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TM(M)/0025/DODY/ELL

14 Oct 26

(All Concerned)

REPLY TO PRE-BID QUERIES
REPLACEMENT OF SEVEN LEVEL LUFFING JETTY CRANES [FOUR 30 TON CRANES FOR ND(MBI) AND ONE EACH 25 TON, 60 TON AND 80 TON CAPACITY FOR ND(VZG)]

1. Refer to RFP for Replacement of Seven Level Luffing Jetty Cranes issued vide this office letter TM(M)/0025/DODY/ELL dated 28 Aug 26 and discussions during Pre-Bid meeting held at NHQ/DODY on 09 Oct 26.

2. Consolidated reply to Pre-Bid queries raised by firms is enclosed herewith for further necessary action.

(AS Dadwal)
Commodore
DDG Acq Tech (Maritime)

Encl: As above

Copy to

The Commodore (DY)
Directorate of Dockyard
Naval Headquarters
Sena Bhawan
New Delhi - 110010

MINUTES OF PRE-BID MEETING HELD ON 09 OCT 26
RFP FOR REPLACEMENT OF SEVEN LEVEL LUFFING JETTY CRANES (FOUR 30T CRANES FOR ND(MBI) AND ONE 25T,60T AND 80T FOR ND(VZG))

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
1	15/ 18.1	The Bidder *(manufacturer or lead partner of consortium/ JV or principal of authorised representative – hereinafter referred simply as 'The Bidder')* should have regularly for at least the last **three** years, ending 31st March of the previous financial year (hereinafter called 'The Relevant Date'), designed, manufactured, supplied, erected and commissioned **Level Luffing Jetty Cranes**, with the same or higher specifications (hereinafter called 'The Product'); and	The bidder(OEM or Licensed manufacturer or lead partner of consortium/JV ~~*or principal of authorised representative*~~ hereafter referred simply as "The bidder") should have regularly in business of level luffing jib crane for at least the last three years, ending 31st March of the previous year (hereinafter called' The relevant date'), have receipt the order for design~~ed~~, manufacturing~~ed~~, supply~~ed~~, erection~~ed~~, and commissioning~~ed~~ of level luffing jetty cranes, with the same(minimum 30T) or higher specifications (hereinafter product); and	As per DPM-25. To be complied as per RFP. Credentials of Consortium/JV partner can be used for Qualification criteria independently as per Para 21.3 of Part I of RFP.
2	16/ 18.2	The bidder should have designed, manufactured, supplied, erected and commissioned at least **03** numbers (herein after referred as 'The Qualifying Quantity') of 'The Product' in at **least one of the last five years** ending on 'The Relevant Date'; and out of which	The bidder/licenser should have designed, manufactured, supplied, erected and commissioned at least 03 numbers(herein after referred as 'The qualifying quantity') of the product ~~in at least one of the~~ during last ~~five~~ twelve years ending on 'relevant date'; and out of which	To be complied as per RFP.
3	16/ 18.3	At least **02** numbers of offered version/ model of 'The Product' should be in successful operation for at least **02** years on the date of bid opening.	At least 02 numbers ~~of offered version/ model of numbers~~ of 'the product' should be in successful operation for at least 02 years ~~on the date of bid opening~~ after handing over/completion of the respective crane.	To be complied as per RFP.
4	16/ 18.3	The Government Entities/ PSU/ CPSU/ DPSU, who are the OEMs/ Licensed Manufacturers of Level Luffing Jetty cranes, and should have supplied Level luffing jetty cranes of minimum 40 Ton capacity and above to the Central Govt Department/ State Govt Department/ Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking/ State Public Sector Undertaking/ City Development Authority/ Municipal Corporation of City formed under any act by Central/ State Govt and published in Central/ State Gazette/ Private Port Operators/ Industrial clients in the past.	This clause to be deleted.	To be complied as per RFP.
