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सत्यमेव जयते
Ministry of Defence
Government of India

REQUEST FOR PROPOSAL

BY

MINISTRY OF DEFENCE

GOVERNMENT OF INDIA

FOR PROCUREMENT OF

**QUANTITY TEN (10) LOW LEVEL LIGHT WEIGHT
RADAR (IMPROVED)**

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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 81 pages including cover page and Appendices.

Tele : 91-11-23018551
Fax : 91-11-23018551
E mail : skyplan-94@gov.in

File No : 50078/LLLR(I)/EP/GS/AAD-9

Directorate General of Army Air Defence/AAD-9
Room No 608, D I Wing, Sena Bhawan
New Delhi-110011

To

13 Dec 2022

**REQUEST FOR TECHNICAL AND COMMERCIAL PROPOSAL FOR PROCUREMENT OF
QUANTITY 10 LOW LEVEL LIGHT WEIGHT RADARS (IMPROVED)
CATEGORY: BUY (INDIAN)**

Dear Sir / Madam,

1. The Ministry of Defence, Government of India, intends to procure **quantity 10 (Ten) Low Level Light Weight Radars (Improved) under Buy (Indian) Category** and seeks participation in the procurement process from prospective Bidders subject to requirements in succeeding paragraphs.

Synopsis

2. **Broad Description of Equipment / System.** **Low Level Light Weight Radar (LLLR) - Improved** is a surveillance system for scanning the air space, detect, track and prioritise targets (including very low RCS), based on threat and designate them to multiple command posts through wired or wireless communication medium. The LLLR (Improved) radar is a compact, lightweight, 3D Active Electronically Scanned Array (AESA) agile multiple beam radar system. The Radar is characterised by its low weight and small physical footprint that allows for integration on a Tripod making the system portable. The Radar has Digital Beam Forming techniques in transmission, which enables the detection of targets flying at high altitudes and long distances. It has a very high elevation coverage which is a crucial factor in a multiple threat environment where the reaction time is often very short. The high update rate improves performance of the automatic target tracking functions, minimises reaction times and increases effectiveness of the supported weapon systems.

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.

Ser No	Description	Details	Reference Para of the RFP
(a)	Equipment/System required	Low Level Light Weight Radar (Improved)	Para 2 of this covering letter
(b)	Quantity Required	10 (Ten)	Para 1 of this covering letter
(c)	Categorisation of Procurement	Buy (Indian)	Para 1 of this covering letter
(d)	Minimum IC Content required	As per Para 9 of Chapter I of DAP-2020	Para 7 of RFP
(e)	Place(s) of Delivery	COD, Agra	Para 1.1 of Appendix G
(f)	Warranty Period	24 Months	Para 12 of RFP
(j)	EMD Amount	70 Lakh	Para 21 of RFP
(k)	Last date for submission of Pre-bid queries	1200hrs, 16 Dec 22	Para 23 of RFP
(l)	Date and time for Pre-bid meeting	1030hrs, 21 Dec 22	Para 24 of RFP
(m)	Last date and time for Bid Submission	1200hrs, 27 Dec 22	Para 25 of RFP

4. **Special features of the RFP.** Radars will be procured through OTE. Vendors may be required to demonstrate all capabilities of the equipment. The bidder is required to keep the equipment fully ready as per the timelines given by the Buyer for a demonstration (to be organised by the Bidder) cum evaluation as per methodology given at **Appendix F** to this RFP at the location as decided by the Empowered Committee, in India, at 'No Cost No Commitment' basis. The demonstration will be evaluated by the members of Empowered Committee (EC) / members nominated by the EC. The TEC and CNC would be carried out by members of the Empowered Committee. The commercial bid of the Bidder would be opened only if he is declared successful by the EC, in both, the Technical bid evaluation and the demonstration. The delivery of the contract should be completed 12 months from the date of signing of the contract.

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

Ser No	Description	Page No
(a)	Part I - General Requirements	06
(b)	Part II - Technical Requirements	12
(c)	Part III - Commercial Requirements	17
(d)	Part IV - Bid Evaluation and Acceptance Criteria	18

6. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM) or Authorised Vendors or Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEM) 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.

7. The end user of the equipment is the **Indian Army**.

8. This RFP is being issued with no financial commitment; and the Ministry of Defence 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.
9. This RFP is non-transferable.
10. 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.
11. The receipt of the RFP may please be acknowledged.



Yours faithfully,


(Jagroop Singh)
Major General
Chairman, Empowered Committee

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Disclaimer

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/ 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 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.

5. **Business Eligibility**

(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.

(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) cases}**. The detailed Pre-Qualification criteria for the Bidders for participation in the instant procurement case are placed at **Appendix L** to this RFP. All Bidders are to submit details as per the criteria along with the Technical Bids. These would be evaluated by the TEC comprising of members of the Empowered Committee or the representatives nominated by the Empowered Committee.

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 **Paras 9 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 **Paras 4 to 7 of Appendix B to Chapter I of DAP 2020**. The right to verification of Bidder/ sub-contractors / suppliers / technology partners shall vest in the Ministry of Defence as prescribed under **Para 10**; and aspects of delivery, certification, payments, withholding of payments and imposition of penalties shall be as prescribed under **Paras 11 to 15** thereof. Furthermore, Bidders in 'Buy (Indian)' will be required to submit their indigenisation plan in respect of indigenous content as stipulated in **Paras 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) for reference and free download.

8. **Year of Production**. Deliverables of **10 Low Level Light Weight Radars (Improved)** 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 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 will be completed within twelve months from the date of signing of contract as per the under mentioned schedule: -

Ser No	Delivery Schedule (in Months)	Deliverables (Qty)	Remarks
(a)	$T_0 + 12$	10 x LLLR (Improved)	(i) Training Equipment and MRLS, SMT/STE as per contract on pro rata basis. (ii) T_0 is the date of signing of contract.
	Total	10 x LLLR (Improved)	

Notes.**(i) Manufacturers Recommended List of Spares (MRLS).**

(aa) MRLS delivered to be completed six months before the expiry of warranty period of each system.

(ab) All consumables and spares required for scheduled maintenance and servicing (as per Maintenance Philosophy of vendor) during the warranty period will be provided on pro rata basis with the equipment.

(ii) Complete quantity of SMT / STEs to be delivered with first batch.

(iii) **Technical Literature & Training Aggregates.** The entire quantity to be delivered along with the first lot of equipment.

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. **Preservation.** The deliverables supplied are to be preserved post-delivery/JRI/ installation. In case, JRI necessitates unpacking to the extent that the preserved life of the deliverables is affected, Bidder is to undertake re-packing to restore the preserved life to the specified period at his own cost. In cases of any delay in STW/installation/integration trials/commissioning, attributable to the Buyer, and if preservation period expires during the storage prior installation/post installation and prior trials, the deliverables are to be re-preserved by the Bidder against payment of de-preservation/re-preservation charges as per price quoted in the Price Bid. To facilitate this, the cost of in-storage/in-situ de-preservation/ re-preservation, as applicable, is to be indicated in the Price Bid. This cost quoted by the Bidders at Ser (i)(G) of Price bid format at **Appendix H** would be counted towards determination of L1 and will be paid as per the price quoted if the service is utilized for extending the preserved life. In the cases where installation and trials is part of the Contract, the warranty will commence from the date of commissioning/acceptance. In cases where the delay for installation, trials and commissioning is not attributable to the Bidder, payment terms for the stage related to installation and commissioning will be in accordance with **Appendix G.**

12. **Warranty.** The deliverables supplied shall carry a warranty for **24 months.** Commencement of warranty will be from the date of acceptance post JRI. **Warranty Clause** is given at **Appendix C** to this RFP.

13. **In Service Life.** The In Service Life of the equipment will be **15 years.** In case of service life, the relevant storage conditions should be clearly specified. 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 evaluation by Empowered Committee.

14 **Product Support.**

(a) 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 **25 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. Bidder to provide shelf life extension methodology along with the Technical Bid. Bidder to also be associated with defect investigation as long as equipment is in service.

(b) **Codification.** The Bidder agrees to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract (as applicable) 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 Standardisation. 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).

15. **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 Capability Development Directorate (CD-11), IHQ of MoD (Army), Gol as per the agreed mechanism.

16. **Training of Crew, QA and Maintenance Personnel.** 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. This training shall be designed to give the operators and maintainers necessary knowledge and skills to operate & maintain equipment (level 1 to 4 or 'O'), as applicable. The syllabus will be defined by the Bidder in consultation with the Buyer at the time of Contract. 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 etc will be catered by the Bidder.

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

Ser	Training For	Number of Personnel	Duration (Working Days)	Batches	Location	Remarks
(a)	Users	24	18	01	Bidder Premises	
(b)	EME	16	14	02	Bidder Premises	
(c)	DGQA	04	07	01	Bidder Premises	

Note.

