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सत्यमेव जयते Ministry of Defence Government of India

REQUEST FOR PROPOSAL

BY

MINISTRY OF DEFENCE

GOVERNMENT OF INDIA

FOR PROCUREMENT OF QUANTITY FORTY-SIX (46) CRANE 5/ 10 TON SELF PROPELLED 4x4 FULL SLEW

CATEGORY: BUY (INDIAN-IDDM)

This document is the property of Government of India/Ministry of Defence.

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 Ninety Five (95) pages including cover page and Appendices.

File No: 75961/GS/CD/RFP Cell/ Crane 5/10 Ton (SP)

Additional Director General Acquisition Technical (Army) New Delhi-110011

16 Jan 2023

Tele: 011-21411984 Fax : 011-21410219 E-mail: tmls-mod@nic.in

То

REQUEST FOR TECHNICAL AND COMMERCIAL PROPOSAL FOR PROCUREMENT OF QUANTITY FORTY SIX (46) CRANE 5/ 10 TON SELF PROPELLED 4x4 FULL SLEW CATEGORY: BUY (INDIAN-IDDM)

Dear Sir/Madam,

1. The Ministry of Defence, Government of India, intends to procure quantity Forty six (46) Crane 5/ 10 Ton Self Propelled 4X4 Full Slew under Category Buy (Indian-IDDM) and seeks participation in the procurement process from prospective Bidders subject to requirements in succeeding paragraphs.

<u>Synopsis</u>

2. **Broad Description of Equipment/ System**. The crane is required for handling of defence equipment and stores including vehicles to and from railway siding/ yards, shifting of stores to and from stocking areas and their loading/ unloading on vehicles during issue/ receipt. These tasks are carried out throughout the year on daily basis in all logistic echelons. Manual handling of stores is time consuming, uneconomical and prone to damages and injuries and is also not feasible in most of the instances. The introduction of these cranes will help in improving efficiency and reducing accidents or damage to equipment/ stores.

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 Annexure(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	Crane 5/ 10 Ton Self	Heading and Para 1
	required	Propelled 4X4 Full Slew	of covering letter

(b)	Quantity Required	Forty Six (46)	Heading and Para 1
			of covering letter
(C)	Categorisation of	Buy (Indian-IDDM)	Heading and Para 1
	Procurement		of covering letter
(d)	Minimum IC Content	As per Para 8 of Chapter I	Para 7 of RFP
	required	of DAP 2020	
(e)	Place(s) of Delivery	- NCVD, Udhampur	Para 1.1.1 of Appx
. ,		- CVD, Delhi Cantonment	H
		- COD, Dehu Road	
		- 41 Vehicle Company,	
		Guwahati	
		- OD, Allahabad	
		- TVP Bengdubi, 5 FOD	
		- OD, Avadi	
(f)	Warranty Period	Twenty four (24) months	Para 11 of RFP
		of complete equipment or	
		2000 Operational Hours,	
		whichever is earlier	
(g)	EMD Amount	Nil	
(h)	Last date for submission	06 February 2023	Para 21 of RFP
. ,	of Pre-bid queries	(Monday)	
(j)	Date and time for Pre-bid	27 February 2023	Para 22 of RFP
	meeting	(Monday)	
(k)	Last date and time for Bid	By 1400hr,	Para 23 of RFP
	Submission	10 April 2023 (Monday)	

4. <u>Special Features of the RFP</u>. The procurement case is processed under Buy (Indian-IDDM) category as per Para 8 of Chapter I of DAP-2020. Trials of the Equipment to be carried out on 'No Cost No Commitment' basis, iaw Para 65 and 66 of Chapter II of DAP 2020. The procurement is carried out by Open Tender Enquiry, with preference given to MSMEs, provided there are atleast two or more MSMEs eligible to participate in the category iaw Para 23 of Chapter II of DAP 2020.

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

Ser	Description	Page No
No.		_
(a)	Part I – General Requirements	7-12
(b)	Part II - Technical Requirements	13-17
(C)	Part III – Commercial Requirements	18
(d)	Part IV – Bid Evaluation and Acceptance Criteria	19

6. The Government of India invites responses to this request only from Original Equipment Manufacturers (OEM) or Authorised Vendors or Government Sponsored Export Agencies (applicable in the case of countries where domestic laws do not permit direct export by OEM) subject to the condition that in cases where the same equipment is offered by more than one of the aforementioned parties, preference would be given to the OEM.

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

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

9. 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 <u>www.mod.nic.in</u>.

Yours faithfully,

(S Hariharan) Colonel Director G, O/o ADG Acq Tech (Army)

		Description	Reference		
	Disclaimer				
	Part I of RFP -	General Requirements			
	Part II of RFP -	- Technical requirements			
	Part III of RFP	- Commercial Requirements			
	Part IV of RFP	 Evaluation Criteria and Price Bid Format 			
Appendix A	Operational Ch	aracteristics and Features	Part II		
Appendix B	Compliance Ta	ble	Parti		
Appendix C	Warranty Claus	Se la	Part I		
Appendix D	Repair and Ma	intenance Philosophy			
	Annexure I	Manufacture's Recommended list of Spares	-		
	Annexure II	List of SMT/STEs, Jigs, Fixture and Infrastructure	-		
	Annexure III				
	Annexure IV Training Aggregates				
	Annexure V	Itemised Spares Part Price List (ISPPL)			
Appendix E	Trial Methodolo	Trial Methodology			
	Annexure	Detailed Trial Methodology	-		
Appendix F	Guidelines for Framing ATP				
Appendix G	Commercial Cl	auses			
	Annexure I	Guidelines for protecting ERV in contracts			
	Annexure II	Bank Guarantee Format for Advance			
	Annexure III	Bank Guarantee Format for PWBG			
	Annexure IV	Annexure IV Format for extension of Delivery Period/Performance Notice			
	Annexure V	Annexure V Delivery Schedule and Stages of Payment			
Appendix H	Bid Evaluation	and Acceptance Criteria			
Appendix J	Standard Conc	itions of RFP			
	Annexure I	Pre Contract Integrity Pact			
Appendix K	Criteria for Ven	dor Selection/Pre-Qualification	Part I		
Appendix L	Check-Off list -	- Documents to be submitted	Part IV		
Appendix M	Glossary				

<u>Disclaimer</u>

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 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. <u>**Confidentiality of Information**</u>. 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). <u>Undertaking by Bidders</u>. 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) for the Bidder shall indicate the same

with justification for participation of such sub-contractor(s)/supplier(s)/ technology partner(s) in the procurement case.

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

6. <u>Pre-Qualification Criteria for multi-vendor cases in Buy (Indian-IDDM)</u>. The detailed Pre-Qualification criteria for the Bidders for participation in the instant procurement case are placed at **Appendix K** to this RFP. All Bidders are to submit details as per the criteria along with the Technical Bids. These would be evaluated by the

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

8. <u>Year of Production</u>. Deliverables (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 main equipment and deliverables along with the relevant payment stages is specified at **Annexure V to Appendix G**. The delivery schedule of main equipment is given as below: -

Ser No	Quantity	Delivery Timeline (Months)	Remarks
(a)	Forty Six (46)	T ₀ to T ₀ + 12	T ₀ is the date of Payment of Advance

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. <u>Warranty</u>. The deliverables supplied shall carry an 'onsite warranty' for Twenty four (24) months of complete equipment or 2000 Operational Hours, whichever is earlier. Commencement of warranty will be from the date of acceptance post JRI or from date of installation/ commissioning, as applicable. No spares will be drawn during the

warranty period from the MRLS and the cost towards all scheduled servicing during warranty period shall be borne by the Seller to include spares, labour, oils, greases and lubricants etc. Warranty Clause is given at Appendix C to this RFP. The terms of warranty and OEM/ Seller Contact Details including phone number and email should be mentioned in the User Hand Book (UHB). The date from which warranty is applicable (duly endorsed by representative of both Buyer & Seller) should be mentioned in respective log book and User Hand Book of the main equipment and accessories.

12. <u>In-Service Life</u>. The In Service Life of the complete equipment should be at least 4,000 hrs of rugged operations under all environmental and terrain conditions before becoming due for major overhaul and should have a life span of 09 years or 80,000 KMs whichever is earlier. The Bidder is required to give details of reliability model, reliability prediction and its validation by designer/ manufacturer to ensure reliability of stores throughout Service/shelf life. The efficacy of reliability model/prediction/validation would be verified during technical and environmental evaluation as indicated in Para 38 of this RFP.

13(a). Product Support. The Bidder would be bound by a condition in the contract that he is in a position to provide product support in terms of maintenance, materials and spares for a minimum period of Nine (09) years or 80000 Kms of operation, whichever is earlier. Even after the said mandatory period, the Bidder would be bound to give at least two years notice to the Government of India prior to closing the production line so as to enable a Lifetime Buy of all spares before closure of the said production line. This, however, shall not restrict the Buyer from directly sourcing sub-equipment/sub-assembly and spares from their respective OEMs/ sub-vendors on completion of warranty. In case the sub-equipment/ subassembly/ parts require tuning/ calibration/ integration by the Bidder prior replacement, the same is to be undertaken by the Bidder at fair and reasonable cost, as mutually agreed between Buyer and Bidder. OEM/ Bidder(s) to ensure maximum possible use of oils, lubricants and greases which are indigenously available. Further, the OEM/ Bidder(s) is mandated to share the detailed specifications of oils, lubricants and greases alongwith their sources of supply and contact details of suppliers alongwith technical bid.

13(b). <u>Codification</u>. The Bidder agrees to provide existing NATO Stock Numbers (NSNs) of OEM for each item supplied under the contract as per part list (including MRLS). In case, the NSNs are not available, the bidder agrees to codify using basic technical characteristics as required for codification in consultation with MoD/ Directorate of 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 codification should be completed before the completion of warranty period.

14. <u>Obsolescence Management Plan</u>. An actionable obsolescence management plan is to be proposed by the Bidder along with the mechanism for intimation of notification of obsolescence. The modalities of the mechanism for intimation of notification would be deliberated during CNC. The mutually agreed mechanism for intimation would form an integral part of the contract. All upgrades and modifications carried out on the equipment during the next **09 years** must be intimated to SHQ, IHQ of MoD (Army), Gol as per the agreed mechanism.

15. <u>Training of Crew, Maintenance and QA Personnel</u>. A training package for training of operators, operator trainers and maintenance personnel to undertake operation and maintenance of equipment, along with tools and test jigs and training of QA personnel for Quality Assurance of equipment would be required to be carried out in English language and

Hindi language. This training shall be designed to give the operators and maintainers necessary knowledge and skills to operate & maintain equipment (Field level). The syllabus for operators, QA and maintenance personnel will be defined by the Bidder in consultation with the Buyer at the time of FET. The maintenance training will be imparted to the satisfaction of the Buyer and Bidder will ensure that the training content and period will be to impart working proficiency up to the required level. All training requirements such as training aids, projection system, complete equipment with accessories/ optionals, technical literature, spares, test equipment/ test set up, charts, training handouts, power point presentations, Computer Based Training (CBT), Documentation, Simulators etc will be catered by the Bidder.

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

Training Location	Type of Trg	Duration (Days per batch)	No of Batches	Total No of Personnel	Remarks
· / Operator Tra	aining				
OEM Premises	-	10 working days	01	20	Training to be conducted before delivery of 1 st lot of main equipment
air and Mainter	nance Pe	ersonnel			
OEM Premises	'Field' Level	07 working days	01	31	Training to be conducted before 6 months from completion of warranty of 1 st lot of main equipment.
bersonnel		I	I	I	I
OEM Premises	-	02 Working days	01	04	Training to be conducted before commencement of PDI of main equipment
	Location / Operator Tra OEM Premises air and Mainter OEM Premises personnel OEM	Location of Trg / Operator Training OEM Premises air and Maintenance Period OEM Premises OEM Premises Location OEM Premises OEM Premises OEM Premises Level OEM Premises OEM Field' Level Dersonnel OEM OEM	Locationof Trg(Days per batch)/ Operator TrainingOEM Premises-10 working daysair and Maintenance PersonnelOEM Premises'Field' Level07 working daysOEM Premises'Field' Level07 working daysOEM Premises'Field' Level07 working days	Locationof Trg(Days per batch)Batches/ Operator TrainingOEM Premises-10 working days01air and Maintenance PersonnelOEM Premises'Field' Level07 working days01OEM Premises'Field' Level0401OEM Premises'Field' Level05 working days01OEM Premises'Field' Level07 working days01OEM Dersonnel'Field' Level07 working days01OEM OEM-02 Working 0101	Locationof Trg(Days per batch)Batchesof Personnel7 Operator TrainingOEM Premises-10 working days0120air and Maintenance PersonnelOEM Premises'Field' Level07 working days0131Premises'Field' Level07 working days0131personnel-02 Working 010104

Note.

(i) The training to enable the user/ operators to effectively operate the equipment and its accessories in field conditions. The training should also enable QA personnel to carry out effective ATP, QA and defect investigations.

(ii) The above training should meet the needs of repair and maintenance of the complete equipment, use of SMTs/ STE, test set up, assemblies/ sub-assemblies as per the stipulated repair philosophy. In addition to training on operation and diagnosis using STEs, training would also cover repair of STEs using procured spares for STEs.

(iii) Training content should commensurate with the Permissible Repair Schedule (PRS).

(iv) The training should bring out utilization of provided MRLS items including procedure of their fitment/ repair.

