Appendix A to Chapter II
(Refers to Paragraphs 5 and 6 of Chapter II of DAP 2020)

REQUEST FOR INFORMATION FOR CONTAINERISED THEATER LEVEL SONAR (CTLS)

1. The Ministry of Defence, Government of India, intends to induct **Containerised Theatre Level Sonar (CTLS)** for persistent generation of Underwater Domain Awareness (UDA) and enabling Theater level Anti Submarine Warfare operations. The MoD, GoI, intends to install these containerised systems on suitable *IN* ships.

2. This Request for Information (RFI) consists of three parts as indicated below:-

2.1 **Part I.** The first part of the RFI incorporates operational characteristics and features that should be met by the System. Few important technical parameters of the proposed equipment are also mentioned.

2.2 **Part II.** The second part of the RFI states the methodology of seeking response of vendors. Submission of incomplete response format will render the vendor liable for rejection.

2.3 **Part III.** This part lays down the guidelines for framing Criteria for Vendor Selection/Pre-Qualification in **Buy Indian (IDDM) (preferable)**, Buy (Indian) and Buy & Make (Indian) Cases.

PART I: OPERATIONAL AND TECHNICAL REQUIREMENTS

3. **Introduction.** The *IN* intends to induct CTLS systems, for persistent generation of Underwater Domain Awareness (UDA) and enabling Theatre level Anti Submarine Warfare operations. The system is envisaged with the following components:-

3.1 Active transmitter with Very low frequency (< 01 kHz) and high power.

3.2 Passive thin Twin Line Receiver Array.

3.3 Associated operator consoles, winch & handling arrangements.

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3.4 Containerised form fit arrangement for housing the Theatre Level Sonar.

4. **Operational Requirements.** CTLS shall have the following capabilities: -

4.1 The system shall be able to provide theater level long range detection, tracking and classification of sub-surface targets in deep, shallow and complex littoral waters.

4.2 The system shall be able to operated in active and passive modes, individually or simultaneously to enable mono-static, bi-static and multi-static mode of operations.

4.3 The system shall be capable of exploiting Direct, Bottom Bounce and Convergence Zone (CZ) acoustic propagation paths to maximise detection under favourable oceanographic conditions.

4.4 The system shall be capable for undertaking persistent Anti Submarine surveillance for prolonged operations, without frequent maintenance intervention.

4.5 The system shall be deployable onboard a variety of platforms (suitable *IN* ships/ auxiliaries), with minimal platform specific modifications, limited primarily to installation of an A - frame and handling arrangements.

4.6 The system shall be capable of operations across wide oceanographic variability, including temperature gradients, salinity fronts, thermoclines and varying seabed types.

4.7 The system shall support simultaneous detection and tracking of multiple sub-surface targets, with track continuity over extended ranges and time.

4.8 The associated Launch & Recovery Systems shall be able to operate/deploy CTLS in Sea State ≥ 4.

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Technical Parameters

5. **Active Sonar Subsystem.** The active component shall have following broad specifications:-

5.1 The active sonar shall operate at a centre frequency below 01 kHz, optimised for long range detection.

5.2 The active source shall be a Variable Depth Sonar (VDS) capable of being lowered to a depth of atleast 200 meters to exploit favourable sound velocity profiles.

5.3 The system shall generate an acoustic Source Level exceeding 230 dB re 1µPa@1m, with selectable waveforms optimised for long range propagation and reverberation management.

5.4 The active sonar shall support adaptive depth control to optimise performance in real time based environmental conditions.

6. **Passive Sonar Subsystem.** The broad specifications for passive sonar array are as follows: -

6.1 The passive subsystem shall comprise of twin Thin Line Receiver Arrays (TLRA), each with not less than 180 acoustic elements.

6.2 The passive array shall operate over a frequency bandwidth of 10 Hz to 2 kHz, enabling detection of low frequency machinery, propulsion and hydrodynamic noise.

6.3 The system shall be able to support coherent and incoherent processing, beam forming and adaptive noise suppression techniques.

6.4 The passive array shall support bearing estimation, Target Motion Analysis (TMA) and long range classification.

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7. **Signal Processing & Tracking.**

7.1 The system shall employ advanced digital signal processing for detection, localisation, tracking and classification of sub-surface targets in high noise and reverberation environments.

7.2 The system shall support automatic and operator assisted tracking, including multi-hypothesis tracking and track quality assessment.

7.3 The system shall provide classification aids using Broad Band (BB), Narrow Band (NB), DEMON analysis and other modulation/ demodulation techniques.