5	16/ 18.5	The bidder should give a certificate from their clients that Level Luffing jetty cranes supplied by them are running successfully with no defect in the major components viz. Structural members ('A' frame, Boom, Jib, Pulley, support structures etc.), Gears, Wheels, Wheel Bogies/ Carriages etc. for at least 02 years period immediately after commissioning in the previous 10 years from the date of opening of technical Bid. Further, the cranes/ crane supplied by the bidder should not have suffered any such defects of major components during on-site pre-commissioning activities, testing/ commissioning. Buyer has the right to check the above aspects from the customers of the bidder. Towards this, the bidder, as part of technical bid, shall submit the contract details of customers to whom similar cranes (or higher capacity) Level Luffing Jetty cranes have been supplied by bidder in the past 10 years.	The bidder/licenser should give a certificate from their clients that level luffing jetty cranes supplied by them (Bidder / Licensor) are running successfully ~~no defect in the major components viz. Structural members ('A' frame, Boom, Jib, Pulley, support structures etc.), Gears, Wheels, Wheel Bogies/ Carriages etc.~~ for at least 02 years period immediately after commissioning in the previous ~~10~~ 12 years from the ~~date of opening of technical Bid~~. 'Relevant Date. 'Further, the cranes/ crane supplied by the bidder/ Licensor should not have suffered any such defects of major components during on-site pre-commissioning activities, testing/ commissioning. Buyer has the right to check the above aspects from the customers of the bidder. Towards this, bidder, as part of technical bid, shall submit the contract details of customers to whom ~~similar cranes (or higher capacity)~~. The Level Luffing Jetty Cranes have been supplied by bidder/ Licensor in the past ~~10~~ 12 years.	To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
6	16/ 18.7	The bidder is required to **submit copies of the necessary documents** pertaining to experience and past performance including completed work orders with cost, customer contact details and satisfactory work completion certificates of similar work. NHQ reserve the right to seek any additional information and right to accept/ reject the bid.	The bidder is required to submit copies of necessary documents pertaining to experience and past performance including completed work orders ~~with cost~~ /relevant contract page/purchase order copy, customer contact details and satisfactory work completion certificate/ handing over or taking over certificate, and performance certificate ~~of similar work~~. NHQ reserve the right to seek any additional information and right to accept/reject the bid.	To be complied as per RFP.
7	17/ 19	**Capability – Equipment & Manufacturing Facilities.** 'The Bidder' must have an annual capacity to design, fabricate, manufacture, supply, erect and commission at least 'The Qualifying Quantity'.	**Equipment and manufacturing facilities**. The bidder must have a minimum annual production capacity of 5000 tons or above to design, fabricate, manufacture, supply, erect and commission similar heavy engineering equipment ~~at least Qualifying Quantity'~~ certificate from chartered accountant certifying the same shall be submitted as documentary proof of manufacturing capacity.	To be complied as per RFP.
8	17/ 20.1	The average annual financial turnover of 'The Bidder' during the last three years, ending on 'The Relevant Date', should be at least ₹ **75 Cr** as per the annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/ Cost Accountant in India.	The average annual financial turnover of 'The Bidder' during the last three years, ending on 'The Relevant Date', should be at least ₹ ~~75~~ 110 cr as per annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/ Cost Accountant in India.	To be complied as per RFP.
9	17/ 20.2	The net worth of the Bidder firm (manufacturer or lead partner of consortium/ JV or principal of authorised representative) on 'The Relevant Date' should not be less than 5% of the estimated value of the contract.	The net worth of the Bidder firm (OEM or licensed manufacturer or lead partner of consortium/JV ~~or principal of authorised representative~~) on 'The Relevant Date' should not be less than 5% of the estimated value of the contract.	To be complied as per RFP.
