

"Approved":

Mihai IACOB,

Administrator,

S.E. "Radiocomunicatii"

INVITATION AND TERMS OF REFERENCE

Procurement of 4 sets of DVB-T2 digital terrestrial transmitters
Technical specifications and participation conditions

OPEN TENDER

Identification Data and Procurement Summary

Table No. 1. Procurement Identification Data

Field	Description
Contracting entity:	S.E. "Radiocomunicatii"
IDNO:	1002600049442
Registered office:	Chisinau municipality, Drumul Viilor Street 28/2
Project:	"Integration of the localities on the left bank of the Nistru River into the information space of the Republic of Moldova"
Source of financing:	Financial resources intended for project implementation, including the allocation approved by Government Decision No. 290/2026, position 30
Entity responsible for the procedure and payment:	S.E. "Radiocomunicatii", as contracting entity and contractual payer
Field of use:	Extension of the digital terrestrial television infrastructure of National Multiplex A

1. Invitation to Participate and Publication

S.E. "Radiocomunicatii" invites eligible economic operators to participate in the internal open tender for the procurement of 4 complete sets of DVB-T2 digital terrestrial transmitters, under the technical and procedural conditions established in these Terms of Reference.

The invitation to participate and these Terms of Reference shall be published on the official website of S.E. "Radiocomunicatii", Procurement section: <https://www.radiocom.md/achizitii-1-61>. The website shall provide the possibility to download the Terms of Reference.

The text of the Terms of Reference and/or the download link shall be sent by e-mail to DVB-T2 equipment manufacturers and authorized representatives identified by the contracting entity, in order to ensure uniform information of potential participants.

2. Background, Purpose and Legal Basis

S.E. "Radiocomunicatii" manages the technological infrastructure necessary for the transport and broadcasting of audiovisual signals, including the public digital terrestrial television network - National Multiplex A, the infrastructure intended for National Multiplex B, radio and television stations, electronic communications systems, transmission equipment and auxiliary power infrastructure.

The procurement is a component of the project "Integration of the localities on the left bank of the Nistru River into the information space of the Republic of Moldova", submitted for financing from the allocations intended for the country reintegration activities. The initiative and project cost estimate were supported and approved by the Board of Directors of S.E. "Radiocomunicatii" by the decision recorded in Minutes No. 1 of 6 February 2026, and the application form was signed on 12 February 2026.

By Government Decision No. 290/2026 on the approval of the Programme of activities for the reintegration of the country for 2026, under position 30, the amount of MDL 800,000.00 was approved for the procurement and installation of technical equipment intended to ensure access for the population in the shadow areas on both banks of the Nistru River to the national audiovisual space. The total approved project budget is MDL 1,231,200.00 excluding VAT.

The procurement file shall include the applicable administrative, financial or contractual act confirming the mechanism for making available to S.E. "Radiocomunicatii" the allocation approved by Government Decision No. 290/2026 and the enterprise's right to pay the contract from the respective funds.

The project aims to install the equipment in Sanatauca, Rezina, Holercani and Talmază and to improve reception of National Multiplex A in the localities indicated in Table No. 13 of Annex No. 1.

The requirements indicated as minimum mandatory requirements are cumulative. Any reference to a standard, marking, technology, protocol or technical solution shall be interpreted as allowing an equivalent or superior standard or solution, provided that equivalence is documented.

3. Subject of Procurement, Estimated Value and Applicable Procedure

The subject of procurement is the supply of 4 (four) complete sets of professional DVB-T2 digital terrestrial transmitters, with a nominal useful RF power of at least 150 W RMS, measured at the input of the channel filter included in the set, intended for continuous 24/7 operation in the existing network of S.E. "Radiocomunicatii", including MFN/SFN mode, with T2-MI and Multi-PLP support, channel filters, GPS/GNSS synchronization, accessories, software licenses, technical documentation and testing.

This procedure does not include technical design, connection of the sites to the VPN network, containers/shelters, installation at sites and coverage measurements, which represent separate project activities. External antenna systems and antenna feeder cables are not included in the subject of these Terms of Reference.

The procurement is organized as a single lot, considering the technically unified nature of the equipment, functional compatibility, use of the same management and monitoring solutions, uniformity of licenses, warranty conditions and technical support.

Partial bids for fewer than 4 sets shall not be accepted. Each set must be fully functional and include all components, accessories and licenses necessary for operation in the requested configuration, without any subsequent additional costs for the contracting entity. The quantity, CPV code and estimated value are indicated in Table No. 2.

The applicable procedure is an internal open tender for the procurement of goods, organized by S.E. "Radiocomunicatii" through publication on the enterprise's official website and direct transmission to relevant manufacturers/representatives. The procedure is not carried out through MTender.

The application of the open tender is determined by the estimated procurement value of MDL 800,000.00 excluding VAT and by the provisions of the internal Regulation of S.E. "Radiocomunicatii", according to which procurements of goods and services with an estimated value exceeding MDL 600,000 excluding VAT are awarded through open tender.

The initiation and publication of the procurement procedure shall be carried out after confirmation of the availability of financial resources and obtaining all mandatory approvals, including the written consent of the founder, under item 13 of the Regulation approved by Government Decision No. 351/2020. The respective documents shall be included in the procurement file.