8. **Containerisation & Modularity Requirements.**

8.1 The complete sonar system shall be containerised, using ISO standard containers (20 ft/ 40 ft), suitable for rapid and safe embarkation, disembarkation and deployment of Theater Level Sonar.

8.2 The system architecture shall be modular, allowing independent replacement, upgradation and scaling of following:-

8.2.1 Active source module.

8.2.2 Passive array module.

8.2.3 Processing and control modules.

8.2.4 Operator console modules.

8.3 The only mandatory ship-fit requirement shall be a certified A-frame with associated handling and winch systems, compatible with the sonar deployment equipment. The same shall be also catered in the Bidder's Scope of Work.

8.4 The system shall be designed for rapid installation and commissioning, with minimal cabling and platform integration complexity.

8.5 The system shall have a minimum shelf life of ≥ 15 years, with possibility of further life extension/ software upgradation.

9. **Ergonomic Parameters (Human - Machine Interface).**

9.1 The system shall provide modern, multi-function operator consoles with high resolution displays suitable for prolonged operations.

9.2 Operator work stations shall be able to support the following:-

9.2.1 Waterfall displays (Wide Band, Narrow Band and Broad Band).

9.2.2 DEMON and modulation analysis.

9.2.3 Track tables and tactical situation displays.

9.3 The user configuration shall be intuitive and configurable, allowing operators to tailor displays, alarms and processing parameters based on mission requirements.

9.4 The system shall support reduced operator workload through automation, intelligent alerts, decision support tools, usage of AI and other multimodal data fusion techniques for faster and accurate onboard analysis of Sonar images/ data.

9.5 The Operator Consoles shall be designed *iaw* Naval ergonomic standards, including seating, display placement, lighting and noise control.

9.6 The system shall have Mean Time Between Failures of ≥ 180 days for submerged hardware.

9.7 Testing equipment shall be provided for testing, analysing and calibrating the system for defined design parameters.

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10. **Modelling, Simulation & Performance Prediction.**

10.1 The system shall include an integrated sonar performance modelling and prediction software suite.

10.2 The modelling tool shall be able to exploit the following:-

10.2.1 Environmental inputs (Sound Velocity Profile, Bathymetry, Seabed type, Ambient Noise etc).

10.2.2 Platform parameters.

10.2.3 Sensor configuration and depth.

10.3 The software shall provide real-time and pre-mission performance prediction including but not limited to following:-

10.3.1 Environmental inputs (Sound Velocity Profile, Bathymetry, Seabed type, Ambient Noise etc).

10.3.2 Detection range estimation.

10.3.3 Convergence Zone and Bottom Bounce viability.

10.3.4 Probability of detection and false alarm rates.

10.4 The tool shall support 'What-if analysis', sensor placement optimisation mission rehearsal.

11. **Analysis, Classification and Data Extraction & Integration Capabilities.**

11.1 The system shall provide comprehensive target analysis tools.

11.2 The system shall support library based and operator assisted classification, with provision for updating and expanding the acoustic libraries.

11.3 The system shall enable correlation between active and passive detections to enhance classification confidence.

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11.4 The system shall have the feasibility of extraction of all data (including raw data). The format for raw and processed data shall be *iaw IN* defined format.

11.5 The CTLS generated data shall be capable of integration with *IN* PRCM/ LDBMS (PRCM - Portable Recorder cum Classification Module; LDBMS - LOFAR Data Base Management System).

12. Additional Features & Interfaces.

12.1 The system shall support external data interfaces for following:-

12.1.1 Navigation sensors.

12.1.2 Environmental sensors.

12.1.3 Command & Control systems.

12.2 The system shall have interoperability with onboard Combat Management System.

12.3 The system shall support secure data recording and playback for post mission analysis and training.

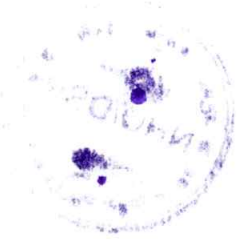
12.4 Provisions shall exist for future upgrades, including AI/ML based classification and distributed bi-static operations.

12.5 The system shall have capability to undertake the Beam Pattern checks. Accordingly, necessary measure tools and SMT/STTEs shall be catered along with the main system.

13. Essential & Certification Requirements.

13.1 The system shall comply with relevant Naval, maritime and electromagnetic compatibility standards.





13.2 All containers and handling equipment shall be certified for marine use, including shock, vibration and environmental compliance.

