone No.: <small>Click or tap here to enter text.</small></p> <p>Email Address: <small>Click or tap here to enter text.</small></p> | <p>Authorized Signature: _____</p> <p>Date: <small>Click or tap here to enter text.</small></p> <p>Name: <small>Click or tap here to enter text.</small></p> <p>Functional Title of Authorised Signatory: <small>Click or tap here to enter text.</small></p> <p>Email Address: <small>Click or tap here to enter text.</small></p> |

**ANNEX 5: FORMAT FOR CV OF PROPOSED KEY PERSONNEL**

|                   |                                  |       |                               |
|-------------------|----------------------------------|-------|-------------------------------|
| Name of Proposer: | Click or tap here to enter text. | Date: | Click or tap to enter a date. |
| RFQ reference:    | <b>RFQ26/03282</b>               |       |                               |

|                                    |  |                              |  |
|------------------------------------|--|------------------------------|--|
| <b>Position (as per ToR)</b>       |  |                              |  |
| <b>Personnel Information</b>       | Name:  |                              |  |
|                                    | Nationality:   | Date of birth:               |  |
|                                    | Language Proficiency:  |                              |  |
| <b>Present Employment</b>          | Name of employer:  | Contact: (manager or HR)     |  |
|                                    | Address of employer:   |                              |  |
|                                    | Telephone:   | Email:                       |  |
|                                    | Job title:   | Years with present employer: |  |
| <b>Education / Qualifications</b>  | <i>Summarise college/university and other specialised education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.</i> |                              |  |
| <b>Professional Certifications</b> | <i>Provide details of professional certifications relevant to the scope of services including name of institution and date of certification.</i>                       |                              |  |
| <b>References:</b>                 | <i>Provide names, addresses, phone and email contact information for two (2) references.</i>   |                              |  |

Summarise professional experience over the last 3 years in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

| <b>From</b> | <b>To</b> | <b>Company / Project / Position / Relevant technical and management experience</b> |
|-------------|-----------|--|
|             |           |  |

I, the undersigned, certify that, to the best of my knowledge and belief, this CV is accurate.

\_\_\_\_\_

Signature of Personnel

\_\_\_\_\_

Date (Day/Month/Year)