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

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

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

20. <u>Integrity Pact</u>. In the subject RFP, the Bidder is required to sign and submit Pre Contract Integrity Pact (PCIP), given at **Annexure I to Appendix J** to this RFP.

21. <u>Fall Clause</u>. 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 India at a lower price, then that very price, will be applicable to the present case and with due allowance for elapsed time, the difference in the cost would be refunded to the Buyer, if the contract has already been concluded.

Bid Timelines

22. Any queries/ clarifications to this RFP may be sent to this office by **06 February 2023** (Monday). A copy of the same may also be sent to Directorate General of Ordnance Services (DGOS), Room No 116, D-II Wing, IHQ of MoD (Army), DHQ PO, New Delhi - 110011 (Tele No: 011-23019452, Fax No 011-23019319)

23. <u>Pre-Bid Meeting</u>. A pre-bid meeting will be organised by SHQ at **1100 hrs** on **27 February 2023 (Monday)** at the address given at **Para 22** above to answer any queries or clarify doubts regarding submission of proposals. The Bidder or his authorised representative is requested to attend. Necessary details may be sent a week in advance to the address given at **Para 22** above, to facilitate obtaining of security clearance.

24. <u>Submission of Bids</u>. The Technical and Commercial Proposals along with IP should be sealed separately in three separate envelopes clearly indicating Commercial/ Technical/ IP 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 1400 hours on 10 April 2023 (Monday):-

Brigadier CD-1 CD Directorate, GS Branch, Room No 415, A Wing Sena Bhawan, IHQ of MoD (Army) New Delhi-110011 Tele & Fax: 011-23019003

25. Offer opening by an Offer opening committee will be held at **1100 hours** on **11 April 2023 (Tuesday)** at the same venue as indicated at **Para 24** above. The Bidder or his authorised representative is welcome to be present at the opening of the proposals. Necessary details may be sent atleast one week in advance to facilitate obtaining of security clearance.

PART II – TECHNICAL REQUIREMENTS

26. The second part of the RFP incorporates the aspects of 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 Trials on a "No Cost No Commitment" basis in India.

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

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

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

30. <u>Technical Details</u>.

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

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

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

32. <u>Field Evaluation</u>. The Bidder is requested to confirm his willingness to provide Quantity one (01) Crane 5/10 Ton (SP) 4x4 Full Slew with complete accessories for trial evaluation in India as per Para 65 & 66 of Chapter II of DAP 2020 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 FET is conducted in the Buyer's facilities, the Bidder shall depute their personnel and equipment at their 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.

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

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

(a) Manufactured by Bidder as OEM and can be sourced as per Part No.

(b) Bought out items and customized by the OEM for the specific purpose and such customization would require OEM intervention.

(c) Bought out from other OEMs/Third Party as specialised items and used without any customization. Such items can be sourced by quoting their Part No./Identification No. as given by OEM/Third Party and directly utilised.

(d) General Engineering items/COTs which can be sourced by stating the relevant standards and item description.

35. As brought out at **Para 28**, the range and depth of spares included in the proposal should be supported by necessary reliability and prediction model or authenticated by past data on the similar equipment in use. These would be evaluated during FET. Any Bidder found to be providing lesser ESP/MRLS in terms of range and depth will have to make good the deficiency at no extra cost. The revised list of MRLS to this effect is to be submitted prior to Staff Evaluation (SE). The Buyer would also have the option to amend the MRLS proposed by the Bidder within **02 years** of the expiry of the warranty period. The Bidders would either 'Buy Back' the spares rendered surplus or exchange them on cost to cost basis with the spares as required by the Buyer. The said spares would be purchased/ replaced by the Bidder, based on the prices negotiated in the contract. The 'Buy Back' clause would not be applicable for additional spares included by the Buyer in MRLS during FET and SE stage, as brought out at **Para 28** of RFP.

36. <u>Online Inventory Management System (OIMS)</u>. The Army is in the process of implement its own OIMS from workshop upto COD level. The Bidder will be required to provide data of main equipment, its accessories and spares in the format required for its uploading on OIMS of the Army for inventory management by Ordnance Depots and by EME workshops. Following inputs to be submitted by the Bidder in excel format in soft copy with respect to 100% data of all spares/ accessories/ Major and minor accessories with the Technical bid: -

Cos Sec	Part No	Manufacturer Part No	Nomenclature	Source of	Country of origin of the	Net wt (in	Basic material
				supply	material	Kg)	

37. <u>Active Technology Obsolescence Management</u>. Bidder is to indicate the methodology on how the Bidder intends to undertake Active Obsolescence Management through life cycle of equipment which would include upgradation of system/ subsystem/ units on completion of its fair service life. The Bidder/ OEM shall also intimate Buyer on likely technology obsolescence of various sub-assemblies/units/modules of equipment through an Annual Bulletin. In case of impending obsolescence of components, bulletin should specify either alternate item or option for life-time buy as under:-

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

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

Evaluation of Technical Offers

38. The Technical Offer submitted by the Bidder will be evaluated by a Technical Evaluation Committee (TEC) to confirm that the equipment being offered meets the Essential Parameters as elaborated at **Appendix A**. Thereafter, the Bidder of the short listed equipment would be asked to provide **one** (01) complete equipment with accessories 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

39. For an equipment to be introduced in service, it is mandatory that it successfully clears all stipulated tests/trials/evaluations as per RFP. The trial evaluation process will include the following: -

(a) <u>User Trials</u>. These will involve functional testing by user of the equipment in various specified conditions as per requirement and may be done in more than one phase. Trials will be conducted only pertaining to conditions where the equipment 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. In case, equipment 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. However, the Crane 5/10 Ton (SP) 4x4 Full Slew will not be allowed to be changed/ replaced after the trial equipment has been taken over by the trial team.

(b) <u>Technical Trials (DGQA Evaluation)</u>. Technical trials will be conducted by QA agency as per Technical Evaluation Plan (to be specified at **Para 41** below) to assess conformance to the quality requirements, standards and specifications. Equipment/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 recognised 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.

(c) <u>Maintainability Evaluation Trial (MET)</u>. MET to address maintenance, repair and spares support aspects of acquisition, wherever feasible, will be undertaken through the OEM documentation concurrent to the User Trials. Essential tests towards establishing maintainability would be undertaken to establish adequacy of maintenance tools, test equipment and spares utilisation. Actual stripping of the equipment to establish adequacy of maintenance tools, test equipment and spares utilisation will ideally be undertaken, where considered necessary by the Buyer.

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

Quality Assurance Instructions & Technical Evaluation Plan

41. Guidelines for framing of Draft ATP are given at **Appendix F**. 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. Based on the draft ATP, the ATP will be finalised by the Buyer's QA agency with Bidder during Technical Trials. 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 is no repetition of QA tests in PDI and JRI. The JRI would normally be restricted to quantitative checks only, except where check proof is required to be carried out. 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.

Painting, Marking and Packaging

42. **Painting**. All metal surfaces exterior (excluding surfaces and shafts having relative motion during operation) shall be painted with one coat of primer paint ready for use, red oxide of Iron and Zinc chromate conforming to specification No **IS 2074**. This will be followed by two finishing coats of paint ready for use, finishing and air drying for war equipment conforming to **IS 8982**. **Color of the Crane** shall be '**Scamic conforming to ISC 294**'.

43. <u>Marking of Deliverables</u>. The Bidder shall ensure that each Crane 5/ 10 Ton Self **Propelled 4X4 Full Slew** is marked clearly and indelibly with non-corrosive paint, as follows:-

'CRANE 5/ 10 TON SELF PROPELLED 4X4 FULL SLEW'

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

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

44. **Packaging of Equipment and Deliverables.** The SELLER shall provide packaging as per Military Packaging Level 'P' of DEFSTAN 81-041 (Part 1) or equivalent Military Standard. The packaging will provide adequate protection against the defined environmental conditions and physical constraints that may be experienced by equipment and all deliverables during storage and transportation. The choice of packaging materials and processes is left to the packaging supplier. However, the following points shall be taken into account when providing items packaged; Provide adequate physical protection, not make the item attractive, provide clear identification and marking, Be the most cost effective solution, provide a solution that is space efficient, be fit for purpose for the journey specified, be easily handled by in-service Mechanical Handling Equipment (MHE). If a re-usable container is required, then the same be provided with adequate physical constraints that may be experienced by equipment.

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

- (a) The name and address of the consigner and consignee including
 - (i) The delivery destination/address if not of the consignee

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

- (b) The description and quantity of the deliverables.
- (c) The full part number in accordance with codification details.
- (d) The makers part, catalogue, serial, batch number, as appropriate.
- (e) The contract number.

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

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. One copy of ISPPL (**Annexure V to Appendix D**) is to be submitted by Bidders along with commercial bid.

Commercial Bid

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

48. Commercial offers will be opened only of the Bidder whose equipment is short-listed, after 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 for 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).

Additional Aspects

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

PART IV: BID EVALUATION AND ACCEPTANCE CRITERIA

53. A list of documents/details to be submitted along with the bids is placed at **Appendix L** 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 Essential Parameter 'A' and prepare a "Compliance Statement" for shortlisting the Bidders. The shortlisted Bidders shall be asked to send **01 (one)** complete equipment with accessories for Field Evaluation in India as per Para 65 & 66 of Chapter II of DAP 2020 on No Cost No Commitment basis, as per Trial Methodology attached as **Appendix E**. Field Evaluation would be conducted for Essential Parameters-A. 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) <u>Evaluation of Commercial Bid</u>. 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 and Staff Evaluation. Comparison of bids would be done on the basis of Evaluation criteria given in **Appendix H** to this RFP. The L-1 bidder would be determined by Contract Negotiation Committee (CNC) on the basis of **Appendix H** to this RFP. Only L-1 bidder would be invited for negotiations by CNC.

(c) <u>**Contract Conclusion.</u>** The successful conclusion of CNC will be followed by contract conclusion.</u>

Appendix A

(Refers to Para 26, 27, 28, 30 (a), 31, & 38 of RFP)

OPERATIONAL CHARACTERISTICS AND FEATURES

PART - I: GENERAL INFORMATION

1. **<u>Proposed Service Employment</u>**. Crane 5/10 Ton (Self Propelled) 4x4 Full Slew is required by Services for facilitating handling and lifting of heavy loads.

PART - II: OPERATIONAL CHARACTERISTICS

2. Essential Parameters- A

2.1 **Operational Characteristics**. The operational characteristics for Crane 5/10 Ton (Self Propelled) 4x4 Full Slew are as follows: -

(a) **<u>Powering System</u>**. The Crane should be Self Propelled with 360⁰ continuous slew, hydraulic power operated and vehicle to be powered by diesel engine.

(b) <u>Environmental Conditions</u>. The equipment must be able to operate in the environment conditions as under without any deterioration in reliability or condition of the equipment: -

(i) <u>**Temperature Range**</u>. The vehicle should conform to existing environmental norms as given below to be able to operate in Plains and High Altitude Areas.

Min Temp	Max Temp
Between minus 15°C and minus 5°C	Between 40°C and 45° C

(ii) <u>Altitude</u>. Upto 3500 meters above Mean Sea Level (MSL).

(iii) <u>Emission Norms</u>. In accordance to latest CMVR emission norms for rough terrain cranes, as applicable at the time of commencement of trials.

(iv) <u>Humidity</u>. 90% RH at below 30° C ambient temperature based on OEM certification.

(v) <u>Wind Velocity</u>. During In-Service condition, the crane should withstand the effect of wind velocity upto 60 kmph safely.

(c) <u>Main Assembly and Sub Assembly.</u> Main motive assemblies and subassemblies are recommended as mentioned below: -

(i)	(aa) Turbo charged diesel engine of minimum 130 HP (@ min 2200 RPM) at the above
	stated altitude.

		(ab) The engine shall be equipped with Cold starting device for extreme cold climate.
(ii)	Transmission	Power shift torque converter transmission system with minimum 4 forward and 2 reverse speeds which provides effortless, fatigueless, & clutch free operation.
(iii)	Suspension	One axle fixed type and the other axle oscillating type with articulation of min 300mm and hydraulic operated suspension locks for free-on-wheels lift and move operations.
(iv)	Axles	All live axles with differential locks, 4-wheel steer, 4 Wheel Drive, & single wheel.
(v)	Towing hooks in front & rear	Minimum 10 Ton capacity towing hook with positive locking for towing eye/bar.
(vi)	Tyres	CC type pneumatic tyres of suitable load capacity and speed rating. The date of manufacture of tyres shall not exceed 06 months prior to the date of inspection.

(d) <u>Controls for Operations</u>. The operator should be able to operate all the crane functions smoothly, controls should be easily accessible, located inside the cabin and enable a single operator to operate the crane & outriggers completely without any external assistance.

(e) <u>Operator's Cabin.</u>

(i) The operator's cabin of Crane should be of revolving type. It should be weather proof, insulated, and enclosed. Operator's cabin mounted on the slewing structure of the crane should offer unrestricted view of the lifted load to the operator.

(ii) All glasses of the cabin shall be transparent to avoid any restrictions allround view of the operator.

(iii) The adjustable seat of operator should be ergonomically designed to provide max comfort to the driver or operator. The requirement of seat belt should also be provided.

(iv) Heating ventilation & Air Conditioning (HVAC) system should be provided for the operator's cabin.

(v) Exhaust pipe should be positioned away from the operator's cabin and it shall be fitted in such a position that the exhaust fumes of the engine do not reach the driver/operator.

