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GENERAL MANAGER,
Dr. Adriana STEFAN

COORDINATOR OF THE EEMS PROGRAM COMPONENT
Dr. Fiz. Georgiana GRIGORAȘ

CONTRACT RESPONSIBLE,
Chim. Marius CORBU

TENDER DOCUMENTATION

regarding the procurement of the „Mobile station with measurement tower EEMS"

In accordance with Contract no. 3/RO-CH/30.10.2025

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Technical Specifications
regarding the procurement of the „Mobile station with measurement tower EEMS"

I. Object of the Contract:

The procurement of the Mobile station with measurement tower EEMS, in accordance with the objectives undertaken through contract no. 3/RO-CH/30.12.2025.

The Contracting Authority intends to procure a Mobile station with measurement tower. The requested products comply with the requirements of contract **no. 3/RO-CH/30.10.2025, within the framework of the program „Emissions Research and Monitoring Infrastructure Programme", Program Component „East European Methane Study" – EEMS.**

The acquisition concerns a single, unified system, in which the components are functionally and operationally interdependent and cannot be used individually in the absence of the others. Accordingly, the acquisition does not relate to separate items, but to a complete system comprising:

- a van-type vehicle with internal engine, configured and adapted for special research use, including the transport and operation of equipment;
- a measurement tower (mast), mounted on the vehicle, equipped with support, fixing, and securing systems for the folded position during transport;
- interior layout and equipping of the van, enabling the installation, protection, power supply, and safe operation of scientific equipment and measurement tower accessories;
- mechanical and functional integration of the instruments, the air sampling system, and the power supply and communication cabling;
- installation, testing, and commissioning at the location indicated by the beneficiary;
- training of the beneficiary's personnel for the use and operation of the equipment and related accessories;
- provision of warranty and maintenance services throughout the warranty period.

The functional measurement component represents the operational core of the Mobile station with measurement tower within EEMS and substantiates the inclusion of the associated instruments and accessories as inseparable elements of the system.

The measurement tower shall be operated in its measurement configuration at a height of approximately 30 m, serving as the structural support for lightweight atmospheric sensors and for the air sampling system.

The delivery of the equipment shall be performed at the address specified by the beneficiary.

Bidders shall prepare their technical proposals in accordance with the requirements of the Technical Specifications and the Procurement Data Sheet.

II. General Terms and Conditions regarding the Procurement

a. General Information

The Tender Documentation is an integral part of the documentation for the preparation and submission of the bid and constitutes the full set of requirements and specifications based on which the tenderer shall develop the technical proposal.

Tender Documentation must contain the technical and operational specifications. All requirements imposed by this Tender Documentation shall be considered as minimum requirements. In this regard, any tender submitted that deviates from the provisions of this documentation, or fails to cover at least all the requirements or specifications described, shall be eliminated as non-compliant or shall be considered only insofar as the technical proposal ensures a qualitative and quantitative level of delivered materials and equipment at least equal or superior to those specified in the present documentation. Failure to fully comply with the minimum conditions will result in the tender being declared non-compliant.

It is mandatory that the offered equipment to be new and commercially available at the date of tender submission and for the entire period of the Supply Contract concluded with the Contracting Authority.

Prognosis, estimations or announcements of the tender or manufacturer will not be considered.

In case of discrepancy, the official specifications published by the equipment manufacturer (valid at the date of the offer submission, for the proposed products) will be considered as reference, and their content has priority over the technical details of the tender.

Technical tender will be sent with the documentary material which will prove the characteristics of each product (prospectuses, catalog files, test certificates, specialized literature, drawings, articles, publications, etc.). Print screens or links to web pages will not be accepted. **Furthermore, a detailed description of the characteristics/performance of the offered products will be included.**

For each individual piece of equipment, all mechanical, electrical, connectivity, etc. accessories that are specific and necessary for its operation shall be provided, whether or not these are expressly requested, without further additional costs for the Contracting Authority.

ATTENTION: The tender of products and/or equipment that do not correspond to the technical requirements or for which the tenderer does not provide the requested services (delivery, installation and commissioning; testing; training, etc.) under the conditions specified in the present Tender Documentation will cause the offer to be declared non-compliant, according to art. 137 para. (3) lett. a) of GD no. 395/2016.

NOTE:
The requirements set forth in the present Tender Documentation will be considered minimum and mandatory. In this regard, the tender presented which deviates from the stipulations of the Tender Documentation, will be considered, only to the extent that the technical proposal involves providing a higher qualitative level than the conditions required.