- (i) Training of DGQA personnel to be provided before commencement of PDI. The training should enable QA personnel to correlate the ATP and for carrying out effective defect investigations.
- (ii) The trained EME personnel should be able to analyse the MRLS to align it to actual on ground requirement. The training should bring out utilization of provided MRLS items including procedure of their fitment/ repair.

18. **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.

19. **Transfer of Conventional Arms.** 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.

20. **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.

21. **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 and shall also deposit **₹ 70 Lakhs as EMD** through any of the instruments mentioned therein. This would be submitted in a separate envelope clearly marked as '***IP and EMD***' at the time of submission of Technical and commercial offers. The Beneficiary Bank Details for furnishing IPBG are as follows:-

(IFSC Code - SBIN0000691)
 State Bank of India New Delhi Main Branch
 C Block, 11 Parliament Street
 New Delhi, Pin: 110001

22. **Fall Clause.** If the equipment being offered by the Bidder has been supplied / contracted with any organisation, 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

23. Any queries / clarifications to this RFP may be sent to this office by **1200hrs, 16 Dec 22**. A copy of the same may also be sent to:-

Directorate General of Army Air Defence/ AAD-9
Room No 608, D-I Wing,
Sena Bhawan
New Delhi-110011
Tele & Fax No: 91-11-23018551

24. **Pre-Bid Meeting**. A pre-bid meeting will be organised by SHQ at **1030hrs on 21 Dec 22** at the address given at **Para 23** above 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 the address given at **Para 23** above, to facilitate obtaining of security clearance.

25. **Submission of Bids**. The Technical and Commercial Proposals along with IP should be sealed separately in three separate envelopes clearly indicating Commercial / Technical / IP **and other Indemnity Bound** 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 address given at **Para 23** above by 1200 hours on **27 Dec 22**.

26. Offer opening by a Offer opening committee will be held at **1030hrs on 28 Dec 22** at the same venue as indicated at **Para 23** 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

27. The second part of the RFP incorporates the aspects of SQRs 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.

28. **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.

29. **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. These would be evaluated during TEC. 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 revised list of MRLS to this effect is to be submitted prior to Staff Evaluation.

30. 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.

31. **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.

32. 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.

33. **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.

34. **Demonstration/ Evaluation.** The Bidder is requested to confirm his willingness to provide the equipment for Demonstration in India on "No Cost No Commitment" basis. The location of the demonstration will be decided by Empowered Committee. Demonstration will be completed as per Appendix B of Chapter V of DAP 2020. The Buyer will depute its representatives for the Demonstration. If any part of the Demonstration are 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 or facilities which the Buyer may choose to provide free of cost. Demonstration Methodology is given at **Appendix F** to this RFP.

35. **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. The details of ESP proposals, must also be submitted separately by the Bidder with technical aspects being included in the technical offer and commercial aspects being included in the commercial offer.

36. **Spares.** The MRLS requirement for two years 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.

37. As brought out at **Para 29**, 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. These would be evaluated during Evaluation. 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 revised list of MRLS to this effect is to be submitted prior to Evaluation. The Buyer would also have the option to amend the MRLS proposed by the Bidder within **two** 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. The 'Buy Back' clause would not be applicable for additional spares included by the Buyer in MRLS during Evaluation stage, as brought out at **Para 29** of RFP.

38. **Online Inventory Management System (OIMS).** The Army is in the process of implementing its own OIMS from workshop upto COD level. The vendor will be required to provide data of main equipment, its accessories and spares in the format required for its uploading on OIMS of the Army for inventory management by Ordnance Depots and by EME

workshops. Following inputs is to be obtained from the firm in excel format in soft copy with respect to 100% data of all spares/ accessories/ Major and minor accessories: -

COS Sec	Part No	Manufacturer Part No	Nomenclature	Source of Supply	Country of Origin of the material	Net wt (in Kg)	Basic Material

39. **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 25 years (or any other period as applicable).

Evaluation of Technical Offers

40. The Technical Offer submitted by the Bidder will be evaluated by Empowered Committee (EC) to confirm that the equipment being offered meets the Operational Characteristics as elaborated at **Appendix A**. In addition to the characteristics mentioned in Appendix A, the equipment should be compatible with NavIC and DSM. Apart from the documents submitted, a demonstration of the equipment will form part of the Technical Demonstration to the EC. The bidders would be asked to transport the equipment alongwith the accessories for demonstration at a location to be decided by the Empowered Committee, in India, to be witnessed by the members of the EC / Members nominated by the EC for evaluation as per the methodology given at **Appendix F** to this RFP, on 'No Cost No Commitment' basis. The Bidder 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.

41. **Commercial offers will be opened only of Bidders whose equipment is short-listed, after TEC and demonstration/ evaluation.** In other words, the equipment would be required to be demonstrated and found suitable by Empowered Committee prior to commencement of any commercial negotiations.

Quality Assurance Instructions & Technical Evaluation Plan

42. Bidder is to submit a Draft Acceptance Test Procedure (ATP) along with the Technical bid as per the QA instructions and Technical Demonstration Plan. Based on the draft ATP, the ATP will be finalised by the Buyer's QA agency and user with Bidder at the CNC stage. ATP will lay down the tests to be carried out during PDI and JRI. It shall be ensured that there are 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 authorised Third Party Inspection (TPI) Agencies, the same will be spelt out in the QA instructions and the details included in the finalised ATP. QA of equipment will be carried out as per finalised QA plan in the contract. Draft ATP Guidelines are att at **Appendix K**.

Marking and Packaging

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

“LOW LEVEL LIGHT WEIGHT RADAR (IMPROVED)”

(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.

(d) Each package will be marked with indelible ink in English Language. Following to be clearly marked on the equipments:-

- (i) Part Number.
- (ii) Nomenclature.
- (iii) Contract Annex Number.
- (iv) Annex Serial Number.
- (v) Quantity Contracted.

(e) One copy of the packing list in English shall be inserted in each cargo package and the full set of the packing lists shall be placed in Case No 1 painted in a yellow colour.

44. 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.

45. **Packaging of Deliverables**. The SELLER shall provide packaging and preservation of the equipment spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, transshipment, storage and weather hazards during transportation, subject to proper cargo handling. The SELLER shall

ensure that the stores are packed in containers which are made sufficiently strong, and with seasoned wood. The packing cases should have hooks for lifting by crane / forklift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed. The packing of the equipment and spares/ goods shall conform to the requirements of specifications. Each spare, tool and accessory shall be packed in separate cartons. A label in English and also Hindi for Indian supplier shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. A tag in English with said information shall be affixed to complete quantity contracted of the item. The cartons shall then be packed in packing cases as required. 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.

46. 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.

47. **Monitoring of Project Based on Progress of Delivery (as applicable)**. In case the project does not proceed as per the indicated timelines for various contractual milestone(s), the Buyer will have the right to invoke Termination of the project.

48. The Bidder is to indicate the proposed timelines in the Technical Bid. On conclusion of the Contract, these delivery will be monitored by the Buyer.

49. The EC is to be organized at quarterly interval post signing of the contract. The Bidder shall attend the progress monitoring meetings through its suitably qualified representatives and shall submit progress reports to the Buyer.

PART III - COMMERCIAL REQUIREMENTS

50. 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

51. 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.

52. Commercial offers will be opened after successful evaluation of Technical Offer by Empowered Committee (EC). The Commercial Offer must be firm and fixed and should be valid for at least 12 months from the last date of bid submission.

Commercial Bid Opening

53. 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.

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

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

Additional Aspects

56. **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

57. 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.

58. 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.

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

60. **Evaluation and Acceptance Process.**

(a) **Evaluation of Technical Proposals.** The technical proposals forwarded by the Bidders will be evaluated by a Empowered Committee through a TEC. The TEC will examine the extent of variations / differences, if any, in the technical characteristics of the equipment offered by various Bidders with reference to the operational characteristics and prepare a "Compliance Statement" for shortlisting the Bidders. Demonstration would be conducted for Operational Characteristics as **Appendix A**. Demonstration will be carried out, which will give out the compliance of the demonstrated performance of the equipment vis-à-vis the requirements. The compliance would be determined only on the basis of the parameters specified in the RFP. The EC will analyse the demonstration report and shortlist the equipment recommended for procurement.

(b) **Evaluation of Commercial Bid.** The Commercial bids of only those bidders will be opened when, whose demonstration have been cleared by Empowered Committee and the equipment has been shortlisted. 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 invited for negotiations by CNC (if reqd).

(c) **Contract Conclusion / Placement of Order.** The successful conclusion of CNC will be followed by contract conclusion.

61. **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 equipment 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 27, 28, 29, 31, 31(a) & 32 of RFP and 8 to Appendix C of RFP)

OPERATIONAL CHARACTERISTICS AND FEATURES

Operational Parameters

1. Low Level Light Weight Radar (Improved) system shall consist of the following components: -

- (a) Search radar.
- (b) Commanders Display Unit (CDU).
- (c) Target Designation System (TDS).
- (d) Power Supply Unit.