(f) <u>Cabin Accessories.</u> The cabin shall be provided with the following accessories:-

- (i) Sun visor.
- (ii) Speedometer & Odometer.

(iii) Separate cumulative Hour's Meter for the crane lifting operations to be provided.

(iv) Digital Safe Load Indicator (SLI) with visual display for hook load, safe load radius & boom length with audio visual alarm on approaching over- load condition.

- (v) Reading cum cabin light on Cabin Ceiling.
- (vi) Fuel level gauge.
- (vii) Hydraulic oil pressure gauge.

(viii) Engine oil temp gauge should incorporate visual indicator and Audio alarm for high oil temp.

- (ix) Low engine oil pressure indicator.
- (x) Rear view mirror on cabin 01.
- (xi) Insulated water camper with tap, min capacity 5 litres.

(xii) Laminated wind screen with Wipers and toughened side & rear glasses will be provided for the cabin.

(xiii) Battery charging indicator.

(g) Accessories. The u/m accessories must be provided with the Crane: -

- (i) Jumper starting electrical cables, heavy duty with clamps.
- (ii) Rigid tow bar of min 2.5m length.
- (iii) Spare wheel Qty 01 No, mounted suitably on the crane.
- (iv) Cable tackles with load lifting capacity, as below: -
 - (aa) Two way slings Qty 02, 5 ton capacity of std length.
 - (ab) Four way slings Qty 02, 10 ton capacity of std length.

(v) <u>**Cargo Nets:**</u> Size 20ft x 20ft, load capacity of two tons with permissible mesh size of 5"x5" max, made of suitable long life synthetic and fray-resistant material - Qty 02 Nos.

(vi)	One box for keeping First Aid kit (empty)				-	Qty	01.		
(vii)	Tool Box with hand tools					-	Qty	01.	
(viii)	Light	weight	Metallic	hollow	blocks	-	Qty	04.	
as per design of vendor to be placed below outriggers so that one person can handle the same									

(with stowage arrangement)

(ix) Metal wheel chokes to be placed against wheels - Qty 04. (with stowage arrangement)

(x) Lighting Arrangements.

(aa) Head lights - Halogen type with dippers.

(ab) Twin fog lamps (both front & rear) - Halogen type, yellow coloured.

(ac) Halogen search lights with 15 mtr electric extension cable and tripod stand, connectable to suitable power outlets on the Crane - Qty 02.

- (ad) Marker lights at all extremities and also on the highest point.
- (ae) One flood light each on cabin and boom of crane.
- (af) Inspection lamp with minimum 3m length cable.
- (ag) Tail light.
- (ah) Brake light.
- (aj) Turn indicators.
- (ak) Reverse light with Audio alarm.
- (al) Beacon revolving light.
- (am) Horn.

(h) **<u>Boom System.</u>** Fully powered and hydraulically operated telescopic boom system. Fully synchronized booms to ensure proportional telescopic extension of boom section under single Joy stick control.

(j) <u>Slew System</u>. Hydraulically powered slew system providing 360^o continuous rotation with capability of intermittent stoppage.

(k) <u>**Control Systems**</u>. The control systems should be provided in the operator's cabin and should ensure that:-

(i) Any two operations out of three (i.e hoisting, derricking and slewing) should be possible simultaneously, and also when using the remote control.

(ii) All control for crane motions, driving/ travelling, outrigger operations, winch operations, etc must be provided in the cabin of operator.

(iii) The crane should be steady, under all working condition i.e whether on wheels or on outriggers.

(I) <u>Self Recovery</u>. A self-recovery hydraulically operated winch of 10 Ton direct line pull (at outermost layer), with minimum 50 mtr length of wire rope will be provided rear of the crane. A suitable rope cleaning device will also be provided on the winch.

(m) <u>Safety Provision</u>. The device should be provided with under mentioned safety arrangements: -

(i) <u>Locking Arrangements</u>.

(aa) The lifting tackle should have locking arrangements under all conditions to hold hoisted loads and to ensure that it does not get detached or fall down.

(ab) In the event of failure of power system there should be alternate provision to lower the suspended load & bring down the crane to stowage condition.

(ac) An alternate backup Manual SLI should be provided in case of failure of Digital Safe Load Indicator (SLI).

(ii) Overload hydraulic cut-off that automatically cuts-off further operations upon reaching safe working load conditions.

(iii) A safety arrangement will also be provided to prevent over hoisting of the Crane hook.

(iv) The hydraulic braking effort shall be provided in hoist, derrick & slew system to hold the rated load in any position. It will act as a fail safe type effort.

(v) **<u>Safety Charts/Indicators.</u>** A safety chart with relevant information to be provided to assist the operator to position the device for safe and satisfactory performance.

(vi) <u>**Fire Extinguisher**</u>. 01 No of (clean agent type) Fire Extinguisher of capacity 02 Kgs be provided inside operator's cabin at suitable location.

(vii) Anti-skid platform around the turn table with necessary ladders & suitably positioned hand rails/ hand grips.

(viii) Holding valves/ Counter balance valves in Hydraulic system to hold the load in its position without falling in the event of power and / or hydraulic failure in hoisting, derricking & telescoping system.

(ix) Digital spirit level display to be provided inside the cabin for leveling of Crane when on outriggers for better stability.

(x) All critical parameters for system monitoring pertaining to hydraulic system, engine, electrical etc should be displayed in the control cabin, as given in para 4.1 (g) above.

(n) <u>**Transportability Through Rail and Road**</u>. The Crane should be transportable on existing railway freight wagons/ road trailers.

(o) **<u>Dimensions of Crane in Transit</u>**. Height of the Crane in closed position should be within 3.55m and width should be within the limit of 2.7m.

(p) <u>Endurance</u>. Crane 5/10 Ton Rough Terrain (SP) should be able to sustain 2 hours of continuous lift.

- 3. Essential Parameters B Nil
- 4. Enhanced Performance Parameters (EPP) Nil

PART - III: TECHNICAL AND PHYSICAL CHARACTERISTIC

5. Essential Parameter – A.

(a) <u>Technical and Physical Characteristic</u> The Crane must confirm to IS-4573 specifications. However, broad characteristics of the Crane dealt in this QR are mentioned in the succeeding paragraphs.

(b) <u>Life Expectancy</u>. The Crane 5/10 Ton capacity (Self Propelled) 4x4 Full Slew should be capable of rendering at least 4,000 hrs of rugged operations under all environmental and terrain conditions before becoming due for major overhaul and should have a life span of **09 years or 80,000 KMs whichever is earlier**. OEM is required to certify the life expectancy.

(c) **Outriggers**. The Crane 5/10 Ton capacity (Self Propelled) 4x4 Full Slew shall have four independent outriggers fully powered, hydraulically operated, "Out & Down" and "Boom & Jack" type telescopic outriggers for both horizontally "In/Out" as well as vertically "Up/Down" operations respectively. These should be operated from the cabin of driver-cum-Operator and have a minimum span of at least 2.5m each. These shall be self-adjusting and lockable by holding valve operated automatically or from the cabin of operator to ensure safety. The Outriggers should be speedily deployable, either individually or collectively. Outriggers design should be such that it should perform satisfactorily on muddy/undulating surfaces. In addition, outriggers to be accommodated within the width of the vehicle.

(d) <u>Battery Life.</u> Minimum service life of maintenance free battery as per the existing service norms viz. three years. It shall be of 12V/24V. It shall comprise of lead acid storage battery, alternator, starter motor etc. The wiring shall be colour coded for ease of identification. The battery box provided shall be painted with anti-corrosive black paint.

(e) <u>Crane Characteristics</u>. The essential characteristics of the Crane performance are enumerated below: -

(i) <u>Lifting Capacity</u>. The equipment should be able to safely lift the following operational loads rated at 85% of tipping load conditions: -

(aa) Minimum 10 Tons lifting capacity at 5m radius, blocked on outriggers and 1.7m clear out reach ahead of the outriggers over 360° slew with boom fully retracted.

(ab) Minimum 5 Tons lifting capacity at minimum 4.5m radius, lift and move at 4 kmph speed over the front on a gradient of minimum 1-in-10 (5.74°) on un-metalled surface (only when moving up the slope with load secured to the chassis).

(ac) It should negotiate minimum 1-in-5 (12°) in un-laden conditions

- (ii) Slewing angle 360⁰ (Continuous rotation).
- (iii) Derricking angle Min (-) 1° to (+) 70°.

(iv) Operating speeds in un-laden condition should be :-

- (aa) Hook hoisting speed Not less than 7m/min (single line speed at top layer of drum)
- (ab) Slewing speed Not less than 12° per sec (2 RPM).

(ac)	Boom In/Out speed	-	Less than 70 sec from fully retracted to fully extended position at maximum Derricking angle.

(ad)Max Achievable- It shall have a maximum achievable
radius of not less than 14m.

(v) <u>**Hook Block</u>** - Pulley block with provision for sufficient fall lines essential for the maximum rated load capacity of the Crane.</u>

(vi) <u>Emergency Operation</u>. It should have an emergency wind off system to enable controlled lowering of the suspended load in case of power failure.

(f) <u>Vehicle Characteristics</u>. The essential characteristics of the vehicle portion of the main equipment are given below: -

(i) <u>Mobility</u>. It should be capable of travelling on highway, cross country and un-metalled road surfaces.

(ii) <u>Steering</u>. A hydraulic power steering system shall be provided. In the event of failure of primary steering system, the steering control should continue to be maintained on at least one axle. An automatic steering reversal mechanism should be provided to ensure that the crane steers in the direction in which the steering wheels is turned, irrespective of the position of the operator's cabin. The crane should be provided with right hand drive system. The cabin of crane must be located on right hand side of the boom.

(iii) <u>Air Pressure</u>. Suitable air line must be provided for filling of air pressure in the tyres from the air reservoir. The crane shall have a legible & prominent inscription on the chassis giving the correct inflation pressure of tyres.

(iv) <u>Stability</u>. Load stability must be in accordance with SAE-J765 standards, which shall be certified by means of Certificate of Conformance(**CoC**) from the OEM.

(v) <u>Wading depth</u>. Not less than 1000 mm with one "Stop & Go" without preparation (un-laden condition).

- (vi) Angle of approach Min 22°
- (vii) Angle of departure Min 24°
- (viii) Ground clearance Not less than 400 mm in un-laden condition.
- (ix) Inner and outer Turning Less than 8 mtr & 14 mtr respectively. Circle Dia, 4 Wheel Steer
- (x) Vehicle speed
 Max speed not less than 30 kmph on plain & metalled roads, and min speed not less than 5 kmph on level unmetalled roads in un-laden condition.
- (xi) Reverse Speed Maximum speed not less than 15 kmph (un-laden condition).

(xii) Mud crossing		- Not less than "200 mm" (un-laden
		condition).
Essential Parameters – B	-	Nil

7. Enhanced Performance Parameters (EPP) - Nil

6.

PART IV - OPERATION AND MAINTENANCE

8. **Product Support**. OEM must undertake assurance to supply for a period of at least 15 years from the date of effecting delivery of the equipment.

9. <u>**Remote Control**</u>. Provide wired remote control for smooth operations of Crane and outrigger operations through cable of not less than 10m length.

10. **Hand Throttle**. Provide hand throttle on chassis of crane to vary the engine RPM.

11. <u>Satellite Navigation System</u>. Provision of satellite navigation system be provided by the vendors.

PART V - MISCELLANEOUS

12. <u>Trialibility of Parameters</u>. Any parameter of the Appendix A which cannot be trial evaluated due to lack of test facilities or equipment or terrain will be accepted on certification of accreditation of Laboratory/ Original Equipment Manufacturer/ Vendor in that sequence, if required.

Appendix B (Refers to Para 26, 30 (b) & 31 of RFP)

COMPLIANCE TABLE

For: Crane 5/10 Ton (Self Propelled) 4x4 Full Slew

Ser No	Requirement as per the RFP	Compliance/ Partial Compliance	Indicate references of Paras/Sub Paras of the Main Technical Document
Genera	I Conditions of RFP (Para 01 to 56	(c))	
Technica	al Parameters as per Appendix A		
	Operation Characteristics and Features		
Comme	rcial Parameters as per RFP		
	Performance-cum-Warranty Bank Guarantee asper Para 2 of Appendix G of RFP		
	Advance Payment Bank Guarantee as per Para 1.4.1 of Appendix G of RFP		

<u>Appendix C</u> (Refers to Para 11 of RFP)

WARRANTY CLAUSE

1. The **SELLER** warrants that the goods/services supplied under this contract conform to technical specifications prescribed and shall perform according to the said Technical Specifications.

2. The SELLER warrants for an onsite warranty for a period of 24 (Twenty Four) months of complete equipment or 2000 Operational hours whichever is earlier from the date of acceptance deliverables post Joint Receipt Inspection and on commissioning, 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). No spares will be drawn during the warranty period from the MRLS.

3. If within the period of warranty, the goods/ stores are reported by the **BUYER** to have failed to perform as per the specifications, the **SELLER** shall either replace or rectify the same free of charge, maximum within **30 (Thirty) days** of notification of such defect by the **BUYER** provided that the goods are used and maintained by the **BUYER** as per instructions contained in the Operating Manual. Warranty repair will be carried out in-situ. Warranty of the equipment would be extended by such duration of downtime, if not repaired/ replaced within 30 days. Record of the down time would be maintained by user in log book. Spares and all consumables required for warranty repairs shall be provided free of cost by SELLER . The SELLER also warrants that the special oils, lubricants and gas required for the warranty repair of the equipment shall be provided by the SELLER himself. All activities including diagnosis, rectification, calibration, transportation etc, required for making equipment serviceable and available would be the SELLER's responsibility. The SELLER also undertakes to diagnose, test, adjust, calibrate and repair/replace the goods/equipment arising due to accidents by neglect or misuse by the operator or damage due to transportation of the goods during the warranty period, at the cost mutually agreed to between the BUYER and the SELLER. The SELLER shall intimate the assignable cause of the failures.