10	17/ 20.3	The net worth of the Bidder firm (manufacturer or lead partner of consortium/ JV or principal of authorised representative) **should not be negative** on 'The Relevant Date' and also should have not eroded by more than 30% (thirty percent) in the last three years, ending on 'The Relevant Date'. [Note - In case of Indian Bidders/ companies (manufacturer or lead partner of consortium/ JV or principal of authorised representative) who have been restructured by Banks in India under the statutory guidelines, such Bidders would be deemed to have qualified the Financial standing criteria, considering the institutional financial backing available to them.]	The net worth of the Bidder firm (OEM or Licensed manufacturer or lead partner of consortium/ JV ~~or principal of authorised representative~~) should not be negative on 'The Relevant Date' and also should have not eroded by more than 30% (thirty percent) in the last three years, ending on 'The Relevant Date'. [Note- In case of Indian Bidders/ companies (OEM or Licensed manufacturer of lead partner of consortium/ JV ~~or principal of authorised representative~~) who have been restructured by Banks in India under the statutory guidelines, such Bidders would be deemed to have qualified the Financial standing criteria, considering the Institutional financial backing available to them.]	To be complied as per RFP. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
11	17/ 20.4	Working Bid Capacity. The Working Bid capacity of the Bidder should be equal to or more than the estimated cost of the contract. The Working Bid Capacity shall be calculated as under.- Working Bid Capacity = [2xAxN] - B, where A = Average Annual Turnover of the bidder for the last Five Years (ending 31st March of previous year) N = Number of years prescribed for completion of work for which bids have been invited (03 Years) B = Value of existing commitments and on-going works to be completed (for all the Clients of the bidder) during the period of completion of Work for which bids have been invited, duly certified by chartered Accountant. (Note. In case of JV, the working bid capacity will be applied for each partner to the extent of his proposed participation in the execution of the contract.)	Working Bid Capacity. The Working Bid capacity of the Bidder should be equal to or more than estimated cost of the contract 354 Cr. The Working Bid Capacity shall be calculated as under.- Working Bid Capacity = [2*A*N]- B, where A= Average Annual Turnover of the bidder for the last Five Years (ending 31st march of previous year) N= Number of years prescribed for completion of work for which bids have been invited ~~(03 Years)~~ 28 Months (2.33 Years) B= Value of existing commitments and on- going works to be completed (for all the Clients of the bidder) during the period of completion of works for which bids have invited, duly certified by chartered Accountant. (Note. In case of JV, the working bid capacity will be applied for each partner to the extent of his proposed participation in the execution of the contract.)	To be complied as per RFP.
12	18/ 21.1	**Authorised Representatives**. Bids of Bidders quoting as an authorised representative of a principal manufacturer would also be considered to be qualified, provided.- 21.1.1. Their principal manufacturer meets all the criteria above without exemption; and 21.1.2. The principal manufacturer furnishes a legally enforceable tender-specific authorisation in the prescribed form, assuring full guarantee and warranty obligations as per the standard and special conditions of contract; and 21.1.3. The Bidder himself should have been associated, as an authorised representative of the same or other principal manufacturer for the same set of services as in the present Bid (supply, installation, satisfactorily commissioning, after sales service, as the case may be) for same or similar 'Product' for past three years ending on 'The Relevant Date'.	This Clause to be deleted	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
13	18/ 21.2	**For Existing Successful Past Suppliers.** In case the Bidder (manufacturer or lead partner of consortium/ JV or principal of authorised representative) who is a successful past supplier of 'The Product' in at least one of the recent past **three** procurements, does not meet any one or more of the requirements above, such a Bidder would also be considered to be qualified, in view of his proven credentials for the maximum quantity supplied by him in such recent past.	**For Existing Successful Past Suppliers.** In case the Bidder (OEM or licensed manufacturer or lead partner of consortium/ JV or ~~principal of authorised representative~~) who is a successful past supplier of 'The Product' in at least one of the recent past ~~three~~ two numbers ~~procurements~~ of 30T above capacity level luffing cranes government entities like PSU/DPUs etc, does not meet any one or more of the requirements above, such a Bidder would also be considered to be qualified, in view of his proven credentials for the maximum quantity (80% or more) supplied by him in such recent past.	To be complied as per RFP.