2. **System Visualization.**

(a) A Low Level Light Weight Radar (Improved) system is visualized to comprise of a three dimensional (3D) Active Electronically Scanned Array (AESA) technology search antenna, Commanders Display Unit (CDU), Target Designation System(TDS), and integral power supply system. The equipment must be light weight and man portable with efficient ECCM capability.

(b) **Technology.** Three dimensional (3D) Active Electronically Scanned Array (AESA) technology search antenna based on GaN T/R Modules with digital beam forming.

3. The Low Level Light Weight Radar (Improved) system should have the flexibility in employment and deployment to provide Air Defence support to Vulnerable Area/ Vulnerable Point (VA / VP). The Low Level Light Weight Radar (Improved) system should have the following operational parameters / capabilities: -

Ser No	Parameter	Requirement
<u>Performance Characteristics</u>		
(a)	Terrain	Suitable of being deployed and operated in mountains, High Altitude Area (HAA), plains, semi deserts, deserts and coastal regions.
(b)	Target tracking capability	>100 targets
(c)	Target Designation	Capability to designate minimum 20 tracks simultaneously to minimum 10 command posts or 10 weapon systems each having Target Data Receivers (TDRs) up to a distance of 20 Km from the radar, using line, and radio / Radio Relay and should be scalable

Ser No	Parameter	Requirement
		upto 20 x TDRs.
(d)	ECCM Facilities	(i) Facilities to detect, depict & work through both active and passive jamming. (ii) Facilities to counter deception jamming in range, azimuth and velocity. (iii) Side lobe cancellation /Ultra Low Side Lobes/ Side Lobe cancellation. (iv) Random PRF and frequency hopping. (v) Facility for sector blanking & sector transmission.
(e)	Operation Temperature Range	(i) Minimum Temperature. Between minus 20°C and minus 10°C. (ii) Maximum Temperature. Between 40°C and 45°C.
(f)	Integration with AKASHTTEER	Radar should be compatible for integration with Akashteer C & R module with two way exchange of data.
(g)	Software	Equipment should operate on propriety software.
(h)	Own Location and North Orientation	Radar should have auto alignment capability through (IRNSS/ GPS /GLONASS) indicating north and own location (10 figure GR).
(j)	Recording	Radar should be capable of recording minimum four hours of computer activities. All data should be recorded with a time tag. The recorded data should be capable of being down loaded to an external debriefing system (Laptop/ PC Computer) for generation of the required debriefing reports.
<u>Physical Characteristics.</u>		
(k)	Transportability	Low Level Light Weight Radar (Improved) system must be man portable and transportable by 'In Service' Load Carrying vehicles, by rail, aircraft and underslung by helicopter.
(l)	Weight	Maximum Weight of Radar System. Weight of radar system (unpacked) < 175 Kgs (Excluding power supply unit).
(m)	Operating Altitude of Radar	5000 m above Mean Sea Level.
(n)	Time to bring equipment into action	Not more than 10 minutes.

4. **Individual Component Requirements.**

(a) **Search Radar.** Search radar of the **Low Level Light Weight Radar (Improved)** should provide continuous 3D surveillance of friendly and hostile aerial targets in the area of responsibility. The radar should comprise of a three dimensional (3D) Active Electronically Scanned Array (AESA) technology search antenna based on GaN T/R Modules with digital beam forming. It should be able to detect all types of aerial targets up to 50 Kms with a wide beam coverage in elevation.

(b) **Commanders Display Unit (CDU).** CDU must provide full remote control of the radar modes, display, provide real time information about the system's status applying user friendly Graphic User Interface(GUI) and can be deployed upto 50 meters from the radar. The display should have a GeoRef /grid lat – long overlay and should be compatible with Defence Series Maps.

(c) **Target Designation System.**

(i) A suitable target designation system should be available which is capable of passing target data to minimum 10 command posts or 10 weapon systems through Target Data Receiver (TDR) up to a distance of 20 Km from the radar, using line, and radio / Radio Relay with suitable display system. TDRs must be based on rechargeable batteries with suitable charging sets.

(ii) Facility must exist to apply parallax correction to the target data automatically. The position determining equipment should be based on IRNSS / GPS /GLONASS available in the TDR.

(iii) TDR should display the target attributes of minimum four priority targets after parallax correction in prioritized sequence based on threat. Prioritisation should be based on the target speed, its location and heading with respect to the TDR.

(iv) For Threat Neutralization the Target Data Receiver should have interface port to provide target cue to Weapon System.

(v) Audible / visual alert should be available in TDR on the appearance of 1st target with provision to reset the alert.

(d) **Power Supply Unit.**

(i) Adequate power supply with backup for uninterrupted operation of the radar. The endurance of each power supply unit should not be less than 8 hours without refueling.

(ii) The generator should be compliant to the latest Central Pollution Control Board (CPCB) norms.

(iii) Facility should also be provided to operate it from commercial power supply.

(iv) UPS should be provided as a power back up of not less than 20 minutes for operation of system computers / display console to ensure that the data is not lost and batteries should be commercially available.

(v) Maximum weight of generator should be less than 50 Kg.

Technical Parameters

5. The Low Level Light Weight Radar (Improved) system should be able to transmit target coordinates to minimum 10 command posts or 10 weapon systems and exercise tactical control on them. The radar should have the following technical parameters/capabilities: -

Ser No	Parameter	Requirement
(a)	Capable of detecting and providing 3D data of aerial objects of specification at ranges	(i) RCS of 2 sqm target - Upto 50 Km (ii) RCS of 0.1 m ² or more - Upto 18 Km (iii) RCS of 0.001 m ² or more - Upto 4 Km
(b)	Minimum Detection Ranges	200 m or less
(c)	Elevation Coverage	≥ 70 ⁰ (incl negative elevation coverage upto-5 ⁰)
(d)	Bearing Coverage	360 ⁰
(e)	Range Accuracy	≤ 50 m
(f)	Azimuth Accuracy	≤ 0.5 ⁰
(g)	Elevation Accuracy	600 m at max range
(h)	Speed of Target	Upto 850 m/s (Vendor certification for speeds exceeding 300 m/s) and should also be capable of detecting hovering aerial objects.
(j)	Tgt Update Rate.	≤ 2 sec
(k)	Target Detection Altitudes	Upto 10,000 meters

6. **Maintainability Requirements.**

(a) Test Equipment (BITE)/Power On Self - Test (POST).

(b) Protection to prevent reverse polarity fitment for all PCBs/Cards/Cables/Batteries.

Miscellaneous.

7. **EMI / EMC.** Compatibility to MIL STD 461 E/F.

8. **Storage.** Weight of radar packed with rugged hard cases < 300 Kgs (excluding power supply unit).

9. **Service Life.** The Radar should have a service life of 15 yrs or more (Vendor certification).

10. **Protection Against Lightning.** The system should be provided protection against lightning.

Appendix B
(Refers to Para 27, 28, 31(b) &
32 of RFP)

COMPLIANCE TABLE

For _____ (Equipment name)

Ser No	Requirement as per the RFP	Compliance/ Partial Compliance	Indicate references of Paras/Sub Paras of the Main Technical Document
General Conditions of RFP (Para 01 to 61)			
Technical Parameters as per Appendix A			
	Operational Characteristics and Features		
Commercial Parameters as per RFP			
	Performance-cum-Warranty Bank Guarantee as per Para 2 of Appendix H of RFP		
	Advance Payment Bank Guarantee as per Para 1.4.1 of Appendix H of RFP		
	Earnest Money Deposit as per Para 24 of RFP is ₹ Seventy (70) Lakhs		

Appendix C
(Refers to Para 12 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 (JRI) or from the date of installation and commissioning, (as per Para 13 and as applicable on case to case basis) that the goods/ stores/ services supplied under this contract and each component used in the manufacture thereof are free from all types of defects/ failures (including latent and patent defects).
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. No spares will be drawn during the warranty period from the MRLS. Warranty of the equipment would be extended by such duration of downtime. Record of the downtime would be maintained by user in logbook. Spares and all consumables required for warranty repairs shall be provided by the **SELLER** himself. The **SELLER** also warrants that the special oil and lubricants 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 60 days of the warranty period.
5. If a particular equipment/ goods fails frequently and/ or, the cumulative downtime exceeds **5%** of the warranty period or a common defect is noticed in more than **10%** of system with respect to a particular item/ component/ sub-component, that complete item/ equipment shall be replaced free of cost by the **SELLER** within a stipulated period of 45 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. The time period, beyond 45 days for which the equipment remains down (Out of Action) will consequently result in the warranty getting extended by the same duration.
6. The MTBF should be at least 72 hours of continuous operation and at least 2000 hrs of operation for the entire system and with minimum MTTR.
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 the goods/ stores shall be extended to that extent.

