



Science and Technology Organization
Centre for Maritime Research and Experimentation
La Spezia – Italy



Request For Proposal

Underwater laser scanner and imaging sensor
system

CMRE-RFP-25-004

Bidding Instructions

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A Bidding Instructions

1 General

This is a Firm Fixed Price deliverable contract in accordance with the STO-CMRE Terms and conditions; Contract award is contingent upon funding availability; Partial bidding is not allowed.

STO-CMRE Standards Terms and Conditions dated July 2016 are applicable to this procurement and can be located on the CMRE website at www.cmre.nato.int/Procurement under General Information.

2 Classification

This Request For Proposal (RFP) is a PUBLIC RELEASE document.

3 Definitions

- a. The “Prospective Bidder” shall refer to the entity that has indicated thereon its intention without commitment, to participate in this RFP.
- b. The term “Bidder” shall refer to the bidding entity that has completed a bid in response to this RFP.
- c. The term “Contractor” shall refer to the bidding entity to whom the contract is awarded.
- d. The term “Contracting Officer” designates the official who executes this RFP on behalf of STO-CMRE
- e. “Contracting Officer’s Technical Representative” or “COTR” is the official who is appointed for the purpose of determining compliance of the successful bid, per the technical specifications.
- f. The term “STO-CMRE” shall refer to Science & Technology Organisation – Centre for Maritime Research and Experimentation.
- g. The term “NATO” shall refer to the North Atlantic Treaty Organisation.
- h. The term “days” as used in this RFP shall, unless otherwise stated, be interpreted as meaning calendar days.

4 Eligibility

This RFP is open to governmental or commercial entities :

1. Established in a North Atlantic Treaty Organisation Alliance member nation.
2. Working in the required field and legally authorised to operate in the country or countries in which this contract is to be performed at the time of bidding.
3. Has performed the desired past performance including size, cost and scope.
4. All proposed key personnel on this requirement must be citizens of a NATO member nation as described in this RFP.

5 Duration of the Contract

1. The contract awarded shall be effective upon date of award.
2. Delivery date: November 2025

6 Exemption of Taxes

All prices and rates quoted shall be exclusive of any taxes and duties from which STO-CMRE is exempt pursuant to the provisions of "Agreement on the status of the North Atlantic treaty Organization, National Representatives and International Staff" (Ottawa Agreement), Articles IX and X and the Italian law ART. 72 of the D.P.R. 26/10/1972 n. 633 and subsequent modifications.

7 Amendment or Cancellation

STO-CMRE reserves the right to amend or delete any one or more of the terms, conditions, or provisions of the RFP prior to the date set for bid closing. A solicitation amendment or amendments shall announce such action.

STO-CMRE reserves the right to cancel, at any time, this RFP either partially or in its entirety. No legal liability on the part of STO-CMRE shall be considered for recovery of costs in connection to bid preparation. All efforts undertaken by any bidder shall be done considering and accepting, that no costs shall be recovered from STO-CMRE.

8 Bidder Clarification

1. Prospective Bidders should seek clarification at their earliest convenience. Any explanation regarding the meaning or interpretation of this RFP, terms, clause, provision, or specifications, shall be requested in writing from the Contracting Officer. The Contracting Officer must receive such requests for clarification no later than 3 (three) working days prior to the bid closing date.
2. Information in response to all inquiries / requests for clarification to a prospective bidder shall be furnished to all prospective bidders by e-mail. All addendums and any necessary solicitation amendments shall be incorporated into this RFP. Oral Interpretations shall not be binding.

9 Bid Closing Date

Bids shall be submitted by 09.00 hours, local time, **28 April 2025** . Bids received after the stated date and time, will not be considered.

Send bids via e-mail as an Adobe® .pdf file to: Contracting@cmre.nato.int and cc Registry@cmre.nato.int (See paragraphs 11 & 12)

NOTE: Please DO NOT send your bid to any other e-mail address otherwise your bid may be determined non-compliant with this RFP.