No electronic auction round shall be used under this procedure. The ranking of bids shall be established by the Tender Committee after full examination of bid compliance and application of the "best price-quality ratio" criterion.

Table No. 2. Quantity, CPV Code and Estimated Value

No.	CPV code	Name of goods	Quantity	Estimated value, MDL excluding VAT	Specification
1	32224000-9	Complete set of DVB-T2 digital terrestrial transmitter, with nominal useful RF power of at least 150 W RMS at the input of the channel filter	4 sets	800,000.00 (200,000.00/set)	According to these Terms of Reference and Annex No. 1

4. Communication with Participants and Procedure Calendar

For additional information and clarifications regarding the bid documents, prospective tender participants shall contact the person indicated below:

Ghenadie DODON;

e-mail: ghenadie.dodon@radiocom.md;

Postal address: S.E. "Radiocomunicatii",

MD-2021, Chisinau municipality, Drumul Viilor Street 28/2;

tel.: +373 22 87 63 00; fax: +373 22 87 63 99;

e-mail: office@radiocom.md;

<https://www.radiocom.md/achizitii-1-61>;

IDNO 1002600049442.

Requests for clarification shall be submitted in writing by e-mail by the deadline indicated in the calendar. Answers shall be sent to all economic operators that requested or received the tender documentation and, where applicable, shall be published on the enterprise's procurement page.

The open tender organized for the supply of DVB-T2 transmitters shall take place during the period:

from 24 July 2026 to 7 September 2026,

according to the indicative calendar in Table No. 3.

Table No. 3. Indicative Procedure Calendar

No.	Tender stages	Start/End	Activities/Notes
1	Publication and transmission of the Terms of Reference	24.07.2026	Publication on www.radiocom.md and transmission by e-mail to relevant manufacturers/representatives.
2	Clarifications and answers	24.07.2026 - 02.09.2026	Clarification requests shall be submitted during this period. Answers shall be issued within up to 3 working days from receipt, but no later than 5 calendar days before the bid submission deadline.
3	Amendment of documentation, where	until 02.09.2026	Amendments shall be communicated to all participants and published on the procurement

	applicable		page. After the clarification deadline, amendments affecting bid preparation shall not be allowed without extending the deadline.
4	Receipt of bids	24.07.2026 - 07.09.2026	Receipt of sealed envelopes at the address indicated in the documentation, until the established deadline.
5	Opening of bids	07.09.2026	The envelopes containing participating bids shall be opened by the Tender Committee.

5. Definitions Used

The terms used in these Terms of Reference have the meanings indicated in Table No. 4.

Table No. 4. Definitions

Term	Definition
Internal open tender	competitive procedure organized by S.E. "Radiocomunicatii" for selection of the winning bid, with publication of the invitation and Terms of Reference on the enterprise's official website and submission of bids according to this document.
Terms of Reference	written documentation establishing the administrative, commercial, technical, evaluation, delivery, acceptance, warranty and support conditions applicable to this procurement.
Tendering authority / contracting entity	S.E. "Radiocomunicatii", which organizes the procedure and concludes the procurement contract.
Tender Committee	group established by S.E. "Radiocomunicatii" for preparation, conduct, evaluation and documentation of the tender procedure.
Economic operator / bidder	resident or non-resident legal entity, manufacturer or authorized representative, submitting a bid within the established term and conditions.
Bid	set of qualification documents, technical bid and financial bid submitted by the bidder in the requested form.
Submission deadline	date and time by which the bidder may submit, amend or withdraw the bid.
Tender winner	bidder whose bid has been declared admissible and obtained the highest total score according to the award criterion.
Ultimate beneficial owner	natural person who ultimately owns or controls the bidder, in accordance with the applicable legislation.

6. Eligible Participants and Bid Content

6.1. Eligible Participants

Any legal entity, resident or non-resident, that meets the requirements set out in these Terms of Reference may participate in the tender.

The direct manufacturers of the requested equipment or representatives/distributors authorized by the manufacturer to deliver the proposed equipment on the territory of the Republic of Moldova are eligible.

The bidder must demonstrate relevant experience in the delivery of similar professional transmission, radiocommunications, broadcasting or telecommunications equipment, confirmed by contracts, recommendations, certificates or other supporting documents.

Participants shall bear all costs related to the preparation and submission of the bid, regardless of the tender outcome.

The bid must be valid for at least 60 calendar days from the bid submission deadline.

6.2. Bid Submission Format

The bid shall be submitted physically, on paper, to the address of S.E. "Radiocomunicatii", MD-2021, Chisinau municipality, Drumul Viilor Street 28/2, by the deadline indicated in the procedure calendar.

The bid shall be submitted in a closed and sealed outer envelope. The outer envelope shall include three separate compartments/envelopes: qualification documents, the technical bid and the financial bid.

Each compartment/envelope shall contain the original and a copy certified by signature. The envelopes shall indicate the bidder's name, its address, the name of the procedure and the relevant marking: "QUALIFICATION DOCUMENTS", "TECHNICAL BID" or "FINANCIAL BID".

