



**REQUEST FOR PROPOSAL**  
**BY**  
**MINISTRY OF DEFENCE**  
**GOVERNMENT OF INDIA**  
**FOR**

**PROCUREMENT OF QUANTITY 1000 MULTIPURPOSE THERMAL MONOCULAR  
SIGHT WITH LASER RANGE FINDER (MTMSL) UNDER EMERGENCY  
PROCUREMENT THROUGH FAST TRACK PROCEDURE (FTP)**

**CATEGORY : BUY (INDIAN)**

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The contents of this RFP must not be disclosed to unauthorised persons and  
must be used only for the purpose of submission of Bids.

**This document contains 86 pages including cover page and Appendices.**

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File No:A/36026/MTMS/EP/AC-4

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AC-4 (FRCV & EM)  
Room No, 501, A Wing  
5<sup>th</sup> Floor, Sena Bhawan  
Integrated Head Quarters of MoD (Army)  
New Delhi-110011

20 Dec 2022

To,

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**REQUEST FOR TECHNICAL AND COMMERCIAL PROPOSAL FOR PROCUREMENT OF QUANTITY 1000 MULTIPURPOSE THERMAL MONOCULAR SIGHT WITH LASER RANGE FINDER (MTMSL) UNDER EMERGENCY PROCUREMENT THROUGH FAST TRACK PROCEDURE (FTP) CATEGORY: BUY (INDIAN)**

Dear Sir/Madam,

1. The Ministry of Defence, Government of India, intends to procure **Quantity 1,000 Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL)** under Fast Track Procurement and seeks participation in the procurement process from prospective Bidders subject to requirements in succeeding paragraphs.

**Synopsis**

2. **Broad Description of Equipment/System.** It is proposed to procure **Quantity 1,000 Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL)** for Indian Army to carry out effective surveillance and target acquisition tasks. **MTMSL** will consist of a Thermal Imaging (TI) channel operating on Uncooled Micro bolometer technology addressing Long Wave Infra Red (LWIR) band which is better at penetrating fog and smoke. Besides TI channel, the device will also have a day channel with longer detection and recognition ranges compared to TI channel and an in-built Laser Range Finder (LRF). The Operational Characteristics and Features of the equipment are attached as **Appendix A**.

3. The salient aspects and timelines of the acquisition are tabulated below. In case of any variation in the details furnished below or in any Annexures(s) with that mentioned in the RFP, information furnished in the main body of the RFP at referred Paragraph is to be followed :-

| <b>S. No</b> | <b>Description</b>                          | <b>Details</b>   | <b>Reference Para of the RFP</b> |
|--------------|---|--|----------------------------------|
| (a)          | Equipment/System required                   | Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL) | • Para 1 of Cover Note           |
| (b)          | Quantity Required                           | 1,000  | • Para 1 of Cover Note           |
| (c)          | Categorisation of Procurement               | Buy (Indian)   | Heading of Cover Note            |
| (d)          | Minimum IC Content required                 | 60%  | • Para 7 of RFP                  |
| (e)          | Place(s) of Delivery                        | COD, Agra  | • Para 9 of RFP                  |
| (f)          | Warranty Period                             | 24 Months from date of completion of JRI                             | • Para 11 of RFP                 |
| (g)          | Last date for submission of Pre-bid queries | <b>27 Dec 2022</b>   | • Para 22 of RFP                 |
| (h)          | Date and time for Pre-bid meeting           | <b>30 Dec 2022 ; 1100hrs</b>   | • Para 23 of RFP                 |
| (j)          | Last date and time for bid submission       | <b>09 Jan 2023 : 1300hrs</b>   | • Para 24 of RFP                 |

4. This Request for Proposal (RFP) consists of following four parts :-

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5. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM) or Authorized Vendors subject to the condition that in cases where the same equipment is offered by more than one of the aforementioned parties, preference would be given to the OEM.

6. The end user of the equipment is the Indian Armed Forces.


7. This RFP is being issued with no financial commitment; and the Ministry of Defense reserves the right to withdraw the RFP and change or vary any part thereof or foreclose the procurement case at any stage. The Government of India also reserves the right to disqualify any Bidder should it be so necessary at any stage on grounds of National Security.

8. This RFP is non-transferable.

9. In addition to various Appendices and their Annexures, attached with this RFP, reference to various paragraphs of DAP-2020 has been made in the RFP. The DAP-2020 is an open domain document that is available at Gol, MoD website [www.mod.nic.in](http://www.mod.nic.in).

10. The receipt of the RFP may please be acknowledged.

Yours faithfully,

  
(JS Mangat)  
Major General  
Chairman  
Empowered Committee

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**Disclaimer**

1. This RFP is neither an agreement and nor an offer by the MoD to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in submitting their proposals pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the MoD in relation to the Project. This RFP document and any assumptions, assessments and statements made herein do not purport to contain all the information that each Bidder may require. The Bidder shall bear all its costs associated with or relating to the preparation and submission of proposal pursuant to this RFP. Wherever necessary, MoD reserves the right to amend or supplement the information, assessment or assumptions contained in this RFP. The MoD reserves the right to withdraw the RFP or foreclose the procurement case at any stage. The issuance of this RFP does not imply that the MoD is bound to shortlist a Bidder for the Project. The MoD also reserves the right to disqualify any Bidder should it be so necessary at any stage on grounds of National Security.

## **PART I - GENERAL REQUIREMENTS**

1. This part consists of the general requirement of the Goods (also referred as equipment/systems/deliverables) and Services, hereafter collectively referred as 'Deliverables', the numbers required, the time frame for deliveries, conditions of usage and maintenance, requirement for training, Engineering Support Package (ESP) and warranty/guarantee conditions, etc. It includes the procedure and the date & time for submission of bids.

### **Non-Disclosure**

2. The Bidding documents, including this RFP and all attached documents provided by the MoD, are and shall remain or become the property of the MoD. These are transmitted to the Bidders solely for the purpose of preparation and the submission of a proposal in accordance herewith. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their proposal. The provisions of this Para shall also apply mutatis mutandis to Bids and all other documents submitted by the Bidders, and the MoD will not return to the Bidders any proposal, document or any information provided along therewith (except unopened Commercial Bid and EMD, as relevant).

3. Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process, or concerning the Bidding Process. The MoD will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. MoD may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or MoD or as may be required by law or in connection with any legal process.

4. **Confidentiality of Information**. No party shall disclose any information to any 'Third Party' concerning the matters under this RFP generally. In particular, any information identified as 'Proprietary' in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisors or the employees engaged by a party with equal force.

### **Business Eligibility**

5(a). **Undertaking by Bidders**. The Bidder will submit an undertaking that they are currently not banned / debarred / suspended from doing business dealings with Government of India / any other government organisation and that there is no investigation going on by MoD against them. In case of ever having been banned / debarred / suspended from doing business dealings with MoD/any other government organization, in the past, the Bidder will furnish details of such ban / debarment along with copy of government letter under which this ban / debarment / suspension was lifted / revoked. The Bidder shall also declare that their sub-contractor(s)/supplier(s)/technology partner(s) are not Suspended or Debarred by Ministry of Defence. In case the sub-contractor(s)/supplier(s)/ technology partner(s) of the Bidder are Suspended or Debarred by Ministry of Defence, the Bidder shall indicate the same with justification for participation of such sub-contractor(s)/supplier(s)/ technology partner(s) in the procurement case.

5(b). Subsequent to submission of bids if any sub-contractor(s)/supplier(s)/technology partner(s) of the Bidder is Suspended or Debarred by Ministry of Defence, the Bidder shall intimate the Ministry of Defence regarding Suspension or Debarment of its sub-contractor(s)/ supplier(s)/technology partner(s) within two weeks of such order being made public.

6. **Pre-Qualification Criteria {for multi-vendor cases in Buy (Indian-IDDM), Buy (Indian) and Buy & Make (Indian) cases}**. The detailed Pre-Qualification criteria for the Bidders for participation in the instant procurement case are placed at **Appendix K** to this RFP. All Bidders are to submit details as per the criteria along with the Technical Bids. These would be evaluated by the Empowered Committee (EC).

7. **Indigenous Content**. For the purposes of this RFP and the acquisition contract (if any) signed by the Ministry of Defence with a successful Bidder, indigenous content shall be as defined under **Para 8 to 12 of Chapter I** and **Para 1 of Appendix B to Chapter I of DAP 2020**. In addition, reporting requirements for prime (main) Bidders (and for sub-contractors/suppliers/technology partners reporting to higher stages/tiers) shall be as prescribed under **Para 4 to 7 of Appendix B to Chapter I** of DAP 2020. The right to audit Bidder/ sub-contractors/suppliers/technology partners shall vest in the Ministry of Defense as prescribed under **Para 10**; and aspects of delivery, certification, payments, withholding of payments and imposition of penalties shall be as prescribed under **Para 11 to 15** thereof. Furthermore, Bidders in 'Buy (Indian)' will be required to submit their indigenization plan in respect of indigenous content as stipulated in **Para 4 to 7 of Appendix B to Chapter I** and **Para 39** of Chapter II of DAP 2020. The DAP 2020 is available at MoD, Gol website ([www.mod.nic.in](http://www.mod.nic.in)) for reference and free download.

8. **Year of Production**. Deliverables **Quantity 1,000 Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL)** supplied under the contract should be of latest manufacture i.e. manufactured after the date of Contract with unused components/assemblies/sub-assemblies, conforming to the current production standard and should have 100% of the defined life at the time of delivery. Deviations, if any, should be clearly brought out by the Bidder in the Technical Proposal.

9. **Delivery and Installation Schedule**. The delivery schedule of equipment and services along with the relevant payment stages is specified at **Annexure V to Appendix G**. The delivery of the equipment and complete installation will be completed within 12 months from the date of signing of contract as per under mentioned schedule:-

| <b><u>Delivery Schedule (in months)</u></b> | <b><u>Deliverables (Qty)</u></b>  | <b><u>Remarks</u></b>  |
|---|---|--|
|   | Quantity 1,000 Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL) |  |
| T <sub>0</sub> to T <sub>0</sub> + 12       | <b>1000</b>   | (i) Ultimate consignee :- COD, Agra<br>(ii) T <sub>0</sub> is date of signing of contract<br>(iii) MRLS, SMT/ STE. |
| <b>Total</b>                                | <b>1000</b>   | (iv) @ 996 units for DGRR and 4 units for EME School   |



**Notes :**

- (i) **MRLS.** MRLS for two years to be delivered on pro rata basis and delivery to commence not before twelve months and to be completed by six months before the expiry of warranty period of the lot.
- (ii) **SMT/STEs, Technical Literature & Training Aggregate.** The entire qty to be delivered along with the first lot of eqpt and prior to the conduct of trg by the OEM, whichever is earlier.

10. Once the contract is concluded and the delivery schedule is established, the Bidder shall adhere to it and ensure continuity of supply of deliverables and their components under the contract.

11. **Warranty.** The deliverables supplied shall carry a warranty for **24 months**. Commencement of warranty will be from the date of acceptance post JRI or from date of installation and commissioning of SMTs/STEs (if applicable), whichever is later. **No spares will be drawn during the warranty period from the MRLS and the cost of all scheduled servicing during the warranty period will be borne by the Bidder** to include spares, labour, oil, gases and lubricants, etc. Warranty clause is as per Appendix 'C' to Standard RFP format and is enclosed as Appendix 'A'. In case the complete delivery of the ESP is delayed beyond the period stipulated in the contract then the bidder should extend the warranty period for the goods/ stores to that extent.

12. **In Service Life.** The In Service Life of the deliverables shall be stipulated in the offer. The In Service Life of Multipurpose Thermal Monocular Sight with Laser Range Finder (MTMSL) shall be **not less than 10000 (Ten Thousand) hours or 5 (five) years whichever is earlier with a minimum of 3000 Battery charging cycles from the date of acceptance post JRI**. The Bidder is required to give details of reliability model, reliability prediction and its validation by designer/manufacturer to ensure reliability of stores throughout Service/shelf life. The efficacy of reliability model/prediction/validation would be verified during technical and environmental evaluation as indicated in Para 38 of this RFP.

13(a). **Product Support.** The Bidder would be bound by a condition in the contract that he is in a position to provide product support in terms of maintenance, materials and spares for a minimum period of **5 (five) years**. Even after the said mandatory period, the Bidder would be bound to give at least two years notice to the Government of India prior to closing the production line so as to enable a Lifetime Buy of all spares before closure of the said production line. This, however, shall not restrict the Buyer from directly sourcing sub-equipment/sub-assembly and spares from their respective OEMs/sub-vendors on completion of warranty. In case the sub-equipment/sub-assembly/parts require tuning/calibration/integration by the Bidder prior replacement, the same is to be undertaken by the Bidder at fair and reasonable cost, as mutually agreed between Buyer and Bidder.

13(b). **Codification.** The Bidder agrees to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract as per part list (including MRLS). In case, the NSNs are not available, the bidder agrees to codify using basic technical characteristics as required for codification in consultation with MoD/Directorate of Standardization. In case of IPR issues, codification will be undertaken as Type IV

codification (where only the manufacturer details and part number are to be provided). The codification to be given prior to expiry of warranty period as part of contractual obligation.

14. **Obsolescence Management Plan.** An actionable obsolescence management plan is to be proposed by the Bidder along with the mechanism for intimation of notification of obsolescence. The modalities of the mechanism for intimation of notification would be deliberated during CNC. The mutually agreed mechanism for intimation would form an integral part of the contract. All upgrades and modifications carried out on the equipment during its life cycle must be intimated to **CD Dte (CD-15(A)), IHQ of MoD (Army), Government of India, DGRR and DGAC/ AC-4** as per the agreed mechanism.

15. **Training of Crew and Maintenance Personnel (Para 18 of RFP Format).** A training package for training of operators, operator trainers and maintenance personnel to undertake operation and maintenance of equipment, along with tools and test jigs and training of QA personnel for Quality Assurance of equipment would be required to be carried out in English language and Hindi language (if required). This training shall be designed to give the operators and maintainers necessary knowledge and skills to operate & maintain equipment ('O' and 'I' level Maintenance). **The Block Syllabus and details of training to be conducted to be decided by Dte Gen of Armd Corps (AC-4), EME Directorate (Arty & Soldier System) and the vendor.** The syllabus for **maintenance Personnel** will be defined by the Bidder in consultation with the Buyer at the time of demonstration. The maintenance training will be imparted to the satisfaction of the Buyer and Bidder will ensure that the training content and period will be to impart working proficiency up to the required level. All training requirements such as training aids, projection system, complete equipment with accessories / optionals, technical literature, spares, test equipment / test set up, charts, training handouts, power point presentations, Computer Based Training (CBT), Documentation, Simulators etc will be catered by the Bidder. **The maintenance training be completed prior to completion of supply of first consignment.**

16. The Bidder would provide the following training to the personnel of the Buyer based on agreed terms of contract:-

(a) **User Training.** User training for **03 days (working days) for 126 personnel in two batches** are to be provided at Buyer premises. Details of training requirement is mentioned at Para 16(e).

(b) **Repair and Maintenance Course.** Repair and Maintenance Course for a total of **14 personnel in 2 batches at EME School and Vendor premises** is to be undertaken for Field (06) and Intermediate (08) level repairs. Details of training requirement is mentioned at Para 16(e).

(c) Training for **QA personnel for 03 days (working days) for 02 personnel in 01 batch** is to be undertaken **at OEM's premises before PDI.** Details of training requirement is mentioned at Para 16(e).

(d) **Training for Ordnance (OS) personnel for 03 days (working days) for 02 personnel in 01 batch is to be undertaken at OEM's premises before JRI.**

(e) The training syllabus and curriculum to be submitted by the vendor and should satisfy the user to achieve required level of expertise as deemed necessary

by the user. The user may add-on content in the syllabus, if needed. Details of training to be carried out is tabulated as under:-

| Ser No                                      | Service / Directorate       | Location               | Duration (No of Working Days per Batch) | No of Batches | Total No of Personnel | Remarks                         |
|---|-----------------------------|------------------------|---|---------------|-----------------------|---------------------------------|
| <b><u>User Personnel</u></b>                |                             |                        |   |               |                       |                                 |
| (i)   | User                        | NC, Udhampur           | 03                                      | 02            | 126                   | 63 pers per batch               |
| <b><u>Maintenance Personnel</u></b>         |                             |                        |   |               |                       |                                 |
| (ii)  | Field Level Repair Training | EME School             | 06                                      | 01            | 06                    | 06 x Technicians per batch      |
| (iii)                                       | Intermediate Level Training | OEM Premises           | 12                                      | 01            | 08                    | 08 Master Technicians per batch |
| <b><u>Ordnance &amp; DGQA Personnel</u></b> |                             |                        |   |               |                       |                                 |
| (iv)  | Ordnance                    | OEM / Vendors Premises | 03                                      | 01            | 02                    |                                 |
| (v)   | DGQA                        |                        | 03                                      | 01            | 02                    |                                 |

17. **Government Regulations.** It may be confirmed that there are no Government restrictions or limitations in the country of the Bidder or countries from which subcomponents are being procured and/or for the export of any part of the deliverables being supplied.

18. It may be further confirmed that all national and international obligations relevant to transfer of conventional arms of the country of the supplier or countries from which parts and components are being procured, have been taken into account for the duration of the contract. Accordingly, thereafter there would be no review, revocation or suppression of Defence export licence and other related clearance issues to the supplier for the contract that could impinge on the continuity of supply of items and their parts or components under the contract.

19. **Patent Rights.** The Bidder should confirm that there are no infringements of any Patent Rights in accordance with the laws prevailing in their respective countries.

20. **Integrity Pact.** In the subject RFP, the Bidder is required to sign and submit Pre Contract Integrity Pact (PCIP) given at **Annexure I to Appendix J** to this RFP. This would be submitted in a separate envelope clearly marked as 'IP' at the time of submission of Technical and commercial offers.

21. **Fall Clause**. If the equipment being offered by the Bidder has been supplied/contracted with any organization, public/private in India, the details of the same may be furnished in the technical as well as commercial offers. The Bidders are required to give a written undertaking that they have not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid to any other Ministry/Department of the Government of India and if the similar system has been supplied at a lower price, then the details regarding the cost, time of supply and quantities be included as part of the commercial offer. In case of non-disclosure, if it is found at any stage that the similar system or subsystem was supplied by the Bidder to any other Ministry/Department of the Government of India at a lower price, then that very price, will be applicable to the present case and with due allowance for elapsed time, the difference in the cost would be refunded to the Buyer, if the contract has already been concluded.

### **Bid Timelines**

22. Any queries/clarifications to this RFP may be sent to this office by **27 Dec 2022**. A copy of the same may also be sent to:-

**Directorate General of Armoured Corps  
General Staff Branch/AC-4  
Integrated HQ of MoD (Army)  
Room No 501 'A' Wing, Sena Bhawan,  
DHQ PO, New Delhi - 110011  
Tele - 011-23011655**

23. **Pre-Bid Meeting**. A pre-bid meeting will be organised by SHQ at **1100 hrs on 30 Dec 2022** at **HANUT Conference Hall, Room No 550, 'A' Wing, Sena Bhawan, New Delhi-110011** (venue) to answer any queries or clarify doubts regarding submission of proposals. The Bidder or his authorised representative is requested to attend. Necessary details may be sent a week in advance to DG AC/AC-4, to facilitate obtaining of security clearance.

24. **Submission of Bids**. The Technical and Commercial Proposals along with IP and EMD should be sealed separately in three separate envelopes clearly indicating Commercial/ Technical/ IP and EMD, as applicable, and then put in one envelope and sealed **(all the envelopes should clearly state the letter No of RFP and the name of equipment and Bidder name)** and submitted to the undersigned at the following address by **1300 hours on 09 Jan 2023** :-

**Directorate General of Armoured Corps  
General Staff Branch/AC-4  
Integrated HQ of MoD (Army)  
Room No 501 'A' Wing, Sena Bhawan,  
DHQ PO, New Delhi - 110011  
Tele - 011-23011655**

25. Offer opening by an Offer opening committee will be held at **1100 hrs on 10 Jan 2023** at the same venue as indicated at Para 24 above. The Bidder or his authorised representative is welcome to be present at the opening of the proposals. Necessary details may be sent at least one week in advance to facilitate obtaining of security clearance.

## **PART II - TECHNICAL REQUIREMENTS**

26. The second part of the RFP incorporates the aspects of Operational Requirements (ORs) describing the technical parameters of the proposed equipment, and the environmental parameters for functioning. The operational characteristics and features that should be met by the equipment are elucidated at **Appendix A** to this RFP and the Compliance Table at **Appendix B** to this RFP. The Bidder would be required to offer the equipment for Demonstration on a “No Cost No Commitment” basis.

27. **Operational Characteristics and Features.** The broad operational characteristics and features that are to be met by the equipment are elucidated at **Appendix A** to this RFP.

28. **Technical Offer.** The Technical Offer must enable detailed understanding of the functioning and characteristics of the equipment as a whole and each sub system independently. It must include the performance parameters as listed at **Appendix A** to this RFP and any other information pertaining to the technical specifications of the equipment considered important/ relevant by the Bidder. The technical proposal should also include maintenance schedules to achieve maximum life and expected life of each assembly/subassembly (or Line Replaceable Unit (LRU)/Shop Replaceable Unit (SRU)), storage conditions/environment condition recommended and the resultant guaranteed in-service/shelf life. The range and depth of spares included in the proposal should be supported by necessary reliability and prediction model or authenticated by past data on the similar equipment in use. Any Bidder found to be providing lesser ESP/MRLS in terms of range and depth will have to make good the deficiency at no extra cost.

29. If there is any associated optional equipment on offer that should also be indicated separately along with the benefit that are likely to accrue by procuring such optional equipment. Should the Bidder be contemplating any upgrades or modifications to the equipment being offered, the details regarding these should also be included in the Technical Proposal.

30. **Technical Details.**

(a) The technical details should be factual, comprehensive and include specifications of the offered system/equipment against broad requirements listed in **Appendix A** to this RFP.

(b) Insufficient or incomplete details may lead to rejection of the offer. Mere indication of compliance may be construed as incomplete information unless system's specific technical details are available in the offer. A format of the compliance table for the technical parameters and other conditions of RFP is attached as **Appendix B** to this RFP.

31. The technical offer should have a separate detachable compliance table as per format given at **Appendix B** to this RFP stating specific answers to all the parameters as listed at **Appendix A** to this RFP. It is mandatory to append answers to all the parameters listed in **Appendix A** to this RFP. Four copies of the Technical Proposal should be submitted (along with one soft copy), however only one copy of the commercial proposal is required.

32. **Malicious Code Certificate.** The Bidder is required to submit a '**Malicious Code Certificate**' (*only for Electronic items and Software*) along with the Technical Proposal. The format is placed at **Appendix D** to this RFP.

33. **Demonstration.** The Bidder is requested to confirm his willingness to provide the equipment for demonstration in India on "No Cost No Commitment" basis when so requested. The Buyer, at his own expense, will depute its representatives for the Demonstration. If any part of the Demonstration is conducted in the Buyer's facilities, the Bidder shall depute his personnel and equipment at his own expenses and bear the cost of all expenses of Demonstration other than the cost of ranges, platform, ammunition or facilities which the Buyer may choose to provide free of cost.

34. **Product Support (ESP).** After induction, the equipment/system would be repaired and maintained as per the repair and maintenance philosophy at **Appendix E** to this RFP. The information on Engineering Support Package that is required to be provided is enclosed at **Annexure I to IV to Appendix E** to this RFP.

35. **Spares.** The spares requirement will be as per **Appendix E** to this RFP. The spares are required to be categorized in four categories as follows:-

- (a) Manufactured by Bidder as OEM and can be sourced as per Part No.
- (b) Bought out items and customized by the OEM for the specific purpose and such customization would require OEM intervention.
- (c) Bought out from other OEMs/Third Party as specialised items and used without any customization. Such items can be sourced by quoting their Part No/ Identification No as given by OEM/Third Party and directly utilised.
- (d) General Engineering items/COTs which can be sourced by stating the relevant standards and item description.

**Note.** The OEM Part No /Identification No of items in addition to bidder assigned part number are also required to be given. To the extent feasible, NATO Stock Number (NSN) be also provided.

36. As brought out at Para 28, the range and depth of spares included in the proposal should be supported by necessary reliability and prediction model or authenticated by past data on the similar equipment in use. Any Bidder found to be providing lesser ESP/MRLS in terms of range and depth will have to make good the deficiency at no extra cost. The Buyer would also have the option to amend the MRLS proposed by the Bidder within 02 years of the expiry of the warranty period. The Bidders would either 'Buy Back' the spares rendered surplus or exchange them on cost to cost basis with the spares as required by the Buyer. The said spares would be purchased/ replaced by the Bidder, based on the prices negotiated in the contract.

37. **Active Technology Obsolescence Management.** Bidder is to indicate the methodology on how the Bidder intends to undertake Active Obsolescence Management through life cycle of equipment which would include upgradation of system/ subsystem/ units on completion of its fair service life. The Bidder/OEM shall also intimate Buyer on likely technology obsolescence of various sub-assemblies/units/modules of equipment

through an Annual Bulletin. In case of impending obsolescence of components, bulletin should specify either alternate item or option for life-time buy as under :-

(a) The Bidder/OEM will notify the Buyer not less than two years before the closure of its production line about the intention to close production of equipment for provision of purchasing spare parts, before closure of the said production line.

(b) Three years prior to completion of design/service life of equipment, the Bidder/OEM will submit techno-commercial proposal for upgradation of equipment, wherever applicable, to mitigate technology obsolescence and for ensuring product support for next 5 years.

### **Evaluation of Technical Offers**

38. The Technical Offer submitted by the Bidder will be evaluated by the Empowered Committee (EC) or a Board of Officers (BOO) nominated by EC to confirm that the equipment being offered meets the Parameters as elaborated at **Appendix A**. Thereafter, the Bidder of the short listed equipment would be asked to provide the equipment for Demonstration as per Demonstration Methodology given at **Appendix F** to this RFP, in India at 'No Cost No Commitment' basis.

39. Commercial offers will be opened only of Bidders whose equipment is short-listed, after demonstration and these have been accepted technically. In other words, the equipment would be required to be **demonstrated** and **found suitable prior to commencement of any commercial negotiations**.

### **Quality Assurance Instructions & Technical Evaluation Plan**

40. Bidder is to submit a Draft Acceptance Test Procedure (ATP) along with the Technical bid as per the QA instructions and Technical Evaluation Plan. Based on the draft ATP, the ATP will be finalized by the Buyer's QA agency with Bidder at the CNC stage. ATP shall be included in the contract at the time of finalization with successful bidder. PDI will be carried out at OEM premises as per mutually agreed ATP. ATP will lay down the tests to be carried out during PDI and JRI. It shall be ensured that there is no repetition of QA tests in PDI and JRI. The JRI would normally be restricted to quantitative checks only, except where check proof is required to be carried out. In case PDI/JRI are planned to be conducted by authorized Third Party Inspection (TPI) Agencies, the same will be spelt out in the QA instructions and the details included in the finalized ATP. QA of equipment will be carried out as per finalized QA plan in the contract. The successful Bidder would also be required to provide those test facilities at OEM premises/accredited laboratories for quality assurance, which are not available with QA agencies. Details of the same will be intimated to the Bidder during finalization of ATP. QA Instructions and Guidelines for framing Draft ATP are at **Appendix L**.

### **Marking and Packaging**

41. **Marking of Deliverables**. The Bidder shall ensure that each deliverable is marked clearly and indelibly, as follows:-

(a) In accordance with the requirements specified in the RFP or if no such requirement is specified, with the indicated codification number or alternative reference number specified.

(b) Ensure that any marking method used does not have a detrimental effect on the strength, serviceability or corrosion resistance of the deliverables.

(c) Where the deliverables have a limited shelf life, with the cure date/date of manufacture or expiry date expressed as months and years.

42. Where it is not possible to mark a deliverable with the required particulars, these should be included on the package in which the deliverable is packed.

44. **Packaging of Deliverables.** The Bidder shall pack or have packed the deliverables, as applicable:-

(a) In accordance with DEFSTAN 81-041 (Part 1)/STANAG-4280 or equivalent Military Standard.

(b) To ensure that each deliverable may be transported in an undamaged and serviceable condition.

45. The Bidder shall ensure that each package containing the deliverable is labeled to include:-

(a) The name and address of the consigner and consignee including

(i) The delivery destination/address if not of the consignee

(ii) Transit destination/address (for aggregation/disaggregation, onward shipment etc)

(b) The description and quantity of the deliverables.

(c) The full part number in accordance with codification details.

(d) The makers part, catalogue, serial, batch number, as appropriate.

(e) The contract number.

(f) Any statutory hazard markings and any handling markings including the mass of any package which exceeds 3 kgs.

(g) The Packaging Label (military J, N or P, special H, commercial A, C etc) (specify reference to DEFSTAN 81-041 (Part 1)/STANAG-4280 or equivalent Military Standard.)



### **PART III - COMMERCIAL REQUIREMENTS**

46. The third part of the RFP consists of the commercial clauses and Standard clauses of contract. The bidders are required to give confirmation of their acceptance of these clauses.

#### **Commercial Bid**

47. The Bidder is requested to take into consideration the ***Commercial Clauses and Payment Terms*** given at **Appendix G** to this RFP while formulating the Commercial Offers. The bidders are required to quote their price in Price bid format given in **Appendix H** to this RFP.

48. Commercial offers will be opened only of the Bidder whose equipment is short-listed, after successful compliance to OR as per Demonstration Methodology. The Commercial Offer must be firm and fixed and should be valid for at least 06 months from the last date of bid submission.

#### **Commercial Bid Opening**

49. The Commercial Offers will be opened by the Empowered Committee (EC) and if Bidder desires he may depute his representative, duly authorised in writing, to be present at the time of opening of the offers.

50. The date, time and venue fixed for this purpose will be intimated separately after the evaluations are completed.

51. The EC will determine the lowest bidder (L1).

#### **Additional Aspects**

52. **Standard Conditions of RFP**. The Government of India desires that all actions regarding procurement of any equipment are totally transparent and carried out as per established procedures. The bidder is required to accept our standard conditions furnished at **Appendix J** to this RFP regarding Agents, penalty for use of undue influence and Integrity Pact, access to books of accounts, arbitration and clauses related to Law. These conditions along with other clauses of the Contract form the Standard Contract Document (as at **Chapter VI** of DAP 2020) indicates the general conditions of contract that would be the guideline for all acquisitions. The draft contract would be prepared as per these guidelines.

## **PART IV: BID EVALUATION AND ACCEPTANCE CRITERIA**

53. A list of documents/details to be submitted along with the bids is placed at **Appendix M** as a reference to help in completeness of bid and meeting the procurement process schedule.

54. The bids shall be unconditional and unqualified. Any condition or qualification or any other stipulation contained in the bid shall render the bid liable to rejection as a non-responsive bid.

55. The bid and all communications in relation to or concerning the bidding documents shall be in English language.

56. **Evaluation and Acceptance Process.**

(a) **Evaluation of Technical Proposals.** The technical proposals forwarded by the Bidders will be evaluated by the Empowered Committee (EC). The EC will examine the extent of variations/differences, if any, in the technical characteristics of the equipment offered by various Bidders with reference to the ORs and prepare a "Compliance Statement" for shortlisting the Bidders. The shortlisted Bidders shall be asked to demonstrate the equipment to EC or BOO nominated by EC at location and varying climatic conditions as specified by EC to evaluate compliance of the equipment to OR as per Demonstration Methodology. Equipment will be shortlisted based on successful compliance to OR as per Demonstration Methodology. .

(b) **Evaluation of Commercial Bid.** The Commercial bids of only those bidders will be opened, whose technical bids have been cleared by EC and equipment has been shortlisted after **successful evaluation by Demonstration**. Comparison of bids would be done on the basis of Evaluation criteria given in **Appendix H** to this RFP. The L-1 bidder would be determined by the Empowered Committee (EC) on the basis of **Appendix H** to this RFP. Only L-1 bidder would be invited for negotiations by EC.

(c) **Contract Conclusion.** The successful conclusion of negotiations will be followed by contract conclusion.

57. **Termination Clause.** This clause will form part of the contract. The Buyer shall have the right to terminate this contract in any of the following cases:-

(a) The delivery of the material is delayed for causes not attributable to Force Majeure for more than six months after the scheduled date of delivery.

(b) The Seller is declared bankrupt or becomes insolvent.

(c) The Buyer has noticed that the Seller has utilised the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual/company etc.

**Appendix A**(Refers to Para 26, 27, 28, 30 (a),  
31 & 38 of RFP)**OPERATIONAL REQUIREMENTS : MULTIPURPOSE THERMAL  
MONOCULAR SIGHT WITH LRF (MTMSL) RECD FROM DG RR**

| <b>S<br/>No</b>                 | <b><u>Operational Requirement</u></b>  |                         |                           |                         |                           |     |            |       |      |      |         |       |       |
|---------------------------------|--|-------------------------|---------------------------|-------------------------|---------------------------|-----|------------|-------|------|------|---------|-------|-------|
| <b>General</b>                  |  |                         |                           |                         |                           |     |            |       |      |      |         |       |       |
| 1.                              | Multipurpose Night Vision Monocular Sight with Laser Range Finder will enhance conventional as well as Counter Insurgency/ Counter Terrorist operations by performing multiple functions like day and night surveillance with range finding.   |                         |                           |                         |                           |     |            |       |      |      |         |       |       |
| <b>Physical Characteristics</b> |  |                         |                           |                         |                           |     |            |       |      |      |         |       |       |
| 2.                              | <p><b>Features.</b> Multipurpose Monocular Sight with Laser Range Finder should be comprising of high quality electronic &amp; optics to enable Night Surveillance during moonless night/ adverse weather conditions. It should have the following features :-</p> <p>(a) Ruggedised, compact, lightweight with Uncooled Thermal Imaging.</p> <p>(b) Range achieved during moonless night/ adverse weather condition must be more than :-</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 40%;"></th> <th style="width: 25%; text-align: center;"><b><u>Detection</u></b></th> <th style="width: 25%; text-align: center;"><b><u>Recognition</u></b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">(i)</td> <td>Single Man</td> <td style="text-align: center;">1800m</td> <td style="text-align: center;">500m</td> </tr> <tr> <td style="text-align: center;">(ii)</td> <td>Vehicle</td> <td style="text-align: center;">2500m</td> <td style="text-align: center;">1000m</td> </tr> </tbody> </table> <p>(c) Integrated Laser Range Finder.</p> <p>(d) Operating temperature to be Minus 20 degree C to Plus 45 degree C (To be supported by a certificate from a recognised Nation/ International accredited lab).</p> <p>(e) Hand-held and tripod-mounted options should be available.</p> <p>(f) Night and day surveillance capability.</p> <p>(g) Weight : Not more than 5kg <math>\pm</math> (plus minus) 20% including Battery/ Battery Mount.</p> <p>(h) <b><u>Power Source.</u></b></p> <p>(i) Commercially available (In Indian Market) rechargeable Lithium Ion or Ni MH or NCMH battery, should function for 6 hours or more in operational mode with two hours of recording.</p> <p>(ii) Should function on 180 volt to 240 volt, 50 Hz AC main and Generator through AC/DC adapter.</p> <p>(iii) Commercially available Battery Charger for charging the battery from 180 volt to 240 volt, 50Hz AC mains alongwith DC charging facility from 12 volt to 24 volt DC, should be provided.</p> <p>(iv) Full charging of battery should take not more than 3 hours.</p> <p>(v) Three sets of Spare batteries should be provided for enhancing Operational efficiency.</p> |                         |                           | <b><u>Detection</u></b> | <b><u>Recognition</u></b> | (i) | Single Man | 1800m | 500m | (ii) | Vehicle | 2500m | 1000m |
|                                 |  | <b><u>Detection</u></b> | <b><u>Recognition</u></b> |                         |                           |     |            |       |      |      |         |       |       |
| (i)                             | Single Man   | 1800m                   | 500m                      |                         |                           |     |            |       |      |      |         |       |       |
| (ii)                            | Vehicle  | 2500m                   | 1000m                     |                         |                           |     |            |       |      |      |         |       |       |

| <b>S<br/>No</b>                        | <b><u>Operational Requirement</u></b>  |
|--|--|
| <b><u>Technical Specifications</u></b> |  |
| 3.                                     | <p><b><u>Laser Range Finder.</u></b></p> <p>(a) Measurement range : 30m or less to 2500m or better. (To be supported by a certificate from a recognised National/ International accredited lab).</p> <p>(b) <b><u>Accuracy</u></b> : (+) (plus minus) 5m or better.</p> <p>(c) Laser Range Finder to be eye safe. Minimum CI-1.</p>  |
| 4.                                     | <p><b><u>Optics and Sensors (Day and Night Monocular).</u></b></p> <p>(a) Type of TI based Day &amp; Night Monocular.</p> <p>(b) <b><u>Storage Capacity.</u></b> Minimum 32 GB (For storage of recorded data).</p> <p>(c) <b><u>Detector Resolution.</u></b>FPA (Focal Plan Array) resolution of min 640 x 480 pixel with pitch of <math>\leq</math> (Less than equal to) 17<math>\mu</math>m (micro meter).</p> <p>(d) <b><u>Sensitivity of Detector.</u></b> NETD (Noise Equivalent Temperature Difference) of uncooled Thermal Detector 40mK (Millikelvin) to 55 mK (Millikelvin).</p> <p>(e) <b><u>Start Up Time.</u></b> &lt; (Less than) 10 sec from display mode and &lt; (Less than) 30 sec from power of mode.</p> <p>(f) <b><u>Polarity Modes.</u></b> Minimum two polarity control modes i.e. white HOT and Black Hot.</p> <p>(g) <b><u>Ruggedness.</u></b> It should adhere to JSS-55555 for high and low temp, humidity, vibration, rain and altitude test supported by National/ International accredited lab certificate. Ruggedized container for transportation. Details of test certificate should be provided.</p> <p>(h) Pixel Pitch - <math>\leq</math> (less than equal to) 17 <math>\mu</math>m (micro meter).</p> <p>(j) Field of View - Maximum 12 degree x 9 degree.</p> <p>(k) Diopter Adjustment - <math>\pm</math> (plus minus) 4D or better.</p> <p>(l) Magnification/ Zoom - <math>\pm</math> (plus minus) 4X or better.</p> <p>(m) Altitude - Operable up to 15000ft above mean sea level.</p> |
| 5.                                     | <p><b><u>Accessories.</u></b> The following accessories per Multipurpose Night Vision Monocular Sight with Laser Range Finder be provided.</p> <p>(a) Training Manual and User Hand book.</p> <p>(b) Illustrated Spare Parts List.</p> <p>(c) Power Supply Adapter.</p> <p>(d) USB Cable/ Connector Cable (minimum 5 meters length).</p> <p>(e) Carrying container for transportation (Hard bound) &amp; soft carrying bag (leather/ synthetic).</p> <p>(f) Three Spare Batteries.</p>   |

| <u>S<br/>No</u> | <u>Operational Requirement</u>   |
|-----------------|--|
|                 | <p>(g) <b><u>External Video Display.</u></b></p> <p>(i) It should be minimum 7 inch screen size.</p> <p>(ii) It should be provided with ruggedised battery operated external video display.</p> <p>(iii) The display should feature real time video output and image snap shot and video.</p> <p>(iv) The display should be provided with at least 5m cable between the display and TI sight.</p> <p>(v) The display resolution should be minimum 800 x 600 pixel.</p> |
| 6.              | <p><b><u>Warranty &amp; Shelf life.</u></b> The Multipurpose TI monocular sight with Laser Range Finder should be warranted to be free of defects for a period of two years with service/ shelf life not less than 10000 (Ten Thousand) hrs or 5 (five) yrs whichever is earlier from the date of delivery.</p>  |
| 7.              | <p><b><u>EMC.</u></b> Compliance to Electromagnetic Capability (EMC) as per laid down Military Stds (MIL-STD) Certification issued by Army Centre for Electromagnetics (ACE), Mhow (MP) PIN-900444, c/o 56 APO, Tele-07324-256130.</p>   |

**Appendix B**

(Refers to Para 26, 30(b) &amp; 31 of RFP)

**COMPLIANCE TABLE**For Multipurpose Thermal Monocular Sight With LRF (MTMSL)

| <b>S No</b>  | <b>Requirement as per the RFP</b>   | <b>Compliance/ Partial</b> | <b>Indicate references of Paras/ Sub Paras of the Main Technical Document</b> |
|--|---|----------------------------|---|
| <b>1. General Conditions of RFP (Para 1 to 57)</b> |   |                            |   |
|  |   |                            |   |
| <b>2. Technical Parameters as per Appendix A</b>   |   |                            |   |
| (a)  | Operational Requirements And Features   |                            |   |
|  |   |                            |   |
|  |   |                            |   |
| <b>3. Commercial Parameters as per RFP</b>         |   |                            |   |
| (a)  | Performance- cum - Warranty Bank Guarantee (PWBG) as per Para 2 of Appendix G |                            |   |
| (b)  | Advance Payment Bank Guarantee (APBG) as per Para 1.4.1 of Appendix G of RFP  |                            |   |

\*\*\*\*

**Appendix C**  
(Refers to Para 11 of RFP)

**WARRANTY CLAUSE**

1. The SELLER warrants that the goods/services supplied under this contract conform to technical specifications prescribed and shall perform according to the said Technical Specifications.
2. The **SELLER** warrants for a period of **24 months** from the date of acceptance deliverables post Joint Receipt Inspection or from date of installation and commissioning of SMT/STEs, **whichever is later**, that the goods/stores/services supplied under this contract and each component used in the manufacture thereof shall be free from all types of defects/failures.
3. If within the period of warranty, the goods/stores are reported by the BUYER to have failed to perform as per the specifications, the SELLER shall either replace or rectify the same free of charge, maximum within **45** days of notification of such defect by the BUYER provided that the goods are used and maintained by the BUYER as per instructions contained in the Operating Manual. **Warranty repair will be carried out in-situ. However, in case certain locations are inaccessible for the seller, then the buyer will relocate the stores to nearest Intermediate level repair points from where the seller will collect the stores for warranty repairs. Decision of BUYER with respect to accessibility of location where defective item is held will be final & binding on seller.** Warranty of the equipment would be extended by such duration of downtime. Record of the down time would be maintained by user in log book. Spares and all consumables required for warranty repairs shall be provided free of cost by SELLER. The SELLER also warrants that the special oils, lubricants, **gas & sealants for purging** required for the warranty repair of the equipment shall be provided by the SELLER himself. All activities including diagnosis, rectification, calibration, transportation etc, required for making equipment serviceable and available would be the SELLER's responsibility. The SELLER also undertakes to diagnose, test, adjust, calibrate and repair/replace the goods/equipment arising due to accidents by neglect or misuse by the operator or damage due to transportation of the goods during the warranty period, at the cost mutually agreed to between the BUYER and the SELLER. The SELLER shall intimate the assignable cause of the failures.
4. SELLER hereby warrants that necessary service and repair backup during the warranty period shall be provided by the SELLER and he will ensure that the cumulative downtime period for the equipment does not exceed **10%** of the warranty period.
5. All scheduled servicing during the warranty period will be "borne by the bidder" to include calibration, consumables, spares labour, oil, gases, expendables and lubricants etc.
6. If a particular equipment/goods fails frequently and/or, the cumulative down time exceeds **10 %** of the warranty period or a common defect is noticed in more than **15 %** of the quantity of goods with respect to a particular item/component/subcomponent, that complete item/equipment shall be replaced free of cost by the SELLER within a stipulated period of **60** days of receipt of the notification from the BUYER duly modified/upgraded through design improvement in all equipment supplied/yet to be supplied and ESP supplied/yet to be supplied.

7. SELLER shall associate technical personnel of maintenance agency and QA of BUYER during warranty repair and shall provide complete details of defect, reasons and remedial actions for averting recurrence of such defects.

8. In case the complete delivery of the Engineering Support Package is delayed beyond the period stipulated in this contract, then the SELLER undertakes that the warranty period for **entire range of goods/stores along with the ESP** shall be extended to that extent by which the delivery of ESP was delayed.

9. The SELLER warrants that the goods will conform to the temperature and humidity conditions as mentioned in operational requirements.

Note: - Vendor to provide Warranty Card along with each equipment giving out details of Warranty

\*\*\*\*



**Appendix D**  
(Refers to Para 32 of RFP)

**CERTIFICATE: MALICIOUS CODE**  
(To be rendered on the Company Letter head)

1. This is to certify that the Hardware and the Software being offered, as part of the Contract, does not contain embedded malicious code that would activate procedures to :-

- (a) Inhibit the desired and designed function of the equipment.
- (b) Cause physical damage to the user or equipment during the exploitation.
- (c) Tap information resident or transient in the equipment/ networks.

2. The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Rights (IPRs) are caused due to activation of any such malicious code in embedded software.

(Signed)

Designation/Name/Address of firm

Date:

Place:

\*\*\*

**PRODUCT SUPPORT**

1. **Maintenance Philosophy.** Maintenance of the equipment is structured on two different levels. The Maintenance philosophy can be categorised into 'O' & 'I' levels depending upon the technological complexity of the equipment as under:-

(a) **'O' Level (Field Repairs).** Repairs carried out at 'O' level or equivalent service organisation by technicians specially trained for the purpose, requiring special tools and spares provided additionally for the class of the equipment. These repairs comprise replacement of common Line Replaceable Units (LRUs), sub-modules, other components beyond the holding of units and repairs undertaken beyond a unit level. Normally, a field workshop covers such repairs of a group of units holding the said class of equipment. **There shall be 06 Nos of 'O' level Repair pts to provide fd repair cover to qty 1000, Multipurpose Thermal Monocular Sight with LRF.** The manufacturer in addition to the basic unit level SMTs/STEs/SE, is required to provide the following:-

(i) Quantity and specification of spares up to sub-Module level, other replaceable components that need to be stocked for a specified population and class of the equipment.

(ii) Additional Special Maintenance Tools and Test Equipment needed for each such field workshop.

(b) **'I' Level (Intermediate Repair).** These repairs include 'I' Level Repairs by Corps Zone workshop or other similar service organisation. These are extensive or special repairs carried out to include component level repairs. This level of repair envisages special diagnosis and repairs of the repairable inventory up to Printed Circuit Board (PCB) level, major assemblies, interface equipment/software and other components beyond the scope of 'O' level repairs. These repairs are carried out in the designated workshops by technicians specially trained for this purpose requiring special tools and spares and the number of such facilities will be stated based on equipment deployment pattern. **There shall be 03 Nos of 'I' level (Intermediate) pts to provide repair cover to qty 1000, Multipurpose Thermal Monocular Sight with LRF.** The manufacturer is required to provide the following:-

(i) Quantity and specification of spares up to PCB level that need to be stocked for a population of the equipment.

(i) All Special Maintenance Tools, jigs, fixtures and test equipment for carrying out repairs up to component / PCBs/ module level.

(iii) Oils and lubricants necessary for overhaul.

(iv) All necessary technical literature.

(v) Calibration facilities for test equipment.

### **Engineering Support Package (ESP)**

3. ESP is the basic engineering support which the Seller needs to provide to the Buyer for undertaking essential repairs and maintenance of the equipment during its exploitation. These repairs and maintenance would be in consonance with the Maintenance Philosophy enunciated above. ESP would constitute the following aspects:-

- (a) Spares.
- (b) SMTs/STEs test set-up.
- (c) Technical Documentation.
- (d) Training.

### 4. **Spares**

(a) **Manufacturer's Recommended List of Spares (MRLS)**. This is the list of spares, recommended by the manufacturer, for maintaining operational serviceability of the equipment and sustain it for the period of 2 years. Based on the explanation given above, you are requested to provide MRLS to sustain the equipment for the period as stipulated in the RFP for various levels of repair as per format given at **Annexure I to this Appendix**. You will be required to provide these both with Technical and Commercial proposals. Cost of the MRLS, along with likely consumption rate of spares would be provided with the Commercial proposal. The MRLS will be supported by Reliability & Maintainability (R&M) report for the proposed spares along with their Mean Time Between Failure (MTBF). MRLS would be provided separately for each such sub system including those of STEs. In order to prevent manipulation of the quantum of MRLS for commercial competitiveness or overload unnecessary MRLS, 'Adequacy' clause and 'Buy Back' clause will be co-opted in the contract as under:-

(i) **'Adequacy' Clause**. The Bidder will confirm to the Buyer the range and depth of Accompanied Accessories/ User Replaceable Parts/ Expendable, Spares and SMT/STE/Test Jigs being supplied are complete and adequate for carrying out repairs on the equipment up to the specified level. Any Bidder found to be providing lesser ESP/MRLS in terms of range and depth will have to make good the deficiency at no extra cost (Para 34 of RFP refers). The Bidder will also commit that any additional items, spares, tools and equipment needed for use, maintenance and repair will be supplied by the Bidder at prices and within a period as specified in the contract, on receipt of notification from the Buyer for the Life-Cycle Support period. The Bidder will confirm that, if two different prices have been given for the same/similar item, then the lower price quoted will prevail. In case, the quoted accessories has several items viz, Sampling Accessory Kit and add up price of these items is higher than the quoted price of the accessory, then the price would be lowered / adjusted proportionately for the items.

(ii) **'Buy Back' Clause**. The Buyer would have the option to amend the Manufacturer's Recommended List of Spares (MRLS) proposed by the Bidder within a period specified in the contract, post expiry of the warranty period. The Bidder needs to agree to either 'Buy Back' the spares rendered surplus or exchange them on 'cost-to-cost' basis with the spares, as required

by the Buyer. The said spares would be purchased / replaced by the Seller, based on the prices negotiated in the contract.

5. **Special Maintenance Tools/ Special Test Equipment and Test Jigs (SMTs/STEs/Test Jigs)**. SMTs, STE and Test Jigs are essential tools/Jigs/fixtures required to undertake effective engineering support / repairs on the equipment and its systems, based on the Maintenance Philosophy. This would be formulated in a similar manner as explained for MRLS and details are to be included in both Technical and Commercial Proposals as per suggested format at **Annexure II to this Appendix**. SMTs, STEs and Test Jigs will be provided by the Seller, as per the list prepared by the Buyer during demonstration, where applicable. The list of equipment required to be supplied will incorporate Adequacy Clause, as elaborated above. Vendor shall also confirm applicability of existing SMT/STEs held for maintenance of sight with 'O' & 'I' level repair points and indicate it in their commercial and technical offer.

6. **Technical Documentation**. The Bidder will be required to provide the technical literature preferably in IETM (Interactive Electronic Training Manuals) in **Level 3** format or higher. The details of technical literature to be supplied with the system should be listed as per the suggested format at **Annexure III to this Appendix**. This should be provided with both Technical and Commercial Proposals. The cost column may be left blank in the Technical Proposal. An illustrated list of documents which may be submitted by the Seller is as under:-

(a) **Technical Literature**.

- (i) User Handbook/Operators Manual in English and Hindi.
- (ii) Design Specifications.
- (iii) **Technical Manuals**.
  - (aa) **Part I**. Tech description, specifications, functioning of various systems.
  - (ab) **Part II**. Inspection/Maintenance tasks repair procedures, materials used, fault diagnosis and use of Special Maintenance Tools (SMTs)/Special Test Equipment (STE).
  - (ac) **Part III**. Procedure for assembly/disassembly, repair up to component level and safety precautions.
  - (ad) **Part IV**. Part list with drawing reference and List of SMTs/STE Test Bench.
- (iv) Manufacturers Recommended List of Spares (MRLS).
- (v) Illustrated Spare Parts List (ISPL) and Illustrated spares parts Price List (ISPPL) i.e along with the prices in the Commercial Offer.
- (vi) Technical Manual on STE with drawing reference.
- (vii) Complete Equipment Schedule.
- (viii) Table of Tools & Equipment (TOTE) & carried spares.
- (ix) Rotable list, norms of consumption, mandatory/non mandatory spares list for each system.

- (x) Interactive Electronic Technical Manuals (IETMs) of class III and above.
- (b) Servicing Schedule.
- (c) Condemnation limits.
- (d) Permissive repair schedule.
- (d) Packing specifications/instructions.
- (e) Any additional information suggested by the OEM.

7. **Details of OEMs.** For major / complex equipment, a large number of other OEMs may also be involved in manufacture of various systems/sub systems / support equipment. Details of such OEMs will also be intimated by the Bidder as per table below:-

**Format for Submitting Details of OEMs**

| Ser No | Equipment | Part No | OEM | Contact Details (Tel/Fax/Email) | Details of Government License to OEMs |
|--------|-----------|---------|-----|---------------------------------|---------------------------------------|
|        |           |         |     |                                 |                                       |

8. **Training.** . A training package for operators, operator trainers and maintenance personnel to undertake operation and maintenance of equipment (**'O' & 'I' level Maintenance**) and QA personnel for QA of equipment as stipulated in respective contract, along with tools and test jigs training would be required to be carried out in English language. Requirements such as training aids, projection system, complete equipment with accessories, technical literature, spares, test equipment, test set up, charts, training handouts, power point presentations, Computer Based Training (CBT), Documentation, Simulators etc will be provided by the Seller for the conduct of training. Training should preferably be conducted before the induction of the equipment. The Seller will provide the Operator and Maintenance & Repair training, for the duration, strength and locations specified in the RFP and Contract. The following may also be noted:

- (a) The requirement of training and associated equipment must be clearly specified in Part I and details should be placed as per **Annexure IV to this Appendix.**
- (b) The costs for aggregates and training must only be indicated in the commercial proposal.
- (c) **Sufficiency Clause.** Bidder will give an undertaking that the proposed Engineering Support Package (ESP) is sufficient to sustain the 'O' and 'I' level repair maintenance for a period of **two years** after expiry of warranty. Any item falling short in the ESP in terms of range and depth will be replenished by the Bidder at **No Additional Cost.** Bidder will give an undertaking agreeing to carry out any change to the ESP (to include MRLS, SMTs/STE, Installation material, Technical Literature and Training Aggregates) under the provisions of this clause within the existing commercial quotes. On termination of training, technicians should be capable of carrying out stipulated maintenance/repair to the full system. Else training will be repeated by the vendor **without any additional cost.**

**Anexure I to Appendix E**  
(Ref Para 4(a) of Appendix E)

**MANUFACTURER'S RECOMMENDED LIST OF SPARES (MRLS)**

**Equipment:** Multipurpose Thermal Monocular Sight with LRF, Qty 1000

**Original Equipment Manufacturer (OEM):** \_\_\_\_\_

| Ser No | Manufacturers Part No | Source of Supply | Nomenclature | No fitted in one equipment | Consumption Rate | MTBF | (V/E/D) | Illustrated Spare Parts List (ISPL) Reference | Unit Cost | Recommended scale of spares for qty 1000 eqpt for 02 years |                                       | Total Cost                     |                                       | Remarks |
|--------|-----------------------|------------------|--------------|----------------------------|------------------|------|---------|---|-----------|--|---------------------------------------|--------------------------------|---------------------------------------|---------|
|        |                       |                  |              |                            |                  |      |         |   |           | Field Level Repair Points (06)                             | Intermediate Level Repair Points (03) | Field Level Repair Points (06) | Intermediate Level Repair Points (03) |         |
|        |                       |                  |              |                            |                  |      |         |   |           |  |                                       |                                |                                       |         |

**Notes:-**

- Maintenance spares/stores like lubricants, sealing compound, gases should be given separately giving source of supply.
- Spares for component repairs should be included under the column of Base Repair as suggested by OEM.
- In 'Remarks' column following information (if applicable) be given:-
  - If an item has a shelf/operational life it be marked as 'G' and life indicated.
  - Matching set of components be indicated.
  - Item which can be locally manufactured should be marked 'LM'.
  - Items which cannot be manufactured in India due to sophisticated design/technology may be marked as 'SI' special item.
  - If a component/assembly is common to other similar equipment offered by the OEM earlier these should be marked 'CM' and name of the equipment be indicated.
- MRLS should be drawn out of the 'Part List' of the equipment, which should be separately given as part of Technical Manual Part IV.
- If the main equipment consists of other equipment then MRLS should be prepared for them under proper heads.
- MRLS be prepared as per the maintenance concept of the customer (**Appendix 'K'** to the RFP).
- Items provided along with the equipment as spares should also be included in MRLS.
- Modules/Shop Replaceable Unit (SRU)/assemblies should be listed and their components should be included under them so as to relate each item of spare to their module/SRU/assembly.

9. Complete MRLS should be costed separately for Field and Base repairs as it is required to be included as part of 'Total Costed Engineering Support Package' (ESP). OEM may give cost details in confidence to Contract Negotiation Committee (CNC), but other details as above be provided during demonstration.
10. MRLS for Test equipment should also be provided on the similar format.
11. 'V/E/D' categorization of items i.e Vital, Essential and Desirable. The criteria for deciding this status is purely based on the criticality of the items for operational functioning of the eqpt. 'Vital', 'Essential' and 'Desirable' items are defined as under:-
  - (a) **Vital**. Items which are operationally critical to functioning of Equipment/Vehicle, where no redundancy is available or its failure endanger the Equipment/ Operator's safety. These items will normally be Assy/Sub-Assy, modules/PCBs and few op-critical components.
  - (b) **Essential**. Items whose failure although result in significant deterioration of Performance
  - (c) **Desirable**. These items are generally meant for ease of operation of equipment and failure of these does not result in significant reduction of performance of the equipment.
12. Likely consumption rate of spares would be provided along with their Mean Time Between Failure (MTBF) at the respective column.

**LIST OF SMT/STEs, JIGS, FIXTURE AND INFRASTRUCTURE**

**Equipment** : Multipurpose Thermal Monocular Sight with LRF, Qty 1000

**Original Equipment Manufacturer (OEM)** : \_\_\_\_\_

| Ser No | Manufacturer's Part No | Designation | Unit Cost | Nos Required (SMT/STEs, Jigs, Fixture And Infrastructure) |                                       |   |           | Brief Purpose (give name of assembly for which used) | Remarks |
|--------|------------------------|-------------|-----------|---|---------------------------------------|---|-----------|--|---------|
|        |                        |             |           | Field Repair Points (06)                                  | Intermediate Level Repair Points (03) | Training Establishment (EME Trg Est) (01) | Total qty |  |         |
|        |                        |             |           |   |                                       |   |           |  |         |

**Notes:-**

1. Prepare separate sheet for each type of equipment.
2. Specify in remarks column whether the Special Test Equipment (STE)/ Special Maintenance Tools (SMT) can be used as general purpose equipment on any other kind of equipment.
3. If test equipment for commercially available ex India, the source of supply be specified.
4. Test equipment for calibrating the STEs should be included in the list above.
5. Test equipment which are required to be provided by the customer should also be included in the list above.
6. **SMT/STEs common to other similar equipment offered by the OEM earlier or existing in-service eqpt, these should be marked as 'CM'.**
7. **Bidder confirms to installation of SMTs/STEs at the nominated premises of the buyer.**
8. **MRLS for STEs should be provided as a package along with STEs at the time of installation.**
9. **'Hot Mockup' to be provided for all 'I' level repair points.**



**Annexure III to Appendix E**  
(Refers to Para 6 of Appendix E)

**TECHNICAL LITERATURE**

EQUIPMENT: **QUANTITY 1000 MULTIPURPOSE THERMAL MONOCULAR SIGHT WITH LASER RANGE FINDER (MTMSL)**

Original Equipment Manufacturer (OEM): \_\_\_\_\_

| Ser No | Technical Literature   | Unit Cost | Scale for 1000 Equipment |            |            |            |            | Total Cost | Remarks   |
|--------|--|-----------|--------------------------|------------|------------|------------|------------|------------|---|
|        |  |           | User                     | EME        | DGQA       | DGOS       | Total      |            |   |
| 1      | User handbook/Operators Manual   |           | 1000                     | 12         | 02         | 02         | 1016       |            | Qty one per eqpt (1000)<br>Qty 02 for DGQA<br>06 x Fd repair pts<br>03 x Intermediate repair pts<br>01 x MAG No 20<br>01 x HQ Tech Gp EME<br>01 x EME Dte<br>Qty 02 for DGOS (02) |
| 2.     | Design Specifications  |           | -                        | 05         | 01         | 02         | 08         |            | Qty 01 for DGQA (01)<br>03 x Intermediate repair pts<br>01 x HQ Tech Gp EME<br>01 x MAG No 20<br>Qty 02 for DGOS (02)   |
| 3.     | <b><u>Technical Manual</u></b>   |           |                          |            |            |            |            |            |   |
|        | (a) <b><u>Part I.</u></b> Tech description, specifications, functioning of various systems |           | -                        | 12<br>Sets | 02<br>Sets | 02<br>Sets | 16<br>Sets |            | Qty 02 for DGQA<br>06 x Fd repair pts<br>03 x Intermediate repair pts   |

| Ser No | Technical Literature  | Unit Cost | Scale for 1000 Equipment |     |      |      |       | Total Cost   | Remarks  |
|--------|---|-----------|--------------------------|-----|------|------|-------|--|--|
|        |   |           | User                     | EME | DGQA | DGOS | Total |  |  |
|        | <p>(b) <b>Part II.</b> Inspection / Maintenance tasks repair procedures, materials used, fault diagnosis and use of Special Maintenance Tools (SMTs)/Special Test Equipment (STEs).</p> <p>(c) <b>Part III.</b> Procedure for assembly/disassembly, repair up to component level, safety precautions.</p> <p>(d) <b>Part IV.</b></p> <p>(i) Part list with drawing reference</p> <p>(ii) List of SMTs/STEs with Test Bench.</p> |           |                          |     |      |      |       | 01 x MAG No 20<br>01 x HQ Tech Gp EME<br>01 x EME Dte<br>Qty 02 for DGOS (02)<br>*Set includes Part I, II,III,and IV |  |
| 4.     | Manufacturer's Recommended List of Spares (MRLS)  |           | -                        | 03  | 01   | 02   | 06    |  | Qty 01 for DGQA<br>01 x MAG No 20<br>01 x HQ Tech Gp EME<br>01 x EME Dte<br>Qty 02 for DGOS (02)   |
| 5.     | Illustrated Spares Parts Price List (ISPPL)   |           | -                        | 12  | 01   | 02   | 15    |  | Qty 01 for DGQA<br>06 x Fd repair pts<br>03 x Intermediate repair pts<br>01 x MAG No 20<br>01 x HQ Tech Gp EME<br>01 x EME Dte<br>Qty 02 for DGOS (02) |
| 6.     | Technical Manual on STE with  |           | -                        | 04@ | 02   | -    | 06    |  | 02 x DGQA  |

| Ser No             | Technical Literature   | Unit Cost | Scale for 1000 Equipment |     |      |      |       | Total Cost | Remarks   |
|--------------------|--|-----------|--------------------------|-----|------|------|-------|------------|---|
|                    |  |           | User                     | EME | DGQA | DGOS | Total |            |   |
|                    | drawing reference  |           |                          |     |      |      |       |            | 03 x Intermediate repair pts<br>01 x EME School<br>@ one per STE                            |
| 7.                 | Soft copy on the above Technical literature in the form of IETM class IV and above |           | -                        | 04  | 02   | -    | 06    |            | Qty 02 for DGQA<br>01 x MAG No 20<br>01 x HQ Tech Gp EME<br>01 x EME School<br>01 x EME Dte |
| 8.                 | Any other (specify)  |           |                          |     |      |      |       |            |   |
| <b>Total Cost:</b> |  |           |                          |     |      |      |       |            |   |

**Total Cost:** \_\_\_\_\_ **(In words)**

**Notes : -**

- (i) In case any additional equipment is used their tech literature will be included.
- (ii) If certain technical literature is being provided free of cost, it should be indicated in remark column.

\*\*\*\*

**Annexure IV to Appendix E**  
(Refers to Para 8(a) of Appendix E)

**TRAINING AGGREGATES**

EQUIPMENT: **QUANTITY 1000 MULTIPURPOSE THERMAL MONOCULAR SIGHT WITH LASER RANGE FINDER (MTMSL)**

OEM: \_\_\_\_\_

| <b>Ser No</b> | <b>Description of Training Aggregate</b>  | <b>User</b> | <b>EME</b> | <b>DGQA</b> | <b>DGOS</b> | <b>Total</b> | <b>Unit cost</b> | <b>Total Cost</b> | <b>Remarks</b>  |
|---------------|---|-------------|------------|-------------|-------------|--------------|------------------|-------------------|---|
| 1.            | Complete Equipment  | -           | 04*        | -           | -           | 04*          |                  |                   | *Qty 04 is included in the overall quantity of 1000 MTMSL   |
| 2.            | Sectionised Equipment / Hot Mockup  | -           | 01         | -           | -           | 01           |                  |                   | For EME School  |
| 3.            | Shop Replaceable Units (SRU)/Assemblies as under:-<br>(a)<br>(b)  | -           | 02         | 02          | -           | 04           |                  |                   | For EME School  |
| 4.            | Computer Based Training package based on interactive multimedia to include<br>(a) Full graphics, Animation test and sound<br>(b) Symptoms fault correlation (expert system) | -           | 02         | 02          | -           | 04           |                  |                   | For Repair and Maintenance Personnel  |
| 5.            | Training Aids to include<br>(a) Charts<br>(b) Slides<br>(c) Training Brochures<br>(d) Training Work Models<br>(e) Blow up diagram<br>(f) Video Films                        | 10 Sets     | 02         | 02          | -           | 14           |                  |                   | <ul style="list-style-type: none"> <li>• 10 for User</li> <li>• 02 for DGQA</li> <li>• 02 for EME School</li> </ul> |

| Ser No | Description of Training Aggregate | User | EME | DGQA | DGOS | Total | Unit cost | Total Cost | Remarks               |
|--------|-----------------------------------|------|-----|------|------|-------|-----------|------------|-----------------------|
| 6.     | Cost of training of 144 personnel | 126  | 14  | 02   | 02   | 144   |           |            | As per Para 15 of RFP |
| 7.     | Any other                         |      |     |      |      |       |           |            |                       |

**Total Cost:** \_\_\_\_\_ (In words)

**Notes:-**

1. Language in Training aggregates will be **Bilingual (English & Hindi)**.
2. Cost should be included in the commercial offer.

\*\*\*

**DEMONSTRATION/ EVALUATION METHODOLOGY : MULTIPURPOSE THERMAL  
MONOCULAR SIGHT WITH LRF (MTMSL)**

- Note :** 1. Demonstration will be carried out at location **Udhampur**, to be concluded by **31 Jan 2023**.  
2. Equipment to be produced for demo by **22 Jan 2023**

| <b><u>S No</u></b>                     | <b><u>Operational Requirement</u></b>                             | <b><u>Methodology</u></b>                         | <b><u>Remarks</u></b>     |                           |
|--|---|---|---------------------------|---------------------------|
| <b><u>Physical Characteristics</u></b> |   |   |                           |                           |
| 1.                                     | <b>(a) <u>Features.</u></b>                                       |   | <b>To be demonstrated</b> |                           |
|  | (i) Multipurpose  | (aa) Hand-held option                             |                           |                           |
|  |   | (ab) Tripod-mounted option                        |                           |                           |
|  | (ii) Day Vision   |   |                           |                           |
|  | (iii) Thermal Imaging (TI) channel.                               |   |                           |                           |
|  | (iv) In-built Laser Range Finder (LRF).                           |   |                           |                           |
|  | (v) Monocular Sight   |   |                           |                           |
|  | (vi) Enable Night Surveillance during moonless night              |   |                           |                           |
|  | (vii) Enable Night Surveillance during adverse weather conditions |   |                           |                           |
|  | (viii) Compact  | (aa) Length                                       |                           |                           |
|  |   | (ab) Width  |                           |                           |
|  |   | (ac) Height                                       |                           |                           |
|  | (b) <b><u>Weight.</u></b>   | Not more than 5.0 kg + 10% (including batteries). |                           | <b>To be demonstrated</b> |
| (c) <b><u>Colour.</u></b>              | Non reflective black or Desert brown.                             |   | <b>To be demonstrated</b> |                           |
| <b><u>S No</u></b>                     | <b><u>Operational Requirement</u></b>                             | <b><u>Methodology</u></b>                         | <b><u>Remarks</u></b>     |                           |

|    |  |  |   |
|----|--|--|---|
|    | (d) <b><u>Carriage &amp; Transportation.</u></b> Each sight should be provided with                          |  |   |
|    | (i) A soft case for carriage   | <b>To be demonstrated</b>  |   |
|    | (ii) A hard case for transportation.   |  |   |
| 2. | <b>Operating temp</b>  | Minus 20°C to Plus 45°C  | <b>To be demonstrated / In case demonstration not feasible Vendor certificate supported by test reports from NABL accredited Labs</b> |
|    | (ii) Night capability.   |  |   |
|    | (iii) Day capability   |  |   |
| 3. | <b><u>Power Source.</u></b>  |  |   |
|    | (a) Commercially available (In Indian Market) rechargeable Lithium Ion or Ni MH or NCMH battery.             | <b>To be demonstrated</b>  |   |
|    | (b) Should function for 6 hours or more in operational mode once fully charged                               |  |   |
|    | (c) Two hours of recording.  |  |   |
|    | (d) Should function on 180 volt to 240 volt, 50 Hz AC main   | <b>To be demonstrated and Vendor certificate supported by test reports from NABL accredited Labs</b> |   |
|    | (e) Should function on Generator through AC/DC adapter   |  |   |
|    | (f) Commercially available Battery Charger for charging the battery from 180 volt to 240 volt, 50Hz AC mains |  |   |
|    | (g) DC charging facility from 12 volt to 24 volt DC, should be provided                                      |  |   |
|    | (h) Full charging of battery should take not more than 3 hours.  |  |   |
|    | (j) Three sets of Spare batteries  | <b>To be demonstrated</b>  |   |

| <b><u>S No</u></b>                     | <b><u>Operational Requirement</u></b> | <b><u>Methodology</u></b> | <b><u>Remarks</u></b> |
|--|---------------------------------------|---------------------------|-----------------------|
| <b><u>Technical Specifications</u></b> |                                       |                           |                       |
| 4.                                     | <b><u>Laser Range Finder.</u></b>     |                           |                       |

|      | (a) Measurement range min 30m or less  | <b>To be demonstrated</b>   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|------|--|---|------------------------|----------------------------|------------|----------------------------|------------|-----|-----------|-------|-------|------|-------------|-------|-------|
|      | (b) Measurement range max 2500m or better.   |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (c) <b>Accuracy</b> : (+) (plus minus) 5m or better.   |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (d) Laser Range Finder to be eye safe. Minimum Cl-1  | <b>Vendor certificate supported by test reports from NABL accredited Labs</b> |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
| 5.   | <b>TI Channel.</b>   |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (a) <b>Tech.</b> Un-cooled   | <b>Vendor certificate supported by test reports from NABL accredited Labs</b> | Tech – Micro Bolometer |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (b) <b>Sensor Resolution (FPA).</b> Min 640x480.   |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (c) <b>Pitch.</b> ≤17μ.  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (d) <b>Magnification.</b> Upto 4x  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (e) <b>Features.</b>   |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (i) Power ON and Off.  | <b>To be demonstrated</b>   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (ii) Brightness and Contrast.  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (iii) White Hot and Black Hot polarity selection.  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (iv) Shutter less automatic Non Uniformity Correction (NUC)  | <b>Vendor certificate supported by test reports from NABL accredited Labs</b> |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | (f) <b>Ranges (Minimum</b>   | <b>To be demonstrated</b>   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      | <table border="1"> <thead> <tr> <th>S No</th> <th>Parameter</th> <th>Light Vehicle (Broad Side)</th> <th>Single Man</th> </tr> </thead> <tbody> <tr> <td>(i)</td> <td>Detection</td> <td>2500m</td> <td>1800m</td> </tr> <tr> <td>(ii)</td> <td>Recognition</td> <td>1000m</td> <td>500 m</td> </tr> </tbody> </table> |   |                        | S No                       | Parameter  | Light Vehicle (Broad Side) | Single Man | (i) | Detection | 2500m | 1800m | (ii) | Recognition | 1000m | 500 m |
| S No | Parameter  |   |                        | Light Vehicle (Broad Side) | Single Man |                            |            |     |           |       |       |      |             |       |       |
| (i)  | Detection  |   |                        | 2500m                      | 1800m      |                            |            |     |           |       |       |      |             |       |       |
| (ii) | Recognition  | 1000m   | 500 m                  |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      |  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |
|      |  |   |                        |                            |            |                            |            |     |           |       |       |      |             |       |       |

| <b>S No</b> | <b>Operational Requirement</b>                | <b>Methodology</b> | <b>Remarks</b> |
|-------------|---|--------------------|----------------|
| 6.          | <b>Day Vision.</b>                            |                    |                |
|             | <b>Range (in clear day light conditions).</b> |                    |                |



|     |   |           |   |            | To be demonstrated   |  |  |
|-----|---|-----------|---|------------|--|--|--|
|     | S No  | Parameter | Light Vehicle (Broad Side)                                      | Single Man |  |  |  |
|     | (a)   | Detection | 2500m   | 1800m      |  |  |  |
| (b) | Recognition   | 1000m     | 500 m   |            |  |  |  |
| 7.  | <b><u>Optics and Sensors (Day and Night Monocular).</u></b>   |           |   |            |  |  |  |
|     | <b><u>Recording and Data Transmission.</u></b>  |           |   |            | To be demonstrated   |  |  |
|     | (a) The device should have facility to record videos and take photos which should be storable with external or internal storage device. |           |   |            |  |  |  |
|     | (b) The storage capacity should be minimum 32 GB.   |           |   |            | Vendor certification   |  |  |
|     | (c) The data captured should be transferable using suitable RS-232/ USB2.0 interface.   |           |   |            | To be demonstrated   |  |  |
|     | (d) <b><u>Sensitivity of Detector.</u></b> NETD (Noise Equivalent Temperature Difference) of uncooled Thermal Detector                  |           | (i) Min 40mK (Millikelvin) or better                            |            | Vendor certificate supported by test reports from NABL accredited Labs |  |  |
|     |   |           | (ii) Max 55 mK (Millikelvin) or better.                         |            |  |  |  |
|     | (e) <b><u>Start Up Time.</u></b>  |           | (i) From display mode (Less than) 10 sec                        |            | To be demonstrated   |  |  |
|     |   |           | (ii) From power of mode (Less than) 30 sec.                     |            |  |  |  |
|     | (f) <b><u>Polarity Modes</u></b>  |           | Minimum two polarity control modes i.e. white HOT and BLACK HOT |            |  |  |  |

| <b><u>S No</u></b> | <b><u>Operational Requirement</u></b>   | <b><u>Methodology</u></b>  | <b><u>Remarks</u></b> |
|--------------------|---|--|-----------------------|
| (g)                | <b><u>Ruggedness.</u></b> Minimum Mil Std 810-G or relevant portions of JSS-5855-11-2019. | Vendor certificate supported by test reports from NABL accredited Labs |                       |

|                    |  |  |  |                       |
|--------------------|--|--|--|-----------------------|
|                    | (h) <b><u>Specifications</u></b>   | (i) Pixel Pitch - $\leq$ (less than equal to) 17 $\mu$ m (micro meter)   | <b>Vendor certificate supported by test reports from NABL accredited Labs</b>                    |                       |
|                    |  | (ii) Diopter Adjustment : $\pm$ (plus minus)<br>4D or better.  |  |                       |
|                    |  | (iii) Magnification/ Zoom : $\pm$ (plus minus) 4X or better  |  |                       |
|                    |  | (iv) Field of View : Maximum 12 degree x 9 degree  |  |                       |
|                    | (j) <b><u>Altitude</u></b> – TI Sight and LRF should be Operable up to 15000ft above mean sea level.   |  | <b>To be demonstrated / In case demonstration not feasible Vendor certificate to be rendered</b> |                       |
| 8.                 | <b><u>Operation and Maintenance.</u></b>   |  |  |                       |
|                    | <b><u>Climate &amp; Durability.</u></b> Minimum Mil Std 810-G or relevant portions of JSS-5855-11-2019.  |  | <b>Vendor certificate supported by test reports from NABL accredited Labs</b>                    |                       |
| 9.                 | <b><u>Service Life.</u></b>  | (a) Service/ shelf life not less than 10000 (Ten Thousand) hrs or 5 (five) yrs whichever is earlier from the date of delivery. | <b>Vendor certificate</b>  |                       |
|                    |  | (b) 300 battery charging cycles  |  |                       |
| <b><u>S No</u></b> | <b><u>Operational Requirement</u></b>  |  | <b><u>Methodology</u></b>  | <b><u>Remarks</u></b> |
| 10.                | <b><u>Maintenance Aspects.</u></b> In order to maintain the equipment in Fd Army following maintenance related aspects shall be provided during the demonstration. |  |  |                       |
|                    | (a) User Handbook  |  | <b>To be demonstrated alongwith Vendor Certificate</b>   |                       |
|                    | (b) Tech manuals   |  |  |                       |
|                    | (c) ISPL   |  |  |                       |

|     |   |   |  |  |
|-----|---|---|--|--|
|     | (d) MRLS  |   | <b>To be demonstrated<br/>alongwith Vendor<br/>Certificate</b> |  |
|     | (e) Tech manuals on STEs  |   |  |  |
|     | (f) Detail of trg aggregates  |   |  |  |
|     | (g) CBTs for trg of technicians for maint (As applicable).                                  |   |  |  |
|     | (h) SMTs and STEs.  |   |  |  |
|     | (j) Tree diagram to incl assemblies/sub assemblies (As applicable).                         |   |  |  |
| 11. | <b><u>Accessories</u></b>   | (i) USB Cable/ Connector<br>Cable (minimum 5 meters<br>length). | <b>To be demonstrated</b>                                      |  |
|     |   | (ii) Tripod   |  |  |
|     |   | (iii) Three Spare Batteries.                                    |  |  |
|     |   | (iv) Battery Charger  |  |  |
| 12. | <b><u>External Video Display.</u></b>   | (i) 7 inch screen size or<br>better                             | <b>To be demonstrated</b>                                      |  |
|     |   | (ii) Battery Operated.  |  |  |
|     |   | (iv) Display should feature<br>real time video output           |  |  |
|     |   | (v) Provn for image snap<br>shot                                |  |  |
| 13  | <b><u>Visual Inspection</u></b>   |   |  |  |
|     | (a) Completeness of components, serviceability, mechanical components &<br>function ability |   | <b>To be demonstrated</b>                                      |  |
|     | (b) Marking & Finish.   |   |  |  |

| <b><u>S No</u></b> | <b><u>Operational Requirement</u></b>   | <b><u>Methodology</u></b>   | <b><u>Remarks</u></b>                                  |
|--------------------|---|---|--|
|                    | (c) Should be free from optical defects viz fungus, scratches, Dirt & cleanness of optics & optical coating |   |  |
|                    | (d) Completeness of accessories (Refer Sr No 11)  |   |  |
|                    | (e) Should be free from loose, missing or damaged components.   |   |  |
|                    | (f) Workmanship   |   |  |
| 14                 | <b><u>Electrical Checks.</u></b>  |   |  |
|                    | (a) Operation of all switches & Power ON and OFF  | <b>To be demonstrated</b>   |  |
|                    | (b) Fitment of battery for power supply   |   |  |
|                    | (c) Brightness & contrast   |   |  |
|                    | (d) LBI (Low Battery Indication), Battery Charger   |   |  |
| 15                 | <b><u>Mechanical Test.</u></b>  |   |  |
|                    | (a) Movement of knobs, All Screw / grub screw shall be tightened.   | <b>To be demonstrated</b>   |  |
|                    | (b) Dimension : L x W x H   |   |  |
|                    | (c) Fitment of Sight with Tripod mount should be satisfactory   |   |  |
|                    | (d) <b><u>Weight.</u></b> Not more than 5.0 Kg $\pm$ 20% including battery and battery mount.               |   |  |
| 16                 | <b><u>EMC.</u></b> Compliance to Electromagnetic Capability (EMC)   | <b>Vendor certificate supported by test reports from NABL accredited Labs</b> | As per laid down Military Stds (MIL-STD) Certification |

## **COMMERCIAL CLAUSES**

### **1. Payment Terms**

#### **1.1 INCOTERMS for Delivery.**

The delivery of goods will be based on **DDP INCOTERMS-2020** with ultimate consignee as **Central Ordnance Depot, Agra.**

#### **1.2. Currency of Payment**

1.2.1 Indian bidders should submit their bids in Indian Rupees.

#### **1.3 Contract Price and Requirement of Bank Guarantees**

1.3.1 **Total Contract Price.** The Total Contract Price will be the final price negotiated by CNC including taxes and duties applicable at the time of signing of Contract.

1.3.2 **Base Contract Price.** The Base Contract Price will be considered as Total Contract Price excluding taxes and duties applicable at the time of signing of Contract.

1.3.3 **Bank Guarantee(s).** For the purpose of payment of Advances to the Bidder and submission of various Bank Guarantees by the Bidder i.e Advance Payment Bank Guarantee (APBG) and Additional Bank Guarantee (ABG), as applicable, Base Contract price will be considered. For Performance cum Warranty Bank Guarantee (PWBG), Total Contract Price including taxes and duties is to be considered.

1.3.4 All Bank Guarantee(s) requirements viz Advance Payment Bank Guarantee (APBG), Performance-cum-Warranty Bank Guarantee (PWBG), Additional Bank Guarantee (ABG), Performance Bank Guarantee (PBG) etc are to be submitted as per following :-

1.3.4.1 **Indian Bidder.** In case of Indian Bidders, the Bank Guarantee(s) shall be from any Indian Public or Private Scheduled Commercial Bank.

**1.4 Payment to Indian Bidders.** The schedule for payments will be based on the Buyers requirements, enumerated at succeeding Paragraphs. The summary of delivery schedule, payments to be made and schedule of submission/release of Advance Bank guarantee (s), as applicable, is specified at Annexure V to Appendix G.

1.4.1 **Advance Payment.** Fifteen (15) % of the **Base Contract Price** shall be paid within thirty (30) days of submission of claim and a Bank Guarantee for the equivalent amount, subject to correction and acceptability of the documents submitted. The prescribed format of the Advance Payment Bank Guarantee (APBG) is placed at **Annexure II to Appendix G.** The Advance Payment Bank Guarantee (APBG) will deemed to be proportionately and automatically reduced until full extinction along with and prorate to value of each delivery, as evidenced by corresponding copy of document proving delivery and invoices of goods/services supplied/provided. The date of delivery would be reckoned from the date of signing of contract ( $T_0$ ). **All deliveries will be completed latest within one year of signing of contract.**

1.4.2 **On Dispatch.** 60% of the **Base Contract Price** of deliverables and reimbursement of **100% of Freight and Transit Insurance (FTI)** and **100% of associated taxes and levies** excluding cost of training shall be paid on submission of proof of dispatch of deliverables to the consignee and on production of an inspection note issued by the buyer designated inspection agency on pro rata basis. Number and date of the Railway/Road/Air Transport receipt under which the deliverables charged for in the bill are dispatched by rail/road/Air and the number and date of letter with which such receipt is forwarded to the consignee, should be quoted on the bill. The payment will be made by PCDA/CDA through cheque/Electronic Fund Transfer (EFT) on submission of following documents :-

1.4.2.1 Ink-signed copy of Seller's bill.

1.4.2.2 Ink-signed copy of Commercial invoice.

1.4.2.3 The relevant Transport Receipt.

1.4.2.4 Inspection Acceptance Certificate of Buyer's QA agency demonstrating compliance with the technical specifications of the contract.

1.4.2.5 Packing List.

1.4.2.6 Certificate of Origin.

1.4.2.7 Claim for statutory and other levies to be supported with requisite documents/GST invoice (with QR code, when made applicable)/proof of payment, as applicable.

1.4.2.8 Exemption certificate for taxes/duties, if applicable.

1.4.2.9 Warranty certificate from the SELLER.

1.4.3 In case of failure of the Seller to deliver the deliverables to the Buyer or inordinate delay in the said delivery leading to Termination of the Contract in accordance with Article 22A.1 of SCD, the SELLER will be liable to return payments received against dispatch.

1.4.4 **On Delivery/ Final Acceptance.** **Twenty Five (25)% of the Base contract price** of deliverables excluding cost of training on pro rata basis shall be paid on completion of JRI post delivery and issue of JRI Certificate/Certified Receipt Voucher (CRV) issued by the Buyer. Such payments will be subject to the deductions of such amounts as the seller may be liable to pay under the agreed terms of the contract. The concerned PCDA/CDA will release the payment through cheque/EFT.

1.4.5 **Part-Dispatch/Part-Shipment.** Part-dispatch or part-shipment of goods is permitted and corresponding payment will be released to the Seller. However, where permitted, the minimum quantity for using this facility on each occasion will not be less than quantity 500.

1.4.6 **Training.** The remaining **85%** of the cost of training and associated taxes and duties, shall be paid on submission of Certificate from BUYER'S representative that training program has been completed by the BUYER/its representative with requisite documents for payment.

1.4.7 **Payment of Taxes and Duties.** Payment of taxes, duties and statutory levies will be made on submission of requisite documentary proof to Paying authority. Reimbursement of taxes and duties will be as per rates and amounts indicated in the commercial bid/contract or as per actuals whichever is lower. Custom duty on import material is not re-imbursable.

1.4.8 **Exchange Rate Variation.** Exchange Rate variation shall be applicable for Rupee contracts with Indian Vendors, based on RFPs issued under all categories of capital acquisitions mentioned at Para 8 to 12 of Chapter I of DAP. The indigenous & import components as also the various currencies (of the import components) for ERV purposes, must be determined in advance. The guidelines on protection of Exchange Rate Variation are given at **Annexure I to this Appendix.**

2. **Performance-cum-Warranty Bank Guarantee Clause.** A Performance-cum-Warranty Bank Guarantee (PWBG) of **3%** (or as applicable during signing of contract) of value of the Total Contract Price including taxes and duties would be furnished by the Bidder in the form of a Bank Guarantee to sequentially act as Performance Bank guarantee till the delivery and as Warranty Bank Guarantee on delivery. The PWBG shall be submitted by the Bidder within one month of signing of contract and shall be valid for a period, until three months beyond the warranty period, as specified in the RFP. If at any stage, the Performance Guarantee is invoked by the Buyer either in full or in part, the Bidder shall make good the shortfall in PWBG within 30 days by an additional Bank Guarantee for equivalent amount. In the event of failure to submit the required Bank Guarantee against invoked Performance Guarantee, equivalent amount will be withheld from the next stage payment till the shortfall in the Bank Guarantee is made good by the Bidder. The prescribed format of the Performance-cum-Warranty Bank Guarantee is placed at **Annexure III to Appendix G.**

3. **Inspection.** Pre Dispatch Inspection (PDI) would be at the discretion of the Buyer. In addition, Joint Receipt Inspection (JRI) may also be carried out. If it is PDI, the Bidder should intimate at least 45 days prior to the day when the equipment is to be offered for PDI to enable Buyer's QA personnel to be available for inspection. All the expenses towards PDI will be borne by the Bidder except transportation and accommodation of Buyer's PDI team, which will be deputed at Buyer's expense. In case of rejection of Goods during PDI, re-PDI will be undertaken at Bidder's premises at Buyer's sole discretion. All expenses including transportation and accommodation of Buyer's PDI team will be borne by the Bidder. Towards this, the expenses towards transportation and accommodation of Buyer's PDI team will be initially done by the Buyer and subsequently reimbursed by the Bidder either by remittance or by recovery from the Balance Payment/PWBG. In the event of a failed PDI, the Bidder shall consult the Buyer for rescheduling re-PDI. In case of JRI, the representative of the Seller may be present for inspection after the equipment reaches the concerned destination. The Seller would be informed of the date for JRI.

4. **Liquidated Damages (LD).** In case of delay in supplies, the vendor shall be levied LD @ 1.5% per week of delay subject to maximum of 15% of value of delayed stores, calculated on the basis of the Contract Price of delayed stores.

5. **Denial Clause.** In case the delay in delivery is attributable to the Seller or a non-force majeure event, the Buyer may protect himself against extra expenditure during the extended period by stipulating a denial clause (over and above levy of LD) in the letter informing the Seller of extension of the delivery period. In the denial clause, any increase in statutory duties and/or upward rise in prices due to the Price Variation Clause (PVC) and/or any adverse fluctuation in foreign exchange are to be borne by the Seller during the extended delivery period, while the Buyer reserves his right to get any benefit of downward revisions in statutory duties, PVC and foreign exchange rate. Thus, PVC, other variations and foreign exchange clauses operate only during the original delivery period. The format for extension of delivery period/performance notice under the Denial clause is at **Annexure IV to Appendix G.**

**Annexure I to Appendix G**  
(Refers to Para 1.4.8 of Appendix G)

**GUIDELINES OF PROTECTION OF EXCHANGE RATE VARIATION IN CONTRACTS**

1. Parameters to be kept in view while formulation ERV Clause.

(a) In contracts with Indian Vendors in all categories of capital acquisitions where there is an import content, ERV clause will be provided. However, ERV clause shall not be applicable to contracts in following conditions:-

(i) The delivery period is less than one year; or

(ii) The rate of exchange variation is within the band of +/- 2.5%.

(b) ERV clause will be framed according to the specific requirements of the contract. While calling for information at the RFP stage/formulation of ERV clauses in the contracts, the following factors are to be taken into consideration depending upon the requirements of the individual contracts:-

(i) Year wise and major currency wise import break up is to be indicated.

(ii) Detailed time schedule for procurement of imported material/Services and their value at the FE rates adopted for the contract is to be furnished by the vendor as per the format given below:-

| YEAR | TOTAL COST OF IMPORTED MATERIAL/SERVICES (In rupees) | FE CONTENT-OUT FLOW (equivalent in rupees ₹ in crore) |                  |                    |  |
|------|--|---|------------------|--------------------|--|
|      |  | DOLLAR DENOMINATED                                    | EURO DENOMINATED | POUNDS DENOMINATED | OTHER CURRENCIES DENOMINATED (as applicable) |
|      |  |   |                  |                    |  |
|      |  |   |                  |                    |  |
|      |  |   |                  |                    |  |
|      |  |   |                  |                    |  |

(iii) ERV clause will not be applicable in case delivery periods for imported content are subsequently to be refixed/ extended unless the reasons for delivery period extension are attributable to the buyer.

(iv) For purposes of ensuring uniformity, the Base Exchange Rate on the ERV reckoning date will be adopted for each of the major foreign currencies. The Base Exchange Rate will be the BC Selling Rate of the Parliament Street Branch of State Bank of India, New Delhi. The ERV reckoning date will be the last date of submission of commercial bids as per RFP. In cases where Option Clause is exercised, the date of reckoning of ERV will be the last date of submission of bids for the RFP of the Original Procurement Case.



(v) ERV clause in the contract is to clearly indicate that ERV is payable/refundable depending upon exchange rate as prevalent on the date of transaction with reference to Base Exchange Rate on the ERV reckoning date.

(vi) Other issues which are peculiar to the contract.

## 2. **Methodology For Claiming ERV**

“The prices finalised in the contract are based on the base exchange rates indicated in the contract. The year-wise amount of foreign exchange component of the imported items as indicated in the contract shall be adjusted for the impact of exchange Rate Variation of the Rupee based on the exchange rate prevailing on the date of each transaction, as notified by the SBI, Parliament Street Branch, New Delhi. The impact of notified Exchange Rate Variation shall be computed on an yearly basis for the outflow as tabulated in Annexure..... (The table at Para 1(b) (ii) is to be an Annexure to the contract) and shall be paid/refunded before the end of the financial year based on the certification of Finance Head of the concerned Division.....”.

3. Paying authority is to undertake a pre-audit of the documents before payment.

4. Documentation for Claiming ERV. The following documents would need to be submitted in support of the claim on account of ERV:-

- (a) A bill of ERV claim enclosing worksheet.
- (b) Banker's Certificate/debit advice detailing Foreign Exchange paid and exchange rate as on date of transaction.
- (c) Copies of import orders placed on the suppliers.
- (d) Invoice of supplier for the relevant import orders.

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**Annexure II to Appendix G**  
(Refers to Para 1.4.1 of Appendix G)

**BANK GUARANTEE FORMAT FOR ADVANCE**

To

The \_\_\_\_\_  
Ministry of \_\_\_\_\_  
Government of India  
\_\_\_\_\_ (complete postal address of the beneficiary)

1. "Whereas President of India represented by the \_\_\_\_\_ Ministry of \_\_\_\_\_ Government of India (hereinafter referred to as BUYER) have entered into a Contract No. \_\_\_\_\_ (No. of Contract), dated \_\_\_\_\_ (Date of Contract) with M/s \_\_\_\_\_ (Name of SELLER) (referred to as SELLER) and whereas according to the said Contract the BUYER has undertaken to make an advance payment of Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ being \_\_\_\_\_ payment of \_\_\_\_\_% of the total value of Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ of the said Contract, against issuance of an advance guarantee by a bank."

2. We \_\_\_\_\_ (indicate the name of the bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the BUYER intimating that the SELLER is in breach of the Contractual obligations stipulated in the said Contract. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our total liability under this guarantee shall be restricted to an amount not exceeding Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_.

3. We undertake to pay to the BUYER any money so demanded notwithstanding any dispute or disputes raised by the SELLER in any suit or proceedings pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the SELLER shall have no claim against us for making such payment.

4. We, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the BUYER under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged or till \_\_\_\_\_ office / Department / Ministry of \_\_\_\_\_ certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said SELLER and accordingly discharges this guarantee.

5. We, further agree with the BUYER that the BUYER shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said SELLER from time to time or to postpone for any time or from time to time any of the powers exercisable by the BUYER against the said SELLER and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, Amendment issued vide MoD ID No. 4(50)/D(Acq)/08 dated 20.06.2016 or extension being granted to the said SELLER or for any forbearance, act or

omission on the part of the BUYER or indulgence by the BUYER to the said SELLER or by any such matter or thing whatsoever which under law relating to sureties would, but for this provision, have effect of so relieving us.

6. The amount of this guarantee will be progressively reduced by (percentage of advance) \_\_\_\_\_ of total value of each part shipment/services against the stage payment released by the BUYER for that shipment/services made by the SELLER and presentation to us of the payment documents.

7. This guarantee will not be discharged due to the change in the constitution of the bank or the BUYER/SELLER.

8. We, undertake not to revoke this guarantee during the currency except with the previous consent of the BUYER in writing.

9. Notwithstanding anything contained herein above:-

(a) Our liability under this Guarantee shall not exceed Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ (in words)\_\_\_\_\_

(b) This Bank Guarantee shall remain valid until \_\_\_\_\_ (hereinafter the expiry date of this guarantee) the Bank Guarantee will cease to be valid after \_\_\_\_\_ irrespective whether the Original Guarantee is returned to us or not.

(c) We are liable to pay guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written demand or a claim in writing on or before \_\_\_\_\_(Expiry Date).

Dated the \_\_\_\_\_day of \_\_\_\_\_ (month and year)

Place :

Signed and delivered by \_\_\_\_\_ (Name of the bank)

Through its authorised signatory

(Signature with seal)

\*\*\*\*

**Annexure III to Appendix G**  
(Refers to Para 2 of Appendix G)

**BANK GUARANTEE FORMAT FOR PERFORMANCE-CUM-WARRANTY**

To

The \_\_\_\_\_  
Ministry of \_\_\_\_\_  
Government of India  
\_\_\_\_\_ (complete postal address of the beneficiary)

Dear Sir,

1. Whereas President of India represented by the \_\_\_\_\_ Ministry of \_\_\_\_\_, Government of India (hereinafter referred to as BUYER) have entered into a Contract No. \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter referred to as the said Contract) with M/s. \_\_\_\_\_ (hereinafter referred to as the SELLER) for supply of goods as per Contract to the said BUYER and whereas the SELLER has undertaken to produce a bank guarantee amounting to Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ which is 3% of Total Contract Price (including taxes and duties) for Performance and Warranty in sequence, to secure its obligations towards Performance-cum-Warranty to the BUYERS.

2. We, the \_\_\_\_\_ bank hereby expressly, irrevocably and unreservedly undertake the guarantee as principal obligors on behalf the SELLER that, in the event that the BUYER declares to us that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the BUYER by reason of breach/failure to perform by the said SELLER of any of the terms and conditions in the Contract related to Performance and Warranty clauses, we will pay you, on demand and without demur, all and any sum up to {3% of Total Contract Price (including taxes and duties)} \_\_\_\_\_ Rupees/ US \$/Euro/PS £/Yen/AUD/SGD only at any instance under this Guarantee. Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said Contract. We shall not be entitled to ask you to establish your claim or claims under this guarantee but will pay the same forthwith without any protest or demur. We undertake to effect payment upon receipt of such written demand.

3. We shall not be discharged or released from the undertaking and guarantee by any arrangements, variations made between you and the SELLER, indulgence to the SELLER by you, or by any alterations in the obligations of the SELLER or by any forbearance whether as to payment, time performance or otherwise.

4. We further agree that any such demand made by the BUYER on the Bank shall be conclusive, binding, absolute and unequivocal notwithstanding any difference or dispute or controversy that may exist or arise between you and the SELLER or any other person.

5. In no case shall the amount of this guarantee be increased.

6. This Performance-cum-Warranty guarantee shall remain valid for a period until three months beyond the warranty period as specified in the Contract i.e. up to \_\_\_\_\_.

7. Subject to the terms of this Bank Guarantee, the issuing bank hereby irrevocably authorizes the beneficiary to draw the amount of up to Rs/ US \$/Euro/PS £/Yen/AUD/SGD

\_\_\_\_\_ {3% of Total Contract Price (including taxes and duties)} for breach/failure to perform by the SELLER of any of the terms and conditions of the Contract related to performance and warranty clause. Partial drawings and multiple drawings under this Bank Guarantee are allowed within the above stated cumulative amount subject to each such drawing not exceeding 3% of the Total Contract Price (including taxes and duties) (Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ only) (Mention BG amount).

8. This guarantee shall be continuing guarantee and shall not be discharged by any change in the constitution of the Bank or in the constitution of M/s \_\_\_\_\_. We undertake not to revoke this guarantee during the currency except with previous consent of BUYER in writing.

9. Notwithstanding anything contained herein above:

(a) Our liability under this Guarantee shall not exceed Rs/ US \$/Euro/PS £/Yen/AUD/SGD \_\_\_\_\_ (Rupees \_\_\_\_\_ only (in words)).

(b) This Bank Guarantee shall remain valid until 3 months from the date of expiry of warranty period of the Contract, i.e up to \_\_\_\_\_ (mention the date) which is 3 months after expiry of the warranty period and the BG shall cease to be valid after \_\_\_\_\_ irrespective whether the Original Guarantee is returned to us or not.

(c) We are liable to pay guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written demand or a claim in writing on or before \_\_\_\_\_ (Expiry Date).

Dated the \_\_\_\_\_ day of \_\_\_\_\_ (month and year)

Place :

Signed and delivered by \_\_\_\_\_ (name of the bank)

Through its authorised signatory

(Signature with seal)

\*\*\*\*

**Annexure IV to Appendix G**  
(Refers to Para 5 of Appendix G)

**FORMAT FOR EXTENSION OF DELIVERY PERIOD/PERFORMANCE NOTICE**

Name of the Procuring Entity.....

Extension of Delivery Period/Performance Notice

To

M/s (name and address of firm)

Sub: Contract No..... dated.....for the supply of.....

Ref: Your letter no. .... dated: .....

Dear Sir,

1. You have failed to deliver {the (fill in qty.) of Stores/the entire quantity of Stores} within the contract delivery period [as last extended up to] (fill in date). In your letter under reply you have asked for [further] extension of time for delivery. In view of the circumstances stated in your said letter, the time for delivery is extended from (fill in date) to (fill in date).

2. Please note that notwithstanding the grant of this extension in terms of Clause (fill in clause number) of the subject contract an amount equivalent to ..... % (..... per cent) of the delivered price of the delayed goods for each week of delay or part thereof (subject to the ceiling as provided in the aforesaid clause) beyond the original contract delivery date/the last unconditionally re-fixed delivery date (as & if applicable), viz., (fill in date) will be recovered from you as liquidated damages. You may now tender the Stores for inspection [balance of the Stores] in terms of this letter. Stores if any already tendered by you for inspection but not inspected will be now inspected accordingly.

3. You are also required to extend the validity period of the performance guarantee for the subject contract from (fill in present validity date) to (fill in required extended date) within 15 (fifteen) days of issue of this amendment letter.

4. The above extension of delivery date will also be subject to the following Denial Clause:-

(a) That no increases in price on account of any statutory increase in or fresh Imposition of customs duty, GST or on account of any other taxes/duty, including custom duty), leviable in respect of the Stores specified in the said contract which takes place after (insert the original delivery date) shall be admissible on such of the said Stores, as are delivered after the said date; and,

(b) That notwithstanding any stipulation in the contract for increase in price on any other ground including foreign exchange rate variation, no such increase which takes place after (insert the reckoning date as per DAP 2020) shall be admissible on such of the said Stores as are delivered after the said date.

(c) But nevertheless, the Buyer shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, GST or on account of any other Tax or duty or on any other ground as stipulated in the price variation clause or

foreign exchange rate variation which takes place after (insert the original delivery date).

5. All other terms and conditions of the contract remain unaltered. This is without any prejudice to Buyer's rights under the terms and conditions of the subject contract.

6. Please intimate your unconditional acceptance of this amendment letter within 10 (ten) days of the issue of this letter failing which the contract will be cancelled at your risk and expense without any further reference to you.

Yours faithfully,

(Authorised Officer)  
Duly authorised,  
for and on behalf of  
The President of India

**Note:** Select one option within { } brackets; delete portion within [ ] brackets, if not applicable; fill in ( ) brackets. Brackets and this note are not to be typed.

Substitute following first para instead of first para in format above, for issuing a performance notice.

1. You have failed to deliver {the (fill in qty.) of Stores/the entire quantity of Stores} within the contract delivery period [as last extended up to] (fill in date). In spite of the fact that the time of delivery of the goods stipulated in the contract is deemed to be of the essence of the contract, it appears that (fill in the outstanding quantity) are still outstanding even though the date of delivery has expired. Although not bound to do so, the time for delivery is extended from (fill in date) to (fill in date) and you are requested to note that in the event of your failure to deliver the goods within the delivery period as hereby extended, the contract shall be cancelled for the outstanding goods at your risk and cost.

\*\*\*\*

**Annexure V to Appendix G**  
(Refers to Para 9 of RFP and  
Para 1.4 of Appendix G)

**DELIVERY SCHEDULE AND STAGES OF PAYMENT**

1. **For Delivery in Lots/ Batches**

| SI    | Activity  | Delivery Timelines (T <sub>0</sub> + Months)                       | Scheme for Payment  | Scheme for submission and Return of Advance Payment Bank Guarantees | Remarks                               |
|-------|---|--|---|---|---------------------------------------|
| (a)   | Signing of contract   | T <sub>0</sub>   | 15% of the Base Contract Price  | APBG of equivalent amount to be submitted                           | T <sub>0</sub> is Signing of Contract |
| (b)   | <b>On Dispatch of all equipment/system</b>  |  |   |   |                                       |
| (i)   | Quantity <b>1000</b> x <b>MTMSL</b>   | T <sub>0</sub> to T <sub>0+T<sub>12</sub></sub>                    | 60% of the Base Contract Price of deliverables and re-imburement of 100% of FTI and 100% of taxes and levies excluding cost of training on Pro-rata Basis |   |                                       |
| (ii)  | Complete quantity of SMT/STE, Jigs and Fixtures, Training Aggregates and Technical Literature | T <sub>0</sub> to T <sub>0+T<sub>12</sub></sub>                    | 60% of the Base Contract Price of deliverables and re-imburement of 100% of FTI and 100% of taxes and levies excluding cost of training on Pro-rata Basis |   |                                       |
| (iii) | Complete quantity of MRLS   | T <sub>0</sub> +T <sub>24</sub> to T <sub>0</sub> +T <sub>30</sub> | 60% of the Base Contract Price of deliverables and re-imburement of 100% of FTI and 100% of taxes and levies excluding cost of training on Pro-rata Basis |   |                                       |
| (c)   | <b>On Delivery/ Final Acceptance of all equipment/ system</b>                                 |  |   |   |                                       |
| (i)   | Quantity  | T <sub>0</sub> to  | 25% of the Base   | APBG is to be returned  |                                       |



| SI    | Activity  | Delivery Timelines (T <sub>0</sub> + Months)                       | Scheme for Payment  | Scheme for submission and Return of Advance Payment Bank Guarantees   | Remarks                               |
|-------|---|--|---|---|---------------------------------------|
|       | 1000 x MTMSL  | T <sub>0</sub> +T <sub>12</sub>                                    | Contract Price of deliverables excluding cost of training on Pro-rata Basis                 | on pro-rata basis on delivery of each lot/batch. APBG pertaining to documentation and training can be returned on delivery of a particular lot/batch                        |                                       |
| (ii)  | Complete quantity of SMT/STE, Jigs and Fixtures, Training Aggregates and Technical Literature | T <sub>0</sub> to T <sub>0</sub> +T <sub>12</sub>                  | 25% of the Base Contract Price of deliverables excluding cost of training on Pro-rata Basis | APBG is to be returned on pro-rata basis on delivery of each lot/batch. APBG pertaining to documentation and training can be returned on delivery of a particular lot/batch |                                       |
| (iii) | Complete quantity of MRLS   | T <sub>0</sub> +T <sub>24</sub> to T <sub>0</sub> +T <sub>30</sub> | 25% of the Base Contract Price of deliverables excluding cost of training on Pro-rata Basis | APBG is to be returned on pro-rata basis on delivery of each lot/batch. APBG pertaining to documentation and training can be returned on delivery of a particular lot/batch |                                       |
| (d)   | On completion of Training   | T <sub>0</sub> to T <sub>0</sub> +T <sub>12</sub>                  | 85% of the cost of Training   | training can be returned on delivery of a particular lot/batch  | On submission of requisite documents. |
| (e)   | Balance Payments (if any)   |  |   |   |                                       |

**Note:**

1. “**Engineering Support Package (ESP)**. Delivery of the deliverables pertaining to ESP shall be as under:-

(a) **MRLS**. MRLS for two years to be delivered on pro rata basis and delivery to commence not before twelve months and to be completed by six months before the expiry of warranty period of the lot.

(b) **SMT SMT/STEs, Technical Literature & Training Aggregate**. The entire quantity to be delivered along with the first lot of equipment and prior to the conduct of training by the OEM, whichever is earlier.

\*\*\*\*

**Appendix H**

(Refers to Para 47 and 56(b) of RFP)

**EVALUATION CRITERIA AND PRICE BID FORMAT**

1. **Evaluation Criteria.** The guidelines for evaluation of Bids will be as follows :-

1.1. Only those Bids will be evaluated, which are found to be fulfilling all the eligibility and qualifying requirements of the RFP, both technically and commercially. The bidder, whose price is arrived as lowest as per Evaluation criteria given in this Appendix, will be declared as L-1 bidder by Buyer.

1.2 **In 'Buy (Indian-IDDM)', 'Buy (Indian)' and 'Buy& Make Indian' Cases'.**

1.2.1 **Where DCF Technique as Given in Para 3 is Not Applicable.**

L-1 bidder will be determined on the basis of quoted cost of all items including taxes and duties payable to Central/ State/ Local Governments.

The cost of equipment supplied by OFB/DPSU/Private vendor will be considered minus GST and other taxes and duties.

1.2.2 **Where DCF Technique as Given in Para3 is Applicable.**

DCF technique will be applied on quoted cost of all items including taxes and duties payable to Central/State/Local Governments to ascertain the NPV which would be used for determining L1 Bidder.

The cost of equipment supplied by OFB/DPSU/Private vendor will be considered minus GST and other taxes and duties.

1.3 Custom duty on input materials shall not be loaded by the Indian Bidders in their price bids, if they are exempted under the existing Notifications. In such cases, necessary Custom Duty Exemption Certificate (CDEC) shall be issued by the Buyer. In cases where Custom Duty is not exempted, Basic Custom Duty on input material is to be included in the cost of Basic Equipment, Installation/Commissioning/Integration, BNE, ToT, MRLS, SMT, STE , ESP and any other item listed at Column (ii) of Para 2 below.

1.4 If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected based on indicative rates of taxes and duties at columns (vi) and (vii) of Para 2 below. If there is a discrepancy between words and figures, the amount in words will prevail for calculation of price.

2. **Price Bid Format.** The Price Bid Format is given below and Bidders are required to fill this correctly with full details. No column of the Bid format has to be left blank. The clubbing of serials/sub serials to indicate a consolidated cost is not acceptable. Columns of 'quantity', 'unit cost', 'total cost (including all taxes and duties)', 'GST/IGST (%) and Custom Duty (%) are to be filled up with '0', 'positive numerical values' or 'Not Applicable' at every row as applicable. If any column is not applicable and intentionally left blank, the reason for the same has to be clearly indicated in the remarks column.

| Ser | Items   | Qty   | Unit Cost | Total Cost<br>(iii) x<br>(iv) | Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable) |                 | Total Cost (including all taxes & duties)<br>(v) + (vi) + (vii) | Remarks |
|-----|---|-------|-----------|-------------------------------|--|-----------------|---|---------|
|     |   |       |           |                               | GST/IGST (%)   | Custom Duty (%) |   |         |
| (i) | (ii)  | (iii) | (iv)      | (v)                           | (vi)   | (vii)           | (viii)  | (ix)    |
| A.  | Cost of <b>Basic Equipment</b> . Full break-up details may be given.  |       |           |                               |  |                 |   |         |
| B.  | Cost of <b>Manufacturer's Recommended List of Spares</b> as per the format given at Annexure I to Appendix E.   |       |           |                               |  |                 |   |         |
| C.  | Cost of <b>Special Maintenance Tools and Special Test Equipment</b> as per format given at Annexure II to Appendix E.                                       |       |           |                               |  |                 |   |         |
| D.  | Cost of <b>Operator's Manual and Technical Literature</b> (in English Language) including Illustrated Spare Parts List as per Annexure III to Appendix E.   |       |           |                               |  |                 |   |         |
| E.  | Cost of <b>Training Aids</b> such as simulators, cut out models, films, charts etc as recommended by the supplier as per Annexure IV to Appendix E.         |       |           |                               |  |                 |   |         |
| F.  | Cost of recommended period of <b>Training</b> excluding the cost of travel and boarding and lodging. This should be given as per Annexure IV to Appendix E. |       |           |                               |  |                 |   |         |
| G.  | <b>Any other</b> cost (to be specified).  |       |           |                               |  |                 |   |         |

| Ser | Items  | Qty   | Unit Cost | Total Cost<br>(iii) x<br>(iv) | Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable) |                 | Total Cost (including all taxes & duties)<br>(v) + (vi) + (vii) | Remarks  |
|-----|--|-------|-----------|-------------------------------|--|-----------------|---|--|
|     |  |       |           |                               | GST/IGST (%)   | Custom Duty (%) |   |  |
| (i) | (ii)   | (iii) | (iv)      | (v)                           | (vi)   | (vii)           | (viii)  | (ix)   |
| H.  | <b>Freight and Transit Insurance Cost</b> (where applicable).                |       |           |                               |  |                 |   |  |
| J.  | <b>Total Cost</b> (Total of Serial A to H)                                   |       |           |                               |  |                 | #   | # This will be used in determining L1 vendor (duly applying provisions of Para 1 above). |
| K.  | <b>Foreign Exchange component</b> of the proposal. (for Indian Vendors only) |       |           |                               |  |                 |   | This will be with reference to Para 1.2.1 of Appendix G.                                 |
| L.  | <b>CDEC (if applicable)</b> , its authority and amount for which required.   |       |           |                               |  |                 |   |  |

**Total Cost:** \_\_\_\_\_

**Total Cost:** \_\_\_\_\_ (in words)

**Note:**

**Taxes and Duties.** All Indirect Taxes and Duties will be paid at actuals or as indicated in the Commercial bid by the Bidder, whichever is lower. In case of any change in the tax structure/rates by BUYER's Government, only incremental/decremented change will be paid.

### 3. **Evaluation of Bids by DCF Technique** -

3.1 **Net Present Value (NPV)** is a variant of DCF method, which will be used by the Buyer for evaluation of Bids. The Net Present Value of a Bid will be equal to the sum of the present values of all the cash flows associated with it. The following formula will be used for calculating NPV of a bid -

$$NPV_n = \sum_{t=1}^n At / (1 + r)^t$$

Where,

NPV = Net Present Value

$A_t$  = Expected cash flow occurring at the end of year 't' as mentioned in the Payment schedule of Bid

$n$  = Duration of cash flow stream

$r$  = Discounting Rate

$t$  = The period after which payment is done

The bid with the lowest NPV would be selected.

3.2. The Discounting rate will be \_\_\_ %". (Note-This will be the Government of India's lending rate on loans given to state governments, as notified by Budget Division of Ministry of Finance annually)

3.3. **Structuring Cash Flows for Tenders/ Bids Received in the Same Currency.** The cash outflows as shown in price bids will be taken into consideration. NPV of different bids will be calculated using the formula given above and the one having lowest NPV will be selected as L-1.

3.4 **Structuring Cash Flows for Tenders/Bids Received in Different Currencies.** Where bids are received in different currencies/combination of currencies, the cash outflow will be brought to a common denomination in rupees by converting foreign currency bids into rupees by taking into account the BC selling rate of Parliament Street Branch of State Bank of India, New Delhi on the ERV reckoning date (as defined in Annexure I to Appendix M), ie the last date of submission of Commercial Bids as per RFP. Thereafter, the procedure as described above in Para 4.3 will be applied to arrive at NPV.

3.5 All bidders are required to indicate year-wise and currency-wise amount required as per their price bid in format given below. In case the firm a bidder does not provide year-wise cash flow details in price bid, the amount quoted in their price bid will not be discounted for comparison purposes.

| <b>Year</b> | <b>Dollars</b> | <b>Euros</b> | <b>Pound Sterling</b> | <b>Rupees</b> | <b>Total Cash-flow</b> |
|-------------|----------------|--------------|-----------------------|---------------|------------------------|
|             |                |              |                       |               |                        |
|             |                |              |                       |               |                        |
|             |                |              |                       |               |                        |
|             |                |              |                       |               |                        |

\*\*\*\*

**Appendix J**  
(Refers to Para 20 and 52 of RFP)

**STANDARD CONDITIONS OF RFP**

**LAW**

1. The present Contract shall be considered and made in accordance to the laws of Republic of India.

**ARBITRATION**

(For Indian Private Vendors)

2.1 All disputes or differences arising out of or in connection with the present Contract, including the one connected with the validity of the present Contract or any part thereof, shall be settled by bilateral discussions.

2.2 Any dispute, disagreement of question arising out of or relating to this Contract or relating to construction or performance (except as to any matter the decision or determination whereof is provided for by these conditions), which cannot be settled amicably, shall within sixty (60) days or such longer period as may be mutually agreed upon, from the date on which either party informs the other in writing by a notice that such dispute, disagreement or question exists, will be referred to the Arbitration Tribunal consisting of three arbitrators.

2.3 Within sixty (60) days of the receipt of the said Notice, one arbitrator shall be nominated in writing by SELLER and one arbitrator shall be nominated by BUYER.

2.4 The third arbitrator, shall be nominated by the parties within ninety (90) days of the receipt of the notice mentioned above, failing which the third arbitrator may be nominated under the provision of Indian Arbitration and Conciliation Act, 1996 (as amended from time to time) or by dispute resolution institutions like Indian Council of Arbitration or ICADR, at the request of either party, but the said nomination would be after consultation with both the parties. The arbitrator nominated under this Clause shall not be regarded nor act as an umpire.

2.5 The Arbitration Tribunal shall have its seat in New Delhi or such other place in India as may be decided by the arbitrator.

2.6 The Arbitration Proceedings shall be conducted in India under the Indian Arbitration and Conciliation Act, 1996 (as amended from time to time) and the award of such Arbitration Tribunal shall be enforceable in Indian Courts only.

2.7 The decision of the majority of the arbitrators shall be final and binding on the parties to this contract.

2.8 Each party shall bear its own cost of preparing and presenting its case. The cost of arbitration including the fees and expenses of the third arbitrator shall be shared equally by the SELLER and the BUYER.

2.9 In the event of a vacancy caused in the office of the arbitrators, the party which nominated such arbitrator, shall be entitled to nominate another in his place and the arbitration proceedings shall continue from the stage they were left by the retiring arbitrator.

2.10 In the event of one of the parties failing to nominate its arbitrator within sixty (60) days as above or if any of the parties does not nominate another arbitrator within sixty (60) days of the place of arbitrator falling vacant, then the other party shall be entitled after due notice of at least thirty (30) days to request dispute resolution institutions in India like Indian Council of Arbitration and ICADR to nominate another arbitrator as above.

2.11 If the place of the third arbitrator falls vacant, his substitute shall be nominated according to the provisions herein above stipulated.

2.12 The parties shall continue to perform their respective obligations under this contract during the pendency of the arbitration proceedings except in so far as such obligations are the subject matter of the said arbitration proceedings.

### **ARBITRATION**

(For Central & State PSEs)

3. In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 (as amended from time to time) shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, when so authorised by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

### **ARBITRATION**

(For Defence PSUs)

4. In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party to the Arbitrator(s) appointed by Defence Secretary. The award of the Arbitrator(s) shall be binding upon the parties to the dispute.

### **FORCE MAJEURE**

5.1 Should any force majeure circumstances arise, each of the contracting party shall be excused for the non-fulfilment or for the delayed fulfilment of any of its contractual obligations, if the affected party within 30 days of its occurrence informs in a written form the other party.

5.2 Force majeure shall mean fires, floods, natural disasters or other acts such as war, turmoil, strikes, sabotage, explosions, beyond the control of either party.



5.3 Provided the acts of The Government or any state parties of the seller which may affect the discharge of the Seller's obligation under the contract shall not be treated as Force Majeure.

### **PENALTY FOR USE OF UNDUE INFLUENCE**

6.1 The Seller undertakes that he has not given, offered or promised to give, directly or indirectly any gift, consideration, reward, commission, fees brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contracts or forbearing to do or for having done or for borne to do any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the seller) or the commission of any offence by the seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1988 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller.

6.2 Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer/employee of the buyer or to any other person in a position to influence any officer/employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Buyer.

### **INTEGRITY PACT**

7.1 Further signing of an 'Integrity Pact' would be considered between government department and the bidder for schemes exceeding ₹ **20 Crores**. The Integrity Pact is a binding agreement between the agency and bidders for specific contracts in which the agency promises that it will not accept bribes during the procurement process and bidders promise that they will not offer bribes. Under the IP, the bidders for specific services or contracts agree with the procurement agency or office to carry out the procurement in a specified manner. The essential elements of the IP are as follows:-

- (a) A pact (contract) between the Government of India (Ministry of Defence) (the authority or the "principal") and those companies submitting a tender for this specific activity (the "bidders");
- (b) An undertaking by the principal that its officials will not demand or accept any bribes, gifts, etc., with appropriate disciplinary or criminal sanctions in case of violation;
- (c) A statement by each bidder that it has not paid and will not pay, any bribes;
- (d) An undertaking by each bidder that he shall not pay any amount as gift, reward, fees, commission or consideration to such person, party, firm or institution (including Agents and other as well as family members, etc., of officials), directly or indirectly, in connection with the contract in question. All payments made to the Agent 12 months

prior to tender submission would be disclosed at the time of tender submission and thereafter an annual report of payments would be submitted during the procurement process or upon demand of the MoD.

- (e) The explicit acceptance by each bidder that the no-bribery commitment and the disclosure obligation as well as the attendant sanctions remain in force for the winning bidder until the contract has been fully executed;
- (f) Undertakings on behalf of a bidding company will be made "in the name and on behalf of the company's chief executive officer";
- (g) The following set of sanctions shall be enforced for any violation by a bidder of its commitments or undertakings:
  - (i) Denial or loss of contract;
  - (ii) Forfeiture of the EMD (Pre Contract) and Guarantee for Performance-cum-Warranty Bond (after signing of the contract).
  - (iii) Payment to the Buyer of any such amount paid as gift, reward, fees or consideration along with interest at the rate of 2% per annum above LIBOR rate.
  - (iv) Refund of all sums already paid by the Buyer along with interest at the rate of 2% per annum above LIBOR rate.
  - (v) Recovery of such amount, referred to in (iii) and (iv) above, from other contracts of the Seller with the Government of India.
  - (vi) At the discretion of the Buyer, the Seller shall be liable for action as per extant policy on Putting on Hold, Suspension and Debarment of Entities.
- (h) Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.
- (j) The draft Pre-Contract Integrity Pact is attached as **Annexure I to this Appendix**. The vendors are required to sign them and submit separately along with the technical and commercial offers.

7.2 In respect of bids from DPSUs, the concerned DPSU shall enter in to a Pre-Contract Integrity Pact, on the same lines with their sub-vendors individually, in case the estimated value of each sub-contract(s) exceed ₹ 20 Crore and such subcontract(s) are required to be entered in to by the DPSU with a view to enable DPSU to discharge the obligations arising out of their bid in question in response to this RFP.

### **AGENTS**

8. The Seller confirms and declares to the Buyer that the Seller is the original manufacturer of the stores referred to in this contract. The Seller confirms that he has not engaged any person, party, firm or institution as an Agent including his Agents already intimated to MoD; to, influence, manipulate or in any way to recommend to any functionaries of the Government of India, whether officially or unofficially, to the award of the contract to the

Seller, or to indulge in corrupt and unethical practices. The Seller has neither paid, promised nor has the intention to pay to any person, party, firm or institution in respect of any such intervention or manipulation. The Seller agrees that if it is established at any time to the satisfaction of the buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that Seller has engaged any such person, party, firm or institution and paid, promised or has intention to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable for any or all of the following actions:-

- (a) To pay to the Buyer any such amount paid as gift, reward, fees or consideration along with interest at the rate of 2% per annum above LIBOR rate.
- (b) The Buyer will also have a right to put on hold or cancel the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such event be liable to refund all payments made by the Buyer in terms of the Contract along with interest at the rate of 2% per annum above LIBOR rate
- (c) The Buyer will also have the right to recover any such amount referred in (a) and (b) above from other contracts of the Seller with the Government of India.
- (d) At the discretion of the Buyer, the Seller shall be liable for action as per extant policy on Putting on Hold, Suspension and Debarment of Entities

9. In case it is found to the satisfaction of the BUYER that the SELLER has engaged an Agent, or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents and clauses relating to Penalty for Use of Undue Influence, the SELLER, on demand of the BUYER shall provide necessary information/inspection of the relevant financial documents/ information, including a copy of the contract(s) and details of payment terms between the vendors and Agents engaged by him.

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**Annexure I to Appendix J**  
(Refers to Para 6.1 (j) of Appendix J)

**PRE-CONTRACT INTEGRITY PACT**

**General**

1. Whereas the PRESIDENT OF INDIA, represented by Joint Secretary & Acquisition Manager (Army/Air Force/Maritime & Systems)/Major General & equivalent, Service Headquarters./Coast Guard, Ministry of Defence, Government of India, hereinafter referred to as the Buyer and the first party, proposes to procure (Name of the Equipment), hereinafter referred to as Defence Stores and M/s \_\_\_\_\_ represented by, \_\_\_\_\_ Chief Executive Officer (which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignees), hereinafter referred to as the Bidder/Seller and the second party, is willing to offer/has offered the Defence stores.

2. Whereas the Bidder is a private company/public company/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the Buyer is a Ministry of the Government of India performing its functions on behalf of the President of India.

**Objectives**

3. Now, therefore, the Buyer and the Bidder agree to enter into this pre-contract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

3.1 Enabling the Buyer to obtain the desired defence stores at a competitive price in conformity with the defined specifications of the Services by avoiding the high cost and the distortionary impact of corruption on public procurement

3.2 Enabling Bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices and the Buyer will commit to prevent corruption, in any form, by their officials by following transparent procedures.

**Commitments of the Buyer**

4. The Buyer commits itself to the following:-

4.1 The Buyer undertakes that, no official of the Buyer, connected directly or indirectly with the contract will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organisation or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.

4.2 The Buyer will, during the pre-contract stage, treat all Bidders alike and will provide to all Bidders the same information and will not provide any such information to

any particular Bidder which could afford an advantage to that particular Bidder in comparison to other Bidders.

4.3 All the officials of the Buyer will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

5. In case of any such preceding misconduct on the part of such official(s) is reported by the Bidder to the Buyer with full and verifiable facts and the same is prima facie found to be correct by the Buyer, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Buyer and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Buyer the proceedings under the contract would not be stalled.

### **Commitments of Bidders**

6. The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:

6.1 The Bidder will not to offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Buyer, connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.

6.2 The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Buyer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.

6.3 The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

6.4 The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

6.5 The Bidder further confirms and declares to the Buyer that the Bidder is the original manufacturer/integrator/authorised government sponsored export entity of the Defence stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Buyer or any of its functionaries, whether officially or unofficially to the award of the contract to the Bidder, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company or Agent in respect of any such intercession, facilitation or recommendation.

6.6 The bidder would not enter into conditional contract with any Agents, brokers or

any other intermediaries wherein payment is made or penalty is levied, directly or indirectly, on success or failure of the award of the contract. The bidder while presenting the bid, shall disclose any payments he has made during the 12 months prior to tender submission or is committed to or intends to make to officials of the buyer or their family members, Agents, brokers or any other intermediaries in connection with the contract and the details of such services agreed upon for such payments. Within the validity of PCIP, bidder shall disclose to MoD any payments made or has the intention to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution as an annual report during the procurement process.

6.7 The Bidder shall not use improperly, for purposes of competition or personal gain or pass on to others, any information provided by the Buyer as part of the business relationship regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.

6.8 The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts. Complaint will be processed as per **Guidelines for Handling of Complaints** in vogue. In case the complaint is found to be vexatious, frivolous or malicious in nature, it would be construed as a violation of Integrity Pact.

6.9 The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

## 7. **Previous Transgression**

7.1 The Bidder declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India.

7.2 If the Bidder makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract and if already awarded, can be terminated for such reason.

## 8. **Company Code of Conduct**

9.1 Bidders are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.

## 9. **Sanctions for Violation**

9.1 Any breach of the aforesaid provisions by the Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act 1988 or any other act enacted for the prevention of corruption shall entitle the Buyer to take all or any one of the following actions, wherever required:

- (i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.
- (ii) The EMD for pre contract period/Performance-cum-Warranty Bond post signing of the Contract shall stand forfeited either fully or partially, as decided by the Buyer and the Buyer shall not be required to assign any reason therefore.
- (iii) To immediately cancel the contract, if already signed, without any compensation to the Bidder.
- (iv) To recover all sums already paid by the Buyer, in case of an Indian Bidder with interest thereon at 2% higher than the prevailing Base Rate of SBI and in case of a Bidder from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the Bidder from the Buyer in connection with any other contract for any other defence stores, such outstanding payment could also be utilised to recover the aforesaid sum and interest.
- (v) To encash the advance bank guarantee and Performance-cum-Warranty Bond if furnished by the Bidder, in order to recover the payments, already made by the Buyer, along with interest.
- (vi) To cancel all or any other Contracts with the Bidder.
- (vii) To Put on Hold or Suspend or Debar the bidder as per the extant policy.
- (viii) To recover all sums paid in violation of this Pact by Bidder(s) to any Agent or broker with a view to securing the contract.
- (ix) If the Bidder or any employee of the Bidder or any person acting on behalf of the Bidder, either directly or indirectly, is closely related to any of the officers of the Buyer, or alternatively, if any close relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. Any failure to disclose the interest involved shall entitle the Buyer to debar the Bidder from the bid process or rescind the contract without payment of any compensation to the Bidder. The term '**close relative**' for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.
- (x) The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Buyer and if he does so, the Buyer shall be entitled forthwith to rescind the contract and all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damage to the Buyer resulting from such rescission

and the Buyer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder.

(xi) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the Buyer with the Bidder, the same shall not be opened.

9.2 The decision of the Buyer to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder shall be final and binding on the Bidder, however, the Bidder can approach the Independent Monitor(s) appointed for the purposes of this Pact.

## 10. **Fall Clause**

10.1 The Bidder undertakes that he has not supplied/is not supplying the similar products, systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India and if it is found at any stage that the similar system or sub-system was supplied by the Bidder to any other Ministry/Department of the Government of India at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, even if the contract has already been concluded.

10.2 The Bidder shall strive to accord the most favoured customer treatment to the Buyer in respect of all matters pertaining to the present case.

## 11. **Independent Monitors**

11.1 The Buyer has appointed Independent Monitors for this Pact in consultation with the Central Vigilance Commission. The names and addresses of nominated Independent Monitors (at the time of issue of RFP) are as follows (however the vendor must refer to the MoD website at [www.mod.nic.in](http://www.mod.nic.in) to check for changes to these details):-

- (a) Shri Ravikant, IAS/ Bihar (1984) (Retd),  
Apartment No 502, Tower-1, M3M Merlin,  
Sector - 67, Gurugram-122001 (Haryana)  
Mob: 9953555566  
Email – 84ravikant@gmail.com
- (b) Dr. Prabhat Kumar, IAS/ UP (1985) (Retd),  
C-120, Sector-39, Noida-201301,  
Gautam Budh Nagar (Uttar Pradesh)  
Mob : 9810530048  
Email – prabhatfamily@gmail.com
- (c) Shri Chet Ram, IRS (1985) (Retd),  
Flat No. A-203, Building Gemini, Gladys Alwares Marg,  
Hiranandani Meadows, Off-Pokhran Road No 2,  
Thane (W), Maharashtra-400610  
Mob : 9869479987  
Email – cr\_koli@yahoo.com



1.1A All communications to Independent Monitors will be copied to Director (Vigilance). The Designation and Contact details of Director (Vigilance) are as follows:-

Director (Vigilance)  
Room No 340,  
B Wing, Sena Bhawan  
New Delhi 110011  
Tele No - 011 – 23012304

11.2 After the Integrity Pact is signed, the Buyer shall provide a copy thereof, along with a brief background of the case to the Independent Monitors, if required by them.

11.3 The Bidder(s), if they deem it necessary, may furnish any information as relevant to their bid to the Independent Monitors.

11.4 If any complaint with regard to violation of the IP is received by the buyer in a procurement case, the buyer shall refer the complaint to the Independent Monitors for their comments/enquiry.

11.5 If the Independent Monitors need to peruse the relevant records of the Buyer in connection with the complaint sent to them by the Buyer, the Buyer shall make arrangement for such perusal of records by the Independent Monitors.

11.6 The report of enquiry, if any, made by the Independent Monitors shall be submitted to the head of the Acquisition Wing of the Ministry of Defence, Government of India for a final and appropriate decision in the matter keeping in view the provision of this Pact.

## 12. **Examination of Books of Accounts**

In case of any allegation of violation of any provisions of this Integrity Pact or payment of commission, the Buyer or its agencies shall be entitled to examine the Books of Accounts of the Bidder and the Bidder shall provide necessary information of the relevant financial documents in English and shall extend all possible help for the purpose of such examination.

## 13. **Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the Buyer i.e. New Delhi.

## 14. **Other Legal Actions**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

## 15. **Validity**

15.1 The validity of this Integrity Pact shall be from date of its signing and extend up to 5 years or the complete execution of the contract to the satisfaction of both the Buyer and the Bidder/Seller, whichever is later.

15.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

16. The Parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

BUYER

BIDDER

\_\_\_\_\_  
MINISTRY OF DEFENCE,  
GOVERNMENT OF INDIA

\_\_\_\_\_  
CHIEF EXECUTIVE OFFICER

Witness

Witness

1. \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

2. \_\_\_\_\_

\*\*\*\*

**Appendix K**  
(Refers to Para 6 of RFP)

**CRITERIA FOR VENDOR SELECTION / PRE-QUALIFICATION**

1. The following parameters will be used, for vendor selection / pre-qualification :-

| <b><u>Sl no</u></b> | <b><u>Parameter</u></b>     | <b><u>Criteria</u></b>   |
|---------------------|-----------------------------|--|
| (a)                 | <b>Financial</b>            |  |
| (i)                 | Net Worth                   | Net worth of entities, ending 31 <sup>st</sup> march of the previous financial year, should be positive.   |
| (ii)                | 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.   |
| (b)                 | <b>Technical</b>            |  |
| (i)                 | Nature of Business          | Vendor shall be a manufacturing entity or System Integrator of defence equipment and not a trading company, except in cases where OEM participates only through its authorised Vendors.  |
| (ii)                | Experience in related field | Min two (02) Years experience in broad areas like manufacturing/ integration / fabrication of electro optical devices. If not, then cumulative experience of at least three (03) years in above areas, resulting in gaining of competence for manufacturing II Sights. |
| (iii)               | Integration Experience      | Where product involves integration, previous experience of not less than one year/ one project in integration of systems / equipment shall be required.  |
| (d)                 | <b>Others</b>               |  |
| (i)                 | Industrial License (IL)     | Vendor should be either holding a valid defence industrial license or should have applied for the same before responding to RFP. (Items requiring IL will be as per DIPP Press Note 3 of 2014 as amended from time to time).   |
| (ii)                | Registration                | Registered for a Minimum two (02) Years, (one (01) year for SMEs). Minimum number of years not applicable for JVs constituted specifically for a project.  |

**Appendix L**  
(Refers to Para 40 of RFP)

**QA INSTRUCTIONS AND GUIDELINES FOR FRAMING DRAFT ACCEPTANCE TEST  
PROCEDURE (ATP)**

| Sl | Test                               | Requirement/Specified   | Observations | Remarks                         |
|----|------------------------------------|---|--------------|---------------------------------|
| 1. | <b>Visual Inspection :</b>         | (a) Completeness of components, serviceability, mechanical components & function ability<br>(b) Marking & Finish.<br>(c) Should be free from optical defects viz fungus, scratches, Dirt & cleanness of optics & optical coating<br>(d) Completeness of accessories (Refer Sr No ___)<br>(e) Should be free from loose, missing or damaged components.<br>(f) Workmanship   |              | Physical/<br>Visual<br>checking |
| 2  | <b>Mechanical Checks</b>           | (a) Movement of knobs, All Screw / grub screw shall be tightened.<br>(b) Dimension : L x W x H<br>(c) Fitment of Sight with Tripod mount should be satisfactory<br>(d) <b>Weight.</b> Not more than 5.0 Kg $\pm$ 20% including battery and battery mount.   |              | Physical/<br>Visual<br>checking |
| 3. | <b>Electrical Checks</b>           | (a) Operation of all switches & Power ON and OFF<br>(b) Fitment of battery for power supply<br>(c) Brightness & contrast<br>LBI (Low Battery Indication), Battery Charger   |              | Physical/<br>Visual<br>checking |
| 4. | <b>Technical Parameters for TI</b> | (a) <b>Type of Detectors.</b> Un-cooled.<br>(b) <b>Start Up Time :</b> <10 sec from display mode and < 30 sec from power of mode<br>(c) <b>Detector Resolution (FPA).</b> Min 640x480 with Pitch $\leq$ 17 $\mu$ micro meter.<br>(d) <b>Field of View.</b> Maxium 12° (azimuth) x 9° (elevation)<br>(e) <b>Optical Magnification.</b> $\pm$ 4x or better<br>(f) <b>Electronic Zoom.</b> $\pm$ 4x or better.<br>(g) <b>Diopter adjustment.</b> $\pm$ 4D or better.<br>(h) <b>Eye Relief.</b> Sight should be |              |                                 |

| SI | Test  | Requirement/Specified  | Observations | Remarks   |
|----|---|--|--------------|---|
|    |   | <p>provided with eye an relief.</p> <p>(j) <b><u>Image Polarity.</u></b> Both white Hot and Black Hot.</p> <p>(k) <b><u>MRTD.</u></b> To be provided by OEM.</p> <p>(l) <b><u>NETD.</u></b> Based on OEM Certification.</p> <p>(m) <b><u>BIT/NUC.</u></b> To be provided by OEM.</p> <p>(n) <b><u>Quality of Image.</u></b> Image should be clear (No of dead and bad pixels specs to be provided by OEM).</p> <p>(o) <b><u>Storage Capacity.</u></b> Min 32 GB (For storage recorded Data)</p> <p>(p) <b><u>Altitude.</u></b> Operable up to 15000 ft above mean sea level.</p>   |              | <p>Specification to be provided by OEM for ser No (k) to (n)</p>  |
| 5  | <p><b><u>Technical Parameters for LRF</u></b></p> | <p>(a) <b><u>Range.</u></b> Min 30m to <math>\geq 2500\text{m}</math> (To be supported by a certificate from NABL)</p> <p>(b) <b><u>Range Accuracy</u></b> : <math>\pm 5</math> m or better</p> <p>(c) <b><u>Energy Output</u></b></p> <p>(d) <b><u>Pulse Width</u></b></p> <p>(e) <b><u>Wavelength</u></b></p> <p>(f) <b><u>Divergence of Beam</u></b></p> <p>(g) <b><u>Bore Sight Accuracy</u></b></p> <p>(h) <b><u>Discrimination (Target)</u></b></p> <p>(j) <b><u>Eye Safe : Laser Range Finder to be eye safe (OEM CoC)</u></b></p> <p>(k) <b><u>Magnification</u></b></p> <p>(l) <b><u>FOV</u></b></p> <p>(m) <b><u>Diopter Setting</u></b></p> <p>(i) Parallax</p> <p>(ii) Vertically of Reticle/ Image (if equipped with reticle)</p> <p>(n) <b><u>Definition</u></b></p> <p>(o) <b><u>Eye Relief</u></b></p> <p>(p) <b><u>False Alarm Rate</u></b></p> <p>(q) <b><u>Pulse repetitive rate</u></b></p> <p>(r) <b><u>Range display on screen</u></b></p> |              | <p>Specification to be provided by OEM for ser No (c) to (h)</p> <p>Ser No (k) to (q) to be specified as applicable</p> |
| 6  | <p><b><u>Power Source</u></b></p>                 | <p>(a) Commercially available (in Indian market) rechargeable Lithium Ion or Ni MH or NCMH battery, should function for 06 (six) hrs or more on operational mode with two hrs of recording.</p> <p>(b) Should function on 180V to 240V, 50Hz</p>   |              |   |

| SI | Test                                     | Requirement/Specified  | Observations | Remarks |
|----|--|--|--------------|---------|
|    |  | <p>AC main and Generator through AC/DC adapter.</p> <p>(c) Commercially available Battery Charger for charging the battery from 180V to 240V, 50Hz AC mains along with DC charging facility from 12V to 24V DC, should be provided.</p> <p>(d) Full charging of battery should take note more than 3 hrs.</p> <p>(e) Three sets of spares batteries should be provided for enhancing OP efficiency</p>   |              |         |
| 7  | <b><u>Warranty &amp; Shelf Life.</u></b> | The Multipurpose Thermal Monocular Sight with LRF should be warranted to be free of defects for a period of 2 (Two) years with Service/ Shelf Life not less than 10000 (Ten Thousand) hrs or 5 (five) years whichever is earlier from the date of delivery   |              |         |
| 8  | <b><u>Accessories</u></b>                | <p>The following accessories of Multipurpose Night Vision Monocular Sight with Laser Range Finder be provided :-</p> <p>(a) <b><u>Technical Literature.</u></b> Training Manual and User Hand Book</p> <p>(b) Illustrated Spare Parts List</p> <p>(c) Power Supply Adapter</p> <p>(d) USB Cable/ Connector Cable (minimum 5 meters length)</p> <p>(e) Rain proof carrying container for transportation (Hard Bound) &amp; soft carrying bag (leather/synthetic- OEM Certificate with Test Report)</p> <p>(f) Three Spare Batteries</p> <p>(g) External Video Display</p> <p>(i) It should be minimum 7 inch screen size.</p> <p>(ii) I should be provided with ruggedized self-powered external video display.</p> <p>(iii) The display should feature real time video output and image snap shot and video.</p> <p>(iv) The display should be provided with at least 5m cable between the display and TI Sight.</p> <p>(v) The display resolution should be</p> |              |         |

| SI | Test                                       | Requirement/Specified   | Observations | Remarks |
|----|--|---|--------------|---------|
|    |  | minimum 800 x 600 pixels.   |              |         |
| 9  | <b><u>Climate and Durability Tests</u></b> | To be carried out as per JSS-5855-11-2019 (Revision 1) as per attached Annexure |              |         |

## NOTE :

- (i) Visual and Functional tests at Sr No.1 (a) to (f), to be carried out 100%.
- (ii) In case of FTP, Vendor Certificate duly supported with test report from NABL accredited lab to be provided for Climatic and Durability tests.
- (iii) Corrosion (Salt) test may be carried out on dummy sight as per JSS 5855-11-2019.
- (iv) Sight to be checked visually and functionally before and after each test.
- (v) Vendor Certificate submitted by the firm should be on the OEM/firm's letter head each for separate parameter.

**Appendix M**  
(Refers to Para 53 of RFP)

**DOCUMENTS TO BE SUBMITTED BY THE BIDDER ALONG WITH THEIR TECHNO-COMMERCIAL PROPOSALS**

The list of documents which needs to be mandatorily submitted by the Bidders as part of Technical Proposal are placed below. Non-submission of the documents may result in disqualification of the Bidder from the bidding process.

| Ser No | Reference                  | Document Description   |
|--------|----------------------------|--|
| 1.     | Para 5(a) of RFP           | Declaration by Bidder : Debarment of vendors                                 |
| 2.     | Para 17 of RFP             | Declaration by Bidder: Government Regulation                                 |
| 3.     | Para 18 of RFP             | Declaration by Bidder: Obligations Relevant to Transfer of Conventional Arms |
| 4.     | Para 19 of RFP             | Declaration by Bidder : Patent Rights  |
| 5.     | Para 21 of RFP             | Declaration by Bidder : Fall Clause  |
| 6.     | Para 28 of RFP             | Technical document covering performance parameters.                          |
| 7.     | Appendix B                 | Compliance Table   |
| 8.     | Appendix C                 | Warranty Clause  |
| 9.     | Appendix D                 | CERTIFICATE: Malicious Code  |
| 10.    | Annexure I to Appendix E   | Manufacturer's Recommended List of Spares (MRLS)                             |
| 11.    | Annexure II to Appendix E  | List of SMT/STEs, Jigs, Fixture and Infrastructure                           |
| 12.    | Annexure III to Appendix E | Technical Literature   |
| 13.    | Annexure IV to Appendix E  | Training Aggregates  |
| 14.    | Appendix H                 | Price Bid  |
| 15.    | Annexure I to Appendix J   | Pre-Contract Integrity Pact  |
| 16.    | Annexure I to Appendix J   | EMD  |



**MTMSL**  
**PERFORMANCE CLIMATIC AND DURABILITY TESTS**  
**(AS PER MIL STD 810-G OR RELEVANT PORTIONS OF JSS: 5855-11 : 2019),**  
**REV I (CLASS-L II)**  
**(To be carried out on 3% of the bulk)**

| <b>S No</b> | <b>Test with specified value (As per JSS: 5855-11: 2019)</b>  |
|-------------|---|
| 1.          | <b><u>Vibration Test:</u></b> Frequency range 5Hz to 350 Hz, $\pm 6$ mm constant displacement or $\pm 20$ m/sec <sup>2</sup> constant acceleration whichever is lesser. Duration 2hrs equally divided in each axis (unpacked switched off condition).   |
| 2.          | <b><u>High Temperature Test:</u></b><br>(a) <b><u>Operation</u></b> : $+55^{\circ}$ C $\pm 3^{\circ}$ C for 16 hrs and followed by<br>(b) <b><u>Storage</u></b> : $+70^{\circ}$ $\pm 3^{\circ}$ C for 16 hrs.<br>During final hour of the period for operation test, the eqpt shall be switched ON for performance check.   |
| 3.          | <b><u>Damp Heat</u></b> : At $+40^{\circ}$ C $\pm 2^{\circ}$ C, RH 93% $\pm 5\%$ for 16 hrs.  |
| 4.          | <b><u>Low Temp Test</u></b> :<br><b><u>Operation</u></b> (-) $30^{\circ}$ C $\pm 3^{\circ}$ C for 16 hrs, and followed by<br><b><u>Storage</u></b> (-) $40^{\circ}$ C $\pm 3^{\circ}$ C for 16 hrs.<br>During last 30 minutes the eqpt shall be switched ON for performance check.  |
| 5.          | <b><u>Altitude Test:</u></b> Temp : (-) $30^{\circ}$ C $\pm 3^{\circ}$ C, Height 9100 mtrs and Air pressure 30 KPa, shall be maintained for 16 hrs.<br>During last 30 minutes the eqpt shall be switched ON for performance check.  |
| 6.          | <b><u>Rapid temperature cycle</u></b> : At $+55^{\circ}$ C $\pm 3^{\circ}$ C RH not exceeding 30% for three hours than transfer to chamber at $(- )30^{\circ}$ C $\pm 3^{\circ}$ for 3 hrs. <b>Transfer duration not exceeding 15 minutes.</b><br><b>-The eqpt shall be subjected to the test in 'unpacked' and 'switched OFF' condition</b><br><b>-At the end of last cycle the eqpt shall be removed from the cold chamber and shall be subjected to recover condition.</b> |
| 7.          | <b><u>Scaling Test</u></b> : Fill nitrogen with 17.5 Kpa and shall not drop by more than 10Kpa in 30 minutes .<br>For hermitically sealed unit - No drop is allowed   |
| 8.          | <b><u>Driven Rain Test.</u></b> Spraying for 01 hr at room temp on all external surfaced with water pressure 200 Kpa $\pm 15\%$   |
| 9.          | <b><u>Dust Test</u></b> : Exposure to dust laden atmosphere at $+40^{\circ}$ C $\pm 3^{\circ}$ C for 1 hr, RH not exceeding 50%.<br>The eqpt shall be subject to this test in its unpacked & 'switched off' ondition  |
| 10.         | <b><u>Tropical Exposure</u></b> : The temp and RH of chamber raised to $+35^{\circ}$ C $\pm 2^{\circ}$ C and 95% RH over a period of 03 hrs & maintained for 12 hrs.  |

|     |   |
|-----|---|
|     | <p>20 ° + <u>5</u> °C over a period of 03 hrs &amp; maintained for 06 hrs. Total no of cycles 14 cycles.</p> <p><b>-The eqpt shall be subjected to the test in ‘unpacked’ and ‘switched OFF’ condition</b></p> <p><b>-At the end of last cycle the eqpt shall be removed from the cold chamber and shall be subjected to recover condition.</b></p> |
| 11. | <p><b><u>Corrosion (salt)</u></b> : Period of spray 02 hrs at lab conditions (unpacked and switch off)</p> <p>Temp : +35 ° C ± 2 ° C with RH 90% to 95% for a period of 22 hrs.</p> <p>Total 03 cycles</p> <p>Recovery : cleaning with distilled water and drying for 01 hrs.</p> <p><b>Test may be carried out on Dummy</b></p>                    |
| 12. | <p><b><u>Drop Test</u></b> : The equipment shall be dropped freely with minimum of disturbance at the moment of release on 150mm thick good river sand bed covered with one layer of canvas from the height of 1500mm once in each of the six directions of the three mutual perpendicular axis convenient for the instrument.</p>                  |
| 13. | <p><b><u>Bump Test</u></b> : No of Bumps 1000 ± 10 bumps, at peak acceleration 400m/sec<sup>2</sup>., Pulse duration 6ms</p>  |
| 14  | <p><b><u>Functional test post environment tests.</u></b></p>  |
| 15  | <p><b><u>Preparation &amp; finalization of Report</u></b></p>   |

**Note : (i) The sight shall be checked visually and operation before and after each test.**

**(ii) ATP will be finalised mutually after receipt of tech specification from OEM.**

**(iii) Procedure and sequence of Test should be as per JSS : 5855-11:2019.**

**(iv) Scaling test to be carried out before start of environmental and durability test also.**

**Appendix N****GLOSSARY**

|       |  |
|-------|--|
| AMC   | Annual Maintenance Contract                        |
| AoN   | Acceptance of Necessity                            |
| ATP   | Acceptance Test Procedure                          |
| CAMC  | Comprehensive Annual Maintenance Contract          |
| CKD   | Completely Knocked Down                            |
| CNC   | Contract Negotiation Committee                     |
| DAC   | Defence Acquisition Council                        |
| DGAQA | Director General of Aeronautical Quality Assurance |
| DGNAI | Director General Naval Armament Inspectorate       |
| DGQA  | Director General of Quality Assurance              |
| DPB   | Defence Procurement Board                          |
| DAP   | Defence Acquisition Procedure                      |
| DRDO  | Defence Research and Development Organisation      |
| EMC   | Electro Magnetic Compatibility                     |
| EMD   | Earnest Money Deposit                              |
| EMI   | Electro Magnetic Interference                      |
| EPP   | Enhanced Performance Parameters                    |
| ESP   | Engineering Support Package                        |
| FET   | Field Evaluation Trials                            |
| Gol   | Government of India                                |
| IC    | Indigenous Content                                 |
| ICG   | Indian Coast Guard                                 |
| IDDM  | Indigenously Designed & Developed Manufactured     |
| IM    | Indigenously Manufactured                          |
| IP    | Integrity Pact                                     |
| LRU   | Line Replaceable Unit                              |
| MET   | Maintainability Evaluation Trial                   |
| MoD   | Ministry of Defence                                |
| MRLS  | Manufacturer Recommended List of Spares            |

|       |                                    |
|-------|------------------------------------|
| M-ToT | Maintenance Transfer of Technology |
| NCNC  | No Cost No Commitment              |
| OEM   | Original Equipment Manufacturer    |
| OTE   | Open Tender Enquiry                |
| PA    | Production Agency                  |
| PCIP  | Pre Contract Integrity Pact        |
| QA    | Quality Assurance                  |
| RFP   | Request for Proposal               |
| SPB   | Services Procurement Board.        |
| SHQ   | Service Headquarters               |
| SKD   | Semi Knocked Down                  |
| SRU   | Shop Replaceable Unit              |
| TEC   | Technical Evaluation Committee     |
| ToT   | Transfer of Technology             |