



REQUEST FOR QUOTATION (RFQ)

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| RFQ Reference: 658-2021-UNDP-UKR-RFQ-Communication equipment | Date: 19 August 2021 |
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SECTION 1: REQUEST FOR QUOTATION (RFQ)

UNDP kindly requests your quotation **for the procurement of emergency communication equipment for the State Emergency Service of Ukraine (SESU) Department in Chernivtsi Oblast** as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:

Signature: 

Name: **Ms. Agnes Kochan**

Title: **Operations Manager**

Date: **August 19, 2021**

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SECTION 2: RFQ INSTRUCTIONS AND DATA

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| 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 publication of cancellation notice on UNDP website.</p> |
| Deadline for the Submission of Quotation | <p>11:59 AM (Kyiv time), September 2, 2021</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><input type="checkbox"/> E-tendering</p> <p><input checked="" type="checkbox"/> Dedicated Email Address</p> <p><input type="checkbox"/> Courier / Hand delivery</p> <p><input type="checkbox"/> Other Click or tap here to enter text.</p> <p>Bid submission address: tenders.ua@undp.org</p> <ul style="list-style-type: none"> ▪ File Format: .ZIP, .PDF ▪ File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. ▪ All files must be free of viruses and not corrupted. ▪ Max. File Size per transmission: 20 MB ▪ Mandatory subject of email: 658-2021-UNDP-UKR-RFQ-Communication equipment ▪ Multiple emails must be clearly identified by indicating in the subject line "email no. X of Y", and the final "email no. Y of Y." ▪ It is recommended that the entire Quotation be consolidated into as few attachments as possible. ▪ The bidder should receive an email acknowledging email receipt. |
| 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> |
| Supplier Code of Conduct, Fraud, Corruption, | <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> |

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| Gifts and Hospitality | 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. |
| Conflict of Interest | <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> |
| General Conditions of Contract | <p>Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General Conditions of Contract</p> <p>Select the applicable GTC:</p> <p><input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions for Contract.</p> <p><input type="checkbox"/> General Terms and Conditions for de minimis contracts (services only, less than \$50,000)</p> <p><input type="checkbox"/> General Terms and Conditions for Works</p> <p>Applicable Terms and Conditions and other provisions are available at UNDP/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 type="checkbox"/> Others: Liquidated damages: up to 0.1% of total contract amount per each day of delay may be applied on discretion of UNDP.</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 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> |
| Currency of Quotation | <p>Quotations shall be quoted in:</p> <p><input checked="" type="checkbox"/> United States Dollars. Due to fluctuations in the national currency, it is recommended to indicate the price in dollars as risk mitigation measure.</p> |

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| | <p>Payments will be provided in local currency according to the UNORE currency rate for the date of payment, following the link: https://treasury.un.org/operationalrates/OperationalRates.php</p> <p><input checked="" type="checkbox"/> or Local Currency: UAH</p> |
| Joint Venture, Consortium or Association | <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 Solicitation policy for details on the applicable provisions on Joint Ventures, Consortium or Association.</p> |
| Only one Bid | <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> <ul style="list-style-type: none"> 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. |
| 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 below:</p> <p>All prices must:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> be inclusive of VAT and other applicable indirect taxes <input type="checkbox"/> be exclusive of VAT and other applicable indirect taxes |
| Language of quotation | <p>Technical and Financial Offer shall be submitted in English or Ukrainian</p> <p>Other documentation including registration documents, instructions and policy can be in Ukrainian (additionally in English if present)</p> |
| Documents to be submitted | <p>Bidders shall include the following documents in their quotation:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Annex 2: Quotation Submission Form duly completed and signed <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. <input checked="" type="checkbox"/> Copy of Latest Business Registration Certificate. <input checked="" type="checkbox"/> Extract from the Register of VAT payers or single tax payers (not mandatory on submission stage but will be required if Offeror is selected for contract award). <input checked="" type="checkbox"/> Company Profile, indicating at least 3 (three) years of experience in the field of supply of similar products. |

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| | <input checked="" type="checkbox"/> Warranty period for the equipment shall be not less than 12 months after acceptance of the goods by the project. <input checked="" type="checkbox"/> Equipment shall have official warranty service centres located in Ukraine. <input checked="" type="checkbox"/> At least 2 positive references from previous clients in past 2 years regarding supply of relevant goods. <input checked="" type="checkbox"/> Official dealership authorization of the manufacturer will be an advantage. |
| Quotation validity period | Quotations shall remain valid for 60 days from the deadline for the Submission of Quotation. |
| 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. |
| Partial Quotes | <input checked="" type="checkbox"/> Not permitted <input type="checkbox"/> Permitted: The offers may be submitted to different Lots. |
| Alternative Quotes | <input checked="" type="checkbox"/> Not permitted <input type="checkbox"/> Permitted If permitted, an alternative quote 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, Click or tap here to enter text. 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" |
| Payment Terms | <input checked="" type="checkbox"/> 30 days net upon delivery, testing and acceptance of items by UNDP. <input checked="" type="checkbox"/> Delivery in several stages may be considered upon confirmation by UNDP, payments linked to delivered goods cost. <input type="checkbox"/> UNDP will pay the negotiated amount based on provided financial offer and actual number of executed activities in a month. |
| Conditions for Release of Payment | <input checked="" type="checkbox"/> Passing Inspection [Acceptance acts to be signed by both UNDP and Supplier upon quality assurance team confirmation.] <input type="checkbox"/> Complete Installation <input type="checkbox"/> Passing all Testing [specify standard, if possible] <input type="checkbox"/> Completion of Training on Operation and Maintenance [specify no. of trainees, and location of training, if possible] <input checked="" type="checkbox"/> Signed act of acceptance of goods, based on full compliance with RFQ requirements <input type="checkbox"/> Others [pls. specify] |
| Contact Person for correspondence, notifications and clarifications | E-mail address: Procurement Unit, UNDP Ukraine, procurement.ua@undp.org Attention: Quotations shall not be submitted to this address but to the address for quotation submission above. Otherwise, offer shall be disqualified. 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. |
| Clarifications | Requests for clarification from bidders will not be accepted any later than 2 (two) days before the submission deadline. Responses to request for clarification will be communicated via email procurement.ua@undp.org by Procurement Unit, UNDP Ukraine. |
| Evaluation method | <input checked="" type="checkbox"/> The Contract will be awarded to the lowest price substantially compliant offer <input type="checkbox"/> Other Click or tap here to enter text. |
| Evaluation criteria | <u>Administrative Requirements:</u> <input checked="" type="checkbox"/> Offers must be submitted within the stipulated deadline. <input checked="" type="checkbox"/> Offers have been signed by the proper authority. <input checked="" type="checkbox"/> Offers must be submitted in English/Ukrainian. <input checked="" type="checkbox"/> Offers include requested company/organization documentation as mentioned above in "Documents to be submitted" section. |

