

(Cover Page)



सत्यमेव जयते  
Ministry of Defence  
Government of India

**REQUEST FOR PROPOSAL**  
**BY**  
**MINISTRY OF DEFENCE**  
**GOVERNMENT OF INDIA**  
**FOR PROCUREMENT OF**  
**QUANTITY 6,175 NUMBERS MULTI SPECTRAL**  
**CAMOUFLAGE NET (MSCN) FOR HIGH ALTITUDE**  
**INCLUDING BARREN MOUNTAIN/SNOW BOUND AREA**  
**CATEGORY:BUY (INDIAN-IDDM)**

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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 **94** pages including cover page and Appendices.

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Additional Director General  
Acquisition Technical (Army)  
Room No 30, D II Wing, Sena Bhawan  
New Delhi-110011

10 November 2023

To

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**REQUEST FOR TECHNICAL AND COMMERCIAL PROPOSAL FOR PROCUREMENT OF  
QUANTITY 6,175 NUMBERS MULTI SPECTRAL CAMOUFLAGE NET (MSCN) FOR HIGH  
ALTITUDE INCLUDING BARREN MOUNTAINS/SNOW BOUND AREA  
CATEGORY: BUY (INDIAN-IDDM)**

Dear Sir/Madam,

1. The Ministry of Defence, Government of India, intends to procure **Quantity 6,175 (Six Thousand One Hundred and Seventy Five) Numbers Multi Spectral Camouflage Net (MSCN) for High Altitude including Barren Mountain/Snow Bound Area** and seeks participation in the procurement process from prospective Bidders subject to requirements in succeeding paragraphs.

**Synopsis**

2. **Broad Description of Equipment/System.** The equipment i.e MSCN for High-Altitude Area (HAA) Barren Mountains and Snow Bound Area is made of specially developed polymer coated fabric(s) of disruptive pattern that blends with the environment in different types of terrain while suppressing signatures in the Visual, IR, TIR and radar ranges of the EM spectrum that can be picked up by the enemy surveillance device. MSCN for High-Altitude Area (HAA) Barren Mountains and Snow Bounded Area will provide camouflage to the designated critical equipment such as tanks, radars etc in the various ranges of the EM spectrum when located within the range of the enemy surveillance devices.

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	Multi Spectral Camouflage Net (MSCN) for High Altitude including Barren Mountains /Snow Bound Area	Para 1 of Cover Note. Para 9 of RFP.
(b)	Quantity Required	6175	Para 1 of Cover Note. Para 9 of RFP.
(c)	Categorisation of Procurement	Buy (Indian-IDDM)	Heading of Cover Note. Para 7 of RFP.
(d)	Minimum IC Content required	60%	Para 7 of RFP.
(e)	Place(s) of Delivery	Central Ordnance Depot (COD), Kanpur, Uttar Pradesh	Para 1.1.1 of Appendix H
(f)	Warranty Period	24 Months	Para 11 of RFP & Appendix C.
(j)	EMD Amount	30 Lakhs	Para 21 of RFP
(k)	Last date for submission of Pre-bid queries	01 Dec 23	Para 23 of RFP
(l)	Date and time for Pre-bid meeting	1100hrs, 22 Dec 23	Para 24 of RFP
(m)	Last date and time for Bid Submission	1200hrs, 02 Feb 24	Para 25 of RFP

4. **Special features of the RFP.** The entire quantity is required to be supplied by L1 and L2 vendors in the ratio of 60:40 respectively (L1- 3705, L2 -2470) as per Paragraph 105 of Chapter II of DAP 2020, provided L2 bidder agrees to accept the price and terms and conditions quoted by/negotiated with the L1 bidder as per the delivery schedule given at Para 9(a) of RFP. In case, L2 is unwilling to supply at price and terms and conditions negotiated with the L1 vendor, then the entire quantity of 6175 numbers will be supplied by the L1 vendor as per the delivery schedule given at Para 9(b).

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

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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 Armed Forces**.

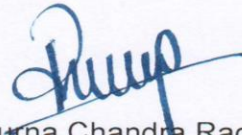
8. This RFP is being issued with no financial commitment; and the Ministry of Defence reserves the right to withdraw the RFP and change or vary any part thereof or foreclose the procurement case at any stage. The Government of India also reserves the right to disqualify any Bidder should it be so necessary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

9. This RFP is non-transferable.

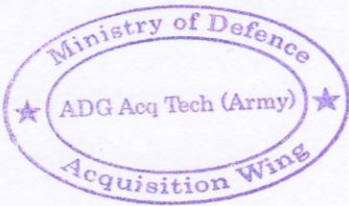
10. In addition to various Appendices and their Annexures, attached with this RFP, reference to various paragraphs of DAP-2020 has been made in the RFP. The DAP -2020 is an open domain document that is available at Gol, MoD website [www.mod.nic.in](http://www.mod.nic.in).

11. The receipt of the RFP may please be acknowledged by e-mail.

Yours faithfully



(P Purna Chandra Rao)  
Col  
Director 'E'  
O/o ADG Acq Tech (Army)



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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/guarantee conditions, etc. It includes the procedure and the date & time for submission of bids.

### **Non-Disclosure**

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

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

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

### **Business Eligibility**

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

Bidder are Suspended or Debarred by Ministry of Defence, the Bidder shall indicate the same with justification for participation of such sub-contractor(s)/supplier(s)/ technology partner(s) in the procurement case.

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

5(c). The Bidder will submit an undertaking at the time of Bid submission. The same will read as "The bidder, M/s ..... is eligible to participate in bidding process in terms of in terms of Ministry of Finance/Department of Expenditure Order No F.7/10/2021 - PPD (1) dated 23.02.2023.

6. **Pre-Qualification Criteria {for multi-vendor cases in Buy (Indian-IDDM) 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.

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 will be **60%** in the current case. In addition, reporting requirements for prime (main) Bidders (and for sub-contractors/suppliers/technology partners reporting to higher stages/tiers) shall be as prescribed under **Para 4 to 7 of Appendix B to Chapter I of DAP 2020**. The right to 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 **Para 11 to 15** thereof. Furthermore, Bidders in 'Buy (Indian IDDM)', will be required to submit their indigenisation plan in respect of indigenous content as stipulated in **Para 4 to 7 of Appendix B to Chapter I and Para 39** of Chapter II of DAP 2020. The DAP 2020 is available at MoD, GoI website ([www.mod.nic.in](http://www.mod.nic.in)) for reference and free download.

8. **Year of Production**. Deliverables [platforms (including major equipment)/ equipment/ systems] 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 H**. Delivery of the Multi Spectral Camouflage Net (MSCN) for High Altitude including Barren Mountains /Snow Bound Area for conditions of Single Source of Supply or Split Source of Supply (as applicable) is as under -

(a) **Splitting Source of Supply**. Splitting of sources of supply will be carried out in the ratio of 60:40 between the L1 and L2 bidder, subject to adherence to the terms and conditions as mentioned in Para 26, Chapter II, DAP 2020. The delivery of equipment to be completed in **24 months**. Proposed delivery schedule for L1 and L2 Bidder is as under: -



Ser No	Period (In Months)	No of MSCNs to be delivered			Remarks
		L1	L2	Total (Nos)	
(i)	T <sub>0</sub> to T <sub>0</sub> +12	1111	741	1852	T <sub>0</sub> is the date of release of advance payment.
(ii)	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	2594	1729	4323	
<b>Total</b>		<b>3705</b>	<b>2470</b>	<b>6175</b> (7,26,835 sqm)	
<b><u>Details</u></b>					
(i)	25m x20m	199	133	332	
(ii)	16m x11m	1038	691	1729	
(iii)	11m x11m	661	440	1101	
(iv)	11m x8m	133	90	223	
(v)	8m x5.5m	1154	769	1923	
(vi)	5.5m x4m	520	347	867	
<b>Total</b>		<b>3705</b>	<b>2470</b>	<b>6175</b> (7,26,835 sqm)	
<b><u>Notes.</u></b>					
(aa) <b><u>Mounting Equipment/Support System &amp; Repair Kit Components.</u></b> Mounting Equipment/Support System and Repair Kit Components to be delivered along with each MSCN as per <b>Annexure I to Appendix A.</b>					
(ab) All equipment deliveries will be accompanied by a Certificate of Indigenous Content (IC) as per Para 11 of Appendix B to Chapter I of DAP 2020.					

(b) **Single Source of Supply.** In case, the terms and conditions as mentioned in Para 26, Chapter II, DAP 2020, is not agreed by L2, the delivery schedule by L1 only is as given below: -

Ser No	Period (In Months)	No of MSCN to be delivered		Remarks
		L1	Total (Nos)	
(i)	T <sub>0</sub> to T <sub>0</sub> +12	1852	6175	T <sub>0</sub> is the date of release of advance payment.
(ii)	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	4323		
<b><u>Details</u></b>				
(i)	25m x20m	332		
(ii)	16m x11m	1729		

(iii)	11m x11m	<b>1101</b>	
(iv)	11m x8m	<b>223</b>	
(v)	8m x 5.5m	<b>1923</b>	
(vi)	5.5m x4m	<b>867</b>	
<b>Total</b>		<b>6175</b>	

**Notes.**

(aa) **Mounting Equipment/Support System & Repair Kit Components.**  
Mounting Equipment/Support System and Repair Kit Components to be delivered along with each MSCN as per **Annexure I to Appendix A.**

(ab) All equipment deliveries will be accompanied by a Certificate of Indigenous Content (IC) as per Para 11 of Appendix B to Chapter I of DAP 2020.

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

11. **Warranty.** The deliverables supplied shall carry a comprehensive on-site 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.

11A. The JRI should be completed within **15 days** of receipt at respective Depots as mentioned at Para 11 above. Any defect/deficiency endorsed during PDI/JRI on Return for Rectification (RFR) document by DGQA/User Representative should be rectified by the vendor and produced for PDI/JRI within **30 days.** The date of completion of JRI and the date from which warranty is applicable (duly endorsed by representative of both Buyer & Seller) should be mentioned in respective log book/user hand book of the equipment.

12. **In Service Life/Shelf Life.**

(a) The MSCN and the support system will have a life of **10 years** in a sealed condition when stored in a closed storage area without environmental control (to be vendor certified).

(b) Upon breaking open the original sealed packing, the MSCN and the support system will sustain **150 handlings** (to be vendor certified) with each handling comprising of taking the MSCN and the support system out of the packing, erecting the MSCN on its support system and repacking it or **seven years** (to be vendor certified) whichever is earlier.

(c) There should be no requirement of any special arrangement for storage and it should be safe for storage from temperature range of **minus 30°C to 50°C.**

(d) The Bidder is required to give details of reliability model, reliability prediction and its validation by designer/manufacturer to ensure reliability of stores throughout

Service/shelf life. The efficacy of reliability model/prediction/validation would be verified during technical and environmental evaluation as indicated in **Para 37** of this RFP.

13. **Product Support.** The Bidder would be bound by a condition in the contract that he is in a position to provide product support in terms of maintenance, materials and spares for a **minimum period of 10 years from the date of last deliverables**. 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.

14. **Codification.** The Bidder agrees to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract as per part list. 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). **The seller should have applied for codification before signing of contract.**

15. **Training of Crew and Maintenance Personnel.** A training package for training of User 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 and Hindi language. This training shall be designed to give the Users and maintainers necessary knowledge and skills to properly use & maintain the product. The syllabus will be defined by the Bidder in consultation with the Buyer at the time of Field Evaluation Trials. 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 setup, charts, training hand-outs, power point presentations, Computer Based Training (CBT), Documentation etc will be catered by the Bidder.

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

Ser No	Training Location	Type of Trg	Duration (Days per batch)	No of Batches	Total No of Personnel			Remarks
					L1	L2	Total	
<b><u>User Personnel</u></b>								
(i)	Vendor Premises	User	03	01	14	10	24	
<b><u>Maintenance Personnel</u></b>								
(ii)	Vendor Premises	Ordnance Personnel	03	01	04	02	06	
(iii)	Vendor Premises	Quality Assurance Personnel	03	01	02	02	04	

**Note.** Training will be completed before the delivery of the first lot of equipment.

16A. In case, the terms and conditions as mentioned in Para 26, Chapter II, DAP 2020, are not agreed by L2, the training to be provided by L1 only is as given below: -

Ser No	Training Location	Type of Trg	Duration (Days per batch)	No of Batches	Total No of Personnel	Remarks
<b><u>User Personnel</u></b>						
(i)	Vendor Premises	User	03	01	24	
<b><u>Maintenance Personnel</u></b>						
(ii)	Vendor Premises	Ordnance Personnel	03	01	06	
(iii)	Vendor Premises	Quality Assurance Personnel	03	01	02	

**Note.** Training will be completed before the delivery of the first lot of equipment.

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

18. **Model Certificate for Tenders.** The bidder will submit a Model Certificate for Tender in compliance to rule 144(xi) of the General Financial Rules (GFR), 2017 issued vide Ministry of Finance Order (Public Procurement Order No 4 dt 23 Feb 2023). The format of certificate is given as **Appendix M**.