Any technical specification which might indicate a specific certification, attestation, origin, source of production, special procedure, the manufacturer's mark, trademark, patent, or manufacturing license may be mentioned only in order that the requirements can be easily and accurately identified and MAY NOT favor or disadvantage in any way the tenderers or the products tendered. All these specifications will be considered, will be read and understood as being 'or similar / or equivalent'.

b. Subject Matter of the Tender Documentation

The present documentation aims at the supply of the „Mobile station with tower", including a technical assistance package that includes a service and maintenance program, transport, assistance for installation and training, the provision of equipment and specific accessories necessary for the operation and functioning of the system.

The acquisition concerns a single, unified system, in which the components are functionally and operationally interdependent and cannot be used individually in the absence of the others. Accordingly, the acquisition does not relate to separate items, but to a complete system comprising:

- A van-type vehicle with internal engine, configured and adapted for special research use, including the transport and operation of equipment;
- A measurement tower (mast), mounted on the vehicle, equipped with support, fixing, and securing systems for the folded position during transport;
- Interior layout and equipping of the van, enabling the installation, protection, power supply, and safe operation of scientific equipment and measurement tower accessories;
- Mechanical and functional integration of the instruments, the air sampling system, and the power supply and communication cabling;
- Installation, testing, and commissioning at the location indicated by the beneficiary;
- training of the beneficiary's personnel for the use and operation of the equipment and related accessories;
- Provision of warranty and maintenance services throughout the warranty period.

Location: National Institute for Aerospace Research "Elie Carafoli" – INCAS Bucharest, 220 Iuliu Maniu Blvd., CP 061126, District 6, Bucharest.

Beneficiary: National Institute for Aerospace Research "Elie Carafoli" – INCAS Bucharest.

c. Estimated Value: 2.042.447,21 lei excluding VAT / 371.827,27[1] CHF excluding VAT / 400.849,26 €[2] excluding VAT, respectively 2.471.361,12 lei with VAT / 449.911,00 CHF with VAT / 485.027,60 € with VAT

Mobile station with measurement tower EEMS:	
A van-type vehicle, configured and adapted for special research use; A measurement tower (mast), mounted on the vehicle; Interior layout and equipping of the van; Mechanical and functional integration of the instruments, the air sampling system, and the power supply and communication cabling	
Total estimated value:	**2.042.447,21 RON excluding VAT**

d. Deadlines

The duration of the contract is **14 months** from the date of its entry into force.

[1] 1 CHF = 5.4930 lei as of 09.05.2025, according to Article 7.3 of Financing Contract No. 3/RO-CH/30.10.2025
[2] 1 EURO = 5,0953/16.02.2026

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III. Mandatory Technical Specifications

Mobile station with measurement tower EEMS (*)

No.	Product name	U.M.	Qty.	Minimum Characteristics
1	Research system EEMS program component	pcs.	1	1. **Van-Type Vehicle**: ➢ Engine displacement: max 2000 cc; ➢ Power output: min 150 HP ➢ Transmission: automatic, 8-speed; ➢ Fuel type: diesel; ➢ Vehicle length: approx. Max 7500 mm; ➢ Cargo compartment length: min 4500 mm, max 5000 mm; ➢ Interior width: min 1800 mm; ➢ Additional tyre set: winter/summer ➢ Rear-view camera ➢ Parking assistance system: front and rear ➢ ESP – Electronic Stability Programme ➢ ABS – Anti-lock Braking System ➢ ASR – Traction Control System ➢ Rear doors without windows ➢ Right-side sliding door ➢ The vehicle, in the configuration specified in the present technical specification, shall be approved and registered by the Romanian Automotive Register (RAR) for operation on public roads. 2. **Cargo Compartment Fit-Out**; ➢ Two (2) 19" equipment racks for instruments ➢ Gas cylinder holders for 8 units ➢ Gas cylinders for calibration – 4 gas cylinders with calibration gas and 4 empty ones to use for recharching (2 cylinders with 30 L and 2 cylinders with 50 L) o Low-level calibration gas – CH_4 2,2 ppm, CO_2 420 ppm, C_2H_6 2 ppb, synthetic air matrix N_2, O_2, Ar – 50 L o High-level calibration gas – CH_4 5 ppm, CO_2 800 ppm, C_2H_6 10 ppb, synthetic air matrix N_2, O_2, Ar – 30 L o Target gas (drift verification) – CH_4 2,3 ppm, CO_2 440 ppm, synthetic air matrix N_2, O_2, Ar, long-term stability verification – 30 L o Dilution gas – CO_2 420 ppm, synthetic air matrix N_2, O_2, Ar – 50 L o Certified gases with metrological traceability o Long-term stability suitable for atmospheric applications ➢ Eight (8) high-purity gas pressure regulator o Two-stage pressure regulator o High outlet pressure stability