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| | <input checked="" type="checkbox"/> Officially registered company (for Ukrainian companies – company should be registered in the territory controlled by the government of Ukraine). <input checked="" type="checkbox"/> Full acceptance of the Contract General Terms and Conditions. <input checked="" type="checkbox"/> Warranty period for the equipment shall be not less than 12 months after acceptance of the goods by the project. <input checked="" type="checkbox"/> Equipment shall have official warranty service centres located in Ukraine. <input checked="" type="checkbox"/> Supplier shall be capable to provide after-sale services. <input checked="" type="checkbox"/> At least 2 positive references from previous clients in past 2 years regarding supply of relevant goods. <input checked="" type="checkbox"/> At least 3 years of experience in supply of similar products. <input checked="" type="checkbox"/> Official dealership authorization of the manufacturer will be an advantage. Technical Requirements: <input checked="" type="checkbox"/> Technical responsiveness to stipulated requirements in TOR. |
| Right not to accept any quotation | UNDP is not bound to accept any quotation, nor award a contract |
| 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. |
| Type of Contract to be awarded | <input checked="" type="checkbox"/> Purchase Order <input type="checkbox"/> Contract Face Sheet <input type="checkbox"/> Contract for Works <input type="checkbox"/> Other Type/s of Contract [pls. specify] |
| Expected date for contract award. | 13 September 2021 |
| Publication of Contract Award | UNDP will publish the contract awards valued at USD 100,000 and more 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 | <p>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.</p> <p>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.</p> |

ANNEX 1: SCHEDULE OF REQUIREMENTS

Specification

for the procurement of emergency communication equipment
for the State Emergency Service of Ukraine (SESU) Department
in Chernivtsi Oblast

Background

UNDP's 'Strengthening Disaster Risk Reduction and Recovery in Ukraine' project (hereinafter—the project) aims at making communities in Ukraine less vulnerable to disasters caused by natural hazards and extreme weather events, decreasing losses in lives, economic losses, damage to livelihoods and health as a result of disasters. Ukraine's Carpathian region, including Chernivtsi Oblast, has been brought into focus of the project as it had been devastated by the series of flash floods in summer 2020.

The project is driven by the direct premise of at least two Sustainable Development Goals (SDGs), namely SDG 11 'Sustainable Cities and Communities' and SDG 13 'Climate Action'. Under the former, a Ukraine's national target is to ensure timely public alert about emergencies through innovative technologies. An inter-agency UN rapid assessment mission deployed in July 2020 in the flood-affected Carpathian region's areas came up with the four priority areas for recovery interventions, namely:

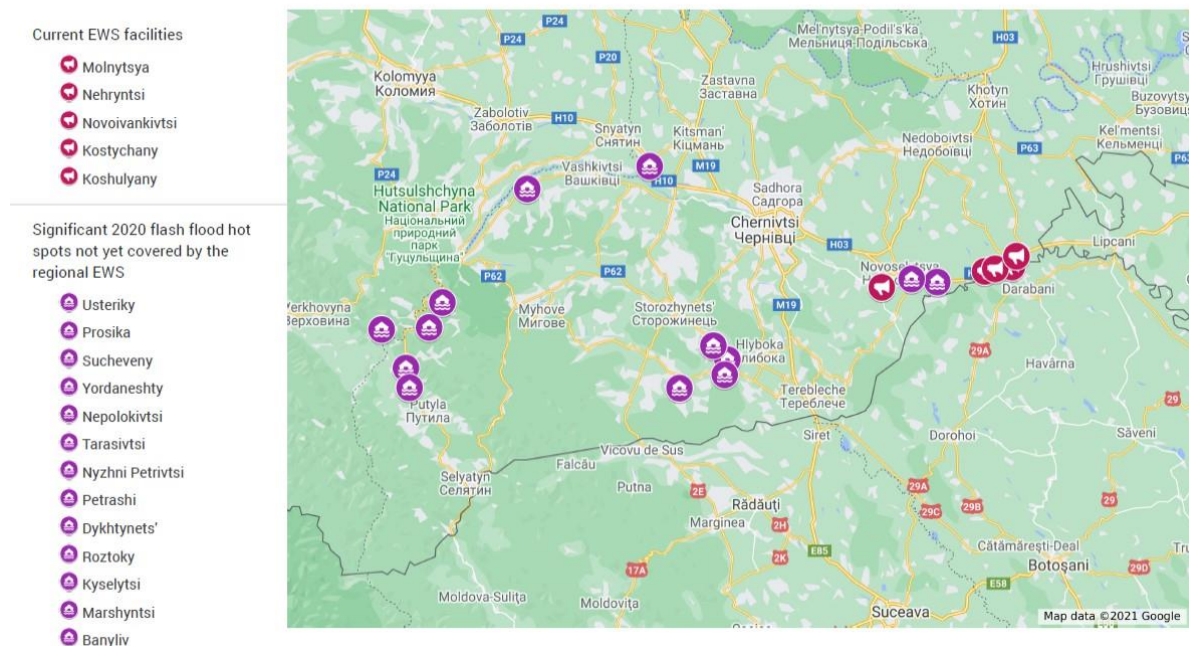
- Emergency Planning and Early Warning;
- Community Engagement/Public Information;
- Sustainable Water and Forest Management; and
- Management of Compensations and Insurance.