14	19/ 21.9	**After Sales Service**. The OEM/ Bidder/ Lead Partner should have sales and service office in India for rendering after sales service of the Cranes quoted. **An undertaking in this regard be submitted along with technical bid**. The supplier should be capable of sending their experts within 48 hours of any defect reported by the client for undertaking defect rectification.	**After Sales Service**. The OEM/ Bidder/ Lead Partner should have sales and service office in India for rendering after sales service of the Cranes quoted. **An undertaking in this regard be submitted along with technical bid**. The supplier should be capable of sending their experts or respond within 48 to 72 hours of any defect reported by the client for undertaking defect rectification.	To be complied as per RFP.
15	19/ 21.12	**Industrial License (IL).** Vendor should be either holding a valid defence industrial license or should have applied for the same before responding to RFP. In any case the vendor must confirm holding of IL before commencement of FET (Items requiring IL will be as per DIPP Press Note 3 of 2014 as amended from time to time).	We hold valid factory license. Please clarify whether this licence would be considered applicable for this requirement. Furthermore, electrical level luffing cranes are not used exclusively for defence applications; they are also widely used in shipyards and repair yards. In view of this, please confirm whether any additional licence, such as a defence industrial licence would be required or not.	Defence Industrial license not applicable. However, vendor must confirm holding of industrial license as per DAP-20.
16	19/ 21.13	**Maintenance, Repair & Overhaul.** Vendors should be capable of carrying out comprehensive Maintenance, Repair & Overhaul, calibration and obsolescence management of the equipment / platform / system indigenously, along with associated jigs, fixtures and test setups, during the designed service life of the equipment.	**Maintenance, Repair & Overhaul.** Vendors should be capable of carrying out comprehensive Maintenance, Repair & Overhaul, calibration and obsolescence management of the equipment / platform / system indigenously in association with technology partner/vendors as required, along with associated jigs, fixtures and test setups, during the designed service life of the equipment.	To be complied as per RFP.
17	20/ 2	Along with all the necessary documents/ certificates required as per the tender conditions, the Bidder should furnish a brief write-up, backed by adequate data, explaining his available capacity (both technical and financial), for manufacture and supply of the required goods/equipment, within the specified time of completion, after meeting all his current commitments.	**This clause may be deleted** as it is repetitive in nature and lead to subjective interpretation during bid valuation. The requirement for working bid capacity already adequately demonstrates the bidder's capacity to execute projects the required scale and complexity. Moreover, the minimum fabrication/manufacturing capacity for heavy equipment has already been taken care in clause No. 19. Therefore, this additional clause is not required.	To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
18	20/ 3	Supporting documents submitted by the Bidder must be certified as follows.- 3.1. All copies of supply/work order/s; respective completion certificate/s and contact details of clients; documents issued by the relevant Industries Department/ National Small Industries Corporation (NSIC)/ manufacturing licence; annual report, etc., in support of experience, past performance and capacity/capability, should be authenticated by the person authorised to sign the Tender on behalf of the Bidder. Original documents must be submitted for inspection, if so demanded. 3.2. All financial standing data should be certified by certified accountants, for example, Chartered Accountants/ Cost Accountants or equivalent in relevant countries; and the Indian Bidder or Indian counterparts of foreign Bidders should furnish their Permanent Account Number.	*Supporting documents submitted by the Bidder must be certified as follows.-* *3.1 All copies of supply/work order/s; respective completion certificate/s or relevant contact copies/purchase order copy and contact details of clients; documents issued by the relevant Industries Department/ National Small Industries Corporation (NSIC)/ manufacturing licence; annual report, etc., in support of experience, past performance and capacity/capability, should be authenticated by the person authorised to sign the Tender on behalf of the Bidder. Original documents must be submitted for inspection, if so demanded.* *3.2 All financial standing data should be certified by chartered accountants, for example, Chartered Accountants/ Cost Accountants ~~or equivalent in relevant countries~~; and the Indian Bidder ~~or Indian counterparts of foreign Bidders~~ should furnish their Permanent Account Number.*	To be complied as per RFP.