				○ Materials compatible with calibration gases (non-contaminating) ○ Suitable pressure range – max 3.5 bar ○ DIN 14 compatible connection ○ Stable flow despite cylinder pressure variations ○ The regulator shall not introduce systematic changes in the analysed concentrations ➢ Work-area furniture – cabinet, desk, 2 chairs ➢ Interior lining and flooring ➢ **Complete electrical installation** intended to ensure safe and continuous power supply for all components of the measurement system. The system shall ensure normal operation both when connected to the external power grid and in autonomous mode in case of power outage ○ External power grid connection point ○ Appropriate electrical protection devices ○ Electrical distribution panel ○ Separate circuits for critical equipment[3] ○ Grounding and indirect contact protection ○ Internal cabling sized according to installed loads ○ Circuit labelling and identification ○ The electrical power supply system shall be designed and sized to allow future expansion of the number of consumers without major modifications to the electrical installation architecture ➢ Backup power supply system ○ Rechargeable batteries sized to supply critical equipment for at least 3 hours ○ Inverter for voltage conversion to equipment-required levels ○ Automatic switching between mains power and backup supply, without interruption of equipment operation ○ Protection against overload, deep discharge, and short circuit ➢ Inverter-type air conditioning system ➢ Tool kit (wrenches, sockets, screwdrivers) ➢ Compressor – work pressure 0-8 atm ➢ Video monitoring system: 3 cameras ➢ DVR with HDD storage ≥ 8 TB.

[3] Critical equipment = all equipments for scientific research (i.e. meteorological sensors, metan sensor, MFC, video monitoring)

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				3. **Measurement Tower (Mast);** ➢ Operational height: minimum 30 m, maximum 35 m ➢ Configuration: modular, telescopic ➢ Material: corrosion-resistant metal alloy ➢ Permissible payload: minimum 12 kg ➢ Wind resistance: designed for operation under strong wind conditions, in accordance with applicable structural standards ➢ Mounting system: compatible with installation on a mobile platform ➢ Locking and securing system in folded position ➢ Sensor mounting elements ➢ Cable and hose guiding and fixing systems along the entire tower height. 4. **Mobile station with measurement tower accessories;** ➢ **Three-dimensional (3D) ultrasonic anemometer for turbulent measurements** o Wind speed range: 0–45 m/s, accuracy: ≤ 1% RMS, resolution: 0.01 m/s o Wind direction range: 0–359°, accuracy: ≤ 1% RMS, resolution: 1° o Interface: RS-422 full-duplex o Ultrasonic sampling frequency: 100 Hz; ➢ **Combined temperature, humidity, and atmospheric pressure sensor with digital output** o Measurement ranges: Temperature: −40 to +70 °C, Relative humidity: 0–100 % RH, Atmospheric pressure: 500–1100 hPa o Minimum accuracy: Temperature: ≤ ±0.2 K, Relative humidity: ≤ ±3 % RH, Pressure: ≤ ±0.4 hPa o Resolution: Temperature: ≤ 0.1 K, Relative humidity: ≤ 0.1 % RH, Pressure: ≤ 0.1 hPa o Communication protocol: Modbus RTU o Interface: RS-485; ➢ **Automatic meteorological station** o Measurement ranges: Temperature: −50 to +60 °C, Relative humidity: 0–100 % RH, Atmospheric pressure: 300–1200 hPa, Precipitation intensity: minimum 0–200 mm/h o Minimum accuracy: Temperature: ≤ ±0.5 K, Relative humidity: ≤ ±3 %

				RH, Pressure: ≤ ±0.5 hPa, Precipitation: accuracy suitable for meteorological applications, with high laboratory reproducibility o Resolution: Temperature: ≤ 0.1 K, Relative humidity: ≤ 0.1 % RH, Pressure: ≤ 0.1 hPa, Precipitation intensity: ≤ 0.01 mm/h, Precipitation amount: ≤ 0.1 mm o Communication protocol: Modbus RTU o Interface: RS-485 ➢ **Sensor intended for continuous measurement of methane and carbon dioxide concentrations** o Optical cavity absorption spectroscopy o Measurement range: CH_4 0–100 ppm, CO_2 0–10,000 ppm o Response time: ≤ 2 s o Precision (1σ, 5 s): CH_4 ≤ 0.25 ppb, CO_2 ≤ 1.5 ppm o Maximum drift (24 h): < 1 ppb CH_4 o Measurement frequency: ≥ 1 Hz o Sample pressure: 70–110 kPa o Power supply: 24 V DC o Typical consumption: < 30 W o Communication interface: Ethernet, Wi-Fi o Weight: 10–15 kg o Compact dimensions suitable for mobile use ➢ **Sensor intended for continuous measurement of nitrous oxide (N_2O) concentrations** o Optical cavity absorption spectroscopy o Measurement range: N_2O 0–100 ppm o Precision (1σ, 5 s): N_2O ≤ 0.20 ppb o Maximum drift (24 h): < 1 ppb o Measurement frequency: ≥ 1 Hz o Sample pressure: 70–110 kPa o Power supply: 24 V DC o Typical consumption: < 30 W o Communication interface: Ethernet, Wi-Fi o Weight: 10–15 kg o Compact dimensions suitable for mobile use ➢ **Gas flow control system (MFC) with 6 channels** o Dilution and gas flow control system integrated in a dedicated enclosure