Among findings was the absence, intermittence or disruptions of reliable landline or mobile network coverage in the affected areas, both highlands and river plains, which thwarted authorities' efforts to ensure emergency safety measures, alert the public and manage rescue operations at all levels. A consequent recommendation was made to concentrate on developing a sufficient telecommunications infrastructure, as well as implementing digital solutions that would ensure timely access to appropriate information and alerts alongside the severity and spread forecasts, which would subsequently enable those affected by the floods to take necessary precautions limiting the severity of damages to property or life. The recommendation, once implemented, is relevant for enhancing the preparedness of target communities for not only flooding events, but similarly for the entirety of hazards and emergencies the communities in a particular region may confront.

In Chernivtsi Oblast, the regional State Emergency Service of Ukraine (SESU) Department assesses as the highest the risks of hydrological, hydrometeorological, and wildfire hazards, while the Oblast's Carpathian portion (population of ca. 400 thousand) as the most vulnerable to disasters. Those vulnerabilities are further exacerbated by disparities within the early warning and emergency communication network existing in the region.

Historically, while establishing emergency warning arrangements in Chernivtsi Oblast greater attention had been paid, due to the region's geography, to the transboundary implications and spatially to the areas stretching along the state borders with Romania and Moldova. This, as the 2020 flash floods have shown, contributed into the structurally imbalanced distribution of early warning and public alert capabilities with the Prut, Siret and Dniester upstream communities facing heightened risks in terms of being properly warned about emergency threats while also constrained in relaying the potentially life-saving information to their downstream counterparts. Similarly, Chernivtsi Oblast's Carpathian communities may be getting cut off the vital alerts from neighbouring Ivano-Frankivsk Oblast, as the two provinces share the Prut, Cheremosh, and Dniester river valleys and watersheds. An example of the identified insufficiencies as concerns the early warning system set-up in Chernivtsi Oblast is provided on the sketch below.

Chernivtsi Oblast



To address the gaps so far identified by the project within the early warning and public alert domain in Chernivtsi Oblast, UNDP in Ukraine seeks to procure a batch of radio communication equipment listed in the Technical Specification for handover to the SESU Department in Chernivtsi Oblast (hereinafter—SESU Chernivtsi). The Technical Specification is based on a single standard introduced across the State Emergency Service of Ukraine in accordance with the effective standing orders of 05 April 2018 and of 16 July 2018 issued by the executive of SESU. The requirement is prescribed therefore by the need in compatibility of the equipment the project seeks to procure with the available and prospective equipment at SESU.

The equipment is intended to serve for:

- Expanding the early warning and emergency communication coverage in Chernivtsi Oblast to provide public alert about disaster risks and emergency threats;
- Deploying in emergencies a field communication centre by SESU Chernivtsi, particularly in most remote and isolated areas; and
- Providing in emergencies a robust communication channel among the SESU monitors and responders and the local communities.

Such upgrade should eventually contribute into achieving one of the project's results that target communities, including the most vulnerable, have necessary capacity, knowledge tools and financing mechanisms to build resilience, and to prevent and better recover from disasters based on the principle of leaving no one behind focusing specifically on developing a necessary disaster risk reduction and management capacity in Chernivtsi Oblast.

Scope of work:

- Provision of required goods by the selected Contractor in accordance with Specification;
- Delivery of goods to the address as follows:
SESU Department in Chernivtsi Oblast
1a Komarova Street
Chernivtsi 58018 Ukraine.
- Assembling and one-off training on the use of equipment. Dates for the conduct of training to be agreed additionally.

Delivery Terms:

DDP (Chernivtsi, Ukraine).

Delivery procedure details will be provided to the selected Contractor.

Latest expected delivery date:

20 November 2021

Proposals for earlier dates are encouraged and will be considered as advantage.

Additional requirements:

- The price of the goods shall include the cost of delivery of all goods to the address indicated above;
- Manufacturer's warranty certificates shall be available;
- Complete technical documentation in Ukrainian shall be provided on the date of delivery;
- Warranty period for the equipment shall be not less than 12 months after acceptance of the goods by the project;
- Equipment shall have official warranty service centres located in Ukraine;
- Supplier shall be capable to provide after-sale services.