19		Site Information, Drawings & Documents required for Proposal	We would like to emphasize that the following drawings and documents are critical for finalizing the design, erection methodology & transportation plan and finally the Techno-commercial proposal. 1. Site layout drawing with material entry routes - To assess transportation feasibility, Storage, assembly & erection area, and plan measurements. 2. Jetty cross-section drawings (RCC slab thickness, pile details, utility interfaces) - To understand pile and pile cap details, spacing, and utility interfaces-crucial for designing load spreading arrangements if required. 3. Allowable Ground Bearing Pressure (GBP) at Storage Yard and Jetty Deck Strength. - Essential for selecting appropriate plant and machinery for erection at jetty & crucial for designing load spreading arrangements if required. 4. Rail cross-section with clearance and fixing details - To determine suitable rail clamp type and storm locking arrangements. 5. Rail span variation at 1m intervals - Required for accurate rail alignment, wheel bogie design. 6. CRD plug point spacing and ELL crane travel span - To define CRD specifications and determine cable length. 7. Existing cable trench layout and dimensions - For planning routing and integration of electrical systems.	To be complied as per RFP. Will be provided. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
20		**New Clause proposed** **(Purchaser's obligation towards site front availability)**	**For smooth and uninterrupted erection, commissioning Purchaser to ensure following for each Crane.** **Front Availability.** Before 45 days from the commencement of supply of items as per agreed delivery schedule of individual Cranes. Suitable area (50m x 50m), jetty for unloading (for the materials by road & by sea), access road (fit for the movement of Trailers and construction vehicles), storage area, assembly area, erection front, clear rail to be made available before 45 days from the commencement of supply of items as per above schedule of individual Cranes. **Clear Rail Track Availability.** 100 m of clear Rail Track for each crane to be made available before 45 days from the commencement of supply of items as per attached delivery schedule of individual Cranes. **Power & Water.** The construction Power & Water, service water, drinking water to be made available by Purchaser within 10 M range from erection points, free of charge.	To be complied as per RFP. Suitable space/ arrangements will be provided/ made for erection of crane catering for operational and refit related activities.
21	53/ 3	**30T Crane (Destroyer Wharf, ND (Mbi))** **4. Min. Radius of hook (Main Hoist) 10 m**	30T Crane (Destroyer Wharf, ND (Mbi)) 4. Min. Radius of hook (Main Hoist) 12.5 m	To be complied as per RFP.
22	53/ 3	8. **Operation speed** **Slew - 0.5 RPM**	8. Operation speed Slew - at outreach 12.5 to 30m – 0.5RPM at outreach 30m to 45m – 0.33RPM	To be complied as per RFP.
23	54/ 3	11. **Power Supply Feed -** **With Motorized Cable Reel Drum (MCRD) cable length of 200 m**	Pls clarify is it mid feed? & what is the cable length needed at mid feed. Total travel of crane specified in clause 21.3 is 170m. Conflicting sentence	To be complied as per RFP. It is mid feed and 200 meters cable length is required.
24	54/ 3	12. Radio Remote Control (RRC) - For all motions with all controls that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	12. Radio Remote Control (RRC) For all motions ~~with all controls~~ that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	To be complied as per RFP. Radio Remote Control (RRC) required for all motion with all speed control. Emergency stop button is to be catered on RRC, as safety feature during remote operation.
25	54/ 3	19. **Rail Type** - Duplex MoD Acquisition Wing O/o ADG Acq-Tech (M&S)	What is the size of Duplex Rail?	To be complied as per RFP. Duplex Rail dimension .- 157 mm – SBW (O) 157 mm – SBW (N) 140 mm – IBW 73mm – Destroyer Wharf Firm to assess exact design and size of rail tracks during site visit.