19. 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), **if applicable**, given at **Annexure I to Appendix K** to this RFP and shall also deposit **Rs 30 lakhs** as **EMD** through any of the instruments mentioned therein. This would be submitted in a separate envelope clearly marked as **EMD** at the time of submission of Technical and commercial offers. The Beneficiary Bank Details for furnishing **EMD** 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 **01 Dec 2023**. A copy of the same may also be sent to:-

Directorate of Combat Engineers (DGCE) / CE-6  
E-in-C's Branch, Kashmir House  
Rajaji Marg, New Delhi-110011  
Fax No: 011-23019675  
E Mail - [ce6-einc-army@nic.in](mailto:ce6-einc-army@nic.in)

24. **Pre-Bid Meeting.** A pre-bid meeting will be organised by SHQ at **1100 hrs** on **22 Dec 2023** (date) 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 Directorate General of Combat Engineers/CE-6, to facilitate obtaining of security clearance.

25. **Submission of Bids.** The Technical and Commercial Proposals along with IP and **EMD** should be sealed separately in three separate envelopes clearly indicating Commercial/Technical/IP and **EMD and any other Bank Guarantee** as applicable, and then put in one envelope and sealed (**all the envelopes should clearly state the letter No of RFP and the name of equipment and Bidder name**) and submitted to the undersigned at the following address by **1200 hrs on 02 Feb 2024**:-

O/o Brig CD-1  
GS Branch, CD Directorate,  
Room No 415, 'A' Wing,  
Sena Bhavan,  
IHQ of MoD (Army)  
New Delhi-110011  
Tele No : 011- 23019003  
Fax No: 011- 23019003

26. Offer opening by a Offer opening committee will be held at **1100 hrs** on **05 Feb 2024** at the same venue as indicated at **Para 25** 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 field evaluation 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 storage conditions/environment conditions recommended and the resultant guaranteed in-service/shelf life.

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 product 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 product'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. One copy of the Technical Proposal with each page signed by authorised signatory should be submitted (along with one soft copy in a CD/DVD), however only one copy of the commercial proposal is required.

33. **Field Evaluation.** The Bidder is requested to confirm his willingness to provide the product for trial evaluation in India on "No Cost No Commitment" basis when so requested. The Buyer, at his own expense, will depute its representatives for the Field Evaluation trials (FETs). If any part of the FETs 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 trials other than the cost of ranges, platform or facilities which the Buyer may choose to provide free of cost.

34. **Mounting Equipment / Support Systems.** Details of the support system for the various sizes of MSCN are given as **Annexure I to Appendix A**. The support system will be made of metallic or composite materials. Their compliance to the under mentioned parameters will be verified under laboratory conditions:

- (a) The material will be able to withstand an impact of minimum 20 kg; vendor will provide a certificate for the same from an accredited laboratory.
- (b) The material will be rust resistant; vendor will provide a certificate for the same from an accredited laboratory.
- (c) The material, when subjected to ultimate load test, will, upon failure, not shatter or burst; vendor will provide a certificate for the same from an accredited laboratory.
- (d) The material will have a maximum gloss value of 6 when evaluated under laboratory conditions against IS: 101 (Part 4 / Section 4) -1988. A flat sample of mounting equipment material of size 5cm x 5cm will be produced for the lab trials.

35. **Repair.** The net will be repairable by troops in field conditions. Each MSCN will be accompanied by a repair kit, details of which are at **Annexure I to Appendix A**.

36. **Technical Literature.** The information on Technical Literature that is required to be provided is enclosed at **Annexure I to Appendix D** to this RFP.

### **Evaluation of Technical Offers**

37. The Technical Offer submitted by the Bidder will be evaluated by a Technical Evaluation Committee (TEC) to confirm that the product being offered meets the Essential Parameters as elaborated at **Appendix A**. Thereafter, the Bidder of the short listed product would be asked to provide the product for trial evaluation as per trial methodology given at **Appendix E** to this RFP, in India at 'No Cost No Commitment' basis.

### **Field Evaluation Trials**

38. For a product to be introduced in service, it is mandatory that it successfully clears all stipulated tests/trials/evaluations as per RFP. **In the instant case, the technical trials will be conducted first followed by User trials. All the Bidders will be required to submit complete quantity of samples for User trials and Technical trials, together before the commencement of trials at the designated trial location.** The trial evaluation process will be conducted in following phases as per sequence mentioned below:-

(a) **Technical Trials.** Technical trials including environmental evaluation will be conducted by QA agency as per Technical Evaluation Plan (Specified at **Para 40** below) to assess conformance to the quality requirements, standards and specifications. Product /assemblies/sub-assemblies will be subjected to environmental tests wherever applicable. As far as possible, physical evaluation will only be carried out of critical parameters and other parameters will be evaluated based on vendor certification duly supported by certification by NABL accredited laboratories/internationally recognized laboratories. Towards this, Bidder will submit the technical documentation and draft ATP as part of technical bid or at least one month before commencement of FET. QA agencies will finalise ATP in respect of all Bidders during Technical trials.

(b) **User Trials.** **User trials will be conducted only for Bidders who qualify the technical trials.** These will involve functional testing by user of the product in various specified conditions as per requirement and maybe done in more than one phase. Trials will be conducted only pertaining to conditions where the product is most likely to be deployed. In other conditions where the probability of deployment is not high, appropriate vendor certifications confirming the functional effectiveness under such conditions can be given and simulations based testing can be resorted to wherever applicable. In case, product fielded requires any repairs/modifications during the course of trials, these in situ servicing, repair, maintenance actions or modifications as requested by the vendor will be permitted. Towards this, Vendors shall ensure availability of requisite maintenance teams/experts onsite during the conduct of trials. Permission for trial product to move out of the trial location for a defined period for such repairs or modifications can be permitted on a case to case basis. In single vendor cases permission for the above may be permitted by the OIC Trials itself.

39. Commercial offers will be opened only of Bidders whose product is short-listed, after technical trials followed by user trials and evaluation and these have been accepted technically. In other words, the product would be required to be trial evaluated and found suitable prior to commencement of any commercial negotiations.

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

40. Bidder is to submit a Draft Acceptance Test Procedure (ATP) along with the Technical bid or at least one month before commencement of FET, as per the QA instructions and Technical Evaluation Plan attached as **Appendix G**. Based on the draft ATP, the ATP will be finalised by the Buyer's QA agency with Bidder during Technical Trials. In cases where no FET is to be conducted, ATP will be finalised at the CNC stage. ATP shall be included in the contract at the time of finalisation with successful bidder. 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. For technical trials by QA agencies, the Bidder will arrange for requisite test facilities at OEM premises/accredited laboratories for establishing conformance. The successful Bidder would also be required to provide those test facilities at OEM premises/accredited laboratories for quality assurance, which are not available with QA



agencies. Details of the same will be intimated to the Bidder during finalisation of ATP in Technical trials. Guidelines for framing of Draft ATP are given at **Appendix F**.

### **Marking & Packaging**

#### 41. **Packaging**

- (a) The SELLER shall provide packing and preservation of the equipment and spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, trans-shipment, storage and weather hazards during transportation, subject to proper cargo handling. The SELLER shall ensure that stores are packed in container/pallets, which are made sufficiently strong with suitable packing material. The packing cases should have hooks for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment which cannot be packed.
- (b) MSCN should be supplied in 3 different packages i.e:-
  - (i) **Package I.** Package of nets in superior quality synthetic carry bags with polypropylene straps in wooden/plastic pallets.
  - (ii) **Package II.** Repair kits in separate Plastic/Carton Box.
  - (iii) **Package III.** Metal Box for Mounting/Support System Components.
- (c) The packing of the equipment and spares/goods shall conform to the requirement of specifications and standards in force.
- (d) Each spare, accessories and Training Aids shall be packed in separate cartons. A label in English shall be pasted on the carton indicating details as per ATP of the item contained in the carton. The cartons shall then be packed in packing cases as required.
- (e) One copy of the packing list in English shall be inserted in each cargo package.
- (f) Should any special equipment to return to the SELLER by the BUYER, the latter shall provide normal packing, which protects the equipment and spares/goods from the damage of deterioration during transportation by land, air or sea. In this case the BUYER shall finalise the marking with the SELLER.

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

- (a) In accordance with the requirements specified in the RFP or if no such requirement is specified, with the indicated codification number or alternative reference number specified.
- (b) Ensure that any marking method used does not have a detrimental effect on the strength, serviceability or corrosion resistance of the deliverables.

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

43. **Marking**

(a) The Bidder shall ensure that each package containing the deliverable is labeled to include:-

Contract No \_\_\_\_\_ Ultimate consignee \_\_\_\_\_ SELLER  
 \_\_\_\_\_ Package No. a/b \_\_\_\_\_ Gross/net weight : Kg \_\_\_\_\_ overall  
 dimensions/volume cm/cum \_\_\_\_\_ The SELLER;s marking,

Where:-

- a - Serial No of package
- b - Total number of package in this consignment.
- (b) If necessary each package shall be marked with warning inscriptions:-  
 <Top>, "Do Not Turn Over" Category of Cargo etc.
- (c) The description and quantity of the deliverables.
- (d) The full part number in accordance with codification details.
- (e) The makers part, catalogue, serial, batch number, as appropriate.
- (f) The contract number.
- (g) Any statutory hazard markings and any handling markings including the mass of any package which exceeds 3 kgs.
- (h) The Packaging Label (military J, N or P, special H, commercial A, C etc)  
 (Reference to DEFSTAN 81-041 (Part 1)/STANAG-4280 or equivalent Military Standard.)

44. **Marking on MSCN and Support Structure**

(a) Marking on MSCN and Supporting structure, pegs and repair kit etc:-

- (i) Nomenclature
- (ii) Cat/Part No.
- (iii) Contract No & date
- (iv) Name of the Manufacturer/Supplier
- (v) Month & Year of Manufacture

## (b) Marking on Packages:-

- (i) Nomenclature
- (ii) Cat/Part No.
- (iii) Contract No & date
- (iv) Name of the Manufacturer/Supplier
- (v) Month & Year of Manufacture
- (vi) Consignee

45. 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.

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

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

#### **Commercial Bid**

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

48. Commercial offers will be opened only of the Bidder whose equipment is short-listed, after technical trials and staff evaluation. The Commercial Offer must be firm and fixed and should be valid for at least 18 months from the last date of bid submission. Seller will take action of revision or extension of bid, as applicable, before expiry of bid.

#### **Commercial Bid Opening**

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

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

51. The CNC will determine the lowest bidder (L1) and second lowest bidder (L2).

### **Additional Aspects**

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

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

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

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

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

56. **Evaluation and Acceptance Process.**

(a) **Evaluation of Technical Proposals.** The technical proposals forwarded by the Bidders will be evaluated by a Technical Evaluation Committee (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 QRs and prepare a "Compliance Statement" for shortlisting the Bidders. The shortlisted Bidders shall be asked to send the desired units of the equipment/weapon system for Field Evaluation in varying climatic, altitude and terrain conditions. A Staff Evaluation 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 Staff Evaluation will analyse the field evaluation results and shortlist the equipment recommended for introduction into service.

(b) **Evaluation of Commercial Bid.** The Commercial bids of only those bidders will be opened, whose technical bids have been cleared by TEC; equipment has been shortlisted after Field Evaluation (Trials)/Technical Trials and Staff Evaluation. Comparison of bids would be done on the basis of Evaluation criteria given in **Appendix J** to this RFP. The L-1 bidder and L-2 bidder would be determined by Contract Negotiation Committee (CNC) on the basis of **Appendix J** to this RFP. Only L-1 bidder would be invited for negotiations by CNC.

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

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**Appendix A**

(Refers to Para 27, 28, 29, 31 (a), 32, 34, 35 &amp; 37 of RFP)

**OPERATIONAL CHARACTERISTICS AND FEATURES****ESSENTIAL PARAMETERS-A****OPERATIONAL PARAMETERS**

1. **Ranges of Spectrum and Distances**. MSCN, when used to camouflage equipment, will reduce the chance of recognition of the object(s) covered by it, when viewed using sensors in the following defined regions of the EM spectrum:-

- (a) **Visual Range**. The wavelength range covered is 380 to 780 nm.
- (i) The chance of recognition of object(s) when covered with MSCN will reduce by 70 % at the following distances:-
- (aa) 750 m during daytime (ambient light condition is that of a clear day with a bright sun).
- (ab) 100 m during night (ambient light condition is that of a full moon night).
- (b) **UV Range**. The wavelength range covered is **300 to 380 nm**. The minimum reflectivity index of the MSCN when tested under laboratory conditions (with the same test set as that for NIR reflectance) will be 60%.
- (c) **NIR Range**. The wavelength range covered is 800 to 1200 nm and the ambient light condition is that of a full moon night.
- (i) The chance of recognition by observer(s) using an in-service Passive Night Vision (PNV) Goggles or a PNV Device of object(s) when covered with MSCN will reduce by 70 % at a distance of 300m.
- (ii) **NIR Reflectance**. The NIR reflectance of the material in the range 800 to 1200 nm used for the MSCN when subjected to laboratory tests against ISO 7724 for the under mentioned colours will be as given below:-

**800 nm to 1200 nm.**

- |                                    |   |             |
|------------------------------------|---|-------------|
| (aa) Olive green (ISC 220)         | : | (45 ± 10)%. |
| (ab) Light green (ISC 278)         | : | (55 ± 10)%. |
| (ac) Un-dyed Hemp (Sand) (ISC 386) | : | (40 ± 10)%. |

(ad)	Dark brown (ISC 412)	:	$\leq 25\%$ .
(ae)	Slate Grey (ISC 634)	:	$< 25\%$ .
(af)	White	:	$\geq 60\%$ .
(ag)	Light Brown (ISC 410/ISC 411)	:	$\leq 35\%$ .