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				○ Number of channels: minimum 6 independent mass flow controllers (MFCs) ○ Internal tubing: metallic (e.g. stainless steel) for high stability and tightness ○ Computer connection via digital interface (USB or equivalent) ○ Intended use: precise control of calibration and dilution gases ○ Channel 1 – approx. 0.5–25 mln/min ○ Channel 2 – approx. 1–100 mln/min ○ Channel 3 – approx. 2–200 mln/min ○ Channel 4 – approx. 5–500 mln/min ○ Channel 5 – approx. 10–1000 mln/min ○ Channel 6 – approx. 50–5000 mln/min ○ Dynamic range: minimum 1:100 ○ Accuracy: ≤ ±0.3% of full scale + ±0.5% of reading ○ Calibration: calibration protocol in minimum 5 points ○ Reference conditions: 0 °C and 1013.25 mbar ○ Inlet pressure: approx. 3 bar ○ Outlet pressure: near atmospheric pressure ○ Connection: internal thread G1/4" ○ Power supply: 18–30 V DC ○ Communication interface: RS-485 Modbus RTU or equivalent ○ Analog setpoint signal: 4–20 mA ○ Analog flow reading signal: 4–20 mA ○ Protection rating: minimum IP50 ○ Independent control of each channel ○ Capability to generate gas mixtures and dilutions ○ Integration into automatic analyser calibration system ○ Stable continuous operation ➢ **Pressure sensor for sample inlet** ○ Measurement domain: 0-15 lpm, for monitoring the pressure inside the sample inlet ○ Differential pressure sensor or switch that continuously monitors the suction pressure (ΔP) associated with the air intake column. If the column breaks (false air enters / system integrity is lost), the pressure signature changes abruptly → triggering an alarm, with adjustable

				threshold and relay output connected to a logger, PLC, or alarm system ➢ Cable reels (folded position): 2 units ➢ Sampling line: multilayer flexible tubing with polyethylene (PE) inner layer and aluminium insert – 300 m o Low weight with high mechanical stability, o Shape-stable o Allows cold geometric forming ➢ Outer diameter: 1/4 inch ➢ Sample conditioning system – nafion type membrane: Number of dryers 5 units o Number of tubes: 50 o Maximum dryer length: 30 cm o Dryer material: polypropylene ➢ Sampling line filters with rigid housing, demountable construction: ➢ Filter housings: 5 units ➢ Dry, oil-free filter elements, particle retention ≤ 5 µm: 10 units ➢ Gas sampling line transition connectors: 1/4" – 3/8": 3 units ➢ T-type particle filter, stainless steel: Connection size: 1/4" ➢ Filter element pore size ≤ 2 µm: 10 units ➢ Replaceable filter elements: Pore size: 7 µm, Quantity: 20 units ➢ Gas sampling line fittings: ➢ T-type fittings, 1/4": 10 units ➢ Cross fittings, 1/4": 5 units ➢ Ferrule and nut sets, 1/4": 50 units ➢ Ferrule and nut sets, 1/8": 20 units ➢ Transition connectors: ➢ 1/4" – 1/8": 5 units ➢ 1/4" – 1/16": 5 units ➢ 1/8" – 1/16": 5 units ➢ T-type fittings, 1/16": 10 units ➢ Stainless steel tube port connectors: 1/2": 10 units ➢ Reducing port connector 3/4" × 1/2": 10 units ➢ Stainless steel tube port connectors: 3/4": 10 units ➢ Stainless steel tubing: Diameter: 1/16", Length: approx. 10 cm, Quantity: 10 units ➢ Three-way valves for gas sampling lines: 6 units ➢ Auxiliary gas pump: Power supply: 24 V DC, Intended for air sampling system ➢ USB–Serial converter with 8 ports for industrial and data acquisition applications, Supported interfaces: RS-232 / RS-422 / RS-485, Quantity: 2 units

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				➢ **Central control and data acquisition console with integrated electronic logbook** o SSD storage minimum 1 TB o Processor: performance suitable for data acquisition and processing (modern multi-core class) o RAM: minimum 32 GB o Display: integrated or external, minimum Full HD o Operating system: modern, licensed, compatible with data acquisition and serial communication applications ➢ **Data acquisition and management software, providing**: o automatic data collection from all meteorological sensors, ultrasonic anemometer, gas analysers, inlet pressure sensor o support for standard communication protocols: RS-232 / RS-422 / RS-485; Modbus or equivalent o data storage in standard formats (e.g. text, CSV, databases) o data export for further analysis o integrated electronic logbook o automatic and/or manual logging of operational events, system interventions, and measurement periods o association of log entries with time intervals and data sets o controlled access (users / permissions) o access via web interface or local application. **5. Delivery, commissioning, and personnel training are included.**

(*) Any technical specification which might indicate a specific certification, attestation, origin, source of production, special procedure, the manufacturer's mark, trademark, patent, or manufacturing license may be mentioned only in order that the requirements can be easily and accurately identified and MAY NOT favor or disadvantage in any way the tenderers or the products tendered. All these specifications will be considered, will be read and understood as being 'or similar / or equivalent'.