The bid shall be numbered, signed on each page by the bidder's authorized representative, stitched or bound so as to prevent page substitution and, where applicable, stamped according to the bidder's practices.

An electronic copy of the bid, identical to the paper version, shall be submitted on a USB memory device. In case of discrepancy, the original paper version shall prevail.

Amendments, additions or withdrawal of the bid shall be allowed only before the submission deadline and shall be submitted in the same form, in a sealed envelope marked accordingly: "AMENDMENT", "ADDITION" or "WITHDRAWAL".

The Secretary of the Tender Committee shall register the submitted bids and, at the bidder's request, issue confirmation of receipt of the envelope.

6.3. Language and Bid Documents

The participation request, bid and correspondence between the bidder and the contracting entity shall be prepared in Romanian. Supporting documents and technical literature may be submitted in another language, with translation of the relevant excerpts into Romanian or English, at the request of the Tender Committee.

The bid shall include at least the following qualification documents: extract from the state register or equivalent document; VAT certificate, where applicable; certificate of authorized distributor/representative or manufacturer's letter; certificates of conformity, quality or origin, where applicable; documents confirming absence of insolvency or suspension of activity; documents regarding the ultimate beneficial owner.

The technical bid shall include the technical description, technical specifications, completed compliance matrix, detailed bill of materials for each set, official technical documentation of the manufacturer, EU/CE declaration of conformity or equivalent document, delivery schedule and firm delivery term, and the offered warranty.

The financial bid shall include price specifications, unit and total price for each set, included costs, bid currency, delivery terms and any discount granted.

7. Financial Conditions, Delivery, Warranty and Support

Prices shall be indicated in MDL, USD or EUR, excluding VAT and, where applicable, with VAT indicated separately. For evaluation and comparison of bids expressed in foreign currency, prices shall be recalculated in MDL according to the official exchange rate of the National Bank of Moldova on the bid opening date. The financial component shall be scored according to Table No. 5.

Delivery terms shall be DAP Chisinau for foreign economic operators or DDP Chisinau for local economic operators, according to INCOTERMS 2010, unless otherwise provided in the contract.

Prices must be indicated in figures and additionally in words. In case of differences between the unit price and the total value, the unit price shall prevail and the total value shall be corrected accordingly.

Payment for the delivered goods shall be made after delivery of the equipment, submission of delivery documents and signing of the quantitative and qualitative acceptance report, within the term established in the contract.

Payment terms may not modify the minimum requirements for delivery, warranty and conformity.

The delivery term shall not exceed 60 calendar days from the date of signing the contract. The firm delivery term offered shall become a contractual obligation and shall be scored according to the evaluation section.

The minimum warranty period shall be 60 months from the date of signing the quantitative and qualitative acceptance report. A longer warranty may receive additional points according to the evaluation criteria.

The bidder shall provide communication channels with a technical support team composed of qualified experts of its own or of the manufacturer.

8. Procedural Rules, Clarifications, Cancellation and Award

Before expiry of the deadline established for bid submission, S.E. "Radiocomunicatii" may amend the tender documentation either on its own initiative or as a result of clarification requests. Amendments shall be communicated to all economic operators that received the documentation and, where applicable, published on the procurement page.

S.E. "Radiocomunicatii" may extend the bid submission deadline. The new date and time for bid submission and opening shall be communicated in writing to participants and published on the procurement page.

Clarifications may not substantially modify the bid after the deadline and may not transform a non-compliant bid into a compliant bid.

S.E. "Radiocomunicatii" may cancel the procedure before communication of the result or before signing the contract, with the decision being justified and participants notified within 3 calendar days.

The procedure may be cancelled if no bidder meets the qualification requirements, if all bids are non-compliant, if prices cannot be justified, if bids exceed the allocated funds or if continuation of the procedure cannot ensure transparency, efficiency and the economic interest of the enterprise.

The fact that only one bid has been submitted or remains admissible shall not automatically result in cancellation of the procedure. The Tender Committee shall examine, with reasons, whether the bid is compliant, whether the price is reasonable in relation to the estimated value and the market, whether the requirements were published transparently and whether the award is in the interest of S.E. "Radiocomunicatii". The decision shall be recorded in minutes.

S.E. "Radiocomunicatii" shall not be liable for expenses incurred by bidders for preparation, submission, amendment or withdrawal of bids.

8.1. Opening, Examination and Comparison of Bids

The envelopes containing the participating bids shall be opened by the Tender Committee on the established date and time at the premises of S.E. "Radiocomunicatii", Chisinau municipality, Drumul Viilor Street 28/2.

At the opening, the bidder's name, submitted documents, existence of the technical and financial bids, bid price and other relevant information shall be recorded. Authorized representatives of the bidders present at the opening may sign the opening minutes.

At the opening stage, bids submitted after the deadline or bids whose envelope is unsealed or does not allow identification of the procedure/bidder may be rejected.

Detailed examination, technical evaluation, verification of qualification and comparison of bids shall be carried out without bidder participation. The Committee may request written clarifications, without substantially modifying the technical or financial proposal.

Bids may be disqualified if they were submitted late, were not prepared in accordance with the documentation, do not meet the minimum requirements, the bidder refuses arithmetic corrections, or there are indications/evidence of corruption, conflict of interest, false or incomplete data.