13.3 The system shall comply with applicable safety, electrical and acoustic emission regulations.

13.4 The preventive Maintenance Schedule should be provide as a deliverable with the system.

13.5 Documentation shall include but not limited to the following:-

13.5.1 Installation manuals and associated drawings.

13.5.2 Operator and maintenance manuals.

13.5.3 Safety and certification documents.

14. Vendors should confirm that following conditions are acceptable:-

14.1 The solicitation of offers will be as per 'Single Stage -Two Bid System'. It would imply that 'Request for Proposal' would be issued soliciting the technical and commercial offers together, but in two separate sealed envelopes. The validity of commercial offers would be at least 18 months from the last date of submission of offers.

14.2 The technical offers would be evaluated by a Technical Evaluation Committee (TEC) to check its compliance with RFP.

14.3 The equipment of all TEC cleared vendors would be put through a trial evaluation in India on a 'No Cost No Commitment' basis. A staff evaluation would be carried out by IHQ MoD (N) to analyse the result of field evaluation and shortlist the equipment for introduction into service.

14.4 Amongst the vendors cleared by GS evaluation, a Contract Negotiations Committee would decide the lowest cost bidder (L1) and conclude the appropriate contract.



14.5 Vendor would be bound to provide product support for time period specified in the RFP, which includes spares and maintenance tools/ Jigs/ fixtures for field and component level repairs.

14.6 The vendor would be required to accept the general conditions of contract given in the Standard Contract Document at Chapter VI of DAP.

14.7 **Offset (if applicable).** Not Applicable.

14.8 **Integrity Pact (if applicable).** An Integrity pact along with appropriate Earnest Money Deposit (EMD) is a mandatory requirement in the instant case in accordance with provisions of **Annexure I** to **Appendix O** of Schedule I Chapter II of DAP -20.

14.9 **Performance-cum-Warranty Bonds.** Performance-cum-Warranty Bond both equal to 5% value of the contract inclusive of taxes and duties is required to be submitted after signing of contract. Confirmation of submission of PWBG at the rate as promulgated by MoD at the time of tender submission is to be provided.

14.10 **ToT (if applicable).** Not Applicable.

14.11 **Warranty.** The equipment shall be covered by warranty for replacement by the vendor for a period of **minimum two years.**

14.12 **Delivery Period.** The equipment to be delivered within 24 months from the effective date of the contract.

14.13 **Spares.** List of Onboard (OB) and Base & Depot (B&D) spares required for supporting the equipment must be provided with cost. Quotations for spares should have a minimum validity of 18 months. Adequacy and continued availability of spares must be ensured prior to placement of orders for procurement of equipment. The list should be split in two parts as follows:-



14.13.1 **Onboard (OB) Spares.** OB spares should cater for one year exploitation needs of the equipment and comprise spares, which can be replaced by the ship's staff. OB spares

normally comprises of items like PCBs, modules, sub-assemblies etc.

14.13.2 **Base and Depot (B&D) Spares.** B&D spares are required to cater for atleast five-year exploitation needs of the equipment. They must also comprise of adequate quantities of all items included in the OB spares especially more PCBs/ modules instead of discrete electronic components.

14.14 **Training.** The vendor shall be responsible for the training of operators and maintainers. Details of training schedule for operators and maintainers are to be indicated accordingly. The vendor must provide computer aided instruction packages in CD, instruction notes and special training aids to enable subsequent in-house training being conducted for following categories of personnel : -

14.14.1 Operators.

14.14.2 First/ Second level maintenance personnel.

14.14.3 Third/ Fourth level depot maintenance personnel.

14.14.4 Training establishment staff.

14.15 The technical documentation should be based on the Reliability and Maintenance (RAM) and Product Life Cycle Support and should mandatorily comprise of User Handbook, Technical Manual and IETMs along with other standard deliverable documents as required by the Indian Navy.

14.16 **Life Cycle Support.** Vendor would be bound to provide product support for time period specified in the RFP. This would include spares and maintenance tools/ jigs/ fixtures for field and component level repairs. The equipment is to be supported till the service life of the equipment. In the event of non-availability of the components/ sub-assemblies due to obsolescence, the sub-assemblies identical in the form, fit and function shall be provided. Overall life of the equipment should be at least 15 years from date of delivery to *IN*. Each set is to be provided with set of OBS and consolidated set for B&D

spares to ensure maintainability of the equipment for 5 years post expiry of warranty.

14.17 **Documentation**. Documentation for the equipment must be supplied as per the latest guidelines promulgated by Indian Navy meeting the requirements Reliability Action Plan. Technical and Operators manuals and other associated technical documents should include internal circuitry details that are required to undertake in-house repairs/ support by Indian Navy.