Offers shall be submitted for all products. Partial offers are not accepted.

The **brand, model, and manufacturer** of the products shall be specified in order to verify compliance with the requested requirements. Furthermore, the Technical Proposal shall include copies of manufacturer documents (catalog files, prospectuses, etc.) certifying compliance with the technical specifications and the minimum conditions imposed for the products (it is accepted that these documents may be presented in an international language).

Products shall be accompanied by at least the following documents:

- If applicable, the delivery note;
- If applicable, the warranty certificates issued by the manufacturer/supplier – ORIGINAL;
- If applicable, the quality certificate with product identification data, issued by the manufacturer (SUPPLIER) – ORIGINAL;
- Technical documentation (user and maintenance manuals, calibration procedure, test reports for all operating modes, etc.) shall be presented in English and/or Romanian language;
- List of delivered components.

All equipment, materials, accessories, and works shall comply with the effective quality assurance norms and standards.

The equipment forming the systems shall be new and unused.

The equipment must comply with European Union standards.

The equipment shall not present manufacturing defects and shall meet the minimum technical characteristics provided in the present Tender Documentation.

Norms and Standards

All equipment, supplies, materials and works shall comply with the effective Romanian legislation or equivalent.

Any norms, standards, or technical specifications that might indicate a particular certification, attestation, origin, production source, special process, manufacturer's brand, trademark, patent, or manufacturing license may be mentioned only to facilitate easy and accurate identification of the requirements and CANNOT in any way favour or disadvantage bidders or offered products. All such references will be considered, read, and interpreted as having the notation 'or equivalent'.

IV. Obligations of the Parties

1. Obligations of the Supplier

a. QUALITY CONDITIONS

The Supplier is responsible for the quality of the delivered products.

The Supplier has the obligation, without modifying the contract price:

i) to replace the supplied products;

ii) to make all necessary modifications to ensure the products comply with the technical specifications;

b. CONDITIONS FOR PACKAGING, LABELLING, COLLECTION, AND MARKING

The equipment shall be properly packaged at the Supplier's expense for delivery to the Purchaser. The packaging shall be appropriately marked to ensure correct handling. The Supplier is obligated to pack the products so they withstand handling during transport, transit, and exposure to extreme temperatures, sunlight, and precipitation that may occur during transport and outdoor storage, ensuring they reach the final destination in good condition. Until the delivery of the products to the Purchaser, the responsibility for their integrity shall rest with the Supplier. Regarding the packaging of heavy weights and large volumes in crates, the Supplier shall take into consideration, where applicable, the distance to the final destination of the products and the absence of heavy handling facilities at all transit points.

Each product shall be accompanied by: relevant technical documentation (user manual/usage documentation in English / Romanian or the translated version in Romanian), quality certificate, and individual warranty certificate.

c. DELIVERY CONDITIONS

The Supplier is obligated to deliver the products to the final destination indicated by the Purchaser: the Purchaser's headquarters. Delivery shall be carried out as mentioned and shall be ensured by the Supplier within **a minimum of 10 months and a maximum of 12 months from the date of entry into force of the contract (according to the award criterion: 'Best quality/price ratio)**, after ensuring the warranty of proper execution. Delivery shall be made in a single shipment for all products. The Supplier shall bear all obligations arising from the delivery of the goods to the final destination. The Supplier shall notify the Purchaser by email at: incas@incas.ro, at least 7 working days prior to the delivery of the products.

The Supplier is obliged to guarantee that the supplied products are new and unused. Delivery shall be considered completed when the provisions of the acceptance clauses for the products are fulfilled.

d. ACCEPTANCE AND TESTING

The Supplier shall bear all obligations arising from the delivery of the products.

The quantitative and qualitative acceptance of the products by the Purchaser's representatives shall be conducted in the presence of the Supplier's delegate.

The Supplier is obligated, without modifying the contract price:

i) to replace any supplied products that do not meet the requirements;

ii) to make all necessary adjustments so that the products comply with the technical specifications.