8.2. Designation of Winner and Contract Signing

The winning bid shall be the admissible bid obtaining the highest total score according to the "best price-quality ratio" criterion.

The tender winner shall be determined by a simple majority of votes of the members of the Tender Committee. In the event of a tie vote, the vote of the Chairperson of the Tender Committee shall be decisive.

S.E. "Radiocomunicatii" shall notify bidders of the procedure result within 3 calendar days from adoption of the decision.

When concluding the contract, it shall be prohibited to modify essential elements of the winning bid or introduce additional costs to the detriment of S.E. "Radiocomunicatii".

If the winning bidder does not respond to the invitation to sign the contract within 20 calendar days from notification, S.E. "Radiocomunicatii" may reject the bid and examine the next admissible bid or may cancel the procedure and organize a repeated tender.

S.E. "Radiocomunicatii" reserves the right to disqualify the bidder if information regarding the ultimate beneficial owner is false, incomplete or modified without proper notification.

9. Award Criterion and Evaluation Methodology

The award criterion is the "best price-quality ratio". Evaluation shall be carried out only for admissible bids that fully meet the minimum mandatory requirements. The evaluation factors and scoring methodology are set out in Table No. 5.

The maximum score is 100 points: 60 points for the financial component and 40 points for the technical component. The total score is calculated according to the formula: $P_{total} = P_{financial} + P_{technical}$.

The technical score shall be awarded only for characteristics confirmed by the manufacturer's official technical documentation, official test reports or verifiable official statements issued by the manufacturer.

The values and functionalities for which points were awarded shall become mandatory contractual commitments and may be verified during FAT, acceptance testing and receipt of the goods.

Table No. 5. Evaluation Factors and Scoring Methodology

No.	Evaluation factor	Maximum score	Scoring method
1	Total offered price, excluding VAT	60	$P = (\text{minimum admissible price} / \text{price of the evaluated bid}) \times 60$.
2	Guaranteed MER at nominal useful RF power	10	Minimum mandatory: 35.0 dB, measured at the channel filter output, at the nominal useful RF power defined in Table No. 7, item 2. $P = ((\text{offered MER} - 35.0) / 3.0) \times 10$, max. 10 points. For MER ≥ 38.0 dB: 10 points. Only the minimum value guaranteed by the manufacturer's documentation or official test report shall be scored.
3	Guaranteed maximum active power consumption	10	Consumption shall be indicated in W, at the nominal useful RF power of at least 150 W RMS, measured at the input of the channel filter, with all modules and auxiliary systems active. $P = (\text{minimum guaranteed consumption} / \text{guaranteed consumption of the evaluated bid}) \times 10$. The value must be confirmed by the manufacturer's official documentation.
4	Warranty period	8	Minimum 60 months. $P = ((\text{offered months} - 60) / 24) \times 8$, maximum 8 points. For 84 months or more: 8 points.
5	Firm delivery term	5	Up to 45 days - 5 p.; 46-50 days - 4 p.; 51-55 days - 2 p.; 56-60 days - 0 p. The offered term becomes a contractual obligation.
6	Maintainability and secure management	7	The score is awarded cumulatively: 2 p. - at least two redundantly configured power supply modules, with the possibility of replacing one module without complete shutdown of the transmitter; 2 p. - the RF module can be replaced without soldering operations and without complete removal of the transmitter from the rack; 1 p. - native SNMPv3 support; 1 p. - event and alarm log can be exported in CSV, syslog or equivalent format; 1 p. - the web management interface uses HTTPS, with TLS 1.2 or higher, and allows access administration on at least two rights levels, for example administrator and user/operator or

			equivalent.
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In case of equal total scores, the following tie-breakers shall apply, in order: higher technical score; lower total price; lower guaranteed maximum consumption; shorter delivery term; higher guaranteed MER value.

The tie-breaker rule shall be reproduced in full in the participation announcement.

10. Technical Requirements

10.1. Sites and Operating Channels

The equipment shall be configured for the sites and operating channels indicated in Table No. 6.

Table No. 6. Sites, Operating Channels and Required RF Power

No.	Site	Channel / frequency	Quantity	Useful RF power	Targeted localities
1	Sanatauca	CH 28 / 530 MHz	1 set	minimum 150 W RMS at the input of the channel filter	7 (3 right bank / 4 left bank)
2	Rezina	CH 28 / 530 MHz	1 set	minimum 150 W RMS at the input of the channel filter	15 (6 / 9)
3	Holercani	CH 31 / 554 MHz	1 set	minimum 150 W RMS at the input of the channel filter	21 (13 / 8)
4	Talmază	CH 21 / 474 MHz	1 set	minimum 150 W RMS at the input of the channel filter	20 (10 / 10)

Each transmitter shall be delivered configured and tested for the indicated channel. Subsequent reconfiguration within the 470-694 MHz band must be possible by software, without replacement of the RF amplifier or other active modules; the channel filter shall be adapted, where applicable, to the requested channel.

The detailed list of localities is presented in Annex No. 2 and has the character of a project objective. The Supplier is responsible for the technical performance of the delivered equipment; final radio coverage also depends on the technical design, antenna system, feeder, site, terrain, installation and network configuration.