14.18 **Upgrading of System**. The vendor shall give an undertaking to make available all future upgrades to the system software and hardware. As for as possible, such upgrades should be possible with minimal change of system configuration.

14.19 **Relaxation**. Relaxation or review of any feature or parameters specified herein which could lead to major reduction in cost, complexity or development and production timeframe of the system shall be informed to the user for consideration.

14.20 **CAMC**. CAMC for hardware and software as part of life cycle management is to be provided by the OEM. The system shall have minimal maintenance requirement and the same shall be covered in the CAMC.

PART - II

15. **Procedure for Response.**

15.1 Vendor must fill the form of response as given in **Annexure II to Appendix A to Chapter II of DAP - 20**. Apart from filling details about company, details about the exact product meeting other generic technical specifications should also be carefully filled. Additional literature on the product can also be attached with the form.

15.2 The filled form should be dispatched at under mentioned address:-

Directorate of Staff Requirements
Room No 206, D Block
Africa Avenue

Integrated Headquarters
Ministry of Defence (Navy)
New Delhi 110026
Fax: 011-26771320
Email ID: dsr@navy.gov.in
PoC - CDR (SR) - ASW, Contact details 011-26771337

Planning Officer (Electronic System)
Dte Gen of Planning and Coordination, DDP
Ministry of Defence
Room No 516, C Block, Defence Offices Complex
KG Marg, New Delhi - 110001
Email ID: poes-ddp-mod.nic.in

15.3 Last date of acceptance of filled form is ***eight weeks*** from the date of posting of this RFI on MoD website. The vendors short listed for issue of RFP would be intimated.

16. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM)/ Authorised Vendors/ Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEMs). The end user of the equipment is Indian Navy.

17. The information is being issued with no financial commitment and the Ministry of Defence reserves the right to change or vary any part thereof at any stage. The Government of India also reserves the right to withdraw it should it be so necessary at any stage. The acquisition process would be carried out under the provisions of DAP.

PART - III

GUIDELINES FOR FRAMING CRITERIA FOR VENDOR SELECTION/ PREQUALIFICATION IN 'BUY (INDIAN-IDDM)' 'BUY (INDIAN)'

18. The guidelines prescribed for short-listing/pre-qualification of Indian vendors in Buy (Indian-IDDM) and Buy (Indian) cases are enumerated in the succeeding paragraphs. **Paragraph 19** deals with the parameters that may be considered for short-listing of vendors, whereas **Paragraph 20** amplifies the process for applying selected parameters to the process of vendor short listing.

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19. **Parameters.**

19.1 **General Parameters.**

19.1.1 Applicant Entity should be an Indian Vendor as defined at Paragraph 20 of Chapter 1 of DAP 2020.

19.1.2 Business dealing with applicant Entity or any of its allied entities should not have been suspended or banned, by MoD/ SHQ or any Government Department or organization (as defined in Guidelines for Penalties in Business Dealings with Entities issued vide Ministry of Defence, D (Vigilance) MoD ID No 31013/1/2006-D (Vig) Vol II dated 21 Nov 2016). None of the Promoters and Directors of applicant entity should be a wilful defaulter.

19.1.3 "Entities" will include companies, with whom the Ministry of Defence has entered into, or intends to enter into, or could enter into contracts or agreements.

19.1.4 Applicant entity" may be a company, subsidiary, an associate company (as defined in the Companies Act, 2013) a consortium or a Joint Venture (JV).

19.2 **Technical Parameters.**

19.2.1 Vendor should be a manufacturing entity or a system integrator of defence equipment and not a trading company, except in case where the OEM participates only through its authorised Vendors.

19.2.2 Minimum **two Years'** experience in **broad areas like manufacturing/ electronics etc as applicable in the instant procurement case.** If not, then cumulative experience of at **least three years in above areas,** resulting in gaining of competence for manufacturing the proposed product.(In case the SHQ feels that for a particular equipment a lesser experience could be accepted, then the same should be got approved by the competent authority before including the same in the RFP).

19.2.3 Where product involves integration, previous experience **of not less than one year/one project** in integration of systems/equipment shall be required.

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19.2.4 **ICT Cases.**

19.2.4.1 Certification to be included if linked to scope of work-Gartner Quadrant/ISO9001/CMMi3 or more (specifying development /service /acquisition models) /ISO27001. For information security and large value projects preferably CMMi5 may be specified.

19.2.4.2 Compliance with IEEE/ITU standards depending upon nature/type of project or solution required.

19.3 **Financial Parameters.**

19.3.1 **Average Annual Turnover.** Minimum average annual turnover for last three financial years, ending 31st March of the previous financial year, should not be less than 30% of estimated cost of the Buy (Indian-IDDM) and Buy (Indian) project.