If deficiencies are identified during the use of the delivered products, the Supplier is obligated to replace them within a maximum of 5 (five) days from the date of signing the Non-Conformity Report.

e. TRAINING

The training shall take place at the Purchaser's headquarters, may be conducted under laboratory conditions and the duration of the training shall be established by the bidder, but shall not be less than 1 day. Training shall be conducted within a maximum of 5 calendar days from the completion of the functional tests of the systems. The number of participants in the training shall be **at least 5 people**. The date on which the training begins shall be communicated to the Beneficiary at least two working days in advance. The training shall include written documentation in English and/or Romanian, organized by subsystems, and instruction for use and operation for each subsystem and each piece of equipment.

2. Purchaser's Obligations

The Contracting Authority (CA) is responsible for:

- providing the Contractor with all necessary information required to obtain the expected results and for the proper implementation of the contract;
- exercising responsibilities regarding the contract results: reception and verification of results, subsequent delivery, and providing the evaluation of results to the Contractor.

a. Payment Terms

The Purchaser considers the contract execution to begin only after the Supplier has provided proof of establishing the performance guarantee.

The payment of the contract shall be made in three (3) stages, by bank transfer, within a maximum of 30 days from the date of invoice issuance, as follows:

- 40% of the quoted value within no more than 30 days from the delivery of the critical design of the entire assembly – Invoice No. 1;
- 40% of the quoted value within no more than 30 days from testing and acceptance at the manufacturer's premises, prior to delivery to the Contracting Authority (CA) – Invoice No. 2;
- the remaining 20% of the quoted value within a maximum of 30 days from the date of approval for payment of the final Invoice – Invoice No. 3 issued by the Supplier (Final Invoice No. 3 shall not be issued in the absence of a Final Acceptance Protocol), subsequent to delivery, testing, and commissioning at the location indicated by the CA.

Payment of the final invoice shall be made by the Contracting Authority/Buyer, by bank transfer, based on the following documents:

a. Quantitative and Qualitative Acceptance Report;
b. Commissioning Report;
c. Personnel Training Report;
d. Final Acceptance Protocol;
e. Documentation/Manuals written in English and/or Romanian;
f. Original fiscal invoice, accompanied, where applicable, by the certificate of conformity and/or warranty.

The offer price shall be expressed in RON/CHF/EUR and shall include all related costs (packaging, transport, storage, customs duties, commercial mark-up, bank fees, specific permits, etc.).

The contracted prices are firm in RON/CHF/EUR for the entire duration of the contract.

b. Reception and testing

Reception: On the delivery date, **if the equipment is provided in terms of quantity and quality according to the accepted offer, a quantitative and qualitative reception** will be carried out by the reception committee of the Purchaser and the Beneficiary, at the latter's premises, together with the Supplier's representative, resulting in a **Quantitative and Qualitative Acceptance Report**.

Subsequently, a **Final Acceptance Protocol** will be prepared.

On the date of reception, if the supplied products do not meet the specifications in the technical proposal, the Supplier is obligated to replace them within **5 days** of this finding, at their own responsibility and expense, without altering the product price. Any such issues will be recorded in a Complaint Protocol.

V. Specific Terms and Conditions Regarding the Purchase

GENERAL BIDDING CONDITIONS:

The offer shall be written in Romanian and will include both the technical and financial proposals, as described below.

a. Technical Proposal

Bidders shall submit the technical proposal in accordance with the requirements outlined in this Tender Documentation.

The technical proposal must include a commentary on each item of the technical specifications as stated in the Specifications Document, demonstrating the alignment of the Technical Proposal with the requirements set by the Purchaser in the Tender Documentation.

The Technical Proposal must MANDATORILY include the technical form provided in the Forms Section, as well as a Table with technical details supplied by the manufacturer.

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The form shall summarize how the technical proposal meets the requirements of the Specifications Document, serving as a commitment from the bidder, certifying the accuracy of the technical and other information presented in their technical proposal, and committing to fulfil the requirements as requested by the Contracting Authority.

The technical proposal must be accompanied by brochures, leaflets, technical manuals, and other documents from the manufacturer that detail the characteristics and performance of the offered products.

SELECTION CRITERIA / EVALUATION CRITERIA:

To determine the "most economically advantageous" bid, the award criteria "best value quality-price" shall be applied, as mentioned in Art. 187 para. (3) lit. a) of Law no. 98/2016.

The winning bid shall be the one that achieves the highest total score resulting from applying the evaluation factors established below:

No.	Evaluation factors	Maximum allocated score
1.	Offer price – $\mathbf{P_{of}}$	**50%**
2.	Technical offer – $\mathbf{P_{teh}}$	**50%**
2.1	Delivery time – $\mathbf{P_1}$	**40%**
2.2	The commissioning period – $\mathbf{P_2}$	**10%**

1. The score for 'Offer price' evaluation criteria will be awarded as follows:

a) For the lowest price among the submitted offers, the maximum allocated score for this evaluation factor shall be awarded, respectively 50 points;

b) For any price other than that provided in lit. (a), the score shall be awarded as follows:

$$\mathbf{P_{of} = (minimum\ price/price_n)\ x\ maximum\ allocated\ score}$$

where:

P_{of} – points of the offer for 'Offer price' evaluation criteria;

Minimum price – the lowest price offered;

Price n – the price offered by the economic operator for which the score is being calculated.