9. **The SELLER warrants that the goods supplied will conform to the Temperature and Humidity conditions as mentioned at Appendix 'A' to RFP.**

Appendix D
(Refers to Para 33 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:

Appendix E
(Refers to Para 35 & 36 of RFP)

PRODUCT SUPPORT : REPAIR AND MAINTENANCE PHILOSOPHY

1. **Maintenance Philosophy.** Maintenance of the equipment is structured on three 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.** Includes Unit and Field Repairs (1st & 2nd Level).

(i) **Unit Repairs.** Repairs, carried out within the unit holding the equipment using tools supplied by the manufacturer as per scaling. These repairs generally pertain to cleaning, lubrications, minor repairs and replacement of components and minor assemblies including Line Replaceable Units (LRUs) etc, carried out without any sophisticated tools or test equipment. The manufacturer is required to provide the following as per provisions in the RFP for carrying out such repairs: -

(aa) Table of Tools and Equipment (TOTE) with each equipment including operators manual.

(ab) Scaling of Special Maintenance Tools (SMT), Special Test Equipment (STE) and Special Equipment (SE) as required.

(ii) **Field Repairs.** Repairs carried out at field level by technicians specially trained for the purpose, and where the required special tools and spares provided. These repairs comprise replacement of common Line Replaceable Units (LRUs), sub-modules, other components which may require Special Maintenance Tools (SMTs) supported by diagnostics using Special Test Equipments (STEs). The vendor may also include Built-in Test Equipment (BITE) facility to identify fault upto field level. In total there shall be three field workshops to provide repair cover to quantity 10 Low Level Light Weight Radars. The manufacturer is required to provide the following:-

(aa) 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.

(ab) Additional Special Maintenance Tools and Test Equipment needed for each such field/flotilla/station work shop.

(iii) **'I' Level.** Includes 3rd level Intermediate Repairs by AAD Regiment workshop. 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 field 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. The manufacturer is required, among others, to provide the following:-

- (aa) Quantity and specification of spares up to PCB level that need to be stocked for a population of the equipment.
- (ab) Special Maintenance Tools and Test Equipment that has to be provided to each of these workshops.
- (ac) Oils and lubricants necessary for Servicing.
- (ad) All necessary technical literature.
- (ae) Calibration facilities for test equipment, where applicable.

2. To sustain and support equipment through its operational life-cycle, MRLS Support requirements for at least 2 years beyond the warranty period will be procured along with the main equipment. The equipment could be provided product support through any one or combination of the following details which are elucidated in subsequent paragraphs:-

Engineering Support Package (ESP)

3. ESP is the basic engineering support 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 two years beyond warranty as stipulated in the RFP. Based on the explanation given above, you are requested to provide MRLS to sustain the equipment for a period of Two Years for various levels of repair as per format given at **Annexure I** to this Appendix. The vendor will be required to provide these both with Technical and Commercial proposals. Cost of the MRLS, along with likely consumption rate of spares is to be provided with the Technical 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. 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 37 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. The 'Buy Back' clause would not be applicable for additional spares included by the Buyer in MRLS during FET and SE stage, as brought out at **Para 37 of RFP**.

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, and will be validated by Buyer during the demonstration for the maintenance of equipment. The list of equipment required to be supplied will incorporate Adequacy Clause, as elaborated above. Bidder will undertake installation of SMT/ STEs at the nominated premises of the buyer.

6. **Technical Documentation.** The Bidder will be required to provide the technical literature preferably in IETM (Interactive Electronic Training Manuals) in Level 4 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) User Handbook/Operators Manual in English and Hindi.
- (b) **Technical Manuals.** (as per governing JSG/Guide for other technologies)
 - (i) **Part I.** Tech description, specifications, functioning of various systems.

- (ii) **Part II.** Inspection/Maintenance tasks repair procedures, materials used, fault diagnosis and use of Special Maintenance Tools (SMTs)/Special Test Equipment (STEs).
 - (iii) **Part III.** Procedure for assembly/disassembly, repair up to component level, safety precautions.
 - (iv) **Part IV.** Part list with drawing reference and List of SMTs/STEs Test Bench.
 - (v) Rotable list, norms of consumption, mandatory/ non-mandatory spares list for each system.
- (c) Table of Tools & Equipment (TOTE) & carried spares.
 - (d) Complete Equipment Schedule.
 - (e) Repair and Servicing schedule.
 - (f) Design Specifications.
 - (g) Technical Manual on STE with drawing references.
 - (h) Condemnation limits.
 - (i) Packing specifications /instructions.
 - (j) Any additional information suggested by the OEM.
 - (k) The documents listed at Serial 6 above are to be delivered to the designated AHSP by $T_0 + 2$ Months where T_0 is the date of signing of contract.

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:-

Table - 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 (level 1 to 4 or 'O') 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, 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 agreeing to provide 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.

9. Bidder to provide following with the commercial offer :-

(a) **Itemised Spare Parts Price Lists (ISPPL)**. ISPPL for all Spares or Line Replaceable Units (LRUs) of the equipment along with their Base price, annual escalation, delivery period and the MTBF (where applicable) be provided, at the time of submission of commercial offer. The ISPPL shall also include details of the source, especially for items which are COTS, bought-out, proprietary, etc. ISPPL shall also indicate interoperability of spares across projects, in case spares/equipment is already inducted in the Indian Armed Forces. The Bidder would submit a comprehensive Itemised Spare Parts Price Lists (ISPPL) comprising the following: -

- (i) Complete Part Identification List (PIL) for all Spares or Line Replaceable Units (LRUs), along with corresponding unique part numbers. The list is not to be limited to MRLS (Depot spares) or On-board Spares (spares along with the system) and should comprise entire list of spares of the equipment.
- (ii) Base Price list of each of the spares along with annual escalation at time of submission of the offer.
- (iii) Delivery Period of each spare after receipt of Order.
- (iv) Mean Time Between Failure (MTBF), where applicable.
- (v) Terms and conditions for supply of spares.

Table 2 - Illustrative Format for Submitting Details of Spares

S No	Part No	Description	Qty / MoQ (Where applicable)	Unit Price List (along with annual escalation)	Delivery Period	If Recommended, as MRLS

Note:- The following details be included in the spare parts submission offer:-

- (vi) Sourcing of spares wrt COTS and Proprietary.
- (vii) Interoperability of spares across projects, in case the part/system/sub-system, etc. is already inducted in some other equipment currently in service

with the Indian Armed Forces, or has been contracted for supply to the Indian Armed Forces.

Active Technology Obsolescence Management (where applicable)

10. OEM will indicate his methodology to undertake Active Obsolescence Management through life cycle of equipment which would include upgradation of systems/ subsystems/ units on completion of its fair service life. The Bidder/OEM (as applicable) shall also intimate the 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 (as applicable) will notify the Buyer not less than three 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 (as applicable) will submit techno-commercial proposal for upgradation of equipment, wherever applicable, to mitigate technology obsolescence and for ensuring product support for next 15 years.

Annexure I to Appendix E
(Refers to Para 4(a) of Appendix E)

MANUFACTURER'S RECOMMENDED LIST OF SPARES (MRLS)

EQUIPMENT: LLLR(I)

Original Equipment Manufacturer (OEM): _____

Ser No	Manufacturer's Part No	Source of Supply	Nomenclature	Nos fitted in one equipment	Illustrated spare Part List (ISPL) Reference	Unit Cost	Recommended scale for two years	Total Cost	Remarks
							'O' & 'I' Level Repair	'O' & 'I' Level Repair	
							10 Radars		
Total Cost									

Note:

1. Maintenance spares/stores like lubricants, sealing compound, gases should be given separately giving source of supply.
2. Spares for component repairs should be included under the column of nodal repair & Base Repair as suggested by OEM.
3. In 'Remarks' column following information (if applicable) be given:
 - (a) If an item has a shelf/operational life it be marked as 'G' and life indicated.
 - (b) Matching set of components be indicated.
 - (c) Item which can be locally manufactured should be marked 'LM'.
 - (d) Items which cannot be manufactured in India due to sophisticated design/technology may be marked as 'SI' (Special Item).
 - (e) 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.
4. MRLS should be drawn out of the 'Part List' of the equipment, which should be separately given as part of Technical Manual Part IV.
5. If the main equipment consists of other equipment then MRLS should be prepared for them under proper heads.

6. *MRLS be prepared as per the maintenance concept of the customer **Appendix E** to this RFP).*
7. *Items provided along with the equipment as spares should also be included in MRLS.*
8. *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, Nodal 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 Maintainability Equipment Trial (MET).*
10. *MRLS for test equipment should also be provided on the similar format.*

Annexure II to Appendix E
(Refers to Para 5 of Appendix E)

LIST OF SMT/STEs, JIGS, FIXTURE AND INFRASTRUCTURE

EQUIPMENT: _____
Original Equipment Manufacturer (OEM): _____

Ser No	Manufactures Part No	Designation	Unit Cost	Nos Required	Brief Purpose	Remarks
					'O' Level Repair Intermediate Repair	
				05 x Sets		Beyond field level repair by the OEM

Note:

- (i) Prepare separate sheet for each type of equipment.
- (ii) Specify in remarks column whether the Special Test Equipment (STE)/Special Maintenance Tools (SMTs) can be used as general purpose equipment on any other kind of equipment.
- (iii) For Nodal Repairs/Base repairs quantity required should be for repair of 10 equipments at a time.
- (iv) If test equipment is commercially available ex India, the source of supply be specified.
- (v) Test equipment for calibrating the STEs should be included in the list above.
- (vi) Test equipment which are required to be provided by the customer should also be included in the list above.