Quality assurance and acceptance:

A joint quality assurance team including UNDP (Project Manager, Strengthening Disaster Risk Reduction and Recovery in Ukraine) and representatives of SESU is responsible to conduct testing and acceptance of the supplied equipment once arrived at the agreed delivery place. Equipment shall be certified for the use in Ukraine according to the national legal requirements of Ukraine, including the national standard of DSTU 3254-95. For goods imported into Ukraine under this purchase, all the national import duty / customs clearance requirements have to be met for the goods to be accepted. Acceptance acts to be signed by both UNDP and Supplier upon quality assurance team confirmation.

Requirements to the organization/company

- Duly registered company/organization (for entities domiciled in Ukraine a place of registration must be within the territory controlled by the Government of Ukraine as of the date of administrative evaluation of the offer submitted to UNDP)
- At least 3 years of experience in supply of similar products
- Full acceptance of UNDP General Terms and Conditions
- At least 2 positive references from previous clients in past 2 years regarding supply of relevant goods
- Official dealership authorization of the manufacturer will be an advantage

Payment terms

- 30 days net upon delivery, testing and acceptance of items by UNDP;
- Delivery in several stages may be considered upon confirmation by UNDP, payments linked to delivered goods cost.

Technical Specification

| No. | Product description | Measurement unit | Quantity |
|------------|---|-------------------------|-----------------|
| 1 | Motorola SLR5500 digital stationary DMR repeater for 400-470 MHz band | kit | 3 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance mandatory |
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| 1 | Ensuring the necessary technical characteristics in the frequency bands used by the units of SESU | Compliance with DSTU 4184:2003 "Radio stations with angle modulation of terrestrial mobile service" and the requirements of Article 25(1) and Article 29(3) of the Law of Ukraine "On radio-frequency resource of Ukraine" | Yes |
| 2 | Operating frequency range | 400–470 MHz (according to the manufacturer's technical specifications) | Yes |
| 3 | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) (for analogue mode) | Yes |
| 4 | Receiver sensitivity | 0.25 μ V at a signal-to-noise ratio (SINAD) of 12 dB in analogue mode; 0.25 μ V at a relative BER of 5% in digital mode (according to the manufacturer's technical specifications) | Yes |
| 5 | Repeater modes | Radio coverage in the frequency range 400–470 MHz with a frequency difference between transmitter and receiver of at least 10 MHz | Yes |
| 6 | Introducing or changing channels | Carried out with external software | Yes |
| 7 | Support for digital communication systems | Repeater operates in the IP-siteConnect system (a system for interconnecting repeaters in an IP network) | Yes |
| 8 | Support for protocols, signalling and other services | The repeater provides both analogue and digital operation. | Yes |
| 9 | Software with a Ukrainian/Russian interface that can be set up on a computer with a programmer. Software settings by means of a computer: - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; - transmitter frequency deviation; - programming of other additional functions of the radio station. | | Yes |

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| 10 | The repeater transmitter is switched on by the specific CTCSS tone of the receiver (in analogue mode). The repeater provides a delay (up to 3 seconds) of switching off the transmitter after the receiver has finished receiving the signal | | Yes |
| 11 | Support for the repeater access restriction function (availability of authentication mode when operating in digital mode). | | Yes |
| 12 | Maximum carrier transmitter power | 50 W | Yes |
| Repeater after-warranty servicing period in Ukraine of at least 24 months | | | |

Completeness of the digital stationary repeater set:

- Repeater — 1 pc.
- 220 V power supply cable — 1 pc.
- Battery connection cable — 1 pc.
- Lightning protection for the IP network — 1 pc.
- Duplex filter (frequency range 400–470 MHz, frequency separation (reception-transmission): 5–15 MHz, maximum input power (continuous): at least 50 W, channel loss <1.5 dB, VSWR <1.5, suppression (isolation) at 10 MHz spacing: at least 75 dB. Temperature range -30°C to +60°C, N-type connectors — 1 pc.
- Base 4-vibrator antenna (frequency range — 400–470 MHz, at least 6 dBd gain, VSWR <1.5, HF connector — type N-female, circular DS, vertical polarisation, impedance 50 Ohm — 1 pc.
- Antenna feeder type 1/2" — 30 metres with N-male HF connectors — 1 pc.
- Battery with a capacity of at least 40 A/h — 1 pc.
- Antenna-feeder surge protector, N-female connectors — 1 pc.
- 220 V mains protection — 1 pc.
- Coaxial jumper set with disconnectors — 1 pc.
- Vandal resistant cabinet with lock — 1 pc.
- Logbook — 1 pc.
- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|------------|--|-------------------------|-----------------|
| 2 | Motorola DM4600E stationary radio station, 403–470 MHz | kit | 12 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance mandatory |
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| 1. | Standard | DMR ETSI TS 102 361-1, -2, -3 | Yes |
| 2. | Operating frequency range | 403–470 MHz (according to the manufacturer's technical specifications) | Yes |
| 3. | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) | Yes |
| 4. | Receiver sensitivity | At least 0.20 μ V at a signal-to-noise ratio (SINAD) of 12 dB (analogue mode) At least 0.20 μ V at a relative BER of 5% (digital mode) (according to the manufacturer's technical specifications) | Yes |
| 5. | Minimum number of channels | At least 100. Channels must be switched using the channel selector switch | Yes |
| 6. | Introducing or changing channels | Must be carried out with external software. | Yes |
| 7. | Modes of operation: | direct mode (without the use of a repeater); conventional (via repeater) single- or multi-site (repeaters are connected to each other via an IP network (WAN, LAN, etc.); trunking (via one and/or several sites) with dynamic automatic distribution of free channels, without using a fixed control channel; Automatic roaming (automatic switching of operating channels when moving between coverage areas of different repeaters (sites) in the system) | Yes |
| 8. | Support for protocols, signalling and other services | The radio station must provide both analogue and digital operation. Support for the digital radio standard DMR. Coding and decoding support: DCS, CTCSS, 2-tone, 5-tone in analogue mode. | Yes |
| 9. | Digital vocoder | Digital vocoder: AMBE++ | Yes |
| 10. | A display showing the current channel, operating mode, caller name and talkgroup | | Yes |
| 11. | Support for radio channel encryption | Support for radio channel encryption with ARC-4 encryption key (40 bits). | Yes |
| 12. | Software that can be set up on a computer. Software settings by means of a computer: - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; | | Yes |