10.2. Minimum Mandatory Technical Requirements

The requirements in Tables No. 7-10 represent the minimum mandatory level. The bidder shall indicate the manufacturer, model and specific offered value, with reference to the document and page confirming each parameter.

RF, Power Supply and Environmental Requirements

Table No. 7. RF, Power Supply and Environmental Requirements

No.	Parameter	Minimum mandatory requirement
1	Equipment condition and purpose	Professional DVB-T2 transmitter, new, unused, non-refurbished, industrially manufactured, in current production, for continuous 24/7 operation.
2	Nominal RF power	Nominal useful RF power of at least 150 W RMS, measured at the input of the channel filter included in the set, in DVB-T2 mode, on the configured channel and under nominal operating conditions. Power must be adjustable within at least 10%-100%. The filter insertion loss shall not reduce the useful RF power below the required minimum level.
3	RF output	Impedance 50 Ohm; N-type or DIN 7/16 female connector, or compatible professional equivalent.

4	Operating band	470-694 MHz, with broadband RF amplifier, without hardware modifications for channel change within the band.
5	Power supply	220/230 V AC +/-15%, 50 Hz, single-phase; automatic start-up and return to stored configuration after power restoration.
6	Consumption	The guaranteed maximum active power consumption, expressed in W, shall be indicated at the nominal useful RF power of at least 150 W, measured at the input of the channel filter, with all modules, fans and auxiliary systems active.
7	Reliability	Manufacturer-declared MTBF: minimum 50,000 hours.
8	Environmental conditions	Operating temperature minimum +5 deg C ... +45 deg C; relative humidity up to 90%, non-condensing; own forced cooling.

Inputs, Transport and DVB-T2 Parameters

Table No. 8. Inputs, Transport and DVB-T2 Parameters

No.	Parameter	Minimum mandatory requirement
1	ASI inputs	Minimum 2 x BNC 75 Ohm, configurable as main/backup.
2	IP interfaces	Minimum 2 x RJ45, minimum 100 Mbit/s, for TSoIP, configurable as main/backup, and separate interface for management.
3	Accepted streams	MPEG-2 Transport Stream and T2-MI over ASI and IP; Interface Mode A and Mode B.
4	Input switching	Manual and/or automatic switching between main and backup input, with alarm on signal loss.
5	Standard	ETSI EN 302 755 or applicable equivalent standard.
6	Constellations	PLP: QPSK, 16QAM, 64QAM, 256QAM;
7	Channel bandwidth	8 MHz.
8	FFT and guard intervals	FFT 1k, 2k, 4k, 8k, 16k, 32k, including normal/extended; GI 1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4.
9	Coding and FEC	Code rate 1/2, 3/5, 2/3, 3/4, 4/5, 5/6; FEC Short (16k) and Normal (64k).
10	Pilot patterns	PP1-PP8.
11	Network modes	MFN, SFN-SISO, SFN-MISO and Multi-PLP mandatory.

RF Performance, Filtering and Synchronization

Table No. 9. RF Performance, Filtering and Synchronization

No.	Parameter	Minimum mandatory requirement
1	MER	Minimum 35 dB, guaranteed and measured at the channel filter output, at nominal useful RF power, in DVB-T2 mode, on the configured channel and under nominal operating conditions. The minimum guaranteed value, not the typical value, shall be indicated.
2	Pre-correction	Adaptive linear and non-linear pre-correction.
3	Shoulder monitoring	Automatic internal measurement and display of MER and shoulder attenuation (+/-4.2 MHz from the center frequency), with values expressed in dB or an equivalent unit and with configurable warning and alarm thresholds.
4	Emissions and mask	Compliant with ETSI EN 302 296 and ETSI EN 302 755 or applicable equivalent standards.
5	Channel filter (6 resonators)	Band-pass channel filter included in each set, configured for the requested channel, with nominal impedance of 50 Ohm and rated for the offered RF power. The filter must ensure compliance with the spectral mask and the requirements of ETSI EN 302 296 or an equivalent standard. The maximum insertion loss shall be expressly indicated in the technical bid.
6	RF couplers and cables (filter connection)	Included for measurement, feedback loops and adaptive correction.

7	Internal oscillator	Thermally stabilized internal oscillator, with frequency stability of maximum 1×10^{-7} /year or better performance.
8	External references	10 MHz input, BNC 50 Ohm, minimum 0.1-3 Vpp; 1PPS input, BNC 50 Ohm, 0-5 V.
9	GPS/GNSS and SFN	Integrated receiver, external antenna and cable minimum 10 m; monitoring and alarm on loss of GPS/GNSS, 10 MHz or 1PPS.