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

TECHNICAL LITERATURE

Equipment : Low Level Light Weight Radar (Improved)

Original Equipment Manufacturer (OEM): _____

<u>Ser No.</u>	<u>Technical Literature</u>	<u>Unit Cost</u>	<u>Quantity</u>					<u>Total Cost</u>	<u>Remarks</u>
			<u>User</u>	<u>EME</u>	<u>DGQA</u>	<u>DGOS</u>	<u>Total</u>		
1.	User Handbook / Operators Manual		05	05	01	-	11		
2.	Design Specifications		03	05	01	-	09		
3.	<u>Technical Manual.</u> (a) <u>Part I.</u> Tech description, specifications, functioning of various Systems. (b) <u>Part II.</u> Inspection/Maintenance tasks, Repair procedures, materials used, fault diagnosis and use of Special Maintenance Tools (SMTs)/ Special Test Equipment (STEs). (c) <u>Part III.</u> Procedure assembly/ disassembly, repair up to component level, safety precautions. (d) <u>Part IV.</u> (i) Part list with drawing reference (ii) List of SMTs/STEs with Test Bench		03	05	01	-	09		
			03	05	01	-	09		
			03	05	01	-	09		
			03	05	01	-	09		
4.	Manufacturer's Recommended List of Spares (MRLS)		-	05	01	01	07		
5.	Illustrated Spare Part list		-	05	01	01	07		
6.	Technical Manual on STE with drawing Reference		-	05	01	01	07		
7.	Interactive Electronic Training Manuals (IETMs) of class III or		-	05	01	-	06		

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

TRAINING AGGREGATES

Equipment : Low Level Light Weight Radar (Improved)

Original Equipment Manufacturer (OEM): _____

Ser No	Description of Training Aggregate	Unit Cost	Quantity				Total cost	Remarks
			User	EME	DGQA	Total		
1.	Shop Replaceable Units(SRU) /PCB/Modules/ Assemblies as under: (a) (b) (c)		-	01	-	01		
2.	Computer based training package based on interactive multimedia to include (a) Full graphics, animation, text and sound (b) Symptoms-fault correlation (expert system).		05 Sets	05 Sets	-	10 Sets		
3.	Training Aids to include (a) Charts (b) Slides (c) Training Brochures (d) Training Work models (e) Blowup diagram (f) Video films		05 Sets	05 Sets	01 Set	11 Sets		
4.	Cost of training as per Para 16 of RFP		-	-	-	-		
5.	Any other							

Appendix F

(Refers to Paras 4 of Covering Letter & Paras 34 & 40 of RFP)

DRAFT DEMONSTRATION METHODOLOGY : LLLR (IMPROVED)

1. **General.** A visit to vendor premises and a demonstration of LLLR (Improved) to the Empowered Committee or its nominated representatives under the Aegis of IHQ of MoD will be conducted on '**No Cost No Commitment (NCNC)**' basis as per provisions mentioned in DAP-2020.
2. **Number of Trial Equipment and Other Associated Items.** **One set** of LLLR (Improved) will be arranged by vendor at the designated demonstration location. Vendor will be responsible for ensuring availability of requisite spares/ tools/ associated equipment/ material required for the demonstration.
3. **Crew.** Crew representative for the operation of equipment for demonstration will be provided by the Vendor. Prior to the commencement of the demonstration, vendor representatives will undertake briefing of the team evaluating demonstration. The vendor representatives should have adequate knowledge about the equipment/ spares/ tools to give the complete details of the equipment.
4. **Timeframe for Demonstration.** The vendor will ensure availability of **one set** of demonstration equipment (as per Para 1(a) above) at designated location as per timeline given by Buyer. The demonstration will be witnessed by empowered committee / representatives as nominated by empowered committee. Firm schedule and scope of the demonstration will be finalized in consultation with Vendor on receipt of the proposal.
5. **Retention of Trial Equipment.** The equipment of all the vendors found compliant after demonstration, will be retained by the Demo Team under their custody till the commencement of CNC. Equipment of vendors found non-compliant in the demonstration would be returned thereafter. On finalisation of contract, other participating vendors may utilise/ dispose off their equipment as deemed fit. The vendor with whom contract is concluded will ensure availability of the equipment at vendor premises till the last lot of delivery, for purpose of comparison.
6. **Transportation of Equipment.** Being NCNC demonstration all charges for transportation freight, insurance, custom, octroi and other local taxes shall be borne by the vendor.
7. **Demonstration to Empowered Committee.** The demonstration will be conducted in accordance with the provisions laid out in DAP 2020 and the equipment will be tested against parameters mentioned at **Annexure I**. Demonstration of the equipment will be conducted entirely under the arrangements of the vendor. The Empowered Committee or its nominated representatives will be familiarised with the operation and technical parameters of the equipment as per **Annexure I to Appendix A** of the RFP. Efficacy of the system will be checked with the flying of fighter aircraft (if available), at the demo location, to be carried out at the place nominated by the Empowered Committee (EC). The system will also be checked for its detection capability of UAS (if available), as per parameters at demo location, to be carried out at the place nominated by the Empowered Committee (EC).

8. **Change of Equipment.** Change of equipment (if required) may be permitted provided the duration required for change is feasible within the EC given timeframe. Towards, this participating vendors are advised to ensure redundancy of equipment and associated accessories.
9. **Location of Demonstration.** Demonstration will be undertaken at a location as decided by the Empowered Committee. Feasibility of Demonstration at any location will be decided by the EC as per weather restrictions.
10. **Certification.** Certification from Vendor/OEM/Accredited NABL/Govt laboratory on aspects specified at **Annexure I to Appendix F.**
11. **Testing Charges.** All testing charges in various laboratories (As applicable) will be borne by respective vendors.
12. **Outline Methodology of Conduct.** Outline methodology of conduct is attached at **Annexure I to Appendix F.**
13. **Pre - Demonstration Meeting.** A pre - demonstration meeting to discuss broad schedule and modalities of demonstration will be organized at a place which will be intimated to the vendors.
14. **Representations / Requests.** All queries, representations and requests related to the demonstration will be addressed in writing to the Empowered Committee. Attention of respective vendors is drawn towards MoD Guidelines for Handling of Complaints promulgated vide MoD ID No 1(6)/D(Acq)/13-Vol.II dated 21 Sep 2015.
15. **Environment Conditions.** Equipment should be capable of satisfying the environmental requirements as applicable for operations at altitudes and conditions as given in the Demo Methodology.
16. **Demonstration of Maintenance Aspects.** In order to maintain the equipment in field Army, maintenance related aspects shall be demonstrated with associated equipment/ accessories.
17. **Conclusion.** This document may be considered only as a guideline for demo team/ Empowered Committee for conduct of Demo. The OIC Demo/ Empowered Committee may modify/change/add any aspects for validating the equipment to ensure all aspects of operational requirements have been verified. In view of the limited quantity of equipment being fielded for the demo, specifics of parameters being verified will be given out in Demo Directive issued by Empowered Committee before demonstration.

Annexure I of Appendix F
(Refers to Para 1(f) of Appendix F)

LOW LEVEL LIGHT WEIGHT RADAR (IMPROVED)

<u>S No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
1.	<u>Performance Characteristics</u>			
	(a) Terrain	Suitable of being deployed and operated in mountains, High Altitude Area (HAA), plains, semi deserts, deserts and coastal regions.	Vendor Certification for deployment capability in HAA / Plains / Deserts / Semi - Deserts and Coastal Areas.	-
	(b) Target tracking capability	>100 targets	To be demonstrated for the actual Number of targets tracked, balance to be given as Vendor Certification.	-
	(c) Target Designation	Capability to designate minimum 20 tracks simultaneously to minimum 10 command posts or 10 weapon systems each having Target Data Receivers (TDRs) up to a distance of 20 Km from the radar, using line, and radio / Radio Relay and should be scalable upto 20 x TDRs.	To be demonstrated with the available TDR(s), balance to be given as Vendor Certification.	-
	(d) ECCM Facilities	(i) Facilities to detect depict & work through both active and passive jamming.	Vendor Certification	Supported by NABL/ Govt lab results.
		(ii) Facilities to counter deception jamming in range, azimuth and velocity.	Vendor Certification	
		(iii) Random PRF and frequency hopping.	Vendor Certification	
		(iv) Side lobe cancellation /Ultra Low Side Lobes/ Side Lobe cancellation.	Vendor Certification	-
		(v) Facility for sector blanking & sector transmission.	Vendor Certification	-