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| | - programming of other additional functions of the radio station. | | |
| 13. | Programming of channel scanning on some channels as well as of priority scanning. | | Yes |
| 14. | Carrier transmitter power | At least 25 W (programmable function) | Yes |
| 15. | The radio station must be capable of transmitting data with radio stations of a similar standard | | Yes |
| 16. | The radio station must operate in the following modes: - "regular reception"; - "reception"; - "transmission" | | Yes |
| 17. | The radio station must be capable of programming an individual number (at least five digits). | | Yes |
| 18. | Possibility to set a time limit for continuous transmission operation (programmable function) | up to three (3) minutes | Yes |
| 19. | Level of protection | IP54 | Yes |
| 20. | Resistance to mechanical and climatic environmental factors (impact, vibration, relative humidity and temperature) | Compliance with the standard MIL-STD810 C,D,E, F&G | Yes |
| 21. | Operating temperature range | from -30 C to +60 C | Yes |
| 22. | Regular speaker | Minimum output power — 3 W | Yes |
| 23. | The radio station should have an after-warranty servicing period in Ukraine of at least 24 months | | Yes |
| 24. | Technical and warranty support by the supplier's and/or manufacturer's service centre in Ukraine | | Yes |

Completeness of one stationary radio station set:

- transceiver — 1 pc.
- power cable — 1 pc.
- 13.8V / 15A power supply unit with a battery backup switching function — 1 pc.
- backup power cable — 1 pc.
- battery with a capacity of at least 40 A/h — 1 pc.
- antenna-feeder surge protector, N-female connectors — 1 pc.
- radio station mounting kit — 1 pc.
- RG-8 type HF cable — 30 m
- base 2-vibrator antenna, at least 3 dBd gain — 1 pc.
- antenna mast with a minimum height of 11.4 metres — 1 pc.
- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|------------|---|-------------------------|-----------------|
| 3 | Motorola DM4601e digital DMR radio station with a display, 403–470 MHz band | kit | 18 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance mandatory |
|-----------|---|---|-----------------------------|
| 1. | Operating frequency range | 403–470 MHz (according to the manufacturer's technical specifications) | Yes |
| 2. | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) | Yes |
| 3. | Receiver sensitivity | At least 0.2 μ V at a signal-to-noise ratio (SINAD) of 12 dB (analogue mode) At least 0.2 μ V at a relative BER of 5% (digital mode) (according to the manufacturer's technical specifications) | Yes |
| 4. | Minimum number of channels | 1000. Channels must be switched using the channel selector switch with a firm (fixed) channel lock. | Yes |
| 5. | Introducing or changing channels | Must be carried out with external software. | Yes |
| 6. | Support for protocols, signalling and other services | The radio station must provide both analogue and digital operation. The radio station must ensure interoperability with the customer's existing digital radio stations (Motorola DP4400e, DP4800e and DM4600e) and similar equipment. Support for the digital radio standard DMR. Coding and decoding support: DCS, CTCSS, 2-tone, 5-tone in analogue mode. | Yes |
| 7. | Support for radio channel encryption | Support for radio channel encryption with an ARC-4 encryption key of at least 40 bits, upgradeable to 256 bits (AES256) | Yes |
| 8. | Software that can be set up on a computer. Software settings by means of a computer: - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; - transmitter frequency deviation; - programming of other additional functions of the radio station. | | Yes |
| 9. | Programming of channel scanning on some channels as well as of priority scanning. | | Yes |

| | | | |
|-----|--|--|-----|
| 10. | Carrier transmitter power | At least 25 W (programmable function) | Yes |
| 11. | The radio station must be capable of transmitting data with radio stations of a similar standard | | Yes |
| 12. | The radio station must operate in the following modes: - "regular reception"; - "reception"; - "transmission" | | Yes |
| 13. | The radio station must be capable of programming an individual number (at least five digits). | | Yes |
| 14. | Possibility to set a time limit for continuous transmission operation (programmable function) | up to three (3) minutes | Yes |
| 15. | Operating temperature range | from -30°C to +60°C | Yes |
| 16. | Regular speaker | Minimum output power – 0.5 W | Yes |
| 17. | The radio station should have an after-warranty servicing period in Ukraine of at least 24 months | | Yes |
| 18. | Technical and warranty support by the supplier's and/or manufacturer's service centre in Ukraine | | Yes |

Completeness of one vehicle radio station set:

- transceiver — 1 pc.
- power cable — 1 pc.
- mounting kit — 1 pc.
- microphone — 1 pc.
- magnetic-based car antenna with a connector and a cable of at least 4 metres — 1 pc.
- magnetic-based GPS antenna — 1 pc.
- radio station logbook — 1 pc.
- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|-----|---|------------------|----------|
| 4 | Motorola DP4401e digital mobile radio station, 403–527 MHz band, 4W (or equivalent) | kit | 31 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No. | Parameters | Technical specifications | Compliance mandatory |
|-----|---|--|----------------------|
| 1 | Frequency range, MHz | 403.0–527.0 | Yes |
| 2 | Operating frequency grid spacing, kHz digital mode analogue mode | 12.5 25.0 | Yes |
| 3 | Number of channels | 32 | Yes |
| 4 | Transmission output capacity, W | 4 | Yes |
| 5 | Switching the power level (software configurable) | Yes (1 W or 4 W) | Yes |
| 7 | Headset connection | Yes | Yes |
| 8 | Digital protocol | ETSI-TS 102.361-1, -2, -3 | Yes |
| 9 | Reference oscillator frequency stability, ppm (frequency deviation in millionths) | +0.5 ppm | Yes |
| 10 | Analogue sensitivity, μ V | no more than 0.2 | Yes |
| 11 | Analogue sensitivity, μ V | no more than 0.2 | Yes |
| 12 | Neighbour channel selectivity, dB | 60 (12.5 kHz) 70 (25.0 kHz) | Yes |
| 13 | Stray signal attenuation, dB | 70 | Yes |
| 14 | Conductive stray radiation, dBm | -57 | Yes |
| 15 | Voice and data encryption (only in digital mode, no encryption in analogue mode) | Key length of at least 40 bits (ARC-4), upgradeable to 256 bits (AES256) | Yes |
| 16 | Modes of operation | Conventional single- or multi-site, trunking (single- or multi-site operation with dynamic automatic allocation of free channels without a separate control channel) | Yes |
| 17 | Resistance to mechanical and climatic environmental factors | Compliance with the standard MIL-STD810 C,D,E, F&G | Yes |

| | | | |
|--|--|--|--|
| | (impact, vibration, relative humidity and temperature) | | |
|--|--|--|--|

Completeness of a mobile radio station set:

- transceiver — 1 pc.
- antenna — 1 pc.
- Li-ion battery with a capacity of at least 2100 mA/h — 1 pc.
- belt clip for wearing the radio station on the belt — 1 pc.
- headset socket cover — 1 pc.
- regular individual charger — 1 pc.
- Ukrainian-language manual – 1 pc.

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: | 658-2021-UNDP-UKR-RFQ-Communication equipment | 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. |
| VAT payer status | Click or tap here to enter text. |
| Contract person name | Click or tap here to enter text. |
| Contact person email | Click or tap here to enter text. |
| Contact person phone | Click or tap here to enter text. |
| Company's core activities | Click or tap here to enter text. |
| Profile – describing the nature of business, field of expertise. | Click or tap here to enter text. |
| 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. |
| References | Please provide contact details of at least 2 (two) previous clients for reference and attach the signed reference letters. |

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. |
| <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 Organisation's Point of Contact. |

| Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Prohibitions, Sanctions: I/We hereby declare that our firm, its 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 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: | 658-2021-UNDP-UKR-RFQ-Communication equipment | Date: Click or tap to enter a date. |

Table 1. Conformity to the requirements of Specification

| No. | Product description | Measurement unit | Quantity |
|-----|---|------------------|----------|
| 1 | Motorola SLR5500 digital stationary DMR repeater for 400-470 MHz band | kit | 3 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance mandatory Yes/No |
|----|---|--|--------------------------------|
| 1 | Ensuring the necessary technical characteristics in the frequency bands used by the units of SESU | Compliance with DSTU 4184:2003 "Radio stations with angle modulation of terrestrial mobile service" and the requirements of Article 25(1) and Article 29(3) of the Law of Ukraine "On radio-frequency resource of Ukraine" | |
| 2 | Operating frequency range | 400–470 MHz (according to the manufacturer's technical specifications) | |
| 3 | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) (for analogue mode) | |
| 4 | Receiver sensitivity | 0.25 μ V at a signal-to-noise ratio (SINAD) of 12 dB in analogue mode; 0.25 μ V at a relative BER of 5% in digital mode (according to the manufacturer's technical specifications) | |
| 5 | Repeater modes | Radio coverage in the frequency range 400–470 MHz with a frequency difference between transmitter and receiver of at least 10 MHz | |
| 6 | Introducing or changing channels | Carried out with external software | |

| | | | |
|--|--|--|--|
| 7 | Support for digital communication systems | Repeater operates in the IP-siteConnect system (a system for interconnecting repeaters in an IP network) | |
| 8 | Support for protocols, signalling and other services | The repeater provides both analogue and digital operation. | |
| 9 | Software with a Ukrainian/Russian interface that can be set up on a computer with a programmer. Software settings by means of a computer: - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; - transmitter frequency deviation; - programming of other additional functions of the radio station. | | |
| 10 | The repeater transmitter is switched on by the specific CTCSS tone of the receiver (in analogue mode). The repeater provides a delay (up to 3 seconds) of switching off the transmitter after the receiver has finished receiving the signal | | |
| 11 | Support for the repeater access restriction function (availability of authentication mode when operating in digital mode). | | |
| 12 | Maximum carrier transmitter power | 50 W | |
| Repeater after-warranty servicing period in Ukraine of at least 24 months | | | |

Completeness of the digital stationary repeater set:

- Repeater — 1 pc.
- 220 V power supply cable — 1 pc.
- Battery connection cable — 1 pc.
- Lightning protection for the IP network — 1 pc.
- Duplex filter (frequency range 400–470 MHz, frequency separation (reception-transmission): 5–15 MHz, maximum input power (continuous): at least 50 W, channel loss <1.5 dB, VSWR <1.5, suppression (isolation) at 10 MHz spacing: at least 75 dB. Temperature range -30°C to +60°C, N-type connectors — 1 pc.
- Base 4-vibrator antenna (frequency range — 400–470 MHz, at least 6 dBd gain, VSWR <1.5, HF connector — type N-female, circular DS, vertical polarisation, impedance 50 Ohm — 1 pc.
- Antenna feeder type 1/2" — 30 metres with N-male HF connectors — 1 pc.
- Battery with a capacity of at least 40 A/h — 1 pc.
- Antenna-feeder surge protector, N-female connectors — 1 pc.
- 220 V mains protection — 1 pc.
- Coaxial jumper set with disconnectors — 1 pc.