Management, Monitoring, Maintenance and Conformity

Table No. 10. Management, Monitoring, Maintenance and Conformity

No.	Parameter	Minimum mandatory requirement
1	Management	Web interface; SNMP v2c or higher; traps, configurable thresholds and documented MIB.
2	Monitored parameters	Forward and reflected RF power/VSWR, MER, shoulder, temperatures, RF modules, power supplies, fans, inputs, synchronization and alarms.
3	Log and access	Event and alarm log with date/time; secure access through accounts and passwords.
4	Protections	VSWR/reflected power, overtemperature, overcurrent, fan failure and input signal loss.
5	Fan maintenance	Replacement without removing the transmitter from its operating position.
6	Modular construction	Easy access and quick replacement of main modules; preservation of configurations and licenses after power interruptions or module replacement.
7	Licenses	Permanent and included in the price for DVB-T2, T2-MI, Multi-PLP, SFN, web interface and SNMP.
8	Safety and conformity standards	EN IEC 62368-1 or equivalent; EMC requirements; CE marking or recognized equivalent document; RoHS or equivalent, if applicable.

10.3. Minimum Composition of Each Set

- Professional DVB-T2 transmitter, with modulator/exciter, RF amplifier and cooling system, ensuring a nominal useful RF power of at least 150 W RMS at the input of the channel filter included in the set, according to Table No. 7.
- Band-pass channel filter, configured for the indicated channel, rated for the offered RF power and capable of ensuring compliance with the spectral mask and the requirements of ETSI EN 302 296 or an equivalent standard. The maximum insertion loss shall be indicated in the technical bid.
- GPS/GNSS receiver, antenna and cable of at least 10 m.
- Directional couplers, RF cables, power cables and all mounting and interconnection accessories.
- All permanent software licenses necessary for the requested functions.
- Technical and service documentation provided by the manufacturer, necessary for installation, configuration, operation, diagnostics and maintenance of the equipment.

11. Delivery Conditions, FAT, Acceptance, Warranty and Technical Support

The place of delivery shall be the premises of S.E. "Radiocomunicatii", Chisinau municipality, Drumul Viilor Street 28/2, or another site indicated in writing by the contracting entity. The delivery term shall be a maximum of 60 calendar days from the date of signing the contract and shall be established so as to allow completion of the project activities by the end of Q4 2026.

The bidder shall indicate a firm delivery term and delivery schedule. The offered price shall include packaging, transport, transport insurance, loading, unloading, accessories, licenses, configuration, testing, documentation and warranty obligations.

Partial deliveries are allowed only with the prior written consent of the contracting entity.

Before shipment, the Supplier shall submit for each item of equipment a FAT report or an individual test protocol issued by the manufacturer. The FAT report shall confirm at least the relevant technical parameters in Tables No. 7-10. At the request of the contracting entity, FAT tests may be followed through a remote session, at no additional cost.

After delivery, the contracting entity shall perform acceptance testing at the premises of S.E. "Radiocomunicatii", with the Supplier participating on site or remotely. The tests shall include verification of set completeness, RF power, MER, ASI/IP inputs, T2-MI, Multi-PLP, SFN, GPS/GNSS synchronization, management, alarms, licenses and channel filters.

Quantitative and qualitative acceptance shall be carried out after completion of the acceptance tests and signing of the acceptance report. Subsequent testing at the sites, after execution of installation works, shall not postpone acceptance and payment for the goods, except for non-conformities attributable to the Supplier.

Upon delivery, the following shall be submitted: commercial invoice and/or tax invoice, warranty certificate, EU/CE declaration of conformity or equivalent document, data sheet, installation, configuration, operation and maintenance manuals, FAT report or individual test protocol, list of serial numbers, models and hardware/software versions, list of licenses, MIB file, description of alarms and interfaces, interconnection diagrams and complete list of accessories.

The minimum warranty period shall be 60 months and shall start on the date of signing the quantitative and qualitative acceptance report for the goods. Under warranty, the Supplier shall provide free diagnostics, repair or replacement of defective components, firmware updates necessary for compliant operation and technical support. All transport, dismantling, shipping and return costs shall be borne by the Supplier.

Receipt of the notification shall be confirmed within a maximum of 2 working days, and the remediation solution shall be presented within a maximum of 5 working days. Repair or replacement shall normally be carried out within a maximum of 30 calendar days; if this term cannot be met, the Supplier shall provide, at no cost, equivalent equipment or module for the duration of the remediation. The warranty shall be extended by the period of equipment unavailability.

12. Compliance Tables and Demonstration of Compliance

The bidder shall complete the compliance tables provided in Table No. 11 and Table No. 12. For each position, the specific offered value and the reference document/page shall be indicated. The manufacturer's official documentation shall prevail over general statements by the bidder.

12.1. Compliance Table - Tender Procedure

Table No. 11. Procedural Compliance of the Bid

No.	Requirement	Compliance (YES/NO/PARTIAL)	Notes
1	The bid is submitted in a closed and sealed outer envelope by the established deadline.		
2	The bid includes the qualification documents, technical bid and financial bid, submitted separately.		
3	The bid is numbered, signed, bound/stitched and, where applicable, stamped.		
4	The bid includes the electronic copy on USB, identical to the paper version.		
5	The bid includes the qualification documents provided in section 6.3.		
6	The bid includes the technical documents provided in section 6.3.		
7	The bid includes the completed technical compliance matrix.		
8	The bid confirms a validity period of at least 60		

No.	Requirement	Compliance (YES/NO/PARTIAL)	Notes
	calendar days.		
9	The bid confirms the requested financial terms, delivery conditions and warranty.		