4. SELLER hereby warrants that necessary cost towards service and repair backup including consumables, spares, labour and oils/ lubricants/ greases required for the periodic/ scheduled/ un-scheduled maintenance of the equipment during the warranty period, including routine maintenance beyond Unit Level, shall be borne by the SELLER

5(a). If a particular equipment/ goods fails frequently or the cumulative down time exceeds **10%** of the warranty period, then the equipment will be completely replaced free of cost by the SELLER within a stipulated period of 60 days of receipt of the notification from the **BUYER**.

5(b). If a common defect is noticed in more than 10% of the quantity of equipment with respect to a particular item/ component/ sub-component, that complete item/ component/ sub-component shall be replaced free of cost by the SELLER within a stipulated period of 60 days of receipt of the notification from the BUYER duly modified/upgraded through design improvement in all equipment supplied/ yet to be supplied and ESP supplied/ yet to be supplied.

6. 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.

7. The seller is also bound to support the Buyer's maintenance Agency and QA agency for defect investigations beyond the warranty period.

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

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

10. The terms of warranty and OEM/ Seller Contact Details including phone number and email should be mentioned in the User Hand Book (UHB). The date from which warranty is applicable (duly endorsed by representative of both Buyer & Seller) should be mentioned in respective log book and User Hand Book of the main equipment and accessories.

Appendix D

(Refers to Para 33 and 34 of RFP)

PRODUCT SUPPORT

1. <u>Maintenance Philosophy</u>. 15 Nos out of 46 Nos of Crane 5/ 10 Ton (SP) 4x4 Full Slew will be deployed in Peace station. Hence, no product support is envisaged for these 15 x Crane 5/ 10 Ton (SP) 4x4 Full Slew through EME. They will be maintained through outsourcing model. The Maintenance philosophy for balance 31 x Crane 5/ 10 Ton (SP) 4x4 Full slew, comprise of 'O' level repair only and is defined as under:-

(a) <u>'O' Level (Field Repairs (1st & 2nd Level).</u> These are repairs carried out at field level by technicians specially trained for this purpose and where the required special tools and spares have to be provided. Repairs carried out at field level or equivalent service organisation by technicians specially trained for the purpose, requiring special tools and spares provided additionally. These repairs comprise replacement of common Line Replaceable Units (LRUs), sub-modules, other components and repairs undertaken beyond a unit level. Normally, a field workshop covers such repairs of a group of units holding the said class of equipment and their number will be stated based on equipment deployment pattern. There will be 29 x Field Repair Points taking care of field level repairs/ maintenance of 31 x Crane 5/10 Ton (SP) 4x4 Full Slew. The manufacturer in addition to the basic unit level SMTs/STEs/SE, is required to provide the following: -

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

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

(b) The unserviceable equipment/ assembly/ sub-assembly/ overhaul (if required) beyond the capacity of Field Repair echelons post warranty will be repaired by the OEM, through separate contract by MGS/ in-service maintenance agency/ user (in locations where in-service maintenance agency is not available).

2. To sustain and support Crane 5/10 Ton (SP) 4x4 Full slew through its operational lifecycle, Product Support requirements for at least **Two (02) years** beyond the warranty period will be procured along with the main equipment. The equipment would be provided product support through Engineering Support Package (ESP).

Engineering Support Package (ESP)

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

- (a) Spares.
- (b) SMTs/STEs test set-up.
- (c) Technical Literature.
- (d) Training and training aggregates.

4. Spares

(a) <u>Manufacturer's Recommended List of Spares (MRLS)</u>. This is the list of spares, recommended by the manufacturer, for maintaining operational serviceability of the equipment and sustain it for the period of 02 years. Based on the explanation given above, the Bidder(s) are requested to provide MRLS to sustain the equipment for a period of Two (02) years for 'O' level of repair as per format given at **Annexure I** to this Appendix. List of the MRLS, along with likely consumption rate of spares is to be provided with the Technical proposal. Cost of the MRLS, is to be provided with the Commercial proposal. The MRLS will be supported by Reliability & Maintainability (R&M) report for the proposed spares along with their Mean Time Between Failure (MTBF). MRLS would be provided separately as a package for each such sub system, including those for SMTs/ STEs at the time of Installation. 'Adequacy' clause and 'Buy Back' clause will be co-opted in the contract as under: -

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

(ii) <u>'Buy Back' Clause</u>. The Buyer would have the option to amend the Manufacturer's Recommended List of Spares (MRLS) proposed by the Bidder within a period of two years post expiry of the warranty period. The Bidder needs to agree to either 'Buy Back' the spares rendered surplus or exchange them on 'cost-to-cost' basis with the spares, as required by the Buyer. The said spares would be purchased/ replaced by the Seller, based on the prices negotiated in the contract. 5. <u>Special Maintenance Tools / Special Test Equipment and Test Jigs (SMTs/ STEs/</u> <u>Test Jigs</u>). SMTs, STE and Test Jigs are essential tools required to undertake effective engineering support/ repairs on the equipment and its systems, based on the Maintenance Philosophy. Bidder is required to provide SMTs, STE and Test Jigs up to 'O' Level Repair. This would be formulated in a similar manner as explained for MRLS and details are to be included in both Technical and Commercial Proposals as per suggested format at **Annexure** II to this Appendix. List of SMTs, STEs and Test Jigs will be provided by the Bidder as per Maintenance Philosophy. The SELLER confirms to installation/ commissioning (if applicable) of SMTs/ STEs at the nominated premises (29 Repair points) by the Buyer. The list of equipment required to be supplied will incorporate Adequacy Clause, as elaborated above.

6. <u>Technical Documentation</u>. The Bidder will be required to provide the technical literature preferably in IETM (Interactive Electronic Training Manuals) in Level 4 format or higher as per governing JSS-0251-01:2015 (Revision No 2). The details of technical literature to be supplied with the system should be listed as per the suggested format at **Annexure III** to this Appendix. This should be provided with both Technical and Commercial Proposals. The cost column may be left blank in the Technical Proposal. An illustrated list of documents which may be submitted by the Seller is as under: -

(a) <u>Technical Literature</u>.

- (i) User Handbook/Operators Manual in English and Hindi.
- (ii) Design Specifications.

(iii) <u>Technical Manuals</u>.

(aa) <u>**Part I.</u>** Tech description, specifications, functioning of various systems.</u>

(ab) <u>**Part II.**</u> Inspection/Maintenance tasks repair procedures, materials used, fault diagnosis and use of Special Maintenance Tools (SMTs)/Special Test Equipment (STEs).

(ac) <u>**Part III.</u>** Procedure for assembly/disassembly, repair up to component level, safety precautions.</u>

(ad) <u>**Part IV.</u>** Part list with drawing reference and List of SMTs/STEs Test Bench.</u>

- (iv) Manufacturers Recommended List of Spares (MRLS).
- (v) Illustrated Spare Parts List (ISPL).
- (vi) Technical Manual on STE with drawing references.
- (vii) Complete Equipment Schedule.
- (viii) Table of Tools & Equipment (TOTE) & carried spares.

(ix) Rotable list, norms of consumption, mandatory/ non-mandatory spares list for each system.

(x) Interactive Electronic Technical Manuals (IETMs) of Class IV and above.

- (b) Servicing Schedule.
- (c) Condemnation limits.
- (d) Permissive repair schedule.
- (e) Packing specifications /instructions.
- (f) Any additional information suggested by the OEM.

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

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

8. Training. A training package for operators, operator trainers and maintenance personnel to undertake operation and maintenance of equipment (Field Level Maintenance) along with tools and test jigs training and QA personnel for QA of equipment as stipulated in respective contract, would be required to be carried out in English and Hindi languages. This training shall be designed to give the operators and maintainers necessary knowledge and skills to operate and maintain equipment ('O' Level), as applicable. The syllabus for operators, QA and maintenance personnel will be defined by the Bidder in consultation with the Buyer at the time of FET. 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. Requirements such as training aids, projection system, complete equipment with accessories, technical literature, spares, test equipment, test set up, charts, training handouts, power point presentations, Computer Based Training (CBT), Documentation, Simulators etc will be provided by the Bidder for the conduct of training. Training should preferably be conducted before the induction of the equipment. The Bidder will provide the Operator and Maintenance & Repair training, for the duration, strength and locations specified in the RFP and Contract. The following may also be noted:

(a) The requirement of training and associated equipment is placed as per **Annexure IV to this Appendix**.

(b) The costs for aggregates and training must only be indicated in the commercial proposal.

(c) <u>Sufficiency Clause</u>. Bidder will give an undertaking agreeing to provide Installation material, Technical Literature and Training Aggregates under the provisions of this clause within the existing commercial quotes. On completion of training, technicians should be capable of carrying out maintenance/ repair as per maintenance philosophy.

Active Technology Obsolescence Management

9. Bidder is to indicate the methodology on how the Bidder intends to undertake Active Obsolescence Management through life cycle of equipment which would include upgradation of systems/ subsystems/ units on completion of its fair service life. The Bidder shall also intimate the Buver on likely technology obsolescence of various subassemblies/units/modules of equipment through an Annual Bulletin. In case of impending obsolescence of components, bulletin should specify either alternate item or option for lifetime buy as under: -

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

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

Annexure I to Appendix D

(Refers to Para 4(a) of Appendix D)

MANUFACTURER'S RECOMMENDED LIST OF SPARES (MRLS)

EQUIPMENT: QUANTITY 31 NUMBERS OF CRANE 5/ 10 TON (SP) 4X4 FULL SLEW

Original Equipment Manufacturer (OEM) : _____

Ser No	Manu facturer's Part No	Source of supply	Nomencl ature	Nos fitted in one	ISPL /NSN reference	Unit Cost	Recommended quantity for 31 x Crane 5/ 10 Ton (SP) 4x4 Full Slew		cost	H M	V E	F N	Remarks
				eqpt			Field Repair Points (29)	Total Quantity (29)		L \$	D \$	S \$	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)	(k)	(I)	(m)	(n)	(0)

Notes: -

- 1. Maintenance spares/ stores like lubricants, sealing compound, gases should be given separately giving source of supply.
- 2. Spares for components repairs should be included under the column of Field level as suggested by OEM.
- 3. In 'Remarks' column following information (if applicable) be given: -
 - (a) If an item has a shelf/ operational life, it be marked as 'G' and life indicated
 - (b) Matching set of components be indicated.
 - (c) Item which can be locally manufactured should be marked 'LM'.

37

(d) Items which cannot be manufactured in India due to sophisticated design/ technology may be marked as 'SI' (Special Item).

(e) If a component/ assembly is common to other similar equipment offered by the OEM earlier these should be marked 'CM' and name of the equipment along with details of part number be indicated.

(f) In any item is to be repaired by OEM in his premises, the same should be mentioned as FR.

4. MRLS should be drawn out of the 'Illustrated Spares Part List' of the equipment, which should be separately given as part of Technical Manual Part IV.

5. If the main equipment consists of other equipment then MRLS should be prepared for them under proper heads.

6. MRLS be prepared as per the maintenance concept of the customer (Appendix E to this RFP).

7. Items provided along with the equipment as spares should also be included in MRLS.

8. Modules/ Shop Replaceable Unit (SRU)/ assemblies should be listed and their components should be included under them so as to relate each item of spare to their module/ SRU/ assembly.

9. Complete MRLS should be costed separately for Field repairs as it is required to be included as part of 'Total Costed Engineering Support Package' (ESP). OEM may give cost details in confidence to Contract Negotiation Committee (CNC), but other details as above be provided during Maintainability Equipment Trial (MET).

10. MRLS for test equipment should also be provided on the similar format.

11. \$ The following stands for: -

HML - High cost/ Medium Cost/ Low cost

- VED Vital/ Essential/ Desirable
- FNS Fast/ Normal/ Slow moving spares

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

LIST OF SMTs/ STEs, JIGs, FIXTURE AND INFRASTRUCTURE

EQUIPMENT: QUANTITY 31 NUMBERS OF CRANE 5/ 10 TON (SP) 4X4 FULL SLEW

Original Equipment Manufacturer:

Ser No	Manufacturer Part No	Designation	Unit Cost	Recommended quantity for 31 x Crane 5/ 10 Ton (SP) 4x4 Full Slew		Brief Purpose	Remarks
				Ed Ponsiro Dointo	Total Qty		
				Fd Repairs Points (29)	(29)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
							01 (One) set to each repair pt

Notes

Prepare separate sheet for each type of equipment. (i)

Specify in remarks column whether the Special Test Equipment (STE)/ Special Maintenance Tools (SMTs) can be used as (ii) general purpose equipment on any other kind of equipment.

- If test equipment is commercially available ex India, the source of supply be specified. (iii)
- Test equipment for calibrating the STEs should be included in the list above. (iv)
- Test equipment which are required to be provided by the customer should be also be included in the list above. (v)
- Infrastructure requirement if any for effective repair and maintenance be mentioned as a separate heading. (vi)
- (vii) MRLS for SMTs/ STEs/ Test jigs should be provided as a package alongwith SMTs/STEs at the time of installation.