<u>S No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
	(e) Operation Temperature Range	(i) <u>Minimum Temperature.</u> Between minus 20 ⁰ C and minus 10 ⁰ C. (ii) <u>Maximum Temperature.</u> Between 40 ⁰ C and 45 ⁰ C.	Vendor Certification	Supported by NABL/ Govt lab results.
	(f) Integration with AKASHTEER	Radar should be compatible for integration with Akashteer C & R module with two way exchange of data.	Certificate of Undertaking	-
	(g) Software	Equipment should operate on propriety software.	Vendor Certification	-
	(h) Own Location and North Orientation	Radar should have auto alignment capability through (IRNSS/ GPS /GLONASS) indicating north and own location (10 figure GR).	To be demonstrated	-
		It should be compatible with IRNSS & DSM.	Certificate of Undertaking	-
	(j) Recording	Radar should be capable of recording minimum four hours of computer activities. All data should be recorded with a time tag. The recorded data should be capable of being down loaded to an external debriefing system (Laptop/ PC Computer) for generation of the required debriefing reports.	To be demonstrated	-
2.	<u>Physical Characteristics</u>			
	(a) Transportability	Low Level Light Weight Radar (Improved) system must be manportable and transportable by 'In Service' Load Carrying vehicles, by rail, aircraft and underslung by helicopter.	To be demonstrated for Manportability. Vendor Certification for transportability by 'In Service' Load Carrying vehicles, Rail, Aircraft and underslung by Helicopter.	-
	(b) Weight	Weight of radar system (unpacked) <175 Kgs (Excluding power supply unit).	Physical verification during demonstration	-
	(c) Operating Altitude of Radar	5000 m above Mean Sea Level (MSL).	Vendor Certification.	-
	(d) Time to bring equipment into action	Not more than 10 minutes.	To be demonstrated	

<u>S No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
3.	<u>Individual Component Requirements</u>			
	(a) Search Radar	Search radar of the Low Level Light Weight Radar (Improved) should provide continuous 3D surveillance of friendly and hostile aerial targets in the area of responsibility. The radar should comprise of a three dimensional (3D) Active Electronically Scanned Array (AESA) technology search antenna based on GaN T/R Modules with digital beam forming.	Vendor Certification	-
		It should be able to detect all types of aerial targets up to 50 Kms with wide beam coverage in elevation.	To be demonstrated	-
	(b) Commanders Display Unit (CDU)	CDU must provide full remote control of the radar modes, display, provide real time information about the system's status applying user friendly Graphic User Interface (GUI) and can be deployed upto 50 meters from the radar. The display should have a geo ref / grid lat-long overlay.	To be demonstrated	-
		It should be compatible with Defence Series Maps	Certificate of Undertaking	-
	(c) Target Designation System	A suitable target designation system should be available which is capable of passing target data to minimum 10 command posts or 10 weapon systems through Target Data Receiver (TDR) up to a distance of 20 KM from the radar, using line, and radio / Radio Relay with suitable display system.	To be demonstrated by atleast Two TDRs using Line & Radio. Vendor Certification for passage of data to 10 TDRs.	-
		TDRs must be based on rechargeable batteries with suitable charging sets.	To be demonstrated	-
		Facility must exist to apply parallax correction to the target data automatically.	To be demonstrated	-
		The position determining equipment should be based on IRNSS /GPS / GLONASS available in the TDR.	To be demonstrated. Certificate of undertaking for IRNSS compatibility.	-

<u>S/No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
		TDR should display the target attributes of minimum four priority targets after parallax correction in prioritized sequence based on threat. Prioritisation should be based on the target speed, its location and heading with respect to the TDR.	To be demonstrated	-
		For Threat Neutralization the Target Data Receiver should have interface port to provide target cue to Weapon System.	To be demonstrated	-
		Audible/ visual alert should be available in TDR on the appearance of 1 st target with provision to reset the alert.	To be demonstrated	-
	(d) Power Supply Unit	Adequate power supply with backup for uninterrupted operation of the radar. The endurance of each power supply unit should not be less than 8 hours without refueling.	To be demonstrated	-
		The generator should be compliant to the latest Central Pollution Control Board (CPCB) norms.	Vendor Certification	-
		Facility should also be provided to operate it from commercial power supply.	To be demonstrated	-
		Maximum weight of generator should be less than 50 kg.	Physical verification during demonstration	-
		UPS should be provided as a power back up of not less than 20 minutes for operation of system computers / display console to ensure that the data is not lost and batteries should be commercially available.	To be demonstrated	-

<u>S No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
4.	<u>Technical Parameters</u>			
	-	The LLLR (Improved) system should be able to transmit target coordinates to minimum 10 command posts or 10 weapon systems and exercise tactical control on them.	To be demonstrated to atleast Two TDRs using Line & Radio. Vendor Certification for passage of data to 10 TDRs.	-
	(a) Capable of detecting and providing 3D data of aerial objects of specification at ranges	(i) RCS of 2 sqm target - Upto 50Km (ii) RCS of 0.1 m ² or more - Upto 18 Km (iii) RCS of 0.001 m ² or more - Upto 4 Km	Demonstration on available target system. Vendor Certification on RCS specific detection capability	Supported by NABL/ Govt lab results.
	(b) Minimum Detection Ranges	200 m or less	To be demonstrated	-
	(c) Elevation Coverage	$\geq 70^{\circ}$ (incl negative elevation coverage upto -5°)	To be demonstrated	-
	(d) Bearing Coverage	360°	To be demonstrated	-
	(e) Range Accuracy	≤ 50 m	Vendor Certification	Supported by NABL/ Govt lab results.
	(f) Azimuth Accuracy	$\leq 0.5^{\circ}$	Vendor Certification	
	(g) Elevation Accuracy	600 m at max range	Vendor Certification	
	(h) Speed of Target	Upto 850 m/s (Vendor Certification for speeds exceeding 300 m/s) and should also be capable of detecting hovering aerial objects.	Demonstration on available target system. Vendor Certification of specific speed aspects.	Supported by NABL/ Govt lab results.
	(j) Tgt Update Rate	≤ 2 sec	Vendor Certification	-
	(k) Target Detection Altitudes	Upto 10,000 meters	Vendor Certification	-

<u>S/ No</u>	<u>Parameter</u>	<u>Requirement</u>	<u>Methodology</u>	<u>Remarks</u>
5.	Maintainability Requirements	Test Equipment (BITE)/ Power on Self - Test (Post)	To be demonstrated	-
		Protection to prevent reverse polarity fitment for all PCBs / Cards / Cables / Batteries.	To be demonstrated	-
6.	Miscellaneous			
	(a) EMI / EMC	Compatibility to MIL STD 461 /F	Vendor Certification	Supported by NABL / Govt lab results.
	(b) Storage	Weight of radar packed with rugged hard cases <300 Kgs (excluding power supply unit)	Physical verification during demonstration	-
	(c) Service Life	The Radar should have a service life of 15 yrs or more (Vendor Certification)	Vendor Certification	-
	(d) Protection Against Lightning	The system should be provided protection against lightning	Vendor Certification	-

Note : **Evaluating Agency** will be the **Empowered Committee / Representatives** nominated by the Empowered Committee.

Appendix G

(Refers to Para 11 & 51 of RFP)

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 COD, Agra.

1.2. **Currency of Payment.** 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 For orders with AMC/CMC/PBL/LCSC, an additional Performance Bank Guarantee (PBG) is to be submitted by the Bidder for which the Total Price of AMC/CMC/PBL/LCSC for contracted duration will be considered.

1.3.5 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:-

1.3.5.1 **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 payment Bank guarantee (s), as applicable, is specified at Annexure V to this Appendix.

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 and Performance-Cum-Warranty Bank Guarantee as given in **Annexure II & III to this Appendix**. The date of delivery would be reckoned from the date of signing of the contract (T₀).

1.4.2 **On Dispatch.** 60% of the Base Contract Price of deliverables, equipment (less cost of training) alongwith 100% of Freight, Transit Insurance and reimbursement of 100% taxes shall be paid on pro rata basis on proof of dispatch of deliverables to the consignee and on production of an inspection note issued by the buyer designated inspection agency. 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 Seller will give a notification to Buyer about the readiness of goods for dispatch at least 45 days prior to delivery of goods. The payment will be made by PCDA, New Delhi/Bangalore, upon 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 Final Acceptance and Installation.** 25 % of the Base Contract Price of deliverables (less cost of training) shall be paid on on pro rata basis on completion of JRI post delivery and issue of JRI Certificate, Acceptance Certificate issue by the Buyer and other relevant documents as mentioned above for final payment, but 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 **04 systems**. Transshipment may not be permitted for certain deliverables and/or under certain situations.

1.4.6. **Payment for Training.** The remaining 85% of cost of training and applicable taxes, shall be paid on submission of the training completion certificate from BUYER's representative that training program has been completed, alongwith 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.

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.** No reimbursement of custom duties is applicable for imported input materials to the vendor.