10 Bid Validity

Bids shall remain valid for a period of one hundred and twenty days (120) from the applicable closing date set forth within this RFP. STO-CMRE reserves the right to request an extension of validity. Bidder shall be entitled to either grant or deny this extension of validity. STO-CMRE may consider a denial to extend the validity as a withdrawal of the bid.

11 Content of Proposals

The entire proposal shall be split in 2 proposals :

- a. The Financial proposal containing :
 1. The bidder's full name, address, point of contacts, telephone, and website;
 2. Compliance statement (See Annex 2)
 3. Past performance (See Annex 3); references will be accepted in lieu of past performance;
 4. Price Proposal (See Annex 4 for Price proposal).
- b. The Technical proposal containing:
 1. Provision of technical specifications of the proposed system;
 2. Compliance matrix (See Annex 5 to Statement of Work).

12 Proposal Submission

- a. Proposals shall be submitted electronically in two separate PDF documents; One containing the Technical Proposal and one containing the Financial Proposal, to: Contracting@cmre.nato.int
- b. Email subjects shall include the solicitation information along with company name (for example: RFP-CMRE 25-04_Tech_ABC Inc. / RFP-CMRE-25-04_FIN_ABC Inc.). Allow sufficient time in your submission should you encounter email size challenges.
- c. Price proposals shall be in EURO (€) currency. Proposals may be submitted in other currencies. Comparison of the price proposals will be made in euro; the exchange rate to be used for the purposes of such price comparison will be the NATO exchange rate on the first day of the week of the bid closing date .
- d. Prices shall be on a Firm Fixed Price Basis and include any relevant discount schedule.
- e. No oral bids or oral modifications or telephonic bids shall be considered.
- f. It is the ultimate responsibility of a prospective bidder prior to submission that all proposal submissions are reviewed to ensure they meet the technical, contractual and administrative specifications and that offers meet the limitations and expressed conditions.

13 Late Proposals

- a. It is solely the bidder's responsibility that every effort is made to ensure that the proposal reaches STO-CMRE prior to the established closing date and time. Only if it can be unequivocally demonstrated that the late arrival of the proposal package was the result of NATO staff negligence (mishandling) shall the bid be considered, as long as it is received before an award is made.
- b. A delay in email exchange due to the server or size restrictions does not constitute a delay by NATO.

14 Proposal Withdrawal

A bidder may withdraw their proposal up to the date and time specified for bid closing. Such a withdrawal must be completed in writing, with attention to the STO-CMRE Contracting Officer.

15 Proposal Evaluation

- a. The evaluation of proposals and determination as to the responsiveness and technical adequacy or technical compliance, of the products or services requested, shall be the responsibility of STO-CMRE. Such determinations shall be consistent with the evaluation criteria specified in the RFP.
- b. STO-CMRE is not responsible for any content that is not clearly identified in any proposal package.
- c. Proposals shall be evaluated and awarded based upon the lowest price, technically compliant offer. Technical compliance will be met if the system proposed meets (or exceeds) all the minimum requirements listed in para. 3 of SOW. The following factors are considerations:
 1. Successful administrative submission of bid packages as requested paragraph 11, as listed in this RFP.
 2. Successful determination of Technical Compliance.
 3. Successful cost price criteria (Lowest Price Technical Compliant Offer).
 4. Acceptance of STO-CMRE General Terms and Conditions.

16 Proposal Clarifications

During the entire evaluation process STO-CMRE reserves the right to discuss any bid with the order to clarify what is offered and interpretation of language within the bid, to resolve in potential areas of concern.

17 Award

- a. STO-CMRE intends to award a firm fixed price contract to the Offeror whose proposal represents the Lowest Priced Technically Compliant offer to NATO. Partial awards will not be considered.
- b. STO-CMRE will collect information from references provided by the Offeror in regard to its past performance. Contractors must provide authorization to contact references.
- c. STO-CMRE reserves the right to negotiate minor deviations to the listed General Terms and Conditions to this RFP.

18 Communications

All communication related to this RFP, between a prospective bidder and STO-CMRE shall only be through the nominated STO-CMRE Contracting Officer. Designated contracting staff shall assist the STO-CMRE Contracting Officer in the administrative process. There shall be no contact with other STO-CMRE personnel regarding this RFP. Such adherence shall ensure Fair and Open Competition with equal consideration and competitive footing leverage to all interested parties.