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

TECHNICAL LITERATURE

EQUIPMENT: QUANTITY 31 NUMBERS OF CRANE 5/ 10 TON (SP) 4X4 FULL SLEW

Original Equipment Manufacturer (OEM):

Ser	Technical Literature	Unit	1	Nos Requir	ed	Total	Total	Remarks
No		Cost	User	EMÉ	DGQA	Qty	Cost	
1.	User Handbook/ Operators Manual		46	32	04	82		
2.	Design Specifications		-	03	02	05		
3.	Technical Manual(a)Part IPart ITech description,specifications functioning ofvarious systems.(b)Part IIInspection/Maintenance tasks Repairprocedures, materials used,fault diagnosis and use ofspecialMaintenance Tools(SMTs/SpecialEquipment (STEs).(c)Part IIIProcedure forassembly/ disassembly, repairup to component level, safetyprecautions.		-	32	04	36		

-	Technical Literature			Nos Requ	ired	Total Qty	Total Cost	Remarks
			User	EME	DGQA			
	 (d) <u>Part IV</u> List of SMT/ STEs with Test Bench (if any alongwith photograph and its wage). (i) Part list with drawing reference (ii) List of SMT/ STEs with Test Bench. 							
					0.1	00		
4.	Manufacturer's Recommended List of Spares (MRLS) (Both Soft & Hard copy).		-	02	04	06		
5.	Illustrated Spares Part List (ISPL) (Both Soft & Hard copy).		-	32	04	36		
6.	Illustrated Spares Parts Price List (ISPPL)		-	01	-	01		
7.	Technical Manual on STE with drawing reference and calibration (If applicable) details.		-	32	04	36		
8.	CDs on the above Technical Literature		-	04	04	08		
9.	Any other (specify)							

Notes: -

(i) In case any additional equipment is used their tech literature will be included.

(ii) If some technical literature is being provided free of cost, it should be indicated in remark column.

(iii) The above mentioned technical literature would be in English language except User Handbook/ Operator's manual which would be Bilingual (Hindi/ English).

(iv) All the above Technical Literature is recommended to be provided in the form of CDs/ DVDs.

(v) Diagnostic and installation manuals to be provided for the complete software being used in the equipment.

Annexure IV to Appendix `D`

(Refers to Para 8(a) of Appendix D)

TRAINING AGGREGATES

EQUIPMENT: QUANTITY 31 NUMBERS OF CRANE 5/ 10 TON (SP) 4X4 FULL SLEW

Original Equipment Manufacturer (OEM) : _____

Ser	Description of Training Aggregate	N	os Requ	uired	Total	Unit	Total Cost	Remarks
No.		User	EME	DGQA	Qty	Cost		
1	Complete Equipment	-	-	-	-			
2	Sectionised Equipment (Hydraulic and Electrical System)	-	One Set	-	One Set			
3	Computer based training package with permission make extra copies based on interactive multimedia to include (a) Full Graphics, Animation test and sound (b) Symptoms- fault correlation (expert system)	One Set	Two Set	One Set	Four Set			
4	 Training Aids :- (a) Laminated Charts of system duly annotated in colour (size 4' x 3') to include system layout and exploded view of all SRUs (Soft and Hard Copy). (b) Symptoms fault correlation (except system). (c) Blow up diagram of major assemblies on laminated chart duly annotated in colour (size 4' x 3'). 	One Set	One Set	One Set	Three Set			
5	Cost of training of Operator, QA and Maintenance Personnel as per Para 16 of RFP	20	31	04	55			
6	Any other-	-	-	-				

Annexure V to Appendix D (Refers to Para 46 of RFP)

ITEMISED SPARES PART PRICE LIST (ISPPL)

EQUIPMENT: QUANTITY 31 NUMBERS OF CRANE 5/ 10 TON (SP) 4X4 FULL SLEW

Original Equipment Manufacturer (OEM) : ______ Annual Price Escalation for Spares : _____

Ser	Part No	Description	Quantity fitted in each Equipment (to cover all items)	Minimum Order Quantity	Unit Price List	Delivery Period	Category: Vital/ Essential /Desirable (V/E/D)	Mean Time Between Failure (If applicable)	Recommended for MRLS (Yes or No)

Appendix E

(Refers to Para 38 & 56 (a) of RFP)

TRIAL METHODOLOGY: CRANE 5/10 TON (SP) 4x4 FULL SLEW

1. Field Evaluation Trials will be conducted on a "No Cost No Commitment" (NCNC) basis under the aegis of IHQ of MoD (Army). The broad methodology for evaluation along with evaluating agencies is given at Annexure to this Appendix. The FET will constitute the following: -

- (a) User Trial.
- (b) **Technical Trials**.
 - (i) Technical & Environmental Evaluation.
 - (ii) Maintainability Evaluation Trials (MET).

2. **<u>Pre-Trial Meeting</u>**. Pre-Trial meeting to intimate broad schedule and modalities of trial will be organized at a place, which will be intimated to vendors. The meeting will include representatives of vendors whose equipment has qualified in the TEC, representatives of all stakeholders and agencies involved in conduct of trials.

3. The methodology for evaluation of each parameter of the Appendix A is highlighted at Annexure. However, the decision to carry out physical evaluation for parameters wherein certification is sought, or to seek certification for parameters wherein physical evaluation has been laid down, rests with CD Directorate, depending on conditions existing during the Pre-Trial Meeting.

4. <u>Deposition of Trial Equipment</u>. All vendors should be prepared to deposit the equipment for trials immediately on intimation of successful clearance of TEC. The final date for fielding the equipment for trials will be intimated only to TEC compliant vendors. Quantity one (01) Crane 5/10 Ton (SP) 4x4 Full Slew with complete accessories will be submitted by the vendors at the designated trial location for conduct of the Field Evaluation Trials.

5. **Deposition of Technical Documents**. Each vendor should provide two complete sets of technical literature along with one CD containing the soft copy of the same for Crane 5/10 Ton (SP) 4x4 Full Slew. The technical literature and all documents should be provided by the vendor at least one month in advance of the Field Evaluation Trials. Two sets of User Hand Book, Technical Manuals & Design/ Technical Specifications (as applicable), if any, are to be submitted by the vendors alongwith the equipment for trial, as per Para 4 above. All technical documents and vendor certification for equipment, wherever applicable, shall be submitted by the vendor along with the equipment at Para 4 above, before commencement of trials. Failure to do so shall be construed as non-submission of equipment for trials. The QA rep in the trial team will carry out a check of all applicable certification incl CoC, prior to commencement of physical trials. The CoC will be accompanied by internal QC report of the vendor.

6. These trials will be conducted strictly in accordance with the provisions laid out in DAP-2020 and the Trial equipment will be tested against parameters mentioned at the Annexure. In situ repairs/modifications of the trial equipment may be allowed with due permission. However, the Crane 5/10 Ton (SP) 4x4 Full Slew will not be allowed to be changed/replaced after the trial equipment has been taken over by the trial team. Any change in methodology of evaluation will be at the discretion of the Directorate responsible for conduct of trials and will be communicated to the vendor during Pre-Trial Mtg.

7. <u>Optional Equipment/Accessories</u>. Optional equipment/accessories may be provided by the vendor alongwith the equipment for trials. The optional equipment/accessories will be trial evaluated during the trials and compliance/ non-compliance will be mentioned in the trial report but without having any bearing on overall compliance / non-compliance of the equipment.

8. <u>**Terrain and Crew**</u>. Terrain for trials will be selected at the discretion of the User. Crew for operating the trial equipment will be provided by the OEM only 'No representations by vendors' at later stage. Adequate Training & familiarization of crew will be carried out by the vendor.

9. <u>**Transportation of Equipment</u>**. Whenever movement of trial stores is being undertaken by the vendors from one trial location to another, the equipment will be suitably sealed to prevent tampering. Being NCNC trials, all charges for transportation incl freight, insurance, custom, octroi duties and any other local taxes shall be borne by the vendors. A representative of vendor shall accompany the equipment being transported at all times.</u>

10. <u>Additional Tests</u>. There may be some additional tests that may be required to be carried out by QA agency at the locations identified by OIC Trial and would be informed to the vendors during the Pre-Trial Meeting as mentioned at Para 2 above. In case facilities to conduct tests are not available in any Government laboratories (incl DGQA/ DRDO laboratories/ other Govt establishments), tests will be conducted in private laboratories in India. The participating vendors would be required to pay for the tests conducted in the private laboratories.

11. <u>Qualified Vendor Representatives</u>. The representatives of vendors present during trials should have adequate knowledge about the equipment to give the complete details of the equipment including stripping and assembling, testing procedures, SMTs/ STEs etc. Observations and recommendations will be conveyed to respective vendors and the vendors will sign for the same.

12. **Debriefing to Vendors**. After each stage of trials, debriefing of all vendors to inform them about the performance of all equipment (against the RFP/ Appendix A parameters) being trial evaluated will be organized, in accordance with provisions of DAP-2020. Vendor representatives will be briefed about the performance of their equipment against the RFP parameters by OIC Trial. These pts will also be communicated to them in writing by the OIC Trail.

13. <u>Representations/ Requests</u>. Vendors will be required to forward observations, if any, on this communication to OIC Trial and CD Directorate, within one week of receipt of the same. All queries, representations and request 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 CD Directorate.

14. <u>Security Clearance</u>. A maximum of five (05) representatives per vendor will be allowed to witness the trials. Vendors will intimate relevant details of their representatives who will attend the Pre-Trial Meeting at IHQ of MoD (Army), on intimation of compliance in security clearance. The details of representatives who would attend the trials will be forwarded to OIC Trial. Non receipt of details may result in delays in security clearance and will lead to non-attendance of the vendor representative during the Pre-Trial Meeting and Trials.

15. <u>Retention and Returning of Equipment</u>. The equipment of all the vendors, whether compliant or otherwise, will be retained under the custody of the Trial unit/ evaluating agency, till completion of General Staff Evaluation. Equipment of vendors found non-compliant in General Staff Evaluation would be returned thereafter. On finalization of contract, equipment of L1 vendor will be retained till completion of delivery of all equipment, for purpose of comparison.

16. <u>**Trials</u>**. MET is an interactive manner with vendor is envisaged. Key aspects of MET are as under: -</u>

(a) <u>Assessing Maint Parameters</u>. Assembling/ disassembling of the equipment up to assy/ sub assy/ component level to assess following maintainability parameters:-

- (i) Accessibility.
- (ii) Standardization and inter-changeability.
- (iii) Marking and identification.
- (iv) Precautions and safety measures to be adopted.

(b) <u>**Reliability**</u>. Validate the reliability data provided by the OEM as mean Time between Failures (MTBF) and Mean Time Taken to Repair (MTTR).

(c) Sustainment Plan.

(i) <u>**Technical Documents</u>**. Adequacy of contents of User Handbook (UHB)/Operator's Manual, Technical Manuals (TM), ISPL including those of accessories being provided with the main equipment.</u>

(ii) <u>MRLS</u>. Ascertain adequacy of Manufacture's Recommended List of Spares to sustain the equipment for a period of **02 years** for **29 Field Repair Point**.

(iii) <u>**Training and Training Aggregates**</u>. Assess requirement of training to enable EME personnel to carry out repairs at the nominated repair echelons. Adequacy of training aggregates will also be assessed.

(iv) <u>SMTs/STE/TJs</u>. Details of Special Maint Tools (SMTs)/Special Test Eqpt (STE) Test Jigs (TJs) Tools and diagnostic software required at Unit/Field Workshop.

(v) <u>Inspection Standards</u>. Adequacy of **Field Inspection Standards (FIS)** to be provided by the OEM. (vi) <u>Infrastructure</u>. Any additional infrastructure required for carrying out repairs Unit/Field Workshop.

- (d) Maintainability.
- (e) Libs/Hydraulic fluids.
- (f) Adequacy of tools, VKL/TOTE/CES items.

(g) MET reports will be prepared as per EMER No GN/A 090 No 1 Issue 1, Mar 2014".

Technical & Environmental Evaluation (DGQA Evaluation)

17. These tests will be conducted under aegis of DGQA at agencies/ laboratories so nominated by them.

18. These tests will be conducted as per the standards/ conditions and technical parameters as stated in Appendix A of RFP. There may be some additional tests that may be required to be carried out by DGQA at the locations identified by DGQA and would be informed during the Pre-Trial Meeting as mentioned at **Para 10 above**.

19. Two sets of the following documents are to be submitted by the vendors alongwith the equipment for Trial, as at Para 5 above:-

- (a) User Hand Book.
- (b) Technical Manual.
- (c) Design/ Technical Specifications, if any.
- (d) ISPL

<u>Note</u>: The documents (Literatures) should be in defence format as per JSG0308 : 2012.

20. Vendor representatives will be briefed about the performance of their equipment against the RFP parameters by the OIC Trial. These points will also be communicated to them in writing by the OIC Trial.

21. In case facilities to conduct tests are not available in DGQA or other Government laboratories (incl DRDO laboratories/ establishments), tests will be conducted in private laboratories in India. The participating vendors would be required to pay for the tests conducted in the private laboratories.

22. <u>Equipment Repair and Modification</u>. Equipment fielded may require repairs/modifications during the course of trials and these in situ servicing, repair, maintenance actions or modifications as requested by the vendor will be permitted.

Annexure to Appendix E (Refers to Para 1 of Appendix E)

TRIAL EVALUATION MATRIX: CRANE 5/10 TON (SELF PROPELLED) 4x4 FULL SLEW

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
Part-I	: Gene	ral Information	
1.	1.	Proposed Service Employment . Crane 5/10 Ton (Self Propelled) 4x4 Full Slew is required by Services for facilitating handling and lifting of heavy loads.	Physical Check and Vendor CoC
Part-I	I : Oper	rational Characteristics	
2.	2.1 (a)	Powering System . The Crane should be Self Propelled with 360 [°] continuous slew, hydraulic power operated and vehicle to be powered by diesel engine.	Physical Check and Vendor CoC
3.	2.1 (b)	Environmental Conditions . The equipment must be able to operate deterioration in reliability or condition of the equipment:-	in the environment conditions as under without any
		 (a) <u>Temperature Range</u>. The vehicle should conform to existing environmental norms as given below to be able to operate in Plains and High Altitude Areas. (i) <u>Minimum Temp</u>. Between minus 15^o C to minus 5^o C. 	Vendor CoC supported by NABL lab/ Govt Lab certificate for environmental conditions and temperature ranges if eqpt not undergoing summer and winter trial both
		 (ii) <u>Maximum Temp</u>. Between 40° C to 45° C. (b) <u>Altitude</u>. Upto 3500 meters above Mean Sea Level (MSL). 	De-rating chart of Engine with Vendor CoC

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(c) <u>Emission Norms</u> . In accordance to latest CMVR emission norms for rough terrain cranes, as applicable at the time of commencement of trials.	Certificate from ICAT/ARAI/Govt agency as per latest CMVR norms for emission
		(d) <u>Humidity</u> . 90% RH at below 30 ^o C ambient temperature based on OEM certification.	OEM Certification
		(e) <u>Wind Velocity</u> . During In-Service condition, the crane should withstand the effect of wind velocity upto 60 Kmph safely.	Vendor CoC
4.	2.1 (c)	Main Assembly and Sub Assembly. Main motive assemblies and sub	assemblies are recommended as mentioned below :-
		 (a) <u>Engine</u>. (i) Turbo charged diesel engine of minimum 130 HP (@ min 2200 RPM) at the above stated altitude. (ii) The engine shall be equipped with Cold Starting Device for 	ARAI/ ICAT/ Govt agency certificate for the Engine HP, Type apvl certificate of Engine with De-rating chart and Physical check for cold starting device
		 extreme cold climate. (b) <u>Transmission</u>. Power shift torque converter transmission system with minimum 4 forward and 2 reverse speeds which provides effortless, fatigueless & clutch free operation. 	ARAI/ ICAT/Govt agency certificate for transmission type, No of Fwd and Reverse Gear. Effortless, fatigueless & clutch free operation will be physically checked
		(c) Suspension . One axle fixed type and the other axle oscillating type with articulation of min 300mm and hydraulic operated suspension locks for free-on-wheels lift and move operations.	Physical Check and Vendor CoC
		(d) <u>Axles</u> . All live axles with differential locks, 4 Wheel Steer, 4 Wheel Drive & Single Wheel.	
		(e) Towing Hooks in Front & Rear . Minimum 10 Ton capacity towing hook with positive locking for towing eye/bar.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(f) Tyres . Cross Country (CC) type pneumatic tyres of suitable load capacity and speed rating. The date of manufacture of tyres shall not exceed 06 months prior to the date of inspection.	Visual check for Make, Model & Year of mfg and certificate regarding load capacity & speed rating
5.	2.1 (d)	<u>Controls for Operations</u> . The operator should be able to operate all the crane functions smoothly, controls should be easily accessible, located inside the cabin and enable a single operator to operate the crane & outriggers completely without any external assistance.	Physical Check and Vendor CoC
6.	2.1 (e)	Operator's Cabin . (a) The operator's cabin of Crane should be of revolving type. It should be weather proof, insulated and enclosed. Operator's cabin mounted on the slewing structure of the crane should offer unrestricted view of the lifted load to the operator.	Physical check and certificate for operators cabin confirming to – ROPS as per ISO 3471 : 2008
		 (b) All glasses of the cabin shall be transparent to avoid any restrictions all - round view of the operator. (c) The adjustable seat of operator should be ergonomically designed to provide max comfort to the driver or operator. The requirement of seat belt should also be provided. 	
		(d) Heating ventilation & Air Conditioning (HVAC) system should be provided for the operator's cabin.	Physical Check and Vendor CoC
		(e) Exhaust pipe should be positioned away from the operator's cabin and it shall be fitted in such a position that the exhaust fumes of the engine do not reach the driver/operator.	Physical check

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
7.	2.1 (f)	<u>Cabin Accessories</u> . The cabin shall be provided with the following accessories :-	
		(a) Sun visor.	
		(b) Speedometer and Odometer.	
		(c) Separate cumulative Hour's Meter for the crane lifting operations to be provided.	
		(d) Digital Safe Load Indicator (SLI) with visual display for hook load, safe load radius and boom length with Audio visual alarm on approaching over-load condition.	
		(e) Reading cum cabin light on Cabin Ceiling.	Physical Check and Vendor CoC
		(f) Fuel level gauge.	
		(g) Hydraulic oil pressure gauge.	
		(h) Engine oil temp gauge should incorporate visual indicator and audio alarm for high oil temp.	
		(j) Low engine oil pressure indicator.	
		(k) Rear view mirror on cabin – 01.	
		(I) Insulated water camper with tap, min capacity 5 litres.	
		(m) Laminated wind screen with wipers and toughened side and rear glasses will be provided for the cabin.	
		(n) Battery charging indicator.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
8.	2.1 (g)	Accessories. The u/m accessories must be provided with the Crane :- (a) Jumper starting electrical cables, heavy duty with clamps.	Physical check and Vendor CoC
		(b) Rigid tow bar of min 2.5m length.(c) Spare wheel - Qty 01 No, mounted suitably on the crane.	
		 (d) Cable tackles with load lifting capacity, as below :- (i) Two way slings - Qty 02, 5 ton capacity of std length. (ii) Four way slings - Qty 02,10 ton capacity of std length. 	Mechanical & Chemical test, Proof load test reports for Slings from NABL lab/Govt lab as per relevant IS
		(e) <u>Cargo Nets</u> . Size 20ft x 20ft, load capacity of two tons with permissible mesh size of 5"x5" max, made of suitable long life synthetic and fray-resistant material - Qty 02 Nos.	Certificate from NABL lab/ Govt lab for Fire resistance Cargo Net as per BS : 3119 or relevant IS
		(f) One box for keeping First Aid Kit (empty) - Qty 01.	
		 (g) Tool Box with hand tools - Qty 01. (h) Light weight Metallic hollow blocks - Qty 04. as per design of vendor to be placed below outriggers so that one person can handle the same (with stowage arrangement) (i) Metal wheel chokes to be placed against - Oty 04. 	Physical Check and Vendor CoC
		 (j) Metal wheel chokes to be placed against - Qty 04. wheels (with stowage arrangement) 	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(k) Lighting Arrangements.	
		(i) Head lights - Halogen type with dippers.	
		(ii) Twin fog lamps (both front & rear) - Halogen type, yellow coloured.	
		(iii) Halogen search lights with 15 meter electric extension cable and tripod stand, connectable to suitable power outlets on the Crane – Qty 02.	
		(iv) Marker lights at all extremities and also on the highest point.	
		(v) One flood light each on cabin and boom of crane.	
		(vi) Inspection lamp with minimum 3m length cable.	Physical Check and Vendor CoC
		(vii) Tail light.	
		(viii) Brake light.	
		(ix) Turn indicators.	
		(x) Reverse light with Audio alarm.	
		(xi) Beacon revolving light.	
		(xii) Horn.	
9.	2.1 (h)	Boom System . Fully powered and hydraulically operated telescopic boom system. Fully synchronized booms to ensure proportional telescopic extension of boom section under single Joy stick control.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
10.	2.1 (j)	<u>Slew System</u> . Hydraulically powered slew system providing 360 [°] continuous rotation with capability of intermittent stoppage.	
11.	2.1 (k)	 <u>Control Systems</u>. The control systems should be provided in the operator's cabin and should ensure that: - (a) Any two operation out of three (i.e hoisting, derricking and slewing) should be possible simultaneously, and also when using the remote control. 	
		(b) All control for crane motions, driving/travelling, outrigger operations, winch operations, etc must be provided in the cabin of operator.	Physical Check and Vendor CoC
		(c) The crane should be steady, under all working condition i.e whether on wheels or on outriggers.	
12.	2.1 (l)	Self Recovery . A self-recovery hydraulically operated winch of 10 Ton direct line pull (at outermost layer), with minimum 50 mtr length of wire rope will be provided rear of the crane. A suitable rope cleaning device will also be provided on the winch.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
13.	2.1 (m)	 <u>Safety Provision</u>. The device should be provided with under mentioned safety arrangements: - (a) <u>Locking Arrangements</u>. 	
		(i) The lifting tackle should have locking arrangements under all conditions to hold hoisted loads and to ensure that it does not get detached or fall down.	
		(ii) In the event of failure of power system there should be alternate provision to lower the suspended load and bring down the crane to stowage condition.	Physical Check and Vendor CoC
		(iii) An alternate backup Manual Safe Load Indicator (SLI) should be provided in case of failure of Digital SLI.	
		(b) Overload hydraulic cut-off that automatically cuts-off further operations upon reaching safe working load conditions.	
		(c) A safety arrangement will also be provided to prevent over hoisting of the Crane hook.	
		(d) The hydraulic braking effort shall be provided in hoist, derrick & slew system to hold the rated load in any position. It will act as a fail safe type effort.	
		(e) <u>Safety Charts/ Indicators</u> . A safety chart with relevant information to be provided to assist the operator to position the device for safe and satisfactory performance.	Physical Check

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(f) <u>Fire Extinguisher</u> . 01 No of (clean agent) Fire Extinguisher of capacity 02 Kgs be provided inside operator's cabin at suitable location.	Physical Check and PESO certificate for Cylinder & valve of Fire Extinguisher and Gas purity certificate
		(g) Anti-skid platform around the turn table with necessary ladders and suitably positioned hand rails/ hand grips.	
		(h) Holding valves/Counter balance valves in Hydraulic system to hold the load in its position without falling in the event of power and/ or hydraulic failure in hoisting, derricking & telescoping system.	Physical check and Vendor CoC
		(j) Digital spirit level display to be provided inside the cabin for leveling of Crane when on outriggers for better stability.	
		(k) All critical parameters for system monitoring pertaining to hydraulic system, engine, electrical etc should be displayed in the control cabin, as given in para 4.1 (g) above.	
14.	2.1 (n)	Transportability through Rail and Road . The Crane should be transportable on existing railway freight wagons/ road trailers.	Dhusias labor la and Mandan Os O
15.	2.1 (0)	<u>Dimensions of Crane in Transit</u> . Height of the Crane in closed position should be within 3.55m and width should be within the limit of 2.7m.	Physical check and Vendor CoC
16.	2.1 (p)	Endurance . Crane 5/10 Ton Rough Terrain (SP) should be able to sustain 2 hours of continuous lift.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan		
Part-	III : Tecl	nnical and Physical Characteristic	I		
17.	5 (a)	Technical and Physical Characteristic . The Crane must confirm to IS-4573 specifications.	Vendor CoC		
18.	5 (b)	Life Expectancy . The Crane 5/10 Ton capacity (Self Propelled) 4x4 Full Slew should be capable of rendering at least 4,000 hrs of rugged operations under all environmental and terrain conditions before becoming due for major overhaul and should have a life span of 09 years or 80,000 KMs whichever is earlier. OEM is required to certify the life expectancy.	OEM Certification		
19.	5 (c)	Outriggers . The Crane 5/10 Ton capacity (Self Propelled) 4x4 Full Slew shall have four independent outriggers fully powered, hydraulically operated, "Out & Down" and "Boom & Jack" type telescopic outriggers for both horizontally "In/Out" as well as vertically "Up/Down" operations respectively. These should be operated from the cabin of driver-cum-Operator and have a minimum span of at least 2.5m each. These shall be self-adjusting and lockable by holding valve operated automatically or from the cabin of operator to ensure safety. The Outriggers should be speedily deployable, either individually or collectively. Outriggers design should be such that it should perform satisfactorily on muddy/undulating surfaces. In addition, outriggers to be accommodated within the width of the vehicle.	Dhusiaal Chask and Vandar CaC		
20.	5 (d)	Battery Life. Minimum service life of maintenance free battery as per the existing service norms viz three years. It shall be of 12V/24V. It shall comprise of lead acid storage battery, alternator, starter motor etc. The wiring shall be colour coded for ease of identification. The battery box provided shall be painted with anti-corrosive black paint.	Vendor CoC for service life, Heavy Duty Wiring & colour coding and Battery OEM certificate for details of battery like mfg date, voltage/ current rating		

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
21.	5 (e)	Crane CharacteristicsThe essential characteristics of the Crane performance(a)Lifting CapacityThe equipment should be able to safely lift the following operational loads rated at 85% of tipping load conditions:-	ormance are enumerated below :-
		(i) Minimum 10 Tons lifting capacity at 5m radius, blocked on outriggers and 1.7m clear out reach ahead of the outriggers over 360 ⁰ slew with boom fully retracted.	
		(ii) Minimum 5 Tons lifting capacity at minimum 4.5m radius, lift and move at 4 kmph speed over the front on a gradient of minimum 1-in-10 (5.74 ⁰) on un-metalled surface (only when moving up the slope with load secured to the chassis).	
		(iii) It should negotiate minimum 1-in-5 (12 ⁰) in un-laden conditions.	
		(b) Slewing angle - 360 ⁰ (Continuous rotation).	Physical Check and Vendor CoC
		(c) Derricking angle - Min (-) 1° to (+) 70°.	
		(d) Operating speeds in un-laden condition should be :-	
		 Hook hoisting speed - Not less than 7m/min (single line speed at top layer of drum). 	
		(ii) Slewing speed - Not less than 12 ⁰ per sec (2 RPM).	
		(iii) Boom In/Out speed - Less than 70 sec from fully retracted to fully extended position at maximum Derricking angle.	
		(iv) Max Achievable Radius - It shall have a maximum achievable radius of not less than 14m.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(e) <u>Hook Block</u> . Pulley block with provision for sufficient fall lines essential for the maximum rated load capacity of the Crane.	
		(f) <u>Emergency Operation</u> . It should have an emergency wind off system to enable controlled lowering of the suspended load in case of power failure.	
22.	5 (f)	<u>Vehicle Characteristics</u> . The essential characteristics of the vehicle portion of the main equipment are given below :-	
		(a) <u>Mobility</u> - It should be capable of travelling on highway, cross country and un-metalled road surfaces.	
		(b) <u>Steering</u> . A hydraulic power steering system shall be provided. In the event of failure of primary steering system, the steering control should continue to be maintained on at least one axle. An automatic steering reversal mechanism should be provided to ensure that the crane steers in the direction in which the steering wheels is turned, irrespective of the position of the operator's cabin. The crane should be provided with right hand drive system. The cabin of crane must be located on right hand side of the boom.	Physical Check and Vendor CoC
		(c) <u>Air Pressure</u> . Suitable air line must be provided for filling of air pressure in the tyres from the air reservoir. The crane shall have a legible and prominent inscription on the chassis giving the correct inflation pressure of tyres.	
		(d) <u>Stability</u> . Load stability must be in accordance with SAE-J765 standards, which shall be certified by means of Certificate of Conformance (CoC) from the OEM.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
		(e) <u>Wading Depth</u> . Not less than 1000 mm with one "Stop & Go" without preparation (un-laden condition).	
		(f) Angle of Approach. Min 22°	
		(g) Angle of Departure. Min 24°	
		(h) <u>Ground Clearance</u> . Not less than 400 mm in un-laden condition.	
		(j) Inner and Outer Turning Circle Dia, 4 Wheel Steer. Less than 8 meter and 14 meter respectively.	Physical Check and Vendor CoC
		(k) <u>Vehicle speed</u> . Max speed not less than 30 kmph on plain and metalled roads and min speed not less than 5 kmph on level unmetalled roads in un-laden condition.	
		(I) <u>Reverse Speed</u> . Maximum speed not less than 15 kmph (un-laden condition).	
		(m) <u>Mud crossing</u> . Not less than "200 mm" (un-laden condition).	
23.	8	<u>Product Support</u> . OEM must undertake assurance to supply for a period of at least 15 yrs from the date of effecting delivery of the eqpt.	Vendor CoC
24.	9	<u>Remote Control</u> . Provide wired remote control for smooth operations of Crane and Outrigger operations through cable of not less than 10m length.	
25.	10	<u>Hand Throttle</u> . Provide hand throttle on chassis of crane to vary the engine RPM.	Physical Check with CoC
26.	11	Satellite Navigation System.Provision of satellite navigation systembe provided by the vendors.	

S. No	Appx A Para Ref	Parameters (As per Appendix A to RFP)	Broad Trial Plan
Part-	V : Misc	ellaneous	
27.	12	Trialability of Parameters . Any parameter of the Appendix A which cannot be trial evaluated due to lack of test facilities or equipment or terrain will be accepted on certification of accreditation of Laboratory/Original Equipment Manufacturer/Vendor in that sequence, if required.	

Appendix F

(Refers to Para 41 of RFP)

DRAFT ATP GUIDELINES

1. 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.

(e) **Reference documents including list of drawings, related Standards, Specifications etc.** Includes Reference documents/ drawings of the equipment, Standards/ Specifications up to which he equipment/ system is complied.

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

<u>S.</u> <u>NO</u> -	Item Name/ Descri ption	Part Numb er	<u>NSN</u> <u>Numb</u> <u>er</u>	<u>Drawi</u> ng <u>Numb</u> <u>er</u>	<u>Manuf</u> acturer	<u>Sche</u> matic <u>Refer</u> ence	<u>Standa</u> rd of <u>Refere</u> nce	<u>Qty</u> <u>No</u> <u>s</u>	<u>Mill/</u> Industrial/ Commercial

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

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

(j) <u>Acceptance/ Performance Tests</u>. 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) <u>Applicability of ESS/ Endurance test.</u> ESS procedure to be followed be mentioned and the procedure for carrying out the Endurance test be included.

(I) <u>Quality Audit points/ Checks/ Methodology including Real Time/ Online</u> <u>Audit activities & list of critical processes</u>. Process audit methodology to be carried by mentioned.

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

(n) **<u>Operational checks/ Tests</u>**. 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) **<u>Test & Measurement Record (TMR)</u>**. TMR sheet with expected output be mentioned.

(p) <u>Acceptance criteria including Sampling Plan, if any</u>. Acceptance criteria be mentioned under this section.

<u>Note</u>

(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 whereas 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 by SELLER.

<u>Appendix G</u>

(Refers to Para 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 of main equipment as given below: -

Ser No	Consignee Locations	Quantity	Remarks
		(To to To +	
		12 months)	
(a)	NCVD, Udhampur	08	T ₀ is the date of
(b)	CVD, Delhi Cantonment	18	release of
(C)	COD, Dehu Road	09	advance
(d)	41 Veh Coy, Guwahati	06	payment by the
(e)	OD, Allahabad	03	buyer to the
(f)	TVP Bengdubi, 5 FOD	01	seller.
(g)	OD, Avadi	01]
	Total	46	

1.1.2 Ultimate Consignee details of SMTs/STEs, MRLS, Technical Literature, and Training Aggregates are as under: -

1.1.2.1 <u>SMTs/ STEs</u>. The consignee details of SMTs/ STEs are given below. In case of STEs where installation is involved, delivery & installation will be carried out at user nominated Field Workshop location by Seller. The details of nominated Field Workshop will be given during the contract.

Ser No	Depot/ Ultimate Consignee	Quantity			
(a)	NCVD Udhampur	04			
(b)	CVD Delhi Cantt	06			
(C)	COD Dehu Road	06			
(d)	TVP Bengdubi	01			
(e)	OD Avadi, Chennai	07			
(f)	41 Veh Coy Guwahati	03			
(g)	OD Allahabad	02			
	Total 29				

1.1.2.2 Complete MRLS & Technical Literature for EME and User (Refer **Annexure III to Appendix D**) should be delivered to CVD Delhi Cantonment and COD Dehu Road respectively.

1.1.2.3 Complete Training Aggregates for EME and User (Refer Annexure IV to Appendix D) should be delivered to COD, Dehu Road.

1.1.2.4 Technical Literature and Training Aggregates for DGQA (Refer **Annexure III & Annexure IV to Appendix D**) should be delivered to CVD Delhi Cantonment.

1.2. <u>Currency of Payment</u>. Indian bidders should submit their bids in Indian Rupees.

1.3 Contract Price and Requirement of Bank Guarantees.

1.3.1 <u>Total Contract Price</u>. 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 **<u>Base Contract Price</u>**. The Base Contract Price will be considered as Total Contract Price excluding taxes and duties applicable at the time of signing of Contract.

1.3.3 <u>Bank Guarantee(s)</u>. 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. The prescribed format of the Advance Payment Bank Guarantee (APBG) is placed at **Annexure II to Appendix H.**

1.3.4 All Bank Guarantee(s) requirements viz Advance Payment Bank Guarantee (APBG), Performance-cum-Warrantee Bank Guarantee (PWBG), Additional Bank Guarantee (ABG), Performance Bank Guarantee (PBG) etc are to be submitted. Bank Guarantee(s) shall be from any Indian Public or Private Scheduled Commercial Bank.

1.4 <u>Payment to Indian Bidders</u>. 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 II and Annexure V to this Appendix.

1.4.1 <u>Advance Payment</u>. 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 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 (T₀), 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 45th 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.

1.4.2 **On Dispatch**. 60% of the Base Contract Price of all deliverables (excluding training cost) and reimbursement of 100% taxes and levies on prorata 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 <u>On Final Acceptance</u> The remaining **25** % of the Base Contract Price of the deliverables (Excluding Training cost) shall be paid on pro-rata basis 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 <u>Part-Dispatch/Part-Shipment</u>. Payment will be released to the Seller, subject to **minimum 05 quantities** for a particular consignee location is

despatched/ shipped. For consignee locations, where the quantities are **less than 05** then the applicable quantity/ balance quantity as per table at Para 1.1.1 of this Appendix could be despatched. Transhipment is not permitted for deliverables.

1.4.6 <u>Payment for Training</u>. **85% payment (including 100% taxes/ levies)** for training of DGQA, Operators and Maintenance personnel will be done after completion of training as given in **Para 16** of RFP. Vendor will also furnish training completion certificate from buyer, prior to payment for training.

1.4.7 **<u>Payment of Taxes and Duties</u>**. 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. No reimbursement of custom duties is applicable for imported input materials to the Bidder.

1.4.8 <u>Exchange Rate Variation</u>. 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**.

Performance-cum-Warranty Bank Guarantee Clause. 2. А Performance-cum-Warranty Bank Guarantee (PWBG) of Three (03)% (or as applicable during signing of contract) of value of the Total Contract Price including taxes and duties would be furnished by the Bidder in the form of a Bank Guarantee to sequentially act as Performance Bank guarantee till the delivery and as Warranty Bank Guarantee on delivery. The PWBG shall be submitted by the Bidder within one month of signing of contract and shall be valid for a period, until three months beyond the warranty period, as specified in the RFP. If at any stage, the Performance Guarantee is invoked by the Buyer either in full or in part, the Bidder shall make good the shortfall in PWBG within 30 days by an additional Bank Guarantee for equivalent amount. In the event of failure to submit the required Bank Guarantee against invoked Performance Guarantee, equivalent amount will be withheld from the next stage payment till the shortfall in the Bank Guarantee is made good by the Bidder. The prescribed format of the Performance-cum-Warranty Bank Guarantee is placed at Annexure III to this Appendix.

3. **Inspection**. Pre Dispatch Inspection (PDI) would be at the discretion of the Buyer. In addition, Joint Receipt Inspection (JRI) may also be carried out. If it is PDI, the Bidder should intimate at least **45 days** prior to the day when the equipment is to be offered for PDI to enable Buyer's QA personnel to be available for inspection. All the expenses towards PDI will be borne by the Bidder except transportation and accommodation of Buyer's PDI team, which will be deputed at Buyer' expense. In case of rejection of Goods during PDI, re-PDI will be undertaken at Bidder's premises at Buyer's sole discretion. All expenses including transportation and accommodation of Buyer's PDI team will be borne by the Bidder. Towards this, the expenses towards transportation and accommodation of Buyer's PDI team will be initially done by the Buyer and subsequently reimbursed by the Bidder either by remittance or

by recovery from the Balance Payment/PWBG. In the event of a failed PDI, the Bidder shall consult the Buyer for rescheduling re-PDI. In case of JRI, the representative of the Seller may be present for inspection after the equipment reaches the concerned destination. The Seller would be informed of the date for JRI. The PDI to be completed within 30 days of receipt of intimation from Seller. The JRI should be completed within **45 days** of receipt at respective Depot referred at Para 1.1 above. 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 and User Hand Book of the main equipment and accessories.

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

Annexure I to Appendix G

(Refers to Para 1.4.9 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 DENOMINATE D	POUNDS DENOMINATED	OTHER CURRENCIES DENOMINATE D (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. <u>Methodology For Claiming ERV</u>

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

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

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

(a) A bill of ERV claim enclosing worksheet.

(b) Banker's Certificate/debit advice detailing Foreign Exchange paid and Exchange rate as on date of transaction.

- (c) Copies of import orders placed on the suppliers.
- (d) Invoice of supplier for the relevant import orders.

Annexure II to Appendix G

(Refers to Para 1.4 and 1.4.1 of **Appendix G**)

BANK GUARANTEE FORMAT FOR ADVANCE

То

The _____ Ministry of _____ Government of India

_____ (complete postal address of the beneficiary)

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 ______ irrespective whether the Original Guarantee is returned to us or not.

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

Dated the _____day of _____ (month and year)

Place :

Signed and delivered by _____ (Name of the bank)

Through its authorised signatory

(Signature with seal)

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

BANK GUARANTEE FORMAT FOR PERFORMANCE-CUM-WARRANTY

То

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 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% (or as applicable during signing of contract) of the Total Contract Price (including taxes and duties) to cover 3% (or as applicable during signing of contract) 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.

_____ bank hereby expressly, irrevocably and unreservedly 2. We, the 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% (or as applicable during signing of contract) of Total Contract Price (including taxes _____ Rupees/ US \$/Euro/PS £/Yen/AUD/SGD and duties)} 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% (or as applicable during signing of contract) 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% (or as applicable during signing of contract) of the Total Contract Price (including taxes and duties) (Rs/ US \$/Euro/PS £/Yen/AUD/SGD ______ only) (Mention BG amount).

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

9. Notwithstanding anything contained herein above:

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

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

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

Dated the _____ day of _____ (month and year)

Place :

Signed and delivered by _____ (name of the bank)

Through its authorised signatory (Signature with seal)

Annexure IV to Appendix G

(Refers to Para 5 of Appendix G)

FORMAT FOR EXTENSION OF DELIVERY PERIOD/PERFORMANCE NOTICE

Name of the Procuring Entity.....

Extension of Delivery Period/Performance Notice

To M/s (name and address of firm)

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

Ref: Your letter no.

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).

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

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

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

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

(c) But nevertheless, the Buyer shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, GST or on account of any other Tax or duty or on any other ground as stipulated in the price variation clause or foreign exchange rate variation which takes place after (insert the original delivery date).

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

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

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

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

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

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

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

DELIVERY SCHEDULE AND STAGES OF PAYMENT

1. The broad guidelines for payments terms are appended in subsequent Paras.

2. For Delivery in a Single Lot

SI	Activity	Qua- ntity	Delivery Timelines (Months)	Scheme for Payment	Scheme for submission and Return of Advance Payment Bank Guarantees	Remarks
(a)	Payment of Advance post Signing of contract	-	T₀	Fifteen (15) % of the Base Contract Price	APBG of equivalent amount to be submitted	T _o is date of payment of advance, post signing of contract
						Payment of advance within thirty (30) days of submission of claim.
						Refer Para 1.4.1 of Appendix G.
(b)	On Dispatch o	f all Deliv	verables			
(i)	On Dispatch of all deliverables (Min lot of main equipment - 05)	46	T ₀ to T ₀ + 12 months	60% of the base contract price of all deliverables (excluding training cost), and re- imbursement of 100 % of taxes and levies of the deliverables despatched on pro rata basis.		

(c)	On Final Acceptance of all Deliverables						
	On Delivery of all deliverables (Min lot of main equipment - 05)	46	T ₀ to T ₀ + 12 months	25 % of Base Contract Price of all deliverables (excluding training cost) on final acceptance on pro rata basis of all deliverables	APBG is to be returned on final acceptance of all deliverables on pro-rata basis to the respective bidder	(i) MRLS to be delivered on pro-rata basis with each lot of main equipment being delivered and the delivery to be not earlier than six months and not later than three months before the expiry of warranty period of the main equipment (ii) SMT/ STE, Technical literature and training aggregates should be delivered alongwith the first lot of the main equipment being delivered.	
(d)	Training	-	Completion of Training (as per Para 16 of RFP)	85% of the cost of Training (including 100% taxes/ levies) on successful completion of training.	APBG pertaining to training can be returned to the Seller, on completion of training successfully.		

Appendix H

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

EVALUATION CRITERIA AND PRICE BID FORMAT

1. <u>Evaluation Criteria</u>. The guidelines for evaluation of Bids will be as follows: -

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

1.2 In 'Buy (Indian-IDDM)' Cases where DCF Technique 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 (as applicable), MRLS, SMT, STE, ESP and any other item listed at Column (ii) of Para 2 below.

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

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

Ser	Items	Qty	Unit Cost	Total Cost (iii) x (iv)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (includin g all taxes & duties) (v) + (vi) +(vii)		
					GST/ IGST (%)	Custom Duty (%)			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
A.	Cost of Crane 5/ 10 Ton Self Propelled 4X4 Full Slew	46							
В.	Cost of Manufacturer's Recommended List of Spares as per the format given at Annexure I to Appendix D.								
C.	Cost of Special Maintenance Tools and Special Test Equipment as per format given at Annexure II to Appendix D.								
D.	Cost of Operator's Manual and Technical Literature (in English Language) including Illustrated Spare Parts List as per Annexure III to Appendix D .								
E.	Cost of Training Aids/ Aggregates such as simulators, cut out models, films, charts etc as recommended by the supplier as per Annexure IV to Appendix D .								
F.	Cost of recommended period of Training in India excluding the cost of travel and boarding and lodging. This should be given as per Annexure IV to Appendix D .								
G.	Any other cost (to be specified).								
H.	Freight and Transit Insurance Cost (where applicable).								
J.	Total Cost (Total of Serial A to H)						#	# This will be used in determining L1 vendor (duly applying provisions of Para 1 above).	
	Total Cost as per serial J (in v	words)							

Ser	Ser Items		Unit Cost	Total Cost (iii) x (iv)	Indicative Rate of Taxes & Duties used to arrive at Total Cost (as applicable)		Total Cost (includin g all taxes & duties) (v) + (vi) +(vii)	Remarks	
					GST/ IGST (%)	Custom Duty (%)			
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
K.	ForeignExchangecomponentof the proposal.(for Indian Vendors only)							This will be with reference to Para 1.2 of Appendix G .	
L.	CDEC (if applicable) , its authority and amount for which required.								

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

<u>Appendix J</u> (Refers to Para 52 of RFP)

STANDARD CONDITIONS OF RFP

<u>LAW</u>

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

ARBITRATION

(For Indian Private Vendors)

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

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

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

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

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

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

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

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

2.9 In the event of a vacancy caused in the office of the arbitrators, the party which

nominated such arbitrator, shall be entitled to nominate another in his place and the arbitration proceedings shall continue from the stage they were left by the retiring arbitrator.

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

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

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

ARBITRATION

(For Central & State PSEs)

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

ARBITRATION

(For Defence PSUs)

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

FORCE MAJEURE

4.1 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.

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

4.3 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

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

5.2 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

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

(a) A pact (contract) between the Government of India (Ministry of Defence) (the authority or the "principal") and those companies submitting a tender for this specific activity (the "bidders");

(b) An undertaking by the principal that its officials will not demand or accept any bribes, gifts, etc., with appropriate disciplinary or criminal sanctions in case of violation;

(c) A statement by each bidder that it has not paid and will not pay, any bribes;

(d) An undertaking by each bidder that he shall not pay any amount as gift, reward, fees, commission or consideration to such person, party, firm or institution (including Agents and other as well as family members, etc., of officials), directly or indirectly, in connection with the contract in question. All payments made to the Agent 12 months prior to tender submission would be disclosed at the time of tender submission and thereafter an annual report of payments would be submitted during the procurement process or upon demand of the MoD.

(e) The explicit acceptance by each bidder that the no-bribery commitment and the disclosure obligation as well as the attendant sanctions remain in force for the winning bidder until the contract has been fully executed;

(f) Undertakings on behalf of a bidding company will be made "in the name and on behalf of the company's chief executive officer";

(g) The following set of sanctions shall be enforced for any violation by a bidder of its commitments or undertakings:

(i) Denial or loss of contract;

(ii) Forfeiture of the **EMD (pre-contract)** and Guarantee for Performancecum-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.

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

AGENTS

7. 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

8. 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 J

(Refers to Para 20 of RFP and 6.1 (j) of Appendix J)

PRE-CONTRACT INTEGRITY PACT

<u>General</u>

1. Whereas the PRESIDENT OF INDIA, represented by Joint Secretary & Acquisition Manager (Army/Air Force/Maritime & Systems)/Major General & equivalent, Service Headquarters./Coast Guard, Ministry of Defence, Government of India, hereinafter referred to as the Buyer and the first party, proposes to procure **Quantity 46 Crane 5/10 Ton (SP) 4x4 Full Slew, Category: Buy (INDIAN-IDDM)**,hereinafter referred to as Defence Stores and M/s represented by,______ Chief Executive Officer (which term, unless expressly indicated by the contract, shall be deemed to include its successors and its assignees), hereinafter referred to as the Bidder/Seller and the second party, is willing to offer/has offered the Defence stores.

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

<u>Objectives</u>

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 precontract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:

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

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

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

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

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

6.6 The bidder would not enter into conditional contract with any Agents, brokers or any other intermediaries wherein payment is made or penalty is levied, directly or indirectly, on success or failure of the award of the contract. The bidder while presenting the bid, shall disclose any payments he has made during the 12 months prior to tender submission or is committed to or intends to make to officials of the buyer or their family members, Agents, brokers or any other intermediaries in connection with the contract and the details of such services agreed upon for such payments. Within the validity of PCIP, bidder shall disclose to MoD any payments made or has the intention to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution as an annual report during the procurement process.

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

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

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

7. <u>Previous Transgression</u>

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 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.

8.1 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.

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

9. Company Code of Conduct

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

10. Sanctions for Violation

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

(i) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.

(ii) 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.

If the Bidder or any employee of the Bidder or any person acting on (ix) behalf of the Bidder, either directly or indirectly, is closely related to any of the officers of the Buyer, or alternatively, if any close relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. Any failure to disclose the interest involved shall entitle the Buyer to debar the Bidder from the bid process or rescind the contract without payment of any compensation to the Bidder. The term 'close relative' for this purpose would mean spouse whether residing with the Government servant or not, but not include a spouse separated from the Government servant by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Government servant, but does not include a child or step child who is no longer in any way dependent upon the Government servant or of whose custody the Government servant has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Government servant or to the Government servant's wife or husband and wholly dependent upon Government servant.

(x) The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Buyer and if he does so, the Buyer shall be entitled forthwith to rescind the contract and all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damage to the Buyer resulting from such rescission and the Buyer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder.

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

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

11. Fall Clause

11.1 The Bidder undertakes that he has not supplied/is not supplying the similar products, systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India and if it is

found at any stage that the similar system or sub-system was supplied by the Bidder to any other Ministry/Department of the Government of India at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, even if the contract has already been concluded.

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

12. Independent Monitors

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

- (a) Shri Ravikant, IAS/ Bihar (1984) (Retd) Apartment No 502, Tower-1, M3M Merlin, Sector-67, Gurugram-122001(Haryana) Mob : 9953555566, Email- 84ravikant@gmail.com
- (b) Dr. Prabhat Kumar, IAS/ UP (1985) (Retd)
 C-120, Sector-39, Noida-201301
 Gautam Budh Nagar (Uttar Pradesh)
 Mob : 9810530048, Email- prabhatfamily@gmail.com
- (c) Shri Chet Ram, IRS (1985) (Retd) Flat No A-203, Building Gemini, Gladys Alwares Marg, 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 complaint sent to them by the Buyer, the Buyer shall make arrangement for such perusal of records by the Independent Monitors.

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

13. Examination of Books of Accounts

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

14. Law and Place of Jurisdiction

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

15. Other Legal Actions

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

16. <u>Validity</u>

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.

Appendix K (Refers to Para 6 of RFP)

<u>CRITERIA FOR VENDOR SELECTION / PRE-QUALIFICATION</u> <u>FOR - RFP ISSUE / INCLUSION IN RFP REQUIREMENTS</u>

<u>SI</u> No	Parameter	For all Cases except Shipbuilding (Ch XII), Make (Ch III & IV) and Strategic Partnerships (Ch VII)
1	Financial	
а	Net Worth	Net worth should be Positive.
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.
2	Technical	
а	Nature of Business	Manufacturing entity or System Integrator of defence equipment and not a trading company, except in cases where OEM participates only through its authorised Vendors.
b	Experience in related field	Min 02 Yrs. experience in broad areas like manufacturing/ engineering/ electronics/ explosives etc. as applicable in the instant case. If not, then cumulative experience of at least 03 years in above areas, resulting in gaining of competence for manufacturing the proposed product.
3	Others	
а	Industrial License (If applicable)	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 L

(Refers to Para 53 of RFP)

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

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

Ser No.	Reference	Document Description
1	Para 5 (a) of RFP	Declaration by Bidder : Debarment of Bidders
2	Para 17 of RFP	Declaration by Bidder: Government Regulation
3	Para 19 of RFP	Declaration by Bidder : Patent Rights
4	Para 21 of RFP	Declaration by Bidder : Fall Clause
5	Para 28 of RFP	Technical document covering performance parameters.
6	Appendix B	Compliance Table
7	Appendix C	Warranty Clause
9	Annexure I to Appendix D	Manufacturer's Recommended List of Spares (MRLS)
10	Annexure II to Appendix D	List of SMT/STEs, Jigs, Fixture and Infrastructure
11	Annexure III to Appendix D	Technical Literature
12	Annexure IV to Appendix D	Training Aggregates
13	Annexure V to Appendix D	ISPPL
14	Appendix F	Draft ATP
15	Appendix H	Bid Evaluation and Acceptance Criteria
16	Annexure I to Appendix J	Pre-Contract Integrity Pact
17		Any other document as per RFP

<u>Appendix M</u>

GLOSSARY

AoN	Acceptance of Necessity	
АТР	Acceptance Test Procedure	
CNC	Contract Negotiation Committee	
DGQA	Director General of Quality Assurance	
DAP	Defence Acquisition Procedure	
ESP	Engineering Support Package	
Gol	Government of India	
IC	Indigenous Content	
IM	Indigenously Manufactured	
IP	Integrity Pact	
EMD	Earnest Money Deposit	
LRU	Line Replaceable Unit	
MoD	Ministry of Defence	
MRLS	Manufacturer Recommended List of Spares	
NCNC	No Cost No Commitment	
OEM	Original Equipment Manufacturer	
OTE	Open Tender Enquiry	
PCIP	Pre Contract Integrity Pact	
QA	Quality Assurance	
RFP	Request for Proposal	
SPB	Services Procurement Board.	
SHQ	Service Headquarters	
TEC	Technical Evaluation Committee	