19.3.2 **Net Worth.** Net worth of entities, ending 31st March of the previous financial year, should not be less than 5% of the estimated cost of the Buy (Indian-IDDM) and Buy (Indian) project.

19.3.3 **Insolvency.** The entity should not be under insolvency resolution as per Indian Bankruptcy Code at any stage of procurement process from the issuing of RFP to the signing of contract.

19.3.4 **Credit Rating (Desirable Financial Parameter).** Long term credit rating equivalent to CRISIL rating on Corporate Credit Scale as **CCR-BBB or better**, and **SME-04 or better for SMEs** issued by credit rating agencies recognized by SEBI. Credit rating should be as on 31st March of the previous financial year.

19.4 **Other Parameters.**

19.4.1 **Industrial License (IL).** Vendors should be either holding a valid defence industrial license or should have applied for the same before responding to RFP. In any case the vendor must confirm holding of IL before commencement of FET. (Items

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requiring IL will be as per DIPP Press Note 3 of 2014 as amended from time to time).

19.4.2 **Registration.** Registered for a minimum of two years (one year for SMEs). Minimum number of years not applicable for JVs constituted specifically for a project.

19.4.3 **Maintenance, Repair & Overhaul.** Vendors should be capable of carrying out comprehensive Maintenance, Repair & Overhaul, calibration and obsolescence management of the equipment / platform / system indigenously, along with associated jigs, fixtures and test setups, during the designed service life of the equipment.

19.4.4 **Input / Output Protocols.** Vendors should be able to provide indigenously, the Input / Output Protocols of devices / Line Repair Units envisaged to be replaced by indigenous equivalents or interfaced with equipment of own choice.

20. **Stipulations for Applying Parameters.**

20.1 Areas like manufacturing/electronics etc. should be defined in each case of procurement.

20.2 In case the Applicant Entity is unable to meet the Financial Parameters by itself, it may rely on its **holding Company** (as defined in the Companies Act, 2013 and amendments thereof) ("Companies Act") for fulfilment of the Financial Parameters, in which case reliance must be placed on the Holding Company towards fulfilment of **ALL** the Financial Parameters.

20.3 In case the Applicant Entity is unable to meet one or more of the Technical parameters by itself, it may rely on a Group Company (ies) for fulfilment of the Technical parameters. A Group Company in relation to the Applicant Entity may be:-

20.3.1 A Company of which the Applicant Entity it is an Associate Company such company should have ownership, directly or indirectly, of at least 26% of the voting shares of the Applicant Entity.

20.3.2 A Company which is an Associate Company of the Applicant Entity. The Applicant Entity should have ownership

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directly or indirectly, of at least 26% of the voting shares of such Associate Company.

20.3.3 A Company with whom the Applicant Entity is commonly owned, directly or indirectly, for at least 26% of the voting shares by another company. For example: An Applicant Company A is an Associate Company of Company B, in which B holds at least 26%. Further, C is also an Associate Company of B, in which B holds at least 26%. In this case the Applicant Company may use the credentials of C as well.

20.3.4 The Holding Company and Subsidiary companies (as defined under the Companies Act) of the Applicant Entity.

20.4 The Applicant entity may be a single entity or a group of entities (the "consortium"), coming together to implement the project. In such case:-

20.4.1 The credentials of only those members of their related entities may counted, who have at least 26% equity stake in the Consortium.

20.4.2 Each Consortium should have a designated **Lead Member.**

20.4.3 For Technical Parameters, **any of the consortium members of their Group Companies** may meet the criteria.

20.4.4 **For Financial Parameters.** The Turnover and Net Worth of the Consortium Member shall be reckoned **proportionate to Consortium Member's equity stake** in the Consortium, and each Consortium member should meet the other criteria pertaining to Insolvency and Credit Rating. In case the Consortium Member relies on its Holding Company for any one of the above-mentioned Financial Parameters, then reliance must be placed on the Holding Company for meeting a**ll the financial Parameters.**

20.5 Vendors should provide all necessary self-authenticated document in support of their achievement of criteria. Such documentation should inter-alia include:-



20.5.1 Details of projects/supply orders successfully executed in the last two years.

20.5.2 Annual reports for three years of applicant entity, parent and associate companies, consortium and JV partners.

20.5.3 Details of shareholders, promoters, associated, allied and JV companies.

20.5.4 Details of vigilance action, viz ongoing investigation and suspension/ debarment/ blacklisting actions against the applicant entity or any of its allied entities, parent company or consortium and JV partners, if any by any Department/agency of Central Government.