- Vandal resistant cabinet with lock — 1 pc.
- Logbook — 1 pc.
- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|-----|--|------------------|----------|
| 2 | Motorola DM4600E stationary radio station, 403–470 MHz | kit | 12 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance Mandatory Yes/No |
|----|--|---|-----------------------------|
| 1 | Standard | DMR ETSI TS 102 361-1, -2, -3 | |
| 2 | Operating frequency range | 403–470 MHz (according to the manufacturer's technical specifications) | |
| 3 | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) | |
| 4 | Receiver sensitivity | At least 0.20 μ V at a signal-to-noise ratio (SINAD) of 12 dB (analogue mode) At least 0.20 μ V at a relative BER of 5% (digital mode) (according to the manufacturer's technical specifications) | |
| 5 | Minimum number of channels | At least 100. Channels must be switched using the channel selector switch | |
| 6 | Introducing or changing channels | Must be carried out with external software. | |
| 7 | Modes of operation: | direct mode (without the use of a repeater); conventional (via repeater) single- or multi-site (repeaters are connected to each other via an IP network (WAN, LAN, etc.); trunking (via one and/or several sites) with dynamic automatic distribution of free channels, without using a fixed control channel; Automatic roaming (automatic switching of operating channels when moving between coverage areas of different repeaters (sites) in the system) | |
| 8 | Support for protocols, signalling and other services | The radio station must provide both analogue and digital operation. Support for the digital radio standard DMR. Coding and decoding support: DCS, CTCSS, 2-tone, 5-tone in analogue mode. | |
| 9 | Digital vocoder | Digital vocoder: AMBE++ | |

| | | | |
|----|---|---|--|
| 10 | A display showing the current channel, operating mode, caller name and talkgroup | | |
| 11 | Support for radio channel encryption | Support for radio channel encryption with ARC-4 encryption key (40 bits). | |
| 12 | Software that can be set up on a computer. Software settings by means of a computer: - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; - programming of other additional functions of the radio station. | | |
| 13 | Programming of channel scanning on some channels as well as of priority scanning. | | |
| 14 | Carrier transmitter power | At least 25 W (programmable function) | |
| 15 | The radio station must be capable of transmitting data with radio stations of a similar standard | | |
| 16 | The radio station must operate in the following modes: - "regular reception"; - "reception"; - "transmission" | | |
| 17 | The radio station must be capable of programming an individual number (at least five digits). | | |
| 18 | Possibility to set a time limit for continuous transmission operation (programmable function) | up to three (3) minutes | |
| 19 | Level of protection | IP54 | |
| 20 | Resistance to mechanical and climatic environmental factors (impact, vibration, relative humidity and temperature) | Compliance with the standard MIL-STD810 C,D,E, F&G | |
| 21 | Operating temperature range | from -30 C to +60 C | |
| 22 | Regular speaker | Minimum output power — 3 W | |
| 23 | The radio station should have an after-warranty servicing period in Ukraine of at least 24 months | | |
| 24 | Technical and warranty support by the supplier's and/or manufacturer's service centre in Ukraine | | |

Completeness of one stationary radio station set:

- transceiver — 1 pc.
- power cable — 1 pc.
- 13.8V / 15A power supply unit with a battery backup switching function — 1 pc.
- backup power cable — 1 pc.

- battery with a capacity of at least 40 A/h — 1 pc.
- antenna-feeder surge protector, N-female connectors — 1 pc.
- radio station mounting kit — 1 pc.
- RG-8 type HF cable — 30 m
- base 2-vibrator antenna, at least 3 dBd gain — 1 pc.
- antenna mast with a minimum height of 11.4 metres — 1 pc.
- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|------------|---|-------------------------|-----------------|
| 3 | Motorola DM4601e digital DMR radio station with a display, 403–470 MHz band | kit | 18 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No | Parameters | Technical specifications | Compliance Mandatory Yes/No |
|-----------|--|---|------------------------------------|
| 1 | Operating frequency range | 403–470 MHz (according to the manufacturer's technical specifications) | |
| 2 | Frequency grid pitch programming | 12.5 kHz and 25 kHz with a frequency deviation of ± 2.5 kHz and 5 kHz respectively (programmable function) | |
| 3 | Receiver sensitivity | At least 0.2 μ V at a signal-to-noise ratio (SINAD) of 12 dB (analogue mode) At least 0.2 μ V at a relative BER of 5% (digital mode) (according to the manufacturer's technical specifications) | |
| 4 | Minimum number of channels | 1000. Channels must be switched using the channel selector switch with a firm (fixed) channel lock. | |
| 5 | Introducing or changing channels | Must be carried out with external software. | |
| 6 | Support for protocols, signalling and other services | The radio station must provide both analogue and digital operation. The radio station must ensure interoperability with the customer's existing digital radio stations (Motorola DP4400e, DP4800e and DM4600e) and similar equipment. Support for the digital radio standard DMR. Coding and decoding support: DCS, CTCSS, 2-tone, 5-tone in analogue mode. | |