12.2. Technical Compliance Matrix

The technical matrix in Table No. 12 reproduces point by point the minimum mandatory technical requirements from Tables No. 7-10 and the requirements regarding the minimum composition of each set from section 10.3. The bidder shall complete the compliance column with one of the options YES/NO/PARTIAL and shall indicate the specific offered value, comments and confirmation document/page.

Table No. 12. Technical Compliance Matrix

No.	Reference	Parameter / requirement	Exact requirement from text	Compliance (YES / NO / PARTIAL)	Offered characteristic / comments	Document / page
1	Table No. 7, item 1	Equipment condition and purpose	Professional DVB-T2 transmitter, new, unused, non-refurbished, industrially manufactured, in current production, for continuous 24/7 operation.			
2	Table No. 7, item 2	Nominal RF power	Nominal useful RF power of at least 150 W RMS, measured at the input of the channel filter included in the set, in DVB-T2 mode, on the configured channel and under nominal operating conditions. Power must be adjustable within at least 10%-100%. The filter insertion loss shall not reduce the useful RF power below the required minimum level.			
3	Table No. 7, item 3	RF output	Impedance 50 Ohm; N-type or DIN 7/16 female connector, or compatible professional equivalent.			
4	Table No. 7, item 4	Operating band	470-694 MHz, with broadband RF amplifier, without hardware modifications for channel change within the band.			
5	Table No. 7, item 5	Power supply	220/230 V AC +/-15%, 50 Hz, single-phase; automatic start-up and return to stored configuration after power restoration.			
6	Table No. 7, item 6	Consumption	The guaranteed maximum active power consumption, expressed in W, shall be indicated at the nominal useful RF power of at least 150 W, measured at the input of the channel filter, with all modules, fans and auxiliary systems active.			
7	Table No. 7, item 7	Reliability	Manufacturer-declared MTBF: minimum 50,000 hours.			
8	Table No. 7, item 8	Environmental conditions	Operating temperature minimum +5 deg C ... +45 deg C; relative humidity up to 90%, non-condensing; own forced cooling.			
9	Table No. 8, item 1	ASI inputs	Minimum 2 x BNC 75 Ohm, configurable as main/backup.			

No.	Reference	Parameter / requirement	Exact requirement from text	Compliance (YES / NO / PARTIAL)	Offered characteristic / comments	Document / page
10	Table No. 8, item 2	IP interfaces	Minimum 2 x RJ45, minimum 100 Mbit/s, for TSoIP, configurable as main/backup, and separate interface for management.			
11	Table No. 8, item 3	Accepted streams	MPEG-2 Transport Stream and T2-MI over ASI and IP; Interface Mode A and Mode B.			
12	Table No. 8, item 4	Input switching	Manual and/or automatic switching between main and backup input, with alarm on signal loss.			
13	Table No. 8, item 5	Standard	ETSI EN 302 755 or applicable equivalent standard.			
14	Table No. 8, item 6	Constellations	PLP: QPSK, 16QAM, 64QAM, 256QAM;			
15	Table No. 8, item 7	Channel bandwidth	8 MHz.			
16	Table No. 8, item 8	FFT and guard intervals	FFT 1k, 2k, 4k, 8k, 16k, 32k, including normal/extended; GI 1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4.			
17	Table No. 8, item 9	Coding and FEC	Code rate 1/2, 3/5, 2/3, 3/4, 4/5, 5/6; FEC Short (16k) and Normal (64k).			
18	Table No. 8, item 10	Pilot patterns	PP1-PP8.			
19	Table No. 8, item 11	Network modes	MFN, SFN-SISO, SFN-MISO and Multi-PLP mandatory.			
20	Table No. 9, item 1	MER	Minimum 35 dB, guaranteed and measured at the channel filter output, at nominal useful RF power, in DVB-T2 mode, on the configured channel and under nominal operating conditions. The minimum guaranteed value, not the typical value, shall be indicated.			
21	Table No. 9, item 2	Pre-correction	Adaptive linear and non-linear pre-correction.			
22	Table No. 9, item 3	Shoulder monitoring	Automatic internal measurement and display of MER and shoulder attenuation (+/-4.2 MHz from the center frequency), with values expressed in dB or an equivalent unit and with configurable warning and alarm thresholds.			
23	Table No. 9, item 4	Emissions and mask	Compliant with ETSI EN 302 296 and ETSI EN 302 755 or applicable equivalent standards.			
24	Table No. 9, item 5	Channel filter (6 resonators)	Band-pass channel filter included in each set, configured for the requested channel, with nominal impedance of 50 Ohm and rated for the offered RF power. The filter must ensure compliance with the spectral mask and the requirements of ETSI EN 302 296 or an equivalent standard. The maximum insertion loss shall be expressly indicated in the technical bid.			