20.5.5 A Certificate from CA/ CS indicating the financial parameters for the last three years as per Paragraph 2(c).

20.6 Any vendor furnishing false information will be liable for action as per existing guidelines.



WP/1407/CTLS-RFI

Annexure I to Appendix A

REQUEST FOR INFORMATION: PROCEDURE FOR RESPONSE

Request for Information for CTLS

1. The Ministry of Defence, Government of India, intends to induct **Containerised Theatre Level Sonar (CTLS)** for persistent generation of Underwater Domain Awareness (UDA) and enabling Theatre level Anti Submarine Warfare operations. The MoD, GoI, intends to install these containerised systems on suitable *IN* ships. OEMs/ Authorised Vendors are requested to forward information on the product which they can offer. The parameters/ broad specifications of the item are mentioned in the questionnaire attached as per **Annexure III** to **Appendix A.** In addition the vendors are required to furnish details as per Proforma at **Annexure II** to **Appendix A.**

2. Apart from the information as per the Appendices the vendors may also forward technical details/ product brochures/ literature etc pertaining to the items in question.

3. The required information/ details may please be forwarded at the following address by ***eight weeks from the date of posting of this RFI on MoD website***:-

3.1 **User Directorate.**

Directorate of Staff Requirements
Room No 206, D Block
Africa Avenue
Integrated Headquarters
Ministry of Defence (Navy)
New Delhi 110026
Fax: 011-26771320
Email ID: dsr@navy.gov.in

3.2 **Procurement Directorate.**

Directorate of Staff Requirements
Room No 206, D Block
Africa Avenue
Integrated Headquarters
Ministry of Defence (Navy)





New Delhi 110026
Fax: 011-26771320
Email ID: dsr@navy.gov.in

3.3 **Planning Directorate.**

Directorate of Staff Requirements
Room No 206, D Block
Africa Avenue
Integrated Headquarters
Ministry of Defence (Navy)
New Delhi 110026
Fax: 011-26771320
Email ID: dsr@navy.gov.in

3.4 **ADG Acquisition Technical.**
O/o Technical Manager (M & S)
Room No 5, D-2 Wing
Ground Floor, Sena Bhawan
Rajaji Marg
New Delhi 110011
Tel: 011-23011540,
Fax: 011-23017684





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Annexure II to Appendix A

VENDOR INFORMATION PROFORMA

1. Name of the Vendor/Company/Firm.

(Company profile including Share Holding pattern, in brief, to be attached)

2. **Type (Tick the relevant category)**

Original Equipment Manufacturer (OEM) Yes/No

Authorised Vendor of foreign Firm Yes/No (attach details, if Yes)

others (give specific details)

3. **Contact Details.**

Postal Address.....

City: ..... State:-

Pin Code.....Tele.....

Fax.....URL/Web Site.....

Email.....

4. **Local/ Branch/ Liaison Office/Agent (if any) at New Delhi.**

Name & Address:.....

Pin Code:.....Tel:.....Fax:.....

Email:.....

5. **Financial Details:** Category of Industry (Large/Medium/Small-scale):.....

6. **Certification by Quality Assurance Organisation.**

Name of Agency	Certification	Applicable from (Date &Year)	Valid till (Date &Year)

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7. **Details of Registration.**

Agency	Registration No	Valid till (Date)	Equipment
GeM			
DGQA/DGAQA/DGNAI			
OFB			
DRDO			
Any other Government Agency			

8. **Membership of FICCI/ ASSOCHAM/ CII or other Industrial Associations.**

Name of Organisation **Membership Number**

9. **Equipment/Product Profile (to be submitted for each product separately).**

9.1 Name of Product:.....
(IDDM Capability be indicated against the product)
(Should be given category wise)

9.2 Description (attach technical literature):.....

9.3 Whether OEM or Integrator:.....

9.4 Name and address of Foreign collaborator (if any):.....

9.5 Industrial Licence Number:.....

9.6 Indigenous component of the product (in percentage):.....

9.6.1 Overall IC (in percentage):

9.6.2 IC for material/ components/ software manufactured in India (in percentage):

9.7 Status(in service/design& development stage):

9.8 Production capacity per annum:

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9.9 Countries/agencies where equipment supplied earlier (give details of quantity supplied):

.....