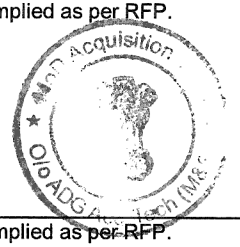
Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
26	54/ 3	27. **Storm brakes/ anchors** -Should withstand wind speed at 220 km per hour	Storm lock pins/ tie downs to be designed for holding cranes at storm wind speed. Storm wind speed should be calculated as per IS875, part 3, 2025 Rail brakes/clamps should be able to keep the Crane stopped in any position with operating wind max pressure	To be complied as per RFP.
27	55/ 4	11 Power Supply Feed With Motorized Cable Reel Drum (MCRD) cable length of 200 m	Pls clarify is it mid feed? & what is the cable length needed at mid feed Total travel of crane specified in clause 21.3 is 600m. Conflicting sentence	To be complied as per RFP. It is mid feed and 200 meters cable length is required.
28	57/ 5	11 Power Supply Feed With Motorized Cable Reel Drum (MCRD) cable length of 200 m	Pls clarify is it mid feed? & what is the cable length needed at mid feed Total travel of crane specified in clause 21.3 is 600m. Conflicting sentence	To be complied as per RFP. It is mid feed and 200 meters cable length is required.
29	58/ 6	11 Power Supply Feed With Motorized Cable Reel Drum (MCRD) cable length of 200 m	Pls clarify is it mid feed? & what is the cable length needed at mid feed Total travel of crane specified in clause 21.3 is 243m. Conflicting sentence	To be complied as per RFP. It is mid feed and 200 meters cable length is required.
30	55-59/ 4, 5, 6	4. 30T Crane (SBW(O) Jetty, ND(Mbi)) 5. 30T Crane (SBW(N) Jetty, ND(Mbi)) 6. 30T Crane (IBW Jetty, ND(Mbi))	Same deviations as specified for crane in clause 3 (30T Crane (Destroyer Wharf, ND (Mbi))) Pls refer clarifciations as specified for crane in clause 3 (30T Crane (Destroyer Wharf, ND (Mbi)))	To be complied as per RFP.
31	59/ 7	25T Crane (N-21/22 Jetty, ND (Vzg)) 4. Min. Radius of hook (Main Hoist) 10 m	30T Crane (Destroyer Wharf, ND (Mbi)) 4. Min. Radius of hook (Main Hoist) 12.5 m	To be complied as per RFP.
32	59/ 7	12. Radio Remote Control (RRC) For all motions with all controls that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	12. Radio Remote Control (RRC) For all motions ~~with all controls~~ that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	To be complied as per RFP. Radio Remote Control (RRC) required for all motion with all speed control. Emergency stop button is to be catered on RRC, as safety feature during remote operation.
33	60/ 7	27. Storm brakes/ anchors Should withstand wind speed at 220 km per hour	Same deviations as specified for clause 3 (27)	To be complied as per RFP.
34	60/ 8	60T Crane (IDS Berth, ND (Vzg)) 4. Min. Radius of hook (Main Hoist) 10 m	60T Crane (IDS Berth, ND (Vzg)) 4. Min. Radius of hook (Main Hoist) 13.5 m	To be complied as per RFP.
35	60/ 8	8. Operation Speed Hoist .....15 m/min. Luff .....20 m/min. LT .....20 m/min. Slew..... 0.5 RPM	8. Operation Speed Hoist .....with load 0-60t..... ...0 - 6.5 m/min. with load 0-12t (ESR).....0 - 13 m/min Luff .....0 - 20 m/min. LT .....0 - 20 m/min. Slew..... At 13.5 - 30m outreach .....0 - 0.5 RPM At 30 - 45m outreach.....0 - 0.3 RPM	To be complied as per RFP. Max speed mentioned. Vendor to suitably design the operation speed within the range as per RFP.