No.	Reference	Parameter / requirement	Exact requirement from text	Compliance (YES / NO / PARTIAL)	Offered characteristic / comments	Document / page
25	Table No. 9, item 6	RF couplers and cables (filter connection)	Included for measurement, feedback loops and adaptive correction.			
26	Table No. 9, item 7	Internal oscillator	Thermally stabilized internal oscillator, with frequency stability of maximum 1×10^{-7} /year or better performance.			
27	Table No. 9, item 8	External references	10 MHz input, BNC 50 Ohm, minimum 0.1-3 Vpp; 1PPS input, BNC 50 Ohm, 0-5 V.			
28	Table No. 9, item 9	GPS/GNSS and SFN	Integrated receiver, external antenna and cable minimum 10 m; monitoring and alarm on loss of GPS/GNSS, 10 MHz or 1PPS.			
29	Table No. 10, item 1	Management	Web interface; SNMP v2c or higher; traps, configurable thresholds and documented MIB.			
30	Table No. 10, item 2	Monitored parameters	Forward and reflected RF power/VSWR, MER, shoulder, temperatures, RF modules, power supplies, fans, inputs, synchronization and alarms.			
31	Table No. 10, item 3	Log and access	Event and alarm log with date/time; secure access through accounts and passwords.			
32	Table No. 10, item 4	Protections	VSWR/reflected power, overtemperature, overcurrent, fan failure and input signal loss.			
33	Table No. 10, item 5	Fan maintenance	Replacement without removing the transmitter from its operating position.			
34	Table No. 10, item 6	Modular construction	Easy access and quick replacement of main modules; preservation of configurations and licenses after power interruptions or module replacement.			
35	Table No. 10, item 7	Licenses	Permanent and included in the price for DVB-T2, T2-MI, Multi-PLP, SFN, web interface and SNMP.			
36	Table No. 10, item 8	Safety and conformity standards	EN IEC 62368-1 or equivalent; EMC requirements; CE marking or recognized equivalent document; RoHS or equivalent, if applicable.			
37	10.3.1	Minimum composition	Professional DVB-T2 transmitter, with modulator/exciter, RF amplifier and cooling system, ensuring a nominal useful RF power of at least 150 W RMS at the input of the channel filter included in the set, according to Table No. 7.			
38	10.3.2	Minimum composition	Band-pass channel filter, configured for the indicated channel, rated for the offered RF power and capable of ensuring compliance with the spectral mask and the requirements of ETSI EN 302 296 or an equivalent standard. The maximum insertion loss shall be indicated in the			

No.	Reference	Parameter / requirement	Exact requirement from text	Compliance (YES / NO / PARTIAL)	Offered characteristic / comments	Document / page
			technical bid.			
39	10.3.3	Minimum composition	GPS/GNSS receiver, antenna and cable of at least 10 m.			
40	10.3.4	Minimum composition	Directional couplers, RF cables, power cables and all mounting and interconnection accessories.			
41	10.3.5	Minimum composition	All permanent software licenses necessary for the requested functions.			
42	10.3.6	Minimum composition	Technical and service documentation provided by the manufacturer, necessary for installation, configuration, operation, diagnostics and maintenance of the equipment.			

The additional technical factors used for evaluation are provided separately in Table No. 5. They do not substitute the minimum mandatory requirements in the technical compliance matrix.

The bidder shall expressly indicate the manufacturer, model, country of origin and offered technical values. General formulations such as "complies" or "according to the Terms of Reference", without the specific parameter and supporting document, are not sufficient.

In case of discrepancies between the bidder's statements and the manufacturer's official documentation, evaluation shall be based on verifiable technical information, in compliance with the clarification rules and without substantial modification of the bid.

Alternative bids and proposals that make conformity conditional upon the subsequent purchase of additional licenses, accessories or services shall not be accepted. The goods, functions, licenses, accessories and activities necessary for complete supply must be included in the technical and financial bid.

A bid that fails to meet one or more minimum mandatory technical requirements shall be declared non-compliant. The contracting entity may request clarifications and supporting documents, without allowing substantial modification of the technical or financial proposal and in compliance with the principles of equal treatment, transparency and proportionality.

Annex No. 1. List of Localities Targeted by the Project

Table No. 13. List of Localities Targeted by the Project

No.	Installation site	Localities on the right bank of the Nistru River	Localities on the left bank of the Nistru River
1	Sanatauca, Floresti district	Sanatauca; Bursuc; Cot	Camenca; Podoima; Podoimita; Solnecinoe
2	Rezina, Rezina district	Rezina; Bosernita; Ciorna; Saharna; Saharna Noua; Solonceni	Ribnita; Ghidirim; Hirjau; Lisaia Gora; Ofatinti; Picalova; Saratei; Smalena; Zazuleni
3	Holercani, Criuleni district	Holercani; Balasesti; Cruglic; Cocieri; Marcauti; Mascauti; Molovata; Molovata Noua; Raculesti; Jevreni; Ohrincea; Ustia; Zolonceni	Dubasari; Doibani 1; Dzerjinscoe; Iagorlic; Goian; Tibuleuca; Roghi; Corjova
4	Talmaza, Causeni district	Talmaza; Chircaesti; Copanca; Leuntea; Cioburciu; Gradinita; Popeasca; Rascaeti; Valea Verde; Viisoara	Dnestrovsc; Slobozia; Chitcani; Caragas; Corotna; Crasnoe; Cremenciug; Hlinaia; Nezavertailovca; Sucleia

Total: 63 localities, of which 32 on the right bank and 31 on the left bank of the Nistru River.