(d) **TIR Range.** The wavelength ranges covered are  $3\mu$  to  $5\mu$  and  $8\mu$  to  $12\mu$  bands.

(i) **Thermal Transmission Test.** The maximum thermal transmission of MSCN when tested under laboratory conditions against MIL PRF 53134 (4.4.2.3.1) specifications and measured in the  $3\mu$  to  $5\mu$  band and  $8\mu$  to  $12\mu$  band will be 20%.

(ii) **Screen Thermal Test or Thermal Loading Test.** The maximum temperature difference of the MSCN with the environment due to solar loading / ambient cooling when evaluated against MIL PRF 53134 (4.4.2.3.2) will be **less than  $10^{\circ}\text{C}$ .**

(e) The MSCN, when evaluated under laboratory conditions, will be capable of attenuating the average radar transmission in the centimetre and millimetre wavelength bands wherein the minimum transmission loss of the sample material should be 6 dB (3 dB one way). The MSCN will be evaluated under lab conditions against MIL-PRF-53134 (4.4.2.4) for the range of 2-18 GHz; in addition, the vendor will certify that the MSCN will provide a 6 dB (3 dB one way) minimum transmission loss for the entire gamut of centimetre and millimetre radar wavelength band.

2. **Reversibility.** The MSCN will be reversible and lend itself for usage in two different contiguous terrains with one side for High Altitude Area Barren Mountain Terrain and the reverse side for Snow Bounded Area Terrain.

3. **Colours.** The MSCN will have a colour pattern that is made up of colours conforming to Indian Standard Colour (ISC) code as given below such that it blends with the terrain that is akin to the areas in Ladakh, Karakoram ranges and glacial regions. For the ease of comprehension, as a generic reference, the constituent colours of the specified terrain are given below. These are only guidelines and consequently vendors may suitably change / moderate the colours and their percentages in order to ensure the paramount mandate that the MSCN blends with the surrounding terrain. The vendor(s) finally selected for supplying MSCN will indicate the various IS colour codes and exact percentages used along with methodology.

- (a) Olive Green (ISC-220).
- (b) Mid Bronze Green (ISC-223).
- (c) Light Green (ISC-278).
- (d) Light Stone (ISC-361).

- (e) Mid Stone (ISC-362).
- (f) Un-dyed Hemp (Sand) (ISC-386).
- (g) Beige (Buff) ISC-388).
- (h) Dark Brown (ISC-412).
- (j) Orange Brown (ISC-439).
- (k) Slate Grey (ISC-634).
- (l) White.

4. **Temperature Range.**

(a) **Operating Temperature Range.** The MSCN will be operable at the ambient temperatures given below:-

- (i) Minimum temperature of minus 30<sup>0</sup>C to minus 20<sup>0</sup>C.
- (ii) Maximum temperature of 25<sup>0</sup>C to 35<sup>0</sup>C.

(b) **Storage Temperature.** There should be no requirement of any special arrangement for storage and it should be safe for storage from temperature range of minus 30<sup>0</sup>C to 50<sup>0</sup>C.

(c) The MSCN will be tested under laboratory conditions against IS 7016 (Part 10): 1997.

**TECHNICAL PARAMETERS**

5. **Material.**

(a) The equipment will have a matt finish with maximum gloss value of 6 when evaluated under laboratory conditions against IS: 1 01 (Part 4 / Section 4) -1988.

(b) The material will be safe for human usage (to be vendor certified).

(c) The material will be washable using off the shelf commercially available detergents and the colour fastness of the net fabric will be tested for a minimum rating of four under laboratory conditions against IS / ISO 105-C10:2006 and IS: 1259-1984 (4.6.4).

6. **Weight.** The dry weight of the MSCN (excluding the mounting and support systems) will not exceed 300 gm/m<sup>2</sup>.



7. **Water Absorption.** The maximum weight increase of the MSCN (without accessories) when tested against ASTM D 570 will be 30% of the dry weight of the same specimen.

8. **Resistance to Fire.** The MSCN will be fire retardant and should meet the standards of MIL PRF 53134 (4.4.2.5.1) when tested under laboratory conditions.

9. **Sizes.** The MSCN will be made available in six sizes as given below (with tolerance of minus 1%). Eight extension cords, each of 10 m length, shall be provided with each net.

- (a) 25 m x 20 m.
- (b) 16 m x 11 m.
- (c) 11 m x 11 m.
- (d) 11 m x 8 m.
- (e) 8 m x 5.5 m.
- (f) 5.5 m x 4 m.

10. **Mounting Equipment / Support Systems.** Details of the support system for the various sizes of MSCN are given as **Annexure**. The support system will be made of metallic or composite materials. Their compliance to the under mentioned parameters will be verified under laboratory conditions:-

- (a) The material will be able to withstand an impact of minimum 20 kg; vendor will provide a certificate for the same from an accredited laboratory.
- (b) The material will be rust resistant; vendor will provide a certificate for the same from an accredited laboratory.
- (c) The material, when subjected to ultimate load test, will, upon failure, not shatter or burst; vendor will provide a certificate for the same from an accredited laboratory.
- (d) The material will have a maximum gloss value of 6 when evaluated under laboratory conditions against IS: 101 (Part 4 / Section 4) -1988. A flat sample of mounting equipment material of size 5cm x 5cm will be produced for the lab trials.

11. **Strength of the MSCN.**

- (a) The minimum tensile/breaking strength of the MSCN material will be 30 kg and the same will be verified against IS 7016 (Part II)-1981 / IS 1969-1985 / IS 5815 (Part 4) 1993 as applicable under laboratory conditions.

(b) The minimum tensile strength of tie, loop and edge cord (each as finished product) will be 200 kg and the same will be verified against IS 7071 (Part 4): 1986 under laboratory conditions.

(c) **Joints.** The MSCN will have the provision for joining two or more nets from all sides. The joint will have an overlap and a minimum tensile strength of 25 kg and the same will be verified against IS: 7016 (Part II)-1981 under laboratory conditions; vendor will provide a certificate for the same from an accredited laboratory.

(d) **Flexing.** The MSCN will be tested against IS: 7016 (Part 4) 2003 under laboratory conditions for resistance to damage by flexing.

(e) **Tear Strength.** The MSCN will be tested under laboratory conditions against BS 3424: Part 5: 1982.

(f) **Shrinkage.** The shrinkage of the MSCN when tested under the laboratory conditions as per IS: 1259-1984 (4.7) will not exceed 5% in warp and weft directions each.

### **Maintainability & Ergonomic Parameters**

#### 12. **Life of the Equipment.**

(a) The MSCN and the support system will have a life of ten years in a sealed condition when stored in a closed storage area without environmental control (to be vendor certified).

(b) Upon breaking open the original sealed packing, the MSCN and the support system will sustain 150 handlings (to be vendor certified) with each handling comprising of taking the MSCN and the support system out of the packing, erecting the MSCN on its support system and repacking it or seven years (to be vendor certified) whichever is earlier.

13. **Repair.** The net will be repairable by troops in field conditions. Each MSCN will be accompanied by a repair kit, details of which are at **Annexure I**.

### **ESSENTIAL PARAMETERS – B**

14. Nil.

### **ENHANCED PERFORMANCE PARAMETERS (EPP)**

15. Nil

**DETAILS OF MSCN SUPPORT SYSTEM COMPONENTS AND REPAIR KIT COMPONENTS**

Serial No	Size of Net (m x m) (with tolerance of minus 1%)	Support System Components							Repair kit Components						
		Accounting unit	Quantity of Ground Stakes/ Anchors	Foldable/Telescopic Screen Support Poles			Quantity of Shape Disruptors	Quantity of Container for Support System	Quantity of Carry Bags for Net	Area of Material in 1 m <sup>2</sup> Patches	Mesh cord in M	Edge Cord in M	Thread in M	Needle	Scissors
				Quantity	Min Extended Length	Max Retracted Length									
(a)	25mx20m	Nos	30	15	5 m	2 m	15	1	1	150	200	200	100	20	4
(b)	16mx11m	Nos	20	15	5 m	2 m	15	1	1	90	100	100	100	20	4
(c)	11mx11m	Nos	15	10	3 m	1.5 m	10	1	1	60	100	100	100	20	4
(d)	11mx8m	Nos	15	10	3 m	1.5 m	10	1	1	45	100	100	100	20	2
(e)	8mx5.5m	Nos	10	10	3 m	1.5 m	10	1	1	20	50	50	100	20	2
(f)	5.5m x 4m	Nos	10	10	3 m	1.5 m	10	1	1	10	50	50	100	20	2

**Note:-**

1. The thread given will be as per the colour combination of the MSCN.
2. The needle will be of stainless steel and suitable for sewing the MSCN and cords.
3. The scissors will be 255 mm in length and as per IS 989.

**Appendix B**

(Refers to Para 27, 31(b) &amp; 32 of RFP)

**COMPLIANCE TABLE****For MULTI SPECTRAL CAMOUFLAGE NET (MSCN) FOR HIGH ALTITUDE INCLUDING BARREN MOUNTAIN/SNOW BOUND AREA**

<b>Ser No</b>	<b>Requirement as per the RFP</b>	<b>Compliance/ Partial Compliance</b>	<b>Indicate references of Paras/Sub Paras of the Main Technical Document</b>
1.	<b>General Conditions of RFP (Para 01 to 56)</b>		
2.	<b>Technical Parameters as per Appendix A</b>		
(a)	Essential Parameters 'A'		
3.	<b>Commercial Parameters as per RFP</b>		
(a)	Performance-cum-Warranty Bank Guarantee as per Para 2 of <b>Appendix H</b> of RFP		
(b)	Advance Payment Bank Guarantee as per Para 1.4.1 of <b>Appendix H</b> of RFP		
(c)	<b>Earnest Money Deposit (EMD)</b> as per Para 21 of RFP ( <b>Rs 30 Lakhs</b> )		

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

**WARRANTY CLAUSE**

1. The **SELLER** warrants that the goods/services supplied under this contract conform to technical specifications prescribed and shall perform according to the said Technical Specifications.
2. The **SELLER** warrants **comprehensive onsite warranty for a period of 24 months** from the **date of acceptance of deliverables post Joint Receipt Inspection (JRI)** or from the date of installation and commissioning whichever is later, that the goods/stores/services supplied under this contract and each component used in the manufacture thereof should be free from all types of defects/failures (including latent and patent defects). Cost towards all scheduled servicing during the warranty period will be borne by the **SELLER** to include spares.
3. If within the period of warranty, the goods/services are reported by the **BUYER** to have failed to perform as per the specifications, the **SELLER** shall either replace or rectify the affected goods/services free of charge, maximum within **45 days** of notification of such defect by the **BUYER** at the location of installation, provided that the goods are used and maintained by the **BUYER** as per instructions contained in the User Handbook/Operating Manual. 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 free of cost by **SELLER**. **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 scheduled service and repair backup during the warranty period of the equipment shall be provided by the **SELLER** and he will ensure that the downtime is within **45 days** at any one time and not exceeding a cumulative period of **10%** of the warranty period.
5. If a particular equipment/goods fail frequently and/or, the cumulative downtime exceeds **10%** of the warranty period, then the equipment will be completely replaced free of cost by the **SELLER** within a stipulated period of **90 days** of receipt of the notification from the **BUYER**.
6. **If a common defect is noticed in more than 5% of the quantity of goods with respect to a particular item/component/sub-component, that complete**

**item/component/sub-component of the entire lot** shall be replaced free of cost by the **SELLER** within a stipulated period of **120 days** of receipt of the notification from the **BUYER** duly modified/upgraded through design improvement in all equipment supplied/yet to be supplied. Warranty of the replaced equipment would start from the date of acceptance.

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. The SELLER warrants that the goods supplied will conform to the conditions as mentioned at **Appendix A** to RFP.

Vendor Copy

**Appendix D**  
(Refers to Para 36 of RFP)

**TECHNICAL LITERATURE AND TRAINING**

1. **Technical Literature.**

(a) The purpose of the User Manual/Technical Literature is to provide user personnel with all the information and instructions required to use and maintain the product. User Manual should contain detailed description of usage instructions, maintenance procedures, necessary support and test equipment, reference information, identification of mounting equipment/ support system and repair kit components. Soft copies of all Technical Literature in CD/DVD shall also be provided.