9.10 Estimated price of the equipment.....

9.11 Indigenously produce subsystems, Line Repair Units, software and critical spares of the product:

9.12 Devices / Line Repair Units for which Input / Output Protocols are indigenously available for enabling replacement by indigenous equivalents or interfacing with equipment of own choice:

9.13 Capability for carrying out Comprehensive Maintenance, Repair and Overhaul, calibration and obsolescence management of the equipment / platform / system along with associated jigs, fixtures and test setups, during the designed service life of the equipment within India:

10. Alternatives for meeting the objectives of the equipment set forth in the RFI.

11. Any other relevant information:.....

12. **Declaration.** It is certified that the above information is true and any changes will be intimated at the earliest.

(Authorised Signatory)





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Annexure III to Appendix A

REQUEST FOR INFORMATION: QUESTIONNAIRE

Ser	Specifications/ Parameters	Reply
1.	Do you comply with complete ORs (operational and technical requirements) mentioned in Part I of RFI? Please provide feature wise compliance?	
2.	Any new specifications/ features/ technology development not included in QRs and are being offered by the OEM?	
3.	Will you provide complete support for software and hardware issues?	
4.	Provisioning of CTLS under Buy Indian (IDDM) (preferred) (Indigenous Design & IC content $\geq$60 %) / Buy Indian categorisation (IC content $\geq$60%) iaw DAP 20?	
5.	Have you supplied CTLS to Indian/ Foreign Armed Forces? Its performance and difference vis a vis QRs in Part I?	
6.	What is the maximum time that you would take to deliver CTLS post contract?	
7.	What is the status of CTLS Technology Readiness Level (TRL) with your firm?	
8.	How would you ensure that operational requirements projected in RFI are met in totality?	
9.	Does the system cater for easy de-bugging and follow the laid down industry standards? If yes, what standards are followed? Does the architecture of the system cater for easy re-loading of corrected embedded software / firmware by *IN* maintainer?	
10.	What is experience in integrating with associated systems *iaw* Part I of RFI?	
11.	Give details of component specific configuration?	
12.	Please provide details wrt containerised system configuration.	

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Ser	Specifications/ Parameters	Reply
13.	Please provide if any AI technology is incorporated in CTLS? Will it utilise hybrid AI algorithm? Will it be utilised for operational planning purpose?	
14.	In case of failure of one TLRA subassembly, will other TLRA will still work efficiently?	
15.	Will the system be able to undertake automatic threat detection and provide automatic alert functionality at the Operator Console?	
16.	What will be the approximate workforce requirement for 24 x 7 manning of the system and deployment/ recovery operations?	
17.	Details of COTs, MOTs and MIL STD component be provided.	
18.	Utilisation of Indigenous Military Material and Indigenous Software, indicating plan for material sourcing iaw Para 11 and 13 of Ch II of DAP 20 be indicated.	
19.	Details regarding repairable LRUs/ Shop Replaceable Unit (SRUs)/ Modules/ Blocks which shall be repaired upto component level at the repair facility offered for the system indicating all critical and high population module.	
20.	Cost estimate including taxes and duties is to be provided.	
21.	Mode of FET (Physical trials/ documentation/ certification/simulation) and trial methodology as per parameters in QRs, including parameters for product evaluation is to be provided.	
22.	Vendor information and relevant documents wrt vendor may be provided iaw Para 23, Chapter II of DAP 20.	
23.	Inputs on alternatives to meet the same/ better operational requirements is to be provided	
24.	Any dependency on Foreign OEM for critical component/ technology along with long term plan for indigenisation of such foreign components/ technology	
25.	Inputs on compliance and/or conformity to various industrial and military standards as applicable, related to operations and safety be provided.	
26.	Undertaking is to be provided stating that "The vendors/ firms (name) have never been banned/ debarred from doing business dealing with MoD /GoI/or any other Govt organisation.	



Ser	Specifications/ Parameters	Reply
27.	Confirmation is to be provided wrt submission of PCIP, EMD and all BGs at the rate as promulgated by MoD at the time of tender submission.	
28.	How will the vendor enhance indigenisation and setup dedicated manufacturing line, including design, integration and manufacturing processes in India, in case of a joint venture with foreign OEM	
29.	What would be depth of ToT envisaged.	
30.	Provide details *iro* feasibility towards establishing a Waterfront Support Centre at *IN* premises for expeditious DI/DR and swift deployment of the systems.	
31.	Provide details pertaining to envisaged space requirements onboard *IN* platform for fitment of CTLS (total space and sub-system level), system weight (total and sub-system level), power requirements etc.	
32.	Furnish details pertaining to operational & towing characteristics of the system catering for Winch & Handling arrangements, A-Frame etc for Active and Passive arrays.	

31. **After Sale Support.** The following details will be provided by the vendor:-

31.1 Repair methodology being proposed.

31.2 What kind of Engineering Support Package (ESP) and life time support can be provided alongwith financial implications?