| | | | |
|----|--|---|--|
| 7 | Support for radio channel encryption | Support for radio channel encryption with an ARC-4 encryption key of at least 40 bits, upgradeable to 256 bits (AES256) | |
| 8 | Software that can be set up on a computer. Software settings by means of a computer: <ul style="list-style-type: none"> - specific frequencies from a particular operating band; - carrier transmitter power; - frequency grid pitch; - transmitter frequency deviation; - programming of other additional functions of the radio station. | | |
| 9 | Programming of channel scanning on some channels as well as of priority scanning. | | |
| 10 | Carrier transmitter power | At least 25 W (programmable function) | |
| 11 | The radio station must be capable of transmitting data with radio stations of a similar standard | | |
| 12 | The radio station must operate in the following modes: <ul style="list-style-type: none"> - "regular reception"; - "reception"; - "transmission" | | |
| 13 | The radio station must be capable of programming an individual number (at least five digits). | | |
| 14 | Possibility to set a time limit for continuous transmission operation (programmable function) | up to three (3) minutes | |
| 15 | Operating temperature range | from -30°C to +60°C | |
| 16 | Regular speaker | Minimum output power – 0.5 W | |
| 17 | The radio station should have an after-warranty servicing period in Ukraine of at least 24 months | | |
| 18 | Technical and warranty support by the supplier's and/or manufacturer's service centre in Ukraine | | |

Completeness of one vehicle radio station set:

- transceiver — 1 pc.
- power cable — 1 pc.
- mounting kit — 1 pc.
- microphone — 1 pc.
- magnetic-based car antenna with a connector and a cable of at least 4 metres — 1 pc.
- magnetic-based GPS antenna — 1 pc.
- radio station logbook — 1 pc.

- Ukrainian-language manual – 1 pc.

| No. | Product description | Measurement unit | Quantity |
|------------|---|-------------------------|-----------------|
| 4 | Motorola DP4401e digital mobile radio station, 403–527 MHz band, 4W (or equivalent) | kit | 31 |

BASIC REQUIREMENTS FOR THE ITEM TO BE PROCURED:

| No. | Parameters | Technical specifications | Compliance Mandatory Yes/No |
|------------|---|---------------------------------|------------------------------------|
| 1 | Frequency range, MHz | 403.0–527.0 | |
| 2 | Operating frequency grid spacing, kHz | 12.5 | |
| | digital mode | 25.0 | |
| | analogue mode | | |
| 3 | Number of channels | 32 | |
| 4 | Transmission output capacity, W | 4 | |
| 5 | Switching the power level (software configurable) | Yes (1 W or 4 W) | |
| 7 | Headset connection | Yes | |
| 8 | Digital protocol | ETSI-TS 102.361-1, -2, -3 | |
| 9 | Reference oscillator frequency stability, ppm (frequency deviation in millionths) | +/-0.5 ppm | |
| 10 | Analogue sensitivity, µV | no more than 0.2 | |
| 11 | Analogue sensitivity, µV | no more than 0.2 | |
| 12 | Neighbour channel selectivity, dB | 60 (12.5 kHz) 70 (25.0 kHz) | |
| 13 | Stray signal attenuation, dB | 70 | |
| 14 | Conductive stray radiation, dBm | -57 | |

| | | | |
|----|---|---|--|
| 15 | Voice and data encryption (only in digital mode, no encryption in analogue mode) | Key length of at least 40 bits (ARC-4), upgradeable to 256 bits (AES256) | |
| 16 | Modes of operation | Conventional single- or multi-site, trunking (single- or multi-site operation with dynamic automatic allocation of free channels without a separate control channel) | |
| 17 | Resistance to mechanical and climatic environmental factors (impact, vibration, relative humidity and temperature) | Compliance with the standard MIL-STD810 C,D,E, F&G | |

Table 2. Financial offer for the supply of goods in accordance with the technical specification and requirements

| Description of goods, services | Amount (currency), with VAT |
|---|--------------------------------|
| (Please include all price components in accordance with the requirements of Specification) | |
| | |
| Warranty | |
| Transportation | |
| Please add other expenses required, with detailed description | |
| | |
| Total amount | |

Table 3. Relevant projects implemented during the last 3 years:

| # | Client' name and address | Project period | | Project cost (USD) | Describe briefly the nature of supply |
|---|-----------------------------|----------------|-------------|-----------------------|---|
| | | Start date | Finish date | | |
| | | | | | |
| | | | | | |
| | | | | | |

Table 4. Compliance with Requirements

| | Your 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. |
| Officially registered company (for Ukrainian companies – company should be registered in the territory controlled by the government of Ukraine). | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |

| | | | |
|--|--------------------------|--------------------------|----------------------------------|
| Full acceptance of the Contract General Terms and Conditions. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Official dealership authorization of the manufacturer will be an advantage. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| At least 3 years of experience in supply of similar products. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| At least 2 positive references from previous clients in past 2 years regarding supply of relevant goods. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Supplier shall be capable to provide after-sale services. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Equipment shall have official warranty service centres located in Ukraine. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Warranty period for the equipment shall be not less than 12 months after acceptance of the goods by the project. | <input type="checkbox"/> | <input type="checkbox"/> | Click or tap here to enter text. |
| Validity of Quotation (min. 60 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. | |
| <i>Exact name and address of company</i> Company Name: Click or tap here to enter text. Address: Click or tap here to enter text. Click or tap here to enter text. Phone No.: Click or tap here to enter text. Email Address: Click or tap here to enter text. | Authorized Signature: Date: 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. |