MoD Acquisition Wing
O/o ADG Acq Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
36	61/ 8	12. Radio Remote Control (RRC) For all motions with all controls that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	12. Radio Remote Control (RRC) For all motions ~~with all controls~~ that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	To be complied as per RFP. Radio Remote Control (RRC) required for all motion with all speed control. Emergency stop button is to be catered on RRC, as safety feature during remote operation.
37	61/ 8	26. Location of operator cabin Maximum at a height of 15 to 20 mtrs.	26. Location of operator cabin Maximum at a height of 15 to 22 mtrs.	To be complied as per RFP.
38	62/ 8	27. Storm brakes/ anchors Should withstand wind speed at 220 km per hour	Same deviations as specified for clause 3 (27)	To be complied as per RFP.
39	62/ 9	80T Crane (N-19/20 Jetty, ND(Vzg)) 4. Min. Radius of hook (Main Hoist) 10 m	80T Crane (N-19/20 Jetty, ND(Vzg)) 4. Min. Radius of hook (Main Hoist) 13.5 m	To be complied as per RFP.
40	62/ 9	8. Operation Speed Hoist .....15 m/min. Luff .....20 m/min. LT .....20 m/min. Slew..... 0.5 RPM	8. Operation Speed Hoist .....with load 0-80t..... ...0 - 6.5 m/min. With load 0-16t (ESR).....0 - 13 m/min Luff .....0 - 12 m/min. LT .....0 - 30 m/min. Slew..... .....0 - 0.5 RPM At 30 - 45m outreach.....0 - 0.3 RPM	To be complied as per RFP. Max speed mentioned. Vendor to suitably design the operation speed within the range as per RFP.
41	62/ 9	12. Radio Remote Control (RRC) For all motions with all controls that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	12. Radio Remote Control (RRC) For all motions ~~with all controls~~ that are provided in operator's cabin. (Main Hoist, Aux Hoist, Slew, Luff and LT)	To be complied as per RFP. Radio Remote Control (RRC) required for all motion with all speed control. Emergency stop button is to be catered on RRC, as safety feature during remote operation.
42	63/ 9	26. Location of operator cabin Maximum at a height of 15 to 20 mtrs	26. Location of operator cabin Maximum at a height of 15 to 22 mtrs	To be complied as per RFP.
43	63/ 9	27. Storm brakes/ anchors Should withstand wind speed at 220 km per hour	Same deviations as specified for clause 3 (27)	To be complied as per RFP.
44	64/ 10	5. Crane management system (i) Crane operation monitoring and management (ii) Crane fault monitoring, Diagnosis and rectification	5. Crane management system (i) Crane operation monitoring and management (ii) Crane fault monitoring, Diagnosis and ~~rectification~~	To be complied as per RFP. Automatic fault clearance is not required.
45	65/ 11	11.1.1. Driving and Trailing Bogies 11.1.2. Compensating equalizers/ Balancers 11.1.3. Portal Legs 11.1.4. Portal Beam 11.1.5. Vertical Mast 11.1.6. Machinery base frame 11.1.7. Machinery house 11.1.8. Operator Cabin 11.1.9. 'A' Frame 11.1.10. Jib/ Boom and Goose Neck 11.1.11. Rocker Arm Assembly with Jib Counter weight 11.1.12. Jib Tie and Boom Tie	11.1.1. Driving and Trailing Bogies 11.1.2. Compensating equalizers/ Balancers 11.1.3. Portal Legs 11.1.4. Portal Beam 11.1.5. Vertical Mast 11.1.6. Machinery base frame 11.1.7. Machinery house 11.1.8. Operator Cabin 11.1.9. 'A' Frame 11.1.10. Jib/ Boom and Goose Neck/Lat 11.1.11. Rocker Arm Assembly with Jib Counter weight 11.1.12. Jib Tie and Boom Tie OR Lattice boom for single boom jib crane	To be complied as per RFP. Single boom lattice type cranes required. MoD Acquisition Wing ★ O/o ADG Acq-Tech (M&S) ★

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
46	65/ 11.2	Mechanical components 11.2.1. Bogie wheels and gears 11.2.2. Long travel gear boxes 11.2.3. Main and Auxiliary hoist gear boxes 11.2.4. Slewing gear boxes 11.2.5. Luff gear boxes 11.2.6. Slew Robello ring bearings and gears 11.2.7. Main hoist and Auxiliary Hoist Steel wire ropes 11.2.8. 4 Nos manual rail clamps, one on each corner with drop anchor pins	Mechanical components 11.2.1. Bogie wheels and gears 11.2.2. Long travel gear boxes 11.2.3. Main and Auxiliary hoist gear boxes 11.2.4. Slewing gear boxes 11.2.5. Luff gear boxes 11.2.6. Slew ~~Robello ring~~ bearings and gears 11.2.7. Main hoist and Auxiliary Hoist Steel wire ropes 11.2.8. ~~4 Nos manual rail clamps, one on each corner with drop anchor pins~~	To be complied as per RFP. Two electro hydraulic rail clamps/ breaks for emergency stop to park the crane at any position on rail track and four maunual rail clamps with drop anchor pin (storm anchors) one on each corner for securing of the crane.