31.3 How are similar kind of systems being maintained by the vendor?

31.4 Will the requisite spares, SMT/ STE be provide by the vendor for carrying out component level repairs?

31.5 What would be the training mechanism for operators and maintainers?

31.6 Proposal for CAMC/ RRC with cost implications.

32. **Product Support and Upgradability.** The vendor shall indicate and give details of the information sought listed below:-

NHQ/DSR

32.1 All major repairs and overhaul facilities for major assemblies and component level owned by the vendor India.

32.2 Base overhaul facilities and availability of infrastructure in India.

32.3 Management of repairs and spares post warranty.

32.4 Upgrade for software (as applicable).

32.5 Upgradability of hardware for enhanced performance features or due to modifications required to obviate recurring defects.

32.6 Vendor shall indicate conformity to submission of Manufacturers Recommended List of Spares (MRLS), Illustrated Spare Part List and Technical Manuals including for STEs.

32.7 Vendor shall indicate compliance to Tangible Obsolescence Management Plan and plane for upward compatibility with latest modules.

32.8 Vendor shall provide details of vendors/ sub-vendors and readiness/ lead time towards provisioning of spares.

33. **Manufacturing and Production Aspects.**

33.1 Vendor shall provide details of all R&D and manufacturing infrastructure.

33.2 **Indigenisation.** Vendor shall give out ability and willingness to supply the product to meet the requirements of **Buy (Indian-IDDM) (Preferred) and/ or Buy (Indian)** to meet the aim of indigenisation as per the provisions and spirit of DAP 2020.

33.3 **Production Capacity.** Vendor will give out his current and planned annual production capacity and proposed delivery schedule of the equipment. The timeline required to deliver required quantity of the equipment for trials and post contract, time required to deliver the equipment. Vendor shall obtain necessary export/ import clearances in due time to ensure expeditious production.

33.4 Vendor should indicate willingness to participate in trials as per DAP 2020 in India on NCNC basis.

NHQ/DSR

33.5 Vendor should give details on use of indigenous military material and software indicating plan for sourcing material and cost implications vis-à-vis foreign sourcing of material.

34. **Test Standards.** Inputs on test standards adopted for similar equipment type be indicated. Equipment procured by Indian Navy has to undergo environmental test and other relevant checks by nominated CQAE, FATs as per Mil Std/ JSS 55555 requirements.

35. **Certification.** Parameters for which certifications can be made applicable and provided in lieu of trials evaluation. Details of parameters of the equipment which can be certified from NABL accredited labs will be indicated.

36. **Financial Aspects.** Vendor shall intimate the cost of 04 x CTLS system as mentioned in Part I of RFI, inclusive of taxes and duties. Details of cost should also include product support package, training, additional details as deemed appropriate. Additionally, vendor shall indicate acceptability to the terms pf payment as per DAP-20.

37. **Compliance with Provisions of DAP 20.** Vendor should indicate compliance with all provisions of DAP-20. If not, which Para/ clause of DAP-20 not agreed with reasons be indicated.

38. Vendor should also indicate willingness for option clause as per DAP 2020.

39. **Training.** Vendor shall indicate ability and willingness to offer following: -

39.1 Training aggregate for conduct of training like technical literature, slides, blow up diagrams, training work modules, brochures and Computer Based Training package.

39.2 Vendor shall indicate the facilities available at Vendor's premises to conduct training. Vendor should also indicate training for user, maintainers, and QA personnel.

39.3 Recommended training period for users, maintainers and QA personnel.

NHQ/DSR Dte of Staff Requirements

39.4 Availability and cost of simulators if any.

39.5 Availability of willingness of the vendor to provide hard and soft copies of the User Handbook, Design Specifications, Technical Manuals along with CBT for training.

40. If vendor is MSME and/ or Startup, relevant information and supporting documents are to be provided.

41. Vendors to specify the protocols/ security features being followed to maintain cyber security of the transmitter. Please indicate acceptability and implementation of provisions with respect to security/ malicious codes as per DAP-20.

42. **Undertaking on Debarment.** Vendor should provide an undertaking that it was never banned/ debarred from doing business dealing with MoD/ GoI/ or any other Govt organisation.

43. Indicate if same or similar system has been supplied to any other customer along with details of deviation in capabilities and cost, if any.

44. **Miscellaneous.**

44.1 Extract of relevant technology perspective, and capability roadmap to be included.

44.2 Any futuristic plans for modification and or modernization plans for the equipment being offered.

44.3 Vendor may consider RFI as advance information to obtain requisite government clearances.