2. **Performance-Cum-Warranty Bank Guarantee Clause.** A Performance-cum-Warranty Bank Guarantee (PWBG) of 3 % 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 II to this Appendix.**

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' 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. The JRI should be completed within 60 days of intimation from the bidder.

4. **Liquidated Damages (LD).** In the event of the Bidder's failure to submit the Documents, supply the stores/ goods, perform services, training and MET as per schedule specified in this contract, the BUYER may, at his discretion withhold any payment until the

completion of the contract. The BUYER may also deduct from the SELLER as agreed, liquidated damages to the sum of **1.5%** for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than **15%** of the contract price of the value of delayed stores/ services (Any extension given by the Buyer for delay attributable to Buyer or Force Majeure Clause to be factored in delivery period).

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 this Appendix.**

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.

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 BIDDER) (referred to as BIDDER) 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 BIDDER 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 BIDDER 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 BIDDER 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 BIDDER 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 BIDDER 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 BIDDER 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 BIDDER or for any forbearance, act or omission on the part of the BUYER or indulgence by the BUYER to the said BIDDER 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 BIDDER 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/BIDDER.

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 Paras 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 the Total Contract Price (including taxes and duties) to cover 3% of Total Contract Price (including taxes and duties) each 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 {5% 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. upto _____.

7. Subject to the terms of this Bank Guarantee, the issuing bank hereby irrevocably authorizes the beneficiary to draw the amount of upto 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 upto _____ (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. The terms of payment may vary between each project depending upon a variety of factors such as complexity of equipment/system, requirement of validation for establishing 'proof of concept', delivery period, integration requirements etc. However, some broad guidelines for payments terms are appended in subsequent Paras.

2. **For Delivery.**

SI	Activity	Delivery Timelines (T ₀ + Months)	Qty	Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
(a)	Signing of contract	-		15% of the base contract price less taxes and duties	APBG of equivalent amount to be submitted	PWBG of 03% of the Contract including taxes and duties to be submitted within 30 days of signing of the Contract
On Dispatch of all equipment						
(b)	-	T ₀ +12 months	10 x LLLR (Improved)	60% of base contract price of deliverables (less cost of training), 100% freight and insurance and re-imburement of 100% taxes and duties on pro rata basis		

SI	Activity	Delivery Timelines (T ₀ + Months)	Qty	Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
(c)	MRLS	T ₀ +21 to T ₀ +24 months	Entire Quantity	60% of cost of MRLS		
<u>On Final Acceptance and Installation</u>						
(d)	-	T ₀ +12 months	10 x LLLR (Improved)	25% of base contract price of deliverables (less cost of training) on pro rata basis	APBG is to be returned on completion of delivery of all equipment/ system (and associated spares).	
(e)	Training		Para 17 of the RFP	85% of the cost of training and reimbursement of 100% taxes		
(f)	MRLS	T ₀ +21 to T ₀ +24 months	Entire Quantity	25% of cost of MRLS		

Appendix H
(Refers to Paras 51 & 60 (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'**. 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 but with exclusion of BNE items sourced from common single source in accordance with Para 107 of Chapter II of DAP-2020. The scope of BNE cost shall include the basic cost of the Main Equipment and OEM Training, Training Aggregates, Documentation, SMT/STE, Freight and OBS as applicable/as indicated in the RFP, which are exclusively sourced from the nominated vendor (OEM). No other cost including the cost of items sourced directly from third parties and the cost of activities jointly undertaken by the Bidder/Bidder's sub vendor and the nominated vendor (OEM) or any third parties are to be included in the BNE cost. BNE rate would also be separately negotiated. However, payment will be made after adding the actual cost of BNE, at the time of purchase from OFB/DPSU/Private vendor, to the L1 cost determined as mentioned above.
 - 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.

S No	Items	Qty	Unit Cost	Total Cost (iii) x (iv)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (including all taxes & duties) (v) + (vi) + (vii)	Remarks
					GST/IGST (%)	Custom Duty (%)		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
A.	Cost of Low Level Light Weight Radar (Improved) comprising of the following:-	10						
A1	Search Radar	10						
A2	Commander Display Unit	10						
A3	Target Designation System and Power Supply System	10						
B.	Cost of Manufacturer's Recommended List of Spares as per the format given at Annexure I to Appendix E . In case equipment is already in usage, the spare parts requirement must be specific rather than being based on MRLS.							
C.	Cost of Special Maintenance Tools and Special Test Equipment as per format given at Annexure II to Appendix E .							
D.	Cost of Operator's Manual and Technical Literature (in English Language) including Illustrated Spare Parts List as per Annexure III to Appendix E .							
E.	Cost of Training Aids such as cut out models, films, charts etc as recommended by the supplier as per Annexure IV to Appendix E .							
F.	Cost of recommended period of Training excluding the cost of travel and boarding and lodging.							
G.	Cost of Preservation/ De-preservation (if applicable)							To be paid as in the contract, if utilised
H.	Any other cost (to be specified).							
J.	Freight and Transit Insurance Cost (where applicable).							
K.	Total Cost (Total of Serial (a) to (j))						#	# This will be used in determining L1 vendor (duly

S No	Items	Qty	Unit Cost	Total Cost (iii) x (iv)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (including all taxes & duties) (v) + (vi) + (vii)	Remarks
					GST/IGST (%)	Custom Duty (%)		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
								applying provisions of Para 1 above).
L.	Foreign Exchange component of the proposal. (for Indian Vendors only)							This will be with reference to Para 1.2.2 of Appendix M.
M.	CDEC (if applicable) , its authority and amount for which required.							
N.	Total Cost as per serial (k) (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.

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 Defence PSUs)

2. 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

2.1 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 (____days) of its occurrence informs in a written form the other party.

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

2.3 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

3.1 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.

3.2 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

4.1 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 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.

4.2 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

5. 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

6. 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.

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. **Bid Security : Earnest Money Deposit**

8.1 Every bidder, while submitting commercial bid, shall submit Bid Security in the form of Earnest Money Deposit (EMD), in cases where applicable (as provided in Clause 8 herein).

(a) To safeguard against a bidder(s) withdrawing or altering its bid during the bid validity period, Bid Security (also known as EMD) is to be obtained from all bidders except for cases upto Rs. 100 Crores (i.e, all cases upto Rs. 100 crores of AoN will be exempted from payment of EMD) as follows:-

EMD TABLE

Estimated Cost of Procurement Scheme(Crore)		EMD Amount
Above (Not including)	To (Including)	
-	100	Nil
100	150	30 Lakh
150	300	70 Lakh
300	1000	2 Crore
1000	2000	5 Crore
2000	3000	10 Crore
3000	5000	15 Crore
5000	-	25 Crore

(b) EMD is not required from Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department or Startups as recognised by Department of Industrial Policy & Promotion (DIPP), in accordance with the Ministry of Finance office memorandum bearing No. No. F.20/2/2014-PPD (Pt.) dated July 25, 2017 (as amended from time to time).

(c) DPSUs are not required to submit EMD when nominated as ab-initio single vendor. DPSUs will submit all BGs and EMD as applicable while participating in multi-vendor cases with private vendors.

(d) **Format of EMD.** The Bid Security may be accepted in the following forms, safeguarding the Buyer's interest in all respect: -

(i) Bank Guarantee from any Indian Public or Private Scheduled Commercial Bank notified by RBI or first-class banks of international repute.

(ii) Insurance Surety Bond - The format and guidelines pertaining to the same shall be issued / notified by the Ministry of Defence.

(iii) Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque shall be payable in an acceptable form. The Beneficiary Bank Details for furnishing the same are as follows:

(IFSC Code - SBIN0000691)
State Bank of India New Delhi Main Branch
C Block, 11 Parliament Street
New Delhi, Pin: 110001

(e) **Validity of EMD.** The EMD will be valid for eighteen months or till signing of contract, whichever is later. The EMD shall be extended from time to time as required by the Buyer and agreed by the Bidder. No interest shall be payable by the Buyer to the Bidder(s) on the EMD for the period of its currency.

For unsuccessful bidders EMD will be returned on declaration of successful bidder(s).

(f) **Instances of Forfeiture of EMD.**

(i) If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.

(ii) If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity.

(aa) If the Bidder fails to furnish the Performance Security for the due performance of the contract.

(ab) Fails or refuses to accept/ execute the contract.

(iii) In case of violation of Pre-Contract Integrity Pact, EMD will be forfeited besides other legal penalties as may be decided by the Ministry of Defence.

8.2 In the case of successful bidder a clause would also be incorporated in the Article pertaining to Performance-cum-Warranty Bond in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

8.3 The provisions regarding Sanctions for Violation in Integrity Pact include forfeiture of Performance-cum-Warranty Bond in case of a decision by the Buyer to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.

8.4 No interest shall be payable by the Buyer to the Bidder(s) on EMD for the period of its currency.

9. **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.

10. **Sanctions for Violation**

10.1 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) **EMD for pre contract period**, Performance-cum-Warranty Bond **post signing of 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.