The maximum possible financial score is 50 points.

For the 'Technical Offer', the evaluation factors 'Delivery Time' and 'Commissioning period' have been considered, as the Contracting Authority (CA) requires prompt delivery and commissioning to facilitate the commencement of its use in research activities, as well as to fulfill the commitments undertaken by INCAS in both National and International Projects in which the Institute is engaged.

2. The score for 'Delivery time' evaluation criteria will be awarded as follows:

Calculation algorithm:

a) for the shortest delivery time of 10 months, the maximum allocated score for this evaluation factor shall be awarded, respectively 50 points;

b) for the longest delivery time of 12 months, the minimum score allocated to the evaluation factor is awarded, respectively: 0 points;

c) for any other delivery times within the minimum and maximum interval, the score will be awarded according to the formula:

The actual score (P_1) = 40 x (Minimum delivery time / Offered delivery time)

where:

The actual score (P_1) – effective score of the offer for the evaluation factor 'Delivery time';

Minimum delivery time – the shortest delivery time offered;

Offered delivery time – the delivery time offered, for which the score is calculated.

Minimum delivery time: 10 months. Maximum delivery time: 12 months.

It is taken into account that the delivery time must not exceed 12 months, in accordance with the needs of the Contracting Authority and considering that a timeframe within the interval presented above (10 – 12 months) represents an optimal interval for the delivery of the equipment.

Offers proposing a delivery time longer than the maximum delivery time (12 months) accepted by the Contracting Authority will be declared non-compliant. Offers proposing a delivery time shorter than the minimum delivery time (10 months) accepted by the Contracting Authority will not receive additional points.

3. The score for the evaluation factor 'Commissioning period' (P_2) is given as follows:

Calculation algorithm:

a) for the shortest commissioning time of 1 day, the maximum score allocated to the evaluation factor is awarded, respectively: 10 points;

b) for the longest commissioning time of 10 days, no score will be awarded / the minimum allocated score shall be awarded, respectively: 0 points;

c) for other commissioning times within the minimum and maximum interval, the score is awarded according to the formula:

The actual score (P_2) = 10 x (Tmin/Tn)

where:

The actual score (P2) – effective score of the offer for the evaluation factor 'Commissioning period';

***Tmin** (minimum commissioning period) – the shortest commissioning period, among those offered;*

***Tn** (the commissioning period offered) – the commissioning period offered, for which the score is being calculated.*

Commissioning period: minimum 1 day, maximum 10 days.

A commissioning period of more than 10 days will not be accepted. Offers proposing commissioning times longer than 10 days shall be declared non-compliant, while offers proposing commissioning times shorter than 1 day shall not receive additional points.

NOTE: When preparing the Technical Proposal, and implicitly the evaluation factors 'Delivery time' and 'Commissioning time', the use of the phrase 'maximum/minimum' shall be avoided, and the exact offered timeframe shall be specified.

b. Financial proposal

The financial proposal must MANDATORILY include the offer form provided in the Forms Section and the relevant Annexes.

The prices will be final and will include all taxes (transportation costs, storage costs, or other taxes related to delivery or acquisition, and other costs). The prices and total value will be expressed in **RON/CHF/EUR**, will be firm, will not be increased thereafter and will remain valid until the full implementation of the contract.

MINIMUM WARRANTY CONDITIONS

The Supplier is obligated to guarantee that the products provided through the contract are new, unused, and manufactured under quality assurance conditions complying with European standards.

The warranty period for the products shall be a minimum of 2 years.

Defective products replaced during the warranty period will have the same warranty period, starting from the date of replacement of the defect.

If, during the use of the delivered products, it is found that they have deficiencies, the Supplier is obligated to replace them free of charge within a maximum of 5 working days. If the product is not replaced within 5 days, the Purchaser will utilize the Performance Bond.

The Purchaser reserves the right to request the Supplier to replace products that do not meet quality standards within a maximum of 24 hours from the notification of the identified issues. In the case of latent defects in some products, these must be reported to the Supplier within 24 hours of their occurrence.

PERFORMANCE BOND

The Supplier is obligated to provide the Performance Guarantee of the contract within 5 working days from the contract signing date, amounting to 10% of the contract value excluding VAT, before the commencement date of the contract execution, in the form of a guarantee instrument issued, under legal conditions, by a banking institution or an insurance company. The method of establishing the Performance Guarantee shall comply with the provisions of Art. 39 of GD no. 395/2016.