19 Invoicing and payments:

The invoicing and payment procedures that will govern the contract resulting from this solicitation, are those found in clauses no. 42 and 44 of STO-CMRE Standards Terms and Conditions (para. 1 of Bidding Instructions).

20 Points of Contact

(PLEASE INCLUDE ALL BELOW ON ALL CORRESPONDENCE)

- (a) Ms Laure Briegne, Contracting Officer: Laure.Briegne@cmre.nato.int
- (b) Ms Edlira Llazo, Contracting specialist, buyer: Edlira.Llazo@cmre.nato.int
- (c) Contracting Office: Contracting@cmre.nato.int

B Statement of Work (SOW)

1 Introduction and Background

The NATO STO CMRE is looking to procure technology to advance their autonomous underwater vehicle (AUV) capabilities for bottom object identification missions. As part of this advancement the NATO STO CMRE is looking to adopt the latest developments in subsea imaging, and 3D modelling, to be installed into one of their 21-inch diameter AUV.

2 Scope of the Work

The NATO STO CMRE is looking to procure an underwater laser scanner and imaging sensor system, including:

- High-resolution single laser line scanner
- 4K digital stills camera with on-board image enhancements
- High-output LED panels, up to 500,000 lumens

The system shall be delivered in a form that allows its integration into a medium size (21" diameter) wet payload section of an existing AUV.

The delivery shall include, software for post-mission data analysis, APIs for data streaming/collection and sensor control, documentation, remote and on-site support during the integration phase.

3 Requirements description

Minimum requirements are specified for each sensor, subsystem and for the overall system:

1) Laser sensor

- a) Line scan (not single beam)
- b) Laser projector shall have no moving parts
- c) Laser receiver shall have an optical filter to minimize the impact of ambient light
- d) Minimum scan range (altitude) 1.0m
- e) Maximum scan range (altitude) ≥ 7.0 m
- f) Points per line > 2400
- g) Laser Class $\leq 3B$ (EN 60825-1)
- h) Real-time data acquisition
- i) Data format: standard file formats for point cloud data types (e.g. XYZ)

2) Imaging system

- a) CMOS sensor, color, larger than 1"
- b) Resolution $> 12MP$
- c) Global Shutter
- d) Field of View $> 40^\circ$ in both directions
- e) Frame rate $\geq 2Hz$
- f) On-board image processing/enhancement
- g) Raw images available
- h) LED lightening synchronized with the camera shutter
- i) LED ≥ 500000 lumens

3) Integration requirements

- a) Laser scanner and camera system mounted in a singlewater tight housing
- b) Max depth (housing and LED) ≥ 850 m
- c) Weight in water (fresh) $< 5Kg$
- d) Length < 1000 mm
- e) Width < 200 mm
- f) Single external connection to the AUV with:
 - i) Power supply

- ii) Data and control link (1Gb Ethernet)
 - iii) PPS (optional)
 - iv) Leak detection (optional)
- g) Power requirements
 - i) Voltage range wider than 24-40VDC
 - ii) Power consumption <120W peak
- h) Data collection:
 - i) Streamed through data link (TCP or UDP)
 - ii) On-board storage (capacity >=1TB)
- i) System configuration and control through API or other protocol suitable for unattended operations

4 Deliverables

- Laser and imaging system ready for AUV integration
- Documentation, at least : Integration Manual; Users Manual; 3D Models for mechanical integration; Software/API documentation; Calibration Procedures; SOPs
- Software for post-mission analysis and data processing
- API or message protocol for system configuration
- On-site support during integration and at-sea tests (max 5 days)
- Remote support during integration and configuration (max 10 days)

5 Timelines / Milestone

Delivery of the required equipment must take place before the end of November 2025.

7 Quality of Deliverables- Acceptance Criteria

All requirements stated in Section B.3 have to be fulfilled.

8 References

The company should have a proven track record of successful installations of the system being offered or an equivalent one on-board autonomous underwater vehicles and remotely operated vehicles.