47	66/ 11.4.3	5 Ton capacity electrically operated EOT crane in machinery house for maintenance works	5 Ton capacity electrically operated EOT crane**/ monorail service hoist OR hoist Jib crane** in machinery house for maintenance works	To be complied as per RFP. 5 Ton capacity electrically operated EOT/ monorail service crane in machinery house for maintenance works required.
48	66/ 11.4.4	4 Nos manual rail clamps, one on each corner with drop anchor pins	~~4 Nos manual rail clamps, one on each corner with drop anchor pins~~	To be complied as per RFP. As per Ser 46 above.
49	66/ 12	Recommended Makes of Major Sub-Assemblies Control Panels .....Siemens, L&T, Crompton, Schneider, Konecranes, ABB, MAN Master Controller .....Siemens, Omega, EMM, E&P, Speed-O-Control, NBB, Lotus wireless (Twister-2X), Telemecanique/ Guessmann Contactors..... Siemens, L&T, ABB, BCH, Push Button .....Siemens, BCH, L&T, Tecknic Gear Boxes..... NAW, Flender, Elecon, Premium, Rossi, IC Bauer, Shanthi, Kone, Agnee, Konecranes, Bonfiglioll, Zollern	Recommended Makes of Major Sub-Assemblies Control Panels .....Siemens, L&T, Crompton, Schneider, Konecranes, ABB, MAN, Ensto, Rittal, Selcast, Nvent (Eldon) Master Controller .....Siemens, Omega, EMM, E&P, Speed-O-Control, NBB, Lotus wireless (Twister-2X), Telemecanique/ Gessman, spohn Contactors..... Siemens, L&T, ABB, BCH, Eaton, Schneider Push Button .....Siemens, BCH, L&T, Tecknic, Schneider, Selcast, Ensto, ABB, Elma Gear Boxes..... NAW, Flender, Elecon, Premium, Rossi, IC Bauer, Shanthi, Kone, Agnee, Konecranes, Bonfiglioll, Zollern, Brevini	To be complied as per RFP. Preferred makers mentioned. Use of additional makers of requisite quality, reliability and assured product support may be considered by the firms. However, in case of any performance issues, the liability of replacing with preferred makers would be of OEM.
50	67/ 13.1	13. Design and Construction of the crane structure. The cranes should be designed and constructed to meet the requirements of FEM 1.001 3rd Edition 1998 standards. Design requirements of structures and mechanisms are as brought out below. - 13.1. Structures Class of Utilization U5 State of Loading Q2 Group Classification . A5 Duty Factor . 0.95 Impact Factor . 1.3	13. Design and Construction of the crane structure. The cranes should be designed and constructed to meet the requirements of FEM 1.001 3rd Edition 1998 standards. Design requirements of structures and mechanisms are as brought