The Performance Bond may be provided by bank transfer to the IBAN account RO86RNCB0290101344950001, opened at Banca Comercială Română – BCR – Iuliu Maniu Branch, or through a guarantee instrument issued by a credit institution from Romania or another state, or by an insurance company, in compliance with the law. This guarantee becomes an annex to the contract, according to Art. 39 of GD no. 395/2016 applying accordingly. The guarantee must be presented in its original form, in the amount and for the period stipulated in the award documentation, in accordance with the provisions of Art. 40, paragraph (1^1) of Government Decision no. 395/2016, correlated with Art. 154, paragraph (4) of Law No. 98/2016.

The Performance Bond Letter/Instrument must:

- be presented in its original form;
- clearly state the name of the Contracting Authority in whose favour it has been issued;
- include the validity period for which it has been issued, which must match the period specified in the documentation;
- contain the legible seal of the issuing credit institution/banking company/insurance company and/or the authorized signature.

VI. Main risks for delivery of the contract and defence measures

1. Delays, insufficient or wrong technical characteristics and performance, defence measures

The Supplier undertakes to indemnify the Purchaser against any:

i) claims and legal actions, resulting from the infringement of intellectual property rights (patents, trademarks, etc.), related to the equipment, materials, installations or machinery used for or in connection with the purchased products, and

ii) damages, expenses, fees and expenses of any nature, related, except for the situation in which such a violation results from the compliance with the Tender Documentation prepared by the Purchaser.

If, through his sole fault, the Supplier fails to fulfil its obligations, then the Purchaser has the right to deduct from the contract price, as penalties, an amount equivalent to 0.1% of the contract price without VAT for each day of delay, until the effective fulfilment of the obligations.

2. Risks associated with the product warranty, indirect damages

The Purchaser has the right to issue claims on the Performance Guarantee, within the limits of the damage created, if the Supplier does not fulfill, does not execute, executes with delay or improperly executes the obligations assumed by this contract. Prior to issuing a claim on the Performance Guarantee, the Purchaser has the obligation to notify the Supplier, specifying at the same time, the obligations that have not been respected.

3. Damages

Failure to fulfill with the obligations assumed by this contract by one of the parties, in a culpable and repeated manner, entitles the injured party to consider the contract legally terminated and to claim payment of damages.

The Supplier's failure to fulfill the assumed obligations under the present contract leads to the non-fulfillment of the tasks and activities assumed within the program **„Emissions Research and Monitoring Infrastructure Programme", Program Component „East European Methane Study" – EEMS, contract no. 3/RO-CH/30.10.2025.**

4. Associated risks of the Purchaser

The Purchaser undertakes to receive the products within the agreed timeframe, if the Object of the Contract is fulfilled in conjunction with the Tender Documentation, annex to this contract.

If the Purchaser does not honour his invoices within 30 days from the expiration of the agreed period, then he has the obligation to pay, as penalties, an amount equivalent to 0.1% of the unfulfilled payment, for each day of delay, until the effective fulfillment of the obligations.

5. Risks regarding force majeure

Force majeure is established by a competent authority.

Force majeure exempts the affected parties from fulfilling the obligations assumed under the present contract for the entire entire period in which it operates.

The execution of the contract will be suspended during the period of force majeure, without prejudice to the rights of the parties until its occurrence.

The contracting party invoking Force Majeure is obligated to notify the other parties immediately and fully of its occurrence and to take any measures at its disposal to limit the consequences.

The contracting party invoking force majeure is obligated to notify the other party of its cessation within a maximum of 5 days from its termination.

If force majeure persists or is expected to persist for more than 3 months, each party will have the right to notify the other party of the termination by right of the present contract, without either party being entitled to claim damages from the other party.

INCAS - Institutul Naţional de Cercetare-Dezvoltare Aerospaţială "Elie Carafoli"
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NOTE: The technical specifications indicating a certain origin, source, production, special process, manufacturing or trade mark, patent, or manufacturing license are mentioned solely for the easy identification of the product type and DO NOT aim to favour or eliminate certain economic operators or products that meet the requirements of this Tender Documentation.

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ANNEX I - Activity schedule

No.	Name of activity	U.M.	Duration of activity	Prepared documents
1.	Delivery and initial quantitative and qualitative acceptance	months	min. 10 months – max. 12 months after signing the contract	► quantitative and qualitative acceptance report ► final quantitative and qualitative acceptance report
2.	Installation and commissioning at the location indicated by CA	days	min. 1 day – max. 10 days, after signing the final quantitative and qualitative acceptance report	► commissioning report
3.	Training the personnel of the Beneficiary	days	min. 1 day after signing the commissioning report	► report on training the personnel of the Beneficiary
4.	Final acceptance		after signing the report on training the personnel of the Beneficiary	► final acceptance protocol