Proposal Content / Checklist

PROPOSAL CONTENT / CHECKLIST

Table of Contents:

- ☐ Bidder's name, address, POC, Contact numbers, email address.
- ☐ Compliance Statement.
- ☐ Past Performance (including References).
- ☐ Technical Proposal.
- ☐ Financial Proposal
- ☐ Compliance matrix (See Annex 5).

Compliance Statement

COMPLIANCE STATEMENT TO SEALED BID RFP-STO-CMRE-25-04

It is hereby stated that our company has read and understand all documentation issued as part of **RFP-STO-CMRE-25-04**. Our company proposal submitted in response to the referenced solicitation is fully compliant with the provisions of **RFP-STO-CMRE-25-04** and the intended contract with the following exception(s); such exemptions are considered non-substantial to the STO-CMRE solicitation provisions issued.

Clause	Description of Minor Deviation

Company: _____ Signature: _____

Name & Title: _____ Date: _____

Company Bid Reference: _____

Bidder's proposal must be based on full compliance with the terms, conditions and requirements of the RFP and all future clarifications and/or amendments. The bidder may offer variations in specific implementation and operational details provided that the functional and performance requirements are fully satisfied. In case of conflict between the compliance statement and the detailed evidence or explanation furnished, the detailed evidence/comments shall take precedence/priority for the actual determination of compliance. Minor or non-substantial deviations may be accepted. Substantial changes shall be considered non- responsive.

Annex 3: Past performance Information Form

PAST PERFORMANCE INFORMATION FORM

(Company is required to submit minimum of **3** – references may be submitted in lieu of past performance).

Contracting Entity:

Contract No:

1. Type of Contract (Firm Fixed Price, Requirements):
2. Title of Contract:
3. Description of Work Performance and Relevance to Current Acquisition:
4. Contract Euro Amount:
5. Period of Performance:
6. Name, Address, Fax and Telephone No. of Reference:
7. Indicate Whether Reference Acted as Prime or Sub-contractor:
8. Comments regarding compliance with contract terms and conditions:
9. Complete Contact Information for client:
10. Permission to contact client for reference: Yes/ No

Name/Signature of Authorized Company Official_____

This Enclosure is designed to assist the respective company provide STO-CMRE with all necessary documents/information required. For clarification, please refer to Bidding Instructions in part 1 of subject solicitation.

Annex 4: Price Proposal

PRICE PROPOSAL

1. Bidders shall provide an all-inclusive, firm fixed price (FFP) bid for the items described below by filling out the "Total Price" box of the schedule of supplies and prices. A complete description of the specifications can be found in Part III Sect. H, Description/Specs./Performance Work Statement. Partial bidding is not allowed.
2. The prices shall be tax and duty free, DAP CMRE La Spezia, Italy.
3. The prices shall be expressed in Euro.

No	Description/Deliverables	Unit of Issue	QTY	Total Price in €
1	Underwater laser scanner and imaging sensor system (as per para. 4 of SOW)	each	1	

Authorizing Company Official:

Printed Name: _____

Position: _____

Authorizing Company (Signature): _____

Title: _____

Date: _____

Annex 5: Compliance Matrix

COMPLIANCE MATRIX

Compliance Matrix to STATEMENT OF WORK

Contractor technical proposal will be assessed based on criteria mentioned in the following table. STO-CMRE reserves the right to conduct technical discussions with contractor. Ultimately, companies shall clearly demonstrate by providing unequivocal explanation to where and how it meets the criteria set forth in this solicitation. The Contractor must demonstrate their experience and expertise in the subject matter, in which will be graded in accordance with the Grading Matrix.

No	ITEM	COMPLIANT /NOT COMPLIANT	Bidders Statement of Compliance – Bidder shall specifically reference the information within the proposal (page/paragraph) that demonstrates compliance with the criteria.
1	Full technical compliance to the as listed paragraph 4 of the SOW		
2	All proposed key personnel on this requirement must be citizens of a NATO member nation		
3	The bidder must have at least 5 years experience in the production of the materials specified in this RFP.		