(b) The details of technical literature to be supplied with the system are as per the suggested format at **Annexure I to this Appendix. This should be provided with the Commercial proposal.**

2. **Training.**

(a) **Training.** User level training to operators for use and periodic maintenance, Ordnance personnel on maintenance and DGQA personnel on QA aspects will be planned by the vendor at his premises. The users after training should be proficient in operation and maintenance of the equipment. The number of personnel to be trained is mentioned at **Para 16 of RFP. The cost of training must be indicated in the Commercial proposal.**

**Annexure I to Appendix D**  
(Refer Para 36 of RFP &  
Para 1 (b) of Appendix D)

**TECHNICAL LITERATURE**

**Equipment: Multi Spectral Camouflage Net (MSCN) for High Altitude including Barren Mountain/Snow Bound Area,**  
**Quantity- 6175**

**Original Equipment Manufacturer (OEM):**

Ser No	Technical Literature	Unit Cost	Total Qty					Total Cost	Remarks
			User (IA)	Ord	DGQA	L1 Qty	L2 Qty		
1.	<b><u>User Handbook cum Maintenance Manual</u></b> <b><u>User Handbook cum Maintenance Manual to include the following:-</u></b> (a) Method of its use. (b) Shelf/In-Service. (c) Fitment and removal. (d) Routine/Periodic Maintenance and repair instructions. (e) Storage Instructions (f) Do's and Dont's (g) Special instructions for decontamination, if any		642	04	06	391	261	652	Quantities for DGQA and Ordnance will be supplied by both L1 and L2 vendors.
2.	Training Brochures		128	-	04	79	53	132	
3.	Illustrated Spare Part List (ISPL)		-	06	06	08	04	12	
4.	CDs on the above Tech literature		128	-	06	80	54	134	
5.	Any other (Specify)								

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

**Note**

1. In case any additional equipment is used their technical literature will be included.
2. If certain technical literature is being provided free of cost it should be indicated in the remarks column.
3. **Cost to be included as part of Commercial Offer and NOT Technical Offer.**



**TRIAL METHODOLOGY: MULTI SPECTRAL CAMOUFLAGE NETS (MSCN) FOR HIGH ALTITUDE INCLUDING BARREN MOUNTAINS/SNOW BOUND AREA TERRAINS**

**General**

1. The Field Evaluation Trials (FET) for MSCN High Altitude Barren Mountain and Snow Bound Area Terrains will be conducted on '**No Cost No Commitment**' basis under the aegis of IHQ of MoD (Army) as per **Annexure-I**. FET will constitute following: -

- (a) User evaluation.
- (b) Technical and environmental evaluation.

2. **Intended Service Employment.** MSCN will be used to camouflage critical designated equipment in conjunction with the terrain considerations to reduce the chance of recognition against aerial and ground based EM sensors.

**Note:-** Recognition means that the observer is able to **differentiate between the various classes of the targets / objects.**

3. **Number of Trial Equipment and Other Associated Items.** Each vendor shortlisted by the Technical Evaluation Committee (TEC) will be asked to deposit under mentioned trial equipment at designated trial location: -

(a) **User Evaluation.**

- (i) One net of size 25 m x 20 m along with support system components.
- (ii) One net of size 16 m x 11 m along with support system components.

(b) **Technical & Environmental Evaluation.**

- (i) One Swath of size 4m x 4m.
- (ii) Two Swaths of size 1.5 x 1.5 m (for evaluation at Defence Laboratory Jodhpur).
- (iii) Tie cord/rope 10m long.
- (iv) Edge Cord and Mesh Cord of length 10 m each.
- (v) 10 m long Loop Cord.

(vi) One Ground Stake/Anchor.

(vii) **Foldable/Telescopic Screen Support**. One pole with minimum extended length of 5 M and maximum retracted length of 2 M.

(viii) One flat surface of size 5cm x 5cm for evaluation of gloss value of mounting/support system. The material of the flat surface to be same as that of mounting and support system.

(ix) Repair kit comprising 10 m thread, two needles and two pairs of scissors.

**Note:-** Trial samples for technical and environmental evaluation will be subjected to destructive testing in laboratory **and therefore will not be returned.**

4. **Crew**. Crew representative for laying/handling of equipment will be provided by the Vendor. The crew will comprise of one coordinator and operating members sufficient to lay/handle the equipment. The crew of vendor should have adequate knowledge about the equipment to give the complete details of the equipment including handling, laying, repair & testing procedures. Observation and recommendations will be conveyed to respective coordinator.

5. **Deposit of Trial Equipment**. The vendor shall be prepared to deposit the equipment for FET within **five months** of issue of RFP or **one month** of clearance by the TEC whichever is later.

6. **Retention of Trial Equipment**. The equipment of all the vendors found compliant in Staff Evaluation, will be retained under the custody of the trial unit/ evaluating agency till the commencement of CNC. Equipment of the vendors found non-complaint in the General Staff Evaluation would be returned thereafter. On finalisation of contract, equipment of other participating vendors will be returned, but equipment of the vendor with whom contract is concluded will be retained till commencement of deliveries for the purpose of comparison.

7. **Transportation of Equipment**. Being NCNC trials all charges for transportation freight, insurance, custom, octroi and any other local taxes shall be borne by the vendor.

### **Trials**

8. The trials will be conducted in accordance with the provisions laid out in DAP 2020 and the equipment will be tested against parameters mentioned at Appendix A to the RFP.

9. **De-Briefing**. After each stage of Trials, OIC Trials will debrief the Vendor Representatives in accordance with Para 79 of Chapter II of DAP 2020.

10. **Location of Trials**. The location for trials will be specified during the pre-trial meet.

11. **Vendor Certification (Certificate of Conformance)**. Certification from NABL accredited lab or Vendor Certification on aspects specified at Annexure-I will be accepted on case-to-case basis i.e. 'Vendor certification duly backed up with a test certificate from a NABL accredited lab/ DGQA facility along with test plan, test, reports, graphs, and results'

or 'Vendor Certification/ Undertaking (only in exceptional cases) based on vendor's design'. **However, in event of non-availability of test facility for any particular parameter at NABL accredited laboratory/DGQA Laboratory/ Defence Laboratory Jodhpur (DLJ), same may be accepted based on tests undertaken in other laboratory in presence of representative of DGQA/DLJ.** Also, SHQ reserves the right to carry out trials on parameters for which vendor certification are required or ask for vendor certificate at a later stage through the method of trial evaluation.

12. **Testing Charges.** In case facilities to conduct tests are not available in DGQA laboratories, the tests may be conducted in Government laboratories (including DRDO laboratories)/ establishment or private laboratories in India. The participating vendor would be required to pay for the tests conducted in the Government (including DRDO) and private laboratories.

### **Outline Methodology of Conduct**

13. Outline Methodology of Conduct is attached as Annexure-I.

### **Pre-Trial Meeting**

14. A pre-trial meeting to discuss broad schedule and modalities of trial will be organised at a place which will be intimated to the vendors. The meeting will include representative of vendor and all stake holders and agencies involved in conduct of trials.

### **Security Clearance**

15. The vendor will intimate relevant details of his representatives who will attend the trials minimum **30 days** in advance of commencement of trials for obtaining security clearance. Non-receipt of details may result in delays in security clearance.

### **Representations / Requests**

16. All queries, representations and requests related to the trial will be addressed in writing to the OIC Trial and will be replied to by the OIC Trial in writing. Both parties will endorse a copy of the correspondence to DGCD/ CD-6. OIC Trial will draw vendor's attention to MoD Guidelines for Handling of Complaints promulgated vide MoD ID No. 1(6)/D(Acq)/13-Vol.II dated 21 Sep 2015.

### **Schedule of Trials**

17. The likely schedule and sequence of trials will be informed to the vendor representatives during the meetings mentioned in Para 14 above.

### **Miscellaneous**

18. The representatives of the Trial Team may be required to visit certain factory locations and/or laboratories during the evaluations. The vendor would organise access and facilitate such visits by Trial Team to its factory/manufacturing locations.

19. Any additional aspects to be checked during FET will be intimated during Pre-Trial meeting.

**Conclusion**

20. The trial methodology is only a broad guideline. The detailed instructions for the conduct of trials will be finalized and issued before its conduct.

Vendor Copy

**Annexure I**

(Refers to Para 1 of the Appendix E)

**BROAD TRIAL METHODOLOGY: MULTI SPECTRAL CAMOUFLAGE NETS (MSCN) FOR HIGH ALTITUDE INCLUDING BARREN MOUNTAINS/SNOW BOUND AREA TERRAINS**

<b>S. No.</b>	<b>GSQR Para Ref</b>	<b>GSQR Parameters</b>	<b>Responsibility for Evaluation</b>	<b>Broad Trial Plan</b>
1.	14(a)	<p><b>Ranges of Spectrum and Distances.</b> MSCN, when used to camouflage equipment, will reduce the chance of recognition of the object(s) covered by it, when viewed using sensors in the following defined regions of the EM spectrum: -</p> <p>(a) <b>Visual Range.</b> The wavelength range covered is 380 to 780 nm.</p> <p>(i) The chance of recognition of object(s) when covered with MSCN will reduce by 70% at the following distances: -</p> <p>(aa) 750 m during day time (ambient light condition is that of a clear day with a bright sun).</p> <p>(ab) 100 m during night (ambient light condition is that of a full moon night).</p>	User	Physical evaluation.
2.	14(b)	<p>(b) <b>UV Range.</b> The wavelength range covered is 300 to 380 nm. The minimum reflective index of the MSCN when tested under laboratory conditions (with the same test set up as that for NIR reflectance) will be 60%.</p>	DGQA	Evaluation in Government/private laboratory in presence of DGQA representative as per DLJ Methodology (only for white color)
3.	14(c)(i)	<p>(c) <b>NIR Range.</b> The wavelength range covered is 800 to 1200 nm and the ambient light condition is that of a full moon light.</p> <p>(i) The chance of recognition by observer(s) using an in-service Passive Night Vision (PNV) Goggles or a PNV Device of object(s) when covered with MSCN will reduce by 70% at a distance of 300m.</p>	User	Physical evaluation.

S. No.	GSQR Para Ref	GSQR Parameters	Responsibility for Evaluation	Broad Trial Plan																					
4	14(c)(ii)	<p>(ii) <b>NIR Reflectance.</b> The NIR reflectance of the material in the range 800 to 1200 nm used for the MSCN when subjected to laboratory tests against ISO 7724 for the under mentioned colours will be as given below: -</p> <p><b>800nm to 1200nm.</b></p> <table border="0"> <tr> <td>(aa) Olive green (ISC 220)</td> <td>:</td> <td>(45 ± 10) %.</td> </tr> <tr> <td>(ab) Light green (ISC 278)</td> <td>:</td> <td>(55 ± 10) %.</td> </tr> <tr> <td>(ac) Un-dyed Hemp (Sand)(ISC-386)</td> <td>:</td> <td>(40 ± 10) %.</td> </tr> <tr> <td>(ad) Dark brown (ISC 412)</td> <td>:</td> <td>≤ 25 %.</td> </tr> <tr> <td>(ae) Slate Grey (ISC 634)</td> <td>:</td> <td>&lt; 25 %.</td> </tr> <tr> <td>(af) White</td> <td>:</td> <td>≥ 60%.</td> </tr> <tr> <td>(ag) Light Brown (ISC-410/ISC-411)</td> <td>:</td> <td>≤ 35%</td> </tr> </table>	(aa) Olive green (ISC 220)	:	(45 ± 10) %.	(ab) Light green (ISC 278)	:	(55 ± 10) %.	(ac) Un-dyed Hemp (Sand)(ISC-386)	:	(40 ± 10) %.	(ad) Dark brown (ISC 412)	:	≤ 25 %.	(ae) Slate Grey (ISC 634)	:	< 25 %.	(af) White	:	≥ 60%.	(ag) Light Brown (ISC-410/ISC-411)	:	≤ 35%	DGQA	Evaluation in Government/private laboratory in presence of DGQA representative as per DLJ Methodology.
(aa) Olive green (ISC 220)	:	(45 ± 10) %.																							
(ab) Light green (ISC 278)	:	(55 ± 10) %.																							
(ac) Un-dyed Hemp (Sand)(ISC-386)	:	(40 ± 10) %.																							
(ad) Dark brown (ISC 412)	:	≤ 25 %.																							
(ae) Slate Grey (ISC 634)	:	< 25 %.																							
(af) White	:	≥ 60%.																							
(ag) Light Brown (ISC-410/ISC-411)	:	≤ 35%																							
5.	14(d)	<p>(d) <b>TIR Range.</b> The wavelength ranges covered are 3μ to 5μ and 8μ to 12μ bands.</p> <p>(i) <b>Thermal Transmission Test.</b> The maximum thermal transmission of MSCN when tested under laboratory conditions against MIL PRF 53134 (4.4.2.3.1) specifications and measured in the 3μ to 5μ band and 8μ to 12μ band will be 20%.</p> <p>(ii) <b>Screen Thermal Test or Thermal Loading Test.</b> The maximum temperature difference of the MSCN with the environment due to solar loading / ambient cooling when evaluated against MIL PRF 53134 (4.4.2.3.2) will be less than 10°C.</p>	Defence Laboratory Jodhpur	As per DL Jodhpur methodology.																					
6.	14	<p>(e) The MSCN, when evaluated under laboratory conditions, will be capable of attenuating the average radar transmission in the centimetre and millimetre wavelength bands wherein the minimum transmission loss of the sample material should be 6dB (3dB one way). The MSCN will be evaluated under lab conditions against MIL- PRF-53134 (4.4.2.4) for the range of 2-18 GHz; in addition, the vendor will certify that the MSCN will provide a 6dB (3dB one way) minimum transmission loss for the entire gamut of centimetre and millimetre radar wavelength band.</p>	Defence Laboratory Jodhpur	As per DL Jodhpur Methodology. Vendor certification for the entire gamut of centimetre and millimetre radar wavelength band.																					
7.	15	<p><b>Reversibility.</b> The MSCN will be reversible and lend itself for usage in two different contiguous terrains with one side for High Altitude Area Barren Mountain Terrain and the reverse side for Snow Bound Area Terrain.</p>	User	To be evaluated concurrent to Ser No 1 above.																					

<b>S. No.</b>	<b>GSQR Para Ref</b>	<b>GSQR Parameters</b>	<b>Responsibility for Evaluation</b>	<b>Broad Trial Plan</b>
8.	16	<p><b>Colours.</b> The MSCN will have a colour pattern that is made up of colours conforming to Indian Standard Colour (ISC) code as given below such that it blends with the terrain that is akin to areas in Ladakh, Karakoram ranges and glacial region. For the ease of comprehension, as a generic reference, the constituent colours of the specified terrain are given below. These are only guidelines, and consequently vendors may suitably change / moderate the colours and their percentages in order to ensure the paramount mandate that the MSCN blends with the surrounding terrain. The vendor(s) finally selected for supplying MSCN will indicate the various IS colour codes and exact percentages used along with methodology.</p> <ul style="list-style-type: none"> <li>(a) Olive Green (ISC-220).</li> <li>(b) Mid Bronze Green (ISC-223).</li> <li>(c) Light Green (ISC-278).</li> <li>(d) Light Stone (ISC-361).</li> <li>(e) Mid Stone (ISC-362).</li> <li>(f) Un-dyed Hemp (Sand) (ISC-386)</li> <li>(g) Beige (Buff) (ISC-388).</li> <li>(h) Dark Brown (ISC - 412).</li> <li>(j) Orange Brown (ISC-439).</li> <li>(k) Slate Grey (ISC-634).</li> <li>(l) White.</li> </ul>	DGQA	Verification of the colours conformance to ISC code.
9.	17	<p><b>Temperature Range.</b></p> <p>(a) <b>Operating Temperature Range.</b> The MSCN will be operable at the ambient temperatures given below: -</p> <ul style="list-style-type: none"> <li>(i) Minimum temperature of minus 30<sup>0</sup> C to minus 20<sup>0</sup> C.</li> <li>(ii) Maximum temperature of 25<sup>0</sup> C to 35<sup>0</sup> C.</li> </ul>	User	Physical evaluation.

10.		(b) <b>Storage Temperature.</b> There should be no requirement of any special arrangement for storage and it should be safe for storage from temperature range of minus 30° C to 50° C.	DGQA	Physical evaluation as per IS 7016 (Part 10): 1997 at CQA (EE), Pune.
11.	17	(c) The MSCN will be tested under laboratory conditions against IS 7016 (Part 10) : 1997.	DGQA	Physical evaluation as per IS 7016 (Part 10): 1997 at CQA (EE), Pune.
12.		<b>Technical Parameters</b> <b>Material.</b> (a) The equipment will have a matt finish with maximum gloss value of 6 when evaluated under laboratory conditions against IS: 101 (Part 4 / Section 4)-1988.	Defence Laboratory Jodhpur	Tests to be conducted at 60° angle as per DLJ methodology
13.	18	(b) The material will be safe for human usage (to be vendor certified).	DGQA	Certificate of conformance by respective vendor
14.		(c) The material will be washable using off the shelf commercially available detergents.	User	Physical evaluation
		(d) Colour fastness of the net fabric will be tested for a minimum rating of four under laboratory conditions against IS / ISO 105-C10:2006 and IS: 1259-1984 (4.6.4).	DGQA	Physical evaluation as per IS / ISO 105-C10:2006 and IS: 1259-1984 (4.6.4) at CQA(EE), Pune.
15.	19	<b>Weight.</b> The dry weight of the MSCN (excluding the mounting and support systems) will not exceed 300 gm/ m <sup>2</sup> .	DGQA	Physical evaluation as per IS 1964 at CQA (EE), Pune.
16.	20	<b>Water Absorption.</b> The maximum weight increase of the MSCN (without accessories) when tested against ASTM D 570 will be 30% of the dry weight of the same specimen.	DGQA	Physical evaluation as per ASTM D 570 at CQA (EE), Pune
17.	21	<b>Resistance to Fire.</b> The MSCN will be fire retardant and should meet the standards of MIL PRF 53134 (4.4.2.5.1) when tested under laboratory conditions.	DGQA	Physical evaluation as per MIL PRF 53134 (4.4.2.5.1) at CQA (EE), Pune.
18.	22	<b>Sizes.</b> The MSCN will be made available in six sizes as given below (with tolerance of minus 1%). Eight extension cords, each of 10 m length, shall be provided with each net. (a) 25 m x 20 m. (b) 16 m x 11 m. (c) 11 m x 11 m. (d) 11 m x 8 m.	User	- Physical evaluation. - For the purpose of FET, following <b>two</b> sizes of MSCN to be submitted by each vendor: - - 25 m x 20 m. - 16 m x 11 m. - Eight extension cords, each of 10 m length, to be provided with



		(e) 8 m x 5.5 m. (f) 5.5 m x 4 m.		each net. <b>The extension cord will be tested for tensile strength by DGQA.</b>
			DGQA (Testing of extension cord only)	Extension cords will be tested for tensile strength against IS : 7071-(Part 4)-1986.
19.	23	<b>Mounting Equipment / Support systems.</b> Details of the support system for the various sizes of MSCN (given as <b>Annexure II</b> ). The support system will be made of metallic or composite materials. Their compliance to the under mentioned parameters will be verified under laboratory conditions: -  (a) The material will be able to withstand an impact of minimum 20 kg; vendor will provide a certificate for the same from an accredited laboratory.	DGQA	- Certificate of conformance supported by test reports from NABL accredited laboratory / DGQA approved laboratory as per ASTM D 638-02a for composites and IS: 1598-1977 for metal.  - Support system and Repair Kit component are as per Annexure-II.
20.		(b) The material will be rust resistant; vendor will provide a certificate for the same from an accredited laboratory.	DGQA	Certificate of conformance supported by test reports from NABL accredited laboratory as per IS: 9844-1981.
21.		(c) The material, when subjected to ultimate load test, will, upon failure, not shatter or burst; vendor will provide a certificate for the same from an accredited laboratory.	DGQA	Certificate of conformance supported by test reports from NABL accredited laboratory as per IS: 9844-1981.
22.		(d) The material will have a maximum gloss value of 6 when evaluated under laboratory conditions against IS: 101 (Part 4 / Section 4)-1988. A flat sample of mounting equipment material of size 5cm x 5cm will be produced for the lab trials.	Defence Lab Jodhpur	- Tests to be conducted at 60° angle as per DLJ methodology.  - Measurement of gloss value to be undertaken on Flat Surface. A separate 5cm x 5cm plate of same material to be provided.
23.	24	<b>Strength of the MSCN.</b>	-	-
24.		(a) The minimum tensile / breaking strength of the MSCN material will be 30 kg and the same will be verified against IS 7016 (Part II) – 1981 / IS 1969-1985 / IS 5815 (Part 4) 1993 as applicable under laboratory conditions.	DGQA	Physical evaluation as per IS 7016 (Part II) – 1981 / IS 1969-1985 / IS 5815 (Part 4) 1993 at CQA(E), Pune.

25.		(b) The minimum tensile strength of tie, loop and edge cord (each as finished product) will be 200 kg and the same will be verified against IS 7071 (Part 4): 1986 under laboratory conditions.	DGQA	Physical evaluation as per IS 7071 (Part 4) Method A: 1986 at CQA(EE), Pune
26.		(c) <b>Joints.</b> The MSCN will have the provision for joining two or more nets from all sides. The joint will have an overlap and a minimum tensile strength of 25 kg and the same will be verified against IS: 7016 (Part II) – 1981 under laboratory conditions; vendor will provide a certificate for the same from an accredited laboratory.	User	Physical verification concurrent to user evaluation.
27.		(d) <b>Flexing.</b> The MSCN will be tested against IS: 7016 (Part 4) 2003 under laboratory conditions for resistance to damage by flexing.	DGQA	Physical evaluation as per IS 7016 (Part 4) 2003 for minimum 20,000 cycles at CQA(EE), Pune
28.	24	(e) <b>Tear Strength.</b> The MSCN will be tested under laboratory conditions against BS 3424: Part 5: 1982.	DGQA	Physical evaluation as per BS 3424: Part 5: 1982-Method 7A at CQA(EE), Pune.
29.		(f) <b>Shrinkage.</b> The shrinkage of the MSCN when tested under the laboratory conditions as per IS: 1259-1984 (4.7) will not exceed 5% in warp and weft directions each.	DGQA	Physical evaluation as per IS: 1259-1984 (4.7) at CQA(EE), Pune.
30.	25	<p><b>Maintainability &amp; Ergonomic Parameters</b></p> <p><b>Life of the Equipment.</b></p> <p>(a) The MSCN and the support system will have a life of ten years in a sealed condition when stored in a closed storage area without environmental control (to be vendor certified).</p> <p>(b) Upon breaking open the original sealed packing, the MSCN and the support system will sustain 150 handlings (to be vendor certified) with each handling comprising of taking the MSCN and the support system out of the packing, erecting the MSCN on its support system and repacking it or seven years (to be vendor certified) whichever is earlier.</p>	DGQA	Certificate of conformance by respective vendor
31.	26	<b>Repair.</b> The net will be repairable by troops in field conditions. Each MSCN will be accompanied by a repair kit (details are as per Annexure II).	User	<ul style="list-style-type: none"> <li>- Repair procedure in field to be demonstrated by respective vendors.</li> <li>- Support system and Repair Kit component as per <b>Annexure II.</b></li> </ul>
32.	-	Support system and repair kit component As per Annexure II	User	For the purpose of FET, support system and repair kit component to be submitted for only two sizes i.e. 25m x 20m and 16 m x 11m

**Annexure II**

(Refers to Serial 19 and 31 of the Annexure I of Appendix E)

**DETAILS OF MSCN SUPPORT SYSTEM COMPONENTS AND REPAIR KIT COMPONENTS**

Serial No	Size of Net (m x m) (with tolerance of minus 1%)	<u>Support System Components</u>							<u>Repair Kit Components</u>						
		Accounting Unit	Quantity of Ground Stakes/ Anchors	Foldable / Telescopic Screen Support Poles			Quantity of Shape Disruptors	Quantity of Container for Support System	Quantity of Carry Bags for Net	Area of Material in 1 m <sup>2</sup> Patches	Mesh Cord in M	Edge Cord in M	Thread in m	Needle	Scissors
				Quantity	Min Extended Length	Max Retracted Length									
(a)	25m x 20m	Nos	30	15	5 m	2 m	15	1	1	150	200	200	100	20	4
(b)	16m x 11m	Nos	20	15	5 m	2 m	15	1	1	90	100	100	100	20	4
(c)	11m x 11m	Nos	15	10	3 m	1.5 m	10	1	1	60	100	100	100	20	4
(d)	11m x 8m	Nos	15	10	3 m	1.5 m	10	1	1	45	100	100	100	20	2
(e)	8m x 5.5m	Nos	10	10	3 m	1.5 m	10	1	1	20	50	50	100	20	2
(f)	5.5m x 4m	Nos	10	10	3 m	1.5 m	10	1	1	10	50	50	100	20	2

**Note:-**

1. The thread given will be as per the colour combination of the MSCN.
2. The needle will be of stainless steel and suitable for sewing the MSCN and cords.
3. The scissors will be 255 mm in length and as per IS 989.

**Appendix F**  
(Refers to Para 40 of the RFP)

**GUIDELINES FOR FRAMING ACCEPTANCE TEST PROCEDURE (ATP)**

1. Bidders to submit draft ATP, along with their Technical Bid.
2. Draft Acceptance Test Procedure for the Equipment/System should mainly consist of the following: -

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

(b) **Brief description of the Equipment/System**. Brief description of the equipment/system be highlighted indication 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**. TS of the equipment be indicated along with dimension, weight of the equipment etc. operational requirements & Pictorial representation of the equipment/system be provided under this section. SQR/ORs are translated into ATP with measurable parameters.

(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**. BoM as per the following format be included.

S. NO	Item Name/ Description	Part Number	NSN Number	Drawing Number	Manufacturer	Schematic Reference	Standard of Reference	Qty Nos	Mil/ 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/JSG, 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 & Post Performance test to check the performance of the equipment be included. Durability tests shall also be included. Various Standards are enclosed for Environmental Test (ET) & Technical Evaluations (TE) as per applicable provisions enclosed at **“Annexure VIII & Annexure XI to Appendix ‘B’**.

(j) **Acceptance/ Performance Tests**. Includes the Visual, Electrical & Functional tests. Functional Test procedure along with diagram showing Test set up to be

mentioned. Final acceptance/ Performance checks comes under this section. Tests can be carried out under lab & field conditions needs to be mentioned separately.

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

(l) **Quality Audit points/ Checks/ Methodology including Real Time/ Online Audit activities & list of critical processes.** Process audit methodology to be carried by 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 & Measurement Record (TMR).** TMR sheet with expected output 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 specify along with power systems including Genset/UPS wherever required.
- (iii) Sampling plans to be invoked wherever feasible.
- (iv) Certain test requires permission from authorities such as long range comn, jamming tests, detection of drones, use of DEW etc. Necessary permissions need to be obtained bySELLER.
- (v) Arms & Ammunition required for testing to be planned suitability by SHQ.

**Appendix G**  
(Refers to Para 40 of the RFP)

**QUALITY ASSURANCE INSTRUCTIONS AND TECHNICAL EVALUATION PLAN**

1. References:-

- (a) GSQR No 1736 Dated 11 May 2023.
- (b) NCNC Samples trial evaluation.

(i)	User Trial	Will be referred after placement of Contract
(ii)	DGQA Evaluation	
(iii)	Confirmatory Laboratory Trial by DGQA	

2. **Product Information.**

- (a) MSCN will be introduced into service for replacement of existing Twine net for critical designated equipment.
- (b) Multi-spectral Camouflage Nets (MSCN) are used by Military Forces to camouflage critical designated equipment to reduce the chance of recognition against aerial and ground-based EM sensors such as optical, electromagnetic, thermal and UV radar detection system.

3. **General Operational & Physical Characteristics and Features of MSCN as per GSQR.**

- (a) General Information (Page 1-2 of GSQR).
- (b) Operational Parameters (Page 2-5 of GSQR).
- (c) Technical Parameters (Page 5-7 of GSQR).
- (d) Details of MSCN Support System components and repair kit components (Appendix of GSQR).

4. **QA Matrix.**

S No	Item	GSQR Reference/ Test Parameters	Test Standards	Test Method	Responsibility of Sampling	Responsibility of Testing	Test Laboratory	Acceptance Criteria	Remarks
(a)	MSCN Fabric	<b><u>Operational Parameters</u></b>							
		(i) <b><u>UV Range.</u></b> The wavelength range covered is 300 to 380nm. The minimum reflectivity index of the MSCN when tested under conditions (with the same test set up as that for NIR reflectance) will be 60%.	To be mentioned by DLJ	DL, Jodhpur developed method	DGQA rep	DL Jodhpur	DL Jodhpur	To be mentioned by DLJ	
		(ii) <b><u>NIR Reflectance 800 to 1200 nm.</u></b> Olive Green-ISC 220 Light Green-ISC 278 Un-dyed Hemp (Sand) ISC-386 Dark Brown-ISC 412 State Grey-ISC 634 White Light Brown-ISC 410/ ISC 411	ISO-7724	DL, Jodhpur developed method	DGQA rep	DL Jodhpur	DL Jodhpur	<b><u>800 to 1200 nm</u></b> Olive Green-ISC 220 : 45±10% Light Green-ISC 278 : 55 ± 10% Un-dyed Hemp (Sand) ISC-386 : 40 ± 10% Dark Brown-ISC 412 : ≤ 25% State Grey-ISC 634 : < 25% White : ≥ 60% Light Brown-ISC 410/ ISC 411 : ≤ 35%	(i) The colour and their percentage may be suitably modified to ensure that MSCN blends with surrounding terrain as per Para 16 of GSQR.

S No	Item	GSQR Reference/ Test Parameters	Test Standards	Test Method	Responsibility of Sampling	Responsibility of Testing	Test Laboratory	Acceptance Criteria	Remarks
		(iii) <b>TIR Range: (Para 14 (d) of GSQR).</b>  (aa) Thermal Transmission in 3-5 $\mu$ and 8-12 $\mu$ .  (ab) Thermal Loading in 3-5 $\mu$ and 8-12 $\mu$ .	MIL PRF5313 4 (4.4.2.3.1)  MIL PRF5313 4 (4.4.2.3.2)	As per DL Jodhpur method	DGQA rep	DL Jodhpur	DL Jodhpur	(a) Thermal Transmission in 3-5 $\mu$ and 8-12 $\mu$ : 20%max.  (b) Thermal Loading in 3-5 $\mu$ and 8-12 $\mu$ : $\pm 10^\circ$ C	
		(iv) <b>Radar Range (Para 14 (e) of GSQR):</b>  Radar transmission loss in range 2-18 GHz	MIL PRF5313 4 (4.4.2.4)	DL, Jodhpur developed method	DGQA rep	DL Jodhpur	DL Jodhpur	6dB (3 dB in one way)	
(b)	MSCN Fabric	<b>Technical Parameters</b>							
		(i) Weight	IS: 1964	As per IS	DGQA rep	DGQA	CQAE Pune	GSM : 300 Max	
		(ii) Water Absorption	ASTM D 570	As per standard	DGQA rep	DGQA	CQAE Pune	Increase in weight 30% Max	
		(iii) Resistance to Fire	MIL-PRF-53134 (4.4.2.5.1)	As per standard	DGQA rep	DGQA	CQAE Pune	Self-extinguishing prior to burning of 60% of the specimen area.	



S No	Item	GSQR Reference/ Test Parameters	Test Standards	Test Method	Responsibility of Sampling	Responsibility of Testing	Test Laboratory	Acceptance Criteria	Remarks
		(iv) Breaking Strength	IS : 7016 Part-II	As per standard	DGQA rep	DGQA	CQAE Pune	30 kg/cm.Sq.Min	
		(v) Tearing Strength	BS: 3424 Part V	Method 7A	DGQA rep	DGQA	CQAE Pune	5 Kg Min	
		(vi) Flexing	IS: 7016 Part IV	As per standard	DGQA rep	DGQA	CQAE Pune	20,000 Cycles Min	
		(vii) Shrinkage	IS 1259:198 4(4.7)	As per standard	DGQA rep	DGQA	CQAE Pune	5% Maximum	As per IS 1259:1984 (4.7)
		(viii) Colour fastness to washing	IS/ISO 105- C10- 2006	As per standard	DGQA rep	DGQA	CQAE Pune	Rating $\geq$ 4	
		(ix) Temperature Range/ Low temperature Bend Test at (-) 20 <sup>o</sup> C	IS: 7016 Part X	As per standard	DGQA rep	DGQA	CQAE Pune	No cracks when folded sharply keeping the coated surface outwards after exposure of test piece at minus 20 <sup>o</sup> C for six hours.	
		(x) Matt Finish/ Gloss	IS :101 (Part-4/ Sec 4)	As per standard	DGQA rep	DGQA	DL Jodhpur/ NABL lab	GU : 6 Max	
		(xi) Colour fastness to Light	IS :1259	As per standard	DGQA rep	DGQA	NABL/ Govt lab	Rating $\geq$ 4	
(c)	Edge Tape and	<b>Tensile Strength.</b> (Para 24(b) of GSQR)	IS 7071 Part 4	As per standard	DGQA rep	DGQA	NABL/ Govt lab	200 Kg Min	

S No	Item	GSQR Reference/ Test Parameters	Test Standards	Test Method	Responsibility of Sampling	Responsibility of Testing	Test Laboratory	Acceptance Criteria	Remarks
	Loop Cords								
(d)	Telescopic Poles	Impact Strength (Para 23 (a) of GSQR)	ASTM D 256	As per standard	DGQA rep	DGQA	NABL/ Lab	20 Kg Min	CoC from NABL lab.
		Ultimate Load test (Para 23 (c) of GSQR)	ASTM D 638	As per standard	DGQA rep	DGQA	NABL/ Govt Lab	Not shatter or Burst	CoC from NABL lab.
(e)	Finished MSCN (Final Product)	(i) Size (Para 22 of GSQR)	As per GSQR	General Engg Method	DGQA rep	DGQA	-	The MSCN will be made available in six sizes given below (with tolerance of minus 1%). Eight extension cords, each of 10m length shall be provided with each net:- (a) 25m x 20m (b) 16m x 11m (c) 11m x 11m (d) 11m x 8m (e) 8m x 5.5m (f) 5.5m x 4m	Visual check for completeness, workmanship & finish.
		(ii) <u>Reversibility</u> . (Para 15 of GSQR)	As per GSQR	General Engg Method	DGQA rep	DGQA	-	The MSCN will be reversible and lend itself for use in two different contiguous terrains.	
(f)	Repair Kit	Repair (Para 26 of GSQR)	As per GSQR	General Engg Method	DGQA rep	DGQA	-	Check as per table given at Appendix of GSQR.	(i) The thread given will be as per the

S No	Item	GSQR Reference/ Test Parameters	Test Standards	Test Method	Responsibility of Sampling	Responsibility of Testing	Test Laboratory	Acceptance Criteria	Remarks
									colour combination of the MSCN.  (ii) The needle will be of stainless steel and suitable for sewing the MSCN and cords.
(g)	Packing	-	-	-	DGQA rep	DGQA	-	Bag of suitable size of MSCN  Accessories:  Container/Box/ carry bag of suitable size	

5. Details of MSCN Support System Component and Repair Kit Components (Appendix of GSQR).

S No	Size of Net (max) with tolerance of minus 1%	Support System Components								Repair Kit Components					
		A/U	Qty of Ground/ Stakes Anchors	Foldable/ Telescopic Screen Support Poles			Qty of Shape Disruptors	Qty of Container for Support System	Qty of Carry Bags for Net	Area of Material in 1 M <sup>2</sup> Patches	Mesh Cord in M	Edge Cord in M	Thread in M	Needle	Scissors
				Qty	Min Extended Length	Max Retracted Length									
(a)	25m x 20m	Nos	30	15	5m	2m	15	1	1	150	200	200	100	20	4
(b)	16m x 11m	Nos	20	15	5m	2m	15	1	1	90	100	100	100	20	4
(c)	11m x 11m	Nos	15	10	3m	1.5m	10	1	1	60	100	100	100	20	4
(d)	11m x 8m	Nos	15	10	3m	1.5m	10	1	1	45	100	100	100	20	2
(e)	8m x 5.5m	Nos	10	10	3m	1.5m	10	1	1	20	50	50	100	20	2
(f)	5.5m x 4m	Nos	10	10	3m	1.5m	10	1	1	10	50	50	100	20	2

6. **Acceptance Test Procedure (ATP) Modalities.**

(a) Acceptance Test Procedure (ATP) for Multi-Spectral Camouflage (MSCN) for High Altitude including Barren Mountain/ Snow Bound Area is followed during the routine quality assurance activities of the MSCN by the DGQA officials. The acceptance test verifies that the system works as required and validates that the correct functionality has been delivered. This comprehensive Acceptance Test Procedure for MSCN is prepared to establish the acceptance test framework for the acceptance of the system.

(b) **Stage inspection of MSCN.**

(i) MSCN fabric in roll form:-

(aa) The firm will offer MSCN fabric in roll form to inspection authority (DGQA). The maximum roll length is 400 meters. Width of the roll is minimum 1.35 meter.

(ab) The samples will be drawn randomly as per sampling plan.

(ac) Only operational and physical properties will be tested.

(ad) MSCN fabric in roll form will not be subjected to visual inspection.

(ii) Edge Tape and Loop Cord:-

(aa) Edge tape and loop cord will be offered from the bulk procured by firm.

(ab) The samples will be drawn as per sampling plan.

(iii) The firm can process the MSCN fabric lots pending test results for fabrication of MSCN nets at their own risk and cost. The firm will maintain traceability of MSCN fabric rolls used for fabrication and maintain records.

(iv) Final Acceptance Inspection of Fabricated MSCN:-

(aa) The firm will offer fabricated finished MSCN, Support System components and repair kit components for final acceptance inspection to QA authority (DGQA).

(ab) Sample will be drawn randomly as per sampling plan as per specification given at Para 3 of QA Matrix of ATP and tested as per specification / GSQR/ RFP.

(v) The firm will submit NABL/ Govt approved laboratory test certificate for telescopic pole to DGQA. The acceptance will be done on review of the test certificate.

(vi) The quantity of store offered shall constitute a lot. DGQA will issue I/ Note for every lot. Camouflage colours, Reflection % and Printing pattern will be the same as per Trial Samples at CQAE which were used for field trials at NCNC stage.

(vii) Maximum two cross joints for each net on end panels of the net shall be acceptable.

7. Tests for physical characteristics will be carried out at CQAE Laboratory. In the event of breakdown/non-availability of CQAE Lab facilities, the tests will be carried out in any other Govt laboratories having facilities/ NABL Accredited Laboratory/ Vendor's Laboratory and will be witnessed by DGQA representatives. The testing charges in outside laboratory will be borne by the firm.

8. Vendor may approach DL Jodhpur for validation / approval of their laboratory and once vendor's laboratory is approved by DL Jodhpur, functional test for which approval has been accorded by DLJ can be carried out at Vendor's Laboratory in presence of DGQA rep.

9. **Acceptance Criteria.** The conformity of the lot to the requirements of the specifications will be ascertained for each lot separately. The lot shall be declared as confirming to the contractual conditions and specifications given in GSQR, if the samples drawn are found to comply with the specifications. If the specimen taken from first sample fails in one or more test each such test shall be repeated by double sampling, if all the specimens pass the duplicate test the lot shall be declared conforming to the specification otherwise not. For any discrepancy sealed sample of NCNC stage held at CQAE will be referred.

10. **Marking.**

(a) **Marking on MSCN and supporting structure, Pegs and repair kit etc.**

(i) Nomenclature.

(ii) Cat/Part No.

(iii) Contract No & date.

(iv) Name of the Manufacturer/Supplier.

(v) Month and Year of Manufacture.

(b) **Marking of Packages.**

- (i) Nomenclature.
- (ii) Cat/Part No.
- (iii) Contract No & date.
- (iv) Name of the Manufacturer/Supplier.
- (v) Month and Year of Manufacture.
- (vi) Consignee.

11. **Certification / Undertaking.**

(a) **In Service Life/ Shelf Life.** The in Service Life/Shelf Life of the equipment shall be stipulated in the offer. The MSCN and the support system should have a shelf life of ten years in sealed certified from the time of acceptance. When used by opening the original sealed packaging the MSCN and support system should sustain 150 handlings (vendor certified) with each handling comprising of taking the MSCN and support system out of the packing, erecting the MSCN on its support system and repacking or seven years (vendor certified) whichever is earlier.

(b) **Warranty.** The goods supplied shall carry a warranty for **24 months** from the date of acceptance. Warranty clause as given in RFP/Contract clause.

(c) **Defective Investigation.** Undertaking/certificate that their rep will associate along with DGQA/CQAE rep for defect investigation during warranty period even after expiry of warranty period that is up to service life of equipment.

(d) **Codification.** Vendor to undertake that the codification of main equipment along with component/ system/spares and will be carried out by Vendor with the assistance of CQAE before submission of final literature to DGQA. ISPL and all technical literature shall be endorsed with NATO stock No (NSN) allotted by Directorate of Standardisation (DOS). Shipment will not be held back for codification.

(e) The vendor will self certify that the MSCN will provide a 6dB (3dB one way) minimum transmission loss for the entire gamut of centimetre and millimetre radar wavelength band.

(f) The MSCN and supporting system will have a life of ten years in sealed condition when stored in a closed area without environmental (to be vendor certified).

(g) Vendor's compliance to the under mentioned parameters for Mounting Equipment/Support Systems verified under laboratory conditions:-

- (i) The material will be able to withstand an impact of minimum 20 kgf.
- (ii) The material will be rust resistance vendor will provide a certificate for the same from accredited laboratory.
- (iii) The material when subjected to ultimate load test, will upon failure, no shatter or burst, vendor will provide a certificate for the same from an accredited laboratory.
- (iv) The material will have a maximum gloss value is 6 when tested against IS : 101 (Part 4/Section 4)-1988.

(h) **Joints**. MSCN will have the provision for joining two or more nets from all sides. The joint will have an overlap and a minimum tensile strength of 25 kg when tested against IS: 7016 (Part-II) 1981 under laboratory conditions, vendor will provide a test certificate from an accredited laboratory.

(j) Certificate that the material of MSCN used will be safe from human usage.

12. **Joint Receipt Inspection (JRI)**.

(a) Based on satisfactory final acceptance inspection (FAI) and issue of I Note, the consignment will be despatched to the consignee. No further QA check will be undertaken by DGQA as part of JRI.

(b) JRI is a joint activity to be carried out by JRI team nominated/constituted as per contract. During JRI visual check for transit damages, quantity verification etc are to be carried out.

13. **Disclaimer**. RFP, Trial report and NCNC Trial samples are the reference & guiding documents. Any variation in content in the ATP which is contrary to RFP, Trial report, Trial samples, the RFP/Trial Report/Trial samples will take precedence.



**Appendix H**  
(Refers to Para 9 and 47 of RFP)

**COMMERCIAL CLAUSES**

1. **Payment Terms**

1.1 **INCOTERMS for Delivery**

1.1.1 The delivery of goods will be based on DDP INCOTERMS-2020 with ultimate consignee as:-

Serial No	Depot	Quantity
(a)	Central Ordnance Depot (COD), Kanpur, Uttar Pradesh	6175 Numbers

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 and excluding the Total Price of AMC/CMC/PBL/LCSC (if any).

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

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

1.3.5.1 **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 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, subject to correction and acceptability of the documents submitted. The prescribed format of the Advance Payment Bank Guarantee (APBG) is placed at **Annexure II to this Appendix.** The Advance Payment Bank Guarantee (APBG) will be deemed to be proportionately and automatically reduced until full extinction along with and prorate to value of each delivery, as evidenced by corresponding copy of document proving delivery and invoices of goods/services supplied/provided. The date of delivery would be reckoned from the date of release of Advance payment by the Buyer to the Seller ( $T_0$ ), provided the Seller submits the documents mandated by the DAP for release of advance by the Buyer within 45 days of signing of contract. In the event of the Seller not submitting the said documents within 45 days of signing of contract, the period between the 45<sup>th</sup> day and actual submission of documents will be excluded from the actual date of advance payment to arrive at the delivery date. In case, no advance is to be paid, the date for reckoning date of delivery would be the date of signing of contract. This clause will not be applicable in cases wherein Advance payment is released after FOPM is successfully validated. In such cases, date of accord of Bulk Production Clearance will be date for reckoning date of delivery.

1.4.2 **On Dispatch.** **Sixty (60) %** of the Base contract price of deliverables and reimbursement of 100% taxes and levies excluding cost of training on pro rata basis shall be paid 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 payment will be made by PCDA/CDA through cheque/Electronic Fund Transfer (EFT) on submission of following documents : - *(Note-The list given below is illustrative. The documents that may be required, depending upon the peculiarities of the procurement being undertaken, may be included/ excluded in RFP).*

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.** Twenty-five (25) % of the Base Contract Price of deliverables excluding cost of training on pro rata shall be paid within thirty (30) days of submission of the Acceptance Certificate & Certified Receipt Voucher (CRV) issued 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 **300 Numbers** and must correspond with the delivery schedule. No transshipment of goods will be allowed.

1.4.6. **Payment for Training.** Payment for training of Operators and Maintenance personnel will be done after completion of training as given in **Para 15** of RFP. Vendor will also furnish training completion certificate from buyer, prior to payment for training.

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 III 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's expense. In case of rejection of Goods during PDI, re-PDI will be undertaken at Bidder's premises at Buyer's sole discretion. All expenses including transportation and accommodation of Buyer's PDI team will be borne by the Bidder. Towards this, the expenses towards transportation and accommodation of Buyer's PDI team will be initially done by the Buyer and subsequently reimbursed by the Bidder either by remittance or by recovery from the Balance Payment/PWBG. In the event of a failed PDI, the Bidder shall consult the Buyer for rescheduling re-PDI. In case of JRI, the representative of the Seller may be present for inspection after the equipment reaches the concerned destination. The Seller would be informed of the date for JRI.

4. **Liquidated Damages (LD).** In the event of the Bidder's failure to submit the Documents, supply the stores/ goods, perform services, conduct trials, installation of equipment, training and MET as per schedule specified in this contract, the BUYER may, at his discretion withhold cost of the specific lot/batch or 1% of the Project cost, whichever is higher, until the completion of the contract. The BUYER may also deduct from the SELLER as agreed, liquidated damages to the sum of **1/100** of the **delay percentage** {Delay percentage = (Period of Delay in Delivery in Weeks) x 100 / (Delivery Period in weeks as per contract)} of the Base Contract Price of the delayed/ undelivered stores/ services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than **10%** 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 VI to this Appendix.**

Vendor Copy

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

**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 H**  
(Refers to Para 1.4.1 of  
Appendix H)

**BANK GUARANTEE FORMAT FOR ADVANCE**

To

The \_\_\_\_\_  
Ministry of \_\_\_\_\_  
Government of India

\_\_\_\_\_ (complete postal address of the beneficiary)

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

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

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

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



5. We, further agree with the BUYER that the BUYER shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said SELLER from time to time or to postpone for any time or from time to time any of the powers exercisable by the BUYER against the said SELLER and to forbear or enforce any of the terms and conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, Amendment issued vide MoD ID No. 4(50)/D(Acq)/08 dated 20.06.2016 or extension being granted to the said SELLER or for any forbearance, act or omission on the part of the BUYER or indulgence by the BUYER to the said SELLER or by any such matter or thing whatsoever which under law relating to sureties would, but for this provision, have effect of so relieving us.

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

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

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

9. Notwithstanding anything contained herein above:-

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

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

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

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

Place :

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

Through its authorised signatory

(Signature with seal)

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

**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 {**3%** of Total Contract Price (including taxes and duties)} \_\_\_\_\_ Rupees/ US \$/Euro/PS £/Yen/AUD/SGD only at any instance under this Guarantee. Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said Contract. We shall not be entitled to ask you to establish your claim or claims under this guarantee but will pay the same forthwith without any protest or demur. We undertake to effect payment upon receipt of such written demand.

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

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

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

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

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

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

9. Notwithstanding anything contained herein above:

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

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

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

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

Place :

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

Through its authorised signatory  
(Signature with seal)

**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 H**  
(Refers to Para 9 of RFP and  
Para 1.4 of Appendix H)

**DELIVERY SCHEDULE AND STAGES OF PAYMENT**

1. The broad guidelines for payments terms are appended as under :-
2. **For Delivery in Lots/ Batches : Split Source of Supply, 60 : 40 ratio and compliance to conditions as mentioned in Para 26 of Chapter II, DAP-2020.**

SI	Activity	Delivery Timelines (T <sub>0</sub> + Months)	No of MSCNs per Batch		Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
			L1	L2			
(a)	Signing of contract	T <sub>0</sub>	-	-	15% of the Base Contract Price shall be paid within thirty (30) days of signing of contract	APBG of equivalent amount to be submitted	(i) T <sub>0</sub> is the date of release of advance payment.  (ii) In case, no advance is to be paid, the date for reckoning date of delivery would be the date of signing of contract.  (iii) PWBG Bond of 3% of the Project Cost within 30 days of signing of the contract.
(b)	<b><u>On Dispatch of all MSCNs / equipment</u></b>						
(i)	1 <sup>st</sup> Batch	T <sub>0</sub> to T <sub>0</sub> + 12	1111	741	60% of Base Contract price of deliverables, and		Complete quantity of Technical

SI	Activity	Delivery Timelines (T <sub>0</sub> + Months)	No of MSCNs per Batch		Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
			L1	L2			
(ii)	2 <sup>nd</sup> Batch	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	2594	1729	re-imbusement of 100% of associated taxes and levies on pro-rata basis excluding cost of training.		Literature to be supplied with first batch
(c)	<b><u>On Acceptance of all equipment/ system</u></b>						
(i)	1 <sup>st</sup> Batch	T <sub>0</sub> to T <sub>0</sub> + 12	1111	741	25% of Base Contract price excluding cost of training on pro rata basis	APBG is to be returned on pro-rata basis as per completion of delivery of product, documentation and training.	
(ii)	2 <sup>nd</sup> Batch	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	2594	1729			
(iii)	Completion of Training	Refer Para 16 of RFP			85% of Base cost of Training and taxes and duties		

3. **For delivery in Lots/ Batches if Contract Signed Only With One Vendor.**

SI	Activity	Delivery Timelines (T <sub>0</sub> + Months)	No of MSCNs per Batch	Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
(a)	Signing of contract	T <sub>0</sub>		15% of the Base Contract Price shall be paid within thirty (30) days of signing of contract	APBG of equivalent amount to be submitted	(i) T <sub>0</sub> is the date of release of advance payment.  (ii) In case, no advance is to be paid, the date for reckoning date

SI	Activity	Delivery Timelines (T <sub>0</sub> + Months)	No of MSCNs per Batch	Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
						of delivery would be the date of signing of contract.  (iii) PWBG Bond of 3 % of the Project Cost within 30 days of signing of the contract.
(b)	<b><u>On Dispatch of all MSCNs / equipment</u></b>					
(i)	1 <sup>st</sup> Batch	T <sub>0</sub> to T <sub>0</sub> + 12	1852	60% of Base Contract price of deliverables, and reimbursement of 100% of associated taxes and levies on pro-rata basis excluding cost of training.		Complete quantity of Technical Literature to be supplied with first batch
(ii)	2 <sup>nd</sup> Batch	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	4323			
(c)	<b><u>On Acceptance of all equipment/ system</u></b>					
(i)	1 <sup>st</sup> Batch	T <sub>0</sub> to T <sub>0</sub> + 12	1852	25% of Base Contract price excluding cost of training on pro rata basis	APBG is to be returned on pro-rata basis as per completion of delivery of product, documentation and training.	
(ii)	2 <sup>nd</sup> Batch	T <sub>0</sub> + 13 to T <sub>0</sub> + 24	4323			
(iii)	Completion of Training	Refer Para 16 of RFP		85% of Base cost of Training and taxes and duties		



**Appendix J**

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

**EVALUATION CRITERIA AND PRICE BID FORMAT**

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

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

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

1.2.1 **Where DCF Technique as Given in Para 4 is Not Applicable.** L-1 bidder will be determined on the basis of quoted cost of all items including taxes and duties payable to Central/State/Local Governments.

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

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

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

Ser	Sizes	Area (Sqmr)	Qty (Nos)	Cost Per Sq Mtr	Cost of Support Sys / Mounting and repair kit	Cost of one MSCN (iii)x(v)+(vi)	Total cost (iv)x(vii)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (including all taxes & duties) (viii)+(ix)+(x)	Remarks
								GST/IGST (%)	Custom Duty (%)		
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
A.	<b>Cost of Basic Equipment</b>										
	25m x 20m	500	332								
	16m x 11m	176	1729								
	11m x 11m	121	1101								
	11m x 8m	88	223								
	8m x 5.5m	44	1923								
	5.5m x 4m	22	867								
										Total Cost of Serial A.....	
Ser	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	
(i)	(ii)			(iii)	(iv)	(v)	GST/IGST (%)	Custom Duty (%)	(viii)	(ix)	
B.	Cost of <b>Technical Literature</b> as per Annexure I to Appendix D.										
C.	Cost of recommended period of <b>Training</b> excluding the cost of travel and boarding and lodging as per <b>Para 16 of RFP</b> .										
D.	<b>Any other</b> cost (to be specified).										

E.	<b>Freight and Transit Insurance</b> Cost (where applicable).							
F.	<b>Total Cost</b> (Total of Serial A to E). To be indicated in figures and words						#	# This will be used in determining L1 vendor (duly applying provisions of Para 1 above).
G.	<b>Foreign Exchange component</b> of the proposal. (for Indian Vendors only)							This will be with reference to Para 1.2 of Appendix H.
H.	<b>CDEC (if applicable)</b> , its authority and amount for which required.							

**Note:-**

- (i) **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, incremental/decremented change will be paid.
- (ii) The total price (Offered Value) be indicated in figures and words in the Price Bid Format.

**STANDARD CONDITIONS OF RFP**

**LAW**

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

**ARBITRATION**

(For Indian Private Vendors)

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

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

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

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

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

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

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

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

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

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

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

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

### **ARBITRATION**

(For Central & State PSEs)

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

### **ARBITRATION**

(For Defence PSUs)

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

### **FORCE MAJEURE**

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

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

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

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

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

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

### **INTEGRITY PACT**

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

- (a) A pact (contract) between the Government of India (Ministry of Defence) (the authority or the "principal") and those companies submitting a tender for this specific activity (the "bidders");
- (b) An undertaking by the principal that its officials will not demand or accept any

bribes, gifts, etc., with appropriate disciplinary or criminal sanctions in case of violation;

- (c) A statement by each bidder that it has not paid and will not pay, any bribes;
- (d) An undertaking by each bidder that he shall not pay any amount as gift, reward, fees, commission or consideration to such person, party, firm or institution (including Agents and others 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.

7.2 In respect of bids from DPSUs, the concerned DPSU shall enter into 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 sub-contract(s) are required to be entered into by the DPSU with a view to enable DPSU to discharge the obligations arising out of their bid in question in response to this RFP.

### AGENTS

8. The Seller confirms and declares to the Buyer that the Seller is the original manufacturer of the stores referred to in this contract. The Seller confirms that he has not engaged any person, party, firm or institution as an Agent including his Agents already intimated to MoD; to influence, manipulate or in any way to recommend to any functionaries of the Government of India, whether officially or unofficially, to the award of the contract to the Seller, or to indulge in corrupt and unethical practices. The Seller has neither paid, promised nor has the intention to pay to any person, party, firm or institution in respect of any such intervention or manipulation. The Seller agrees that if it is established at any time to the satisfaction of the buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that Seller has engaged any such person, party, firm or institution and paid, promised or has intention to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable for any or all of the following actions:-

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

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



**Annexure I to Appendix K**  
(Refers to Para 7.1 (j) of Appendix K)

**PRE-CONTRACT INTEGRITY PACT**

**General**

1. Whereas the PRESIDENT OF INDIA, represented by Joint Secretary & Acquisition Manager (Army)/Major General & equivalent, Service Headquarters./Coast Guard, Ministry of Defence, Government of India, herein after referred to as the Buyer and the first party, proposes to procure (Name of the Equipment), herein after 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-contractor 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 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 Contractor for bearing 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) of **Rupees 30 Lakhs** is to be obtained from all bidders for the instant case.

(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. The format of the Bank Guarantee for Bid Security is provided at Annexure 1 to Appendix O.

(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 signing 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 interests to take 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 contracts 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](http://www.mod.nic.in) to check for changes to these details):-

(a) Shri Ravikant, IAS/ Bihar (1984) (Retd)  
Apartment No 502, Tower-1, M3M Merlin,  
Sector-67, Gurugram-122001 (Haryana)  
Mob : 9953555566, **Email-** 84ravikant@gmail.com

(b) Dr. Prabhat Kumar, IAS/ UP (1985) (Retd)  
C-120, Sector-39, Noida-201301  
Gautam Budh Nagar (Uttar Pradesh)  
Mob : 9810530048, **Email-** prabhatafamily@gmail.com

(c) Shri Chet Ram, IRS (1985) (Retd)  
Flat No A-203, Building Gemini, Gladys Alwares Marg,

Hiranandani Meadows, Off-Pokhran Road No.2,  
Thane (W), Maharashtra-400610  
Mob : 9869479987, **Email-** cr\_koli@yahoo.com

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 complaints 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

BIDDER

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

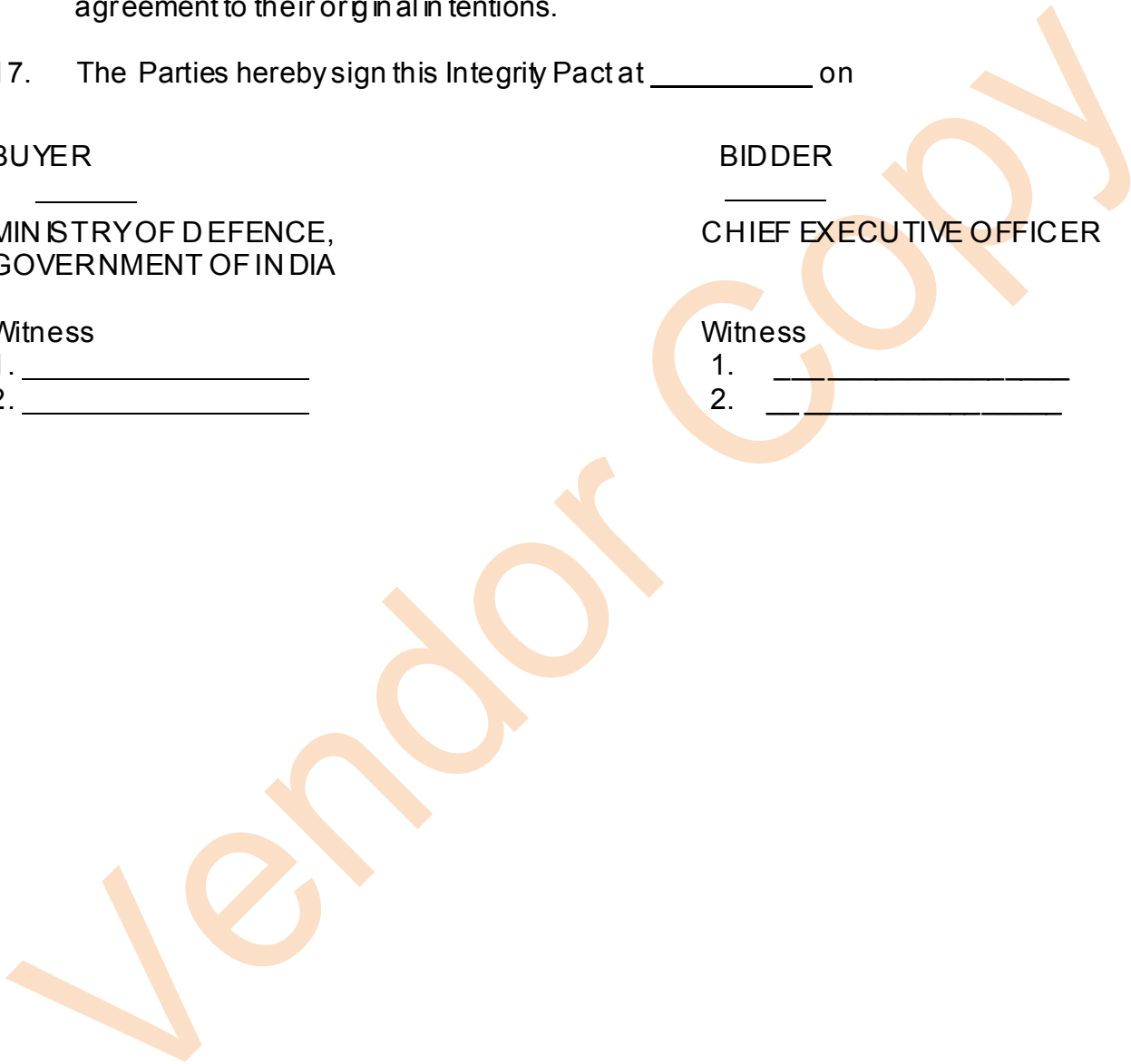
\_\_\_\_\_  
CHIEF EXECUTIVE OFFICER

Witness

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

Witness

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_



**Annexure II to Appendix K**  
 Refers to Para 8.1 of  
 Pre-Contract Integrity Pact

**EMD FORMAT**

Whereas .....(hereinafter called the "Bidder") has submitted their offer dated.....for the supply of ..... (hereinafter called the "Bid") against the Buyer's Request for proposal No. .... KNOW ALL MEN by these presents that WE .....of ..... having our registered office at ..... are bound unto ..... (hereinafter called the "Buyer") in the sum of .....for which payment will and truly to be made to the said Buyer, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said Bank this ..... day of .....20.....

The conditions of obligations are:-

1. If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.
2. If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity.
  - (a) If the Bidder fails to furnish the Performance Security for the due performance of the contract.
  - (b) Fails or refuses to accept/execute the contract.
3. If the bidder violates Pre-Contract Integrity Pact.

WE undertake to pay the Buyer up to the above amount upon receipt of its first written demand, without the Buyer having to substantiate its demand, provided that in its demand the Buyer will note that the amount claimed by it is due to it owing to the occurrence of above mentioned conditions, specifying the occurred condition or conditions.

This guarantee will remain in force upto and including 45 days after the period of 18 months/ contract signing whichever is later and any demand in respect thereof should reach the Bank not later than the above date.

.....

(Signature of the authorized officer of the Bank)  
 Name and designation of the officer  
 Seal, name & address of the Bank and address of the Branch

**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.)**

<b><u>Sl No</u></b>	<b><u>Parameter</u></b>	<b><u>For all Cases except Shipbuilding (Ch XII), Make (Ch III &amp; IV) and Strategic Partnerships (Ch VII)</u></b>
1	<b>Financial</b>	
(a)	Net Worth	Net worth should be Positive ending 31 March of previous FY (Certificate from CA/CS should be furnished).
(b)	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 (Certificate from CA/CS should be furnished).
2	<b>Technical</b>	
(a)	Nature of Business	Manufacturing entity or System Integrator of defence product 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.
3	<b>Others</b>	
(a)	Industrial License	Possess 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 18 of RFP)

**CERTIFICATES IN COMPLIANCE TO ROLE 144 (XI) OF THE GENERAL FINANCIAL RULES (GFRS), 2017 ISSUED VIDE MINISTRY OF FINANCE ORDER (PUBLIC PROCUREMENT ORDER NO 4 DT 25 FEB 2023)**

**Model Certificate for Tenders**

“I have read the clause (Restriction under Rule 144(xi) of the General Financial Rules (GFRs), 2017 issued vide Ministry of Finance Order (Public Procurement Order No 4 dt 23 Feb 2023) regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that ..... (Bidder) is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that ..... (Bidder) fulfils all requirements in this regard and is eligible to be considered (where applicable, evidence of valid registration by the Competent Authority shall be attached)”.

**Model Certificate for Tenders for Works involving possibility of sub-contracting**

“I have read the clause (Restriction under Rule 144(xi) of the General Financial Rules (GFRs), 2017 issued vide Ministry of Finance Order (Public Procurement Order No 4 dt 23 Feb 2023) regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that ..... (Bidder) is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that ..... (Bidder) fulfils all requirements in this regard and is eligible to be considered (Where applicable, evidence of valid registration by the Competent Authority shall be attached)”.

**Model additional certificate by Bidders in the cases of specified ToT**

“I have read the clause (Restriction under Rule 144(xi) of the General Financial Rules (GFRs), 2017 issued vide Ministry of Finance Order (Public Procurement Order No 4 dt 23 Feb 2023) regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that ..... (Bidder) does not have any ToT arrangement requiring registration with the competent authority”.

OR

“I have read the clause (Restriction under Rule 144(xi) of the General Financial Rules (GFRs), 2017 issued vide Ministry of Finance Order (Public Procurement Order No 4 dt 23 Feb 2023) regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that ..... (Bidder) has valid registration to participate in the procurement”.

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

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

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

<b>Ser No.</b>	<b>Reference</b>	<b>Document Description</b>
1	Para 5(a) and 5(c) of RFP	Declaration by Bidder : Debarment of vendors
2	Para 17 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	Maintenance Schedules
7	Para 31 of RFP	Technical document covering performance parameters
8	Appendix B	Compliance Table
9	Appendix C	Warranty Clause
10	Annexure I to Appendix D	Technical Literature
11	Appendix L	Criteria for vendor selection
12	Appendix M	Model Tender Certificate
13	Appendix J	Price Bid
14	Annexure I to Appendix O	Pre-Contract Integrity Pact
15	Annexure I to Appendix O	EMD

**Appendix O****GLOSSARY**

AoN	Acceptance of Necessity
ATP	Acceptance Test Procedure
CAMC	Comprehensive Annual Maintenance Contract
CNC	Contract Negotiation Committee
DAC	Defence Acquisition Council
DGAQA	Director General of Aeronautical Quality Assurance
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
EPP	Enhanced Performance Parameters
ESP	Engineering Support Package
FET	Field Evaluation Trials
Gol	Government of India
IC	Indigenous Content
IM	Indigenously Manufactured
IP	Integrity Pact
EMD	Earnest Money Deposit
LRU	Line Replaceable Unit
MET	Maintainability Evaluation Trial
MoD	Ministry of Defence
NCNC	No Cost No Commitment
OEM	Original Equipment Manufacturer
PCIP	Pre Contract Integrity Pact

QA	Quality Assurance
RFP	Request for Proposal
SPB	Services Procurement Board.
SHQ	Service Headquarters
SRU	Shop Replaceable Unit
TEC	Technical Evaluation Committee

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