10.2 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.

11. **Fall Clause**

11.1 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.

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

12. **Independent Monitors**

12.1 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 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,
HiranandaniMeadows, Off-Pokhran Road No.2,
Thane (W), Maharashtra-400610
Mob : 9869479987, **Email-** cr_koli@yahoo.com

12.1A 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
Tel No - 011 – 23012304

12.2 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.

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

12.4 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.

12.5 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.

12.6 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.

13. **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.

14. **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.

15. **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.

16. **Validity**

16.1 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.

16.2 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.

17. The Parties hereby sign this Integrity Pact at _____ on

BUYER

MINISTRY OF DEFENCE,
GOVERNMENT OF INDIA

Witness

1. _____
2. _____

BIDDER

CHIEF EXECUTIVE OFFICER

Witness

1. _____
2. _____

Appendix K
(Refers to Para 42 of RFP)

DRAFT GUIDELINES FOR FRAMING ATP

1. Draft Acceptable Test Procedure for the Equipment / System should mainly consist of the following :-

(a) **Scope & Introduction.** Includes the scope, introduction & purpose of the document and general information about the equipment.

(b) **Brief Description of the Equipment / System.** Brief description of the equipment / system be highlighted indicating the salient features, equipment / system configuration, interfaces involved and its compatibility and role in the main system where it is intended to be used.

(c) **Safety / Security aspects, if any.**

(d) **Technical Specifications.** Technical Specifications of the equipment be indicated along with dimension, weight of the equipment etc. Operational requirements and pictorial representation of the equipment / system be provided under this section.

(e) **Reference Documents Including List of Drawings, Related Standards, Specifications etc.** Includes reference documents / drawings of the equipment, standards / specifications up to which the equipment / system is complied.

(f) **Bill of Materials.** Bill of Materials as per the following format be included.

S No	Item Name/ Description	Part No	NSN No	Drawi ng No	Manufacturer	Schematic Reference	Standard of Reference	Qty Nos	Military / Industrial / Commercial

(g) **Test Instruments / Accessories Required.** Test Instruments / Accessories required for conduct of ATP be mentioned along with Part number, Make / Model etc.

(h) **Qualification / Environmental Tests.** Applicable class from relevant JSS, as per RFP for environmental testing be mentioned along with test severities and procedures to be followed for the conduct of the test. Pre, In-situ and Post Performance tests to check the performance of the equipment be included.

(j) **Acceptance / Performance Tests.** Includes the Visual, Electrical and Functional tests. Functional Test procedures along with diagram showing test set up to be mentioned. Final acceptance / performance checks come under this section. Tests which can be carried out under lab and field conditions need to be mentioned separately.

(k) **Applicability of ESS / Endurance Test.** ESS procedure to be followed to be mentioned and the procedure for carrying out the Endurance test to be included.

(l) **Quality Audit Points / Checks / Methodology Including Real Time / Online Audit Activities and List of Critical Processes.** Process audit methodology to be carried out to be mentioned.

(m) **Quality Audit Flow Chart / Process Monitor Points.** Mutually agreed Audit flow chart be mentioned by quoting relevant ISO standards.

(n) **Operational Checks / Tests.** Includes Quick checks / Tests with ATE / BITE / Processor based Auto Diagnostic checks on the store, if equipped with, before release of the store to the Consignee.

(o) **Test and Measurement Record (TMR).** TMR sheet with expected output to be mentioned.

(p) **Acceptance Criteria Including Sampling Plan, If Any.** Acceptance criteria be mentioned under this section.

Note:

- (i) Weight and dimension should have tolerance.
- (ii) Weight of the system shall be specified along with power systems including Generator set / UPS, wherever required.
- (iii) Sampling plans to be invoked wherever feasible.
- (iv) Certain tests require permission from authorities such as long range communication, jamming tests, detection of drones, use of DEW etc. Necessary permissions will need to be obtained by the SELLER.

Appendix L
(Refers to Para 6 of RFP)

CRITERIA FOR VENDOR SELECTION / PRE-QUALIFICATION
FOR - RFP ISSUE / INCLUSION IN RFP REQUIREMENTS
(Only For Multi Vendor Cases. Not applicable to DPSUs/PSUs.)

1. The following parameters may be used, as a guideline for the Collegiate to adopt, for inclusion in the RFP.

<u>Sl No</u>	<u>Parameter</u>	<u>For all Cases except Shipbuilding (Ch XII), Make (Ch III & IV) and Strategic Partnerships (Ch VII)</u>
1	Financial	
a	Credit Rating	Long term credit rating of CCR-BBB or better and SME-04 or better for SMEs as on 31 st March of the previous financial year Not applicable for cases below Rs 150 Crs.
b	Average Annual Turn Over	Min Avg Annual Turnover for last 03 financial years, ending 31 st March of the previous financial year, should not be less than 30% of estimated annual outflow of project cost of the Buy (Indian-IDDM) and Buy (Indian) project and for Buy & Make (Indian) should not be less than 30% of estimated annual outflow of the project cost of the make portion. Not applicable for cases below Rs 150 Crs.
c	Net Worth	Net worth of entities, ending 31 st march of the previous financial year, should not be less than 5% of the estimated cost of the Buy (Indian-IDDM) and Buy (Indian) project and for Buy & Make (Indian) should not be less than 5% of estimated cost of the Make portion. For orders above Rs 5000 Cr, the Net worth of group companies can be considered on production of suitable documentary assurance. Not applicable for cases below Rs 150 Crs. But Net worth should be Positive.
d	Insolvency	The entity should not be under insolvency resolution as per IBC at any stage of procurement process from the issuing of RFP to the signing of contract.
2	Technical	
a	Nature of Business	Manufacturing entity or System Integrator of defence equipment and not a trading company, except in cases where OEM participates only through its authorised Vendors.
b	Experience in related field	Min 02 Yrs. experience in broad areas like manufacturing/ engineering/ electronics/ explosives etc. as applicable in the instant case. If not, then cumulative experience of at least 03 years in above areas, resulting in gaining of competence for manufacturing the proposed product. (In case SHQ feels that for particular equipment a lesser experience could be accepted, then the same should be specifically approved by the RFP approving authority before including the same in the RFP).
c	(i)	(i) Cases involving Integration –

	Integration Experience (ii) Turnkey Projects Experience	Where product involves integration, previous experience of not less than one year/ one project in integration of systems/ equipment shall be required. (ii) Turnkey Projects – Experience of successful completion of one Turnkey project of similar nature within last 05 Years with value of at least 20% of AoN cost or currently executing a contract of similar nature with value of at least 30% of the AoN cost. In case of no experience in turnkey projects the vendor for main component of the turnkey project may be selected if it has experience as per Srl 2(b) above and experience of installation or integration of similar equipment/ system or system of systems.
d	Quality control	For ICT Cases – (i) Certification to be included if linked to scope of work – Gartner Quadrant/ ISO9001/ CMMi3 or more (specifying development/ service/ acquisition models) / ISO 27001. For Information Security and large value projects preferably CMMi5 may be specified. (ii) Compliance with IEEE/ ITU standards depending upon nature/type of project or solution required.
3	Others	
a	Industrial License	Posses or be in the process of acquiring a license, if the product under project requires license as per DIPP licensing policy.
b	Registration	Registered for Min 02 Years, 01 years for MSMEs. Min no of years not applicable for JVs constituted specifically for a project.

Appendix M

(Refers to Para 57 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 18 of RFP	Declaration by Bidder: Government Regulation
3	Para 19 of RFP	Declaration by Bidder: Obligations Relevant to Transfer of Conventional Arms
4	Para 20 of RFP	Declaration by Bidder : Patent Rights
5	Para 22 of RFP	Declaration by Bidder : Fall Clause
6	Para 29 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

GLOSSARY

AMC	Annual Maintenance Contract
AoN	Acceptance of Necessity
ATP	Acceptance Test Procedure
CNC	Contract Negotiation Committee
DAC	Defence Acquisition Council
DGQA	Director General of Quality Assurance
DPB	Defence Procurement Board
DAP	Defence Acquisition Procedure
DRDO	Defence Research and Development Organisation
EMC	Electro Magnetic Compatibility
EMI	Electro Magnetic Interference
ESP	Engineering Support Package
FET	Field Evaluation Trials
GoI	Government of India
IC	Indigenous Content
IDDM	Indigenously Designed & Developed Manufactured
IM	Indigenously Manufactured
IP	Integrity Pact
EMD	Earnest Money Deposit
LRU	Line Replaceable Unit
MET	Maintainability Evaluation Trial
MoD	Ministry of Defence
MRLS	Manufacturer Recommended List of Spares
NCNC	No Cost No Commitment
OEM	Original Equipment Manufacturer
PA	Production Agency
PCIP	Pre Contract Integrity Pact
QA	Quality Assurance
SPB	Services Procurement Board.
SHQ	Service Headquarters
TEC	Technical Evaluation Committee
ToT	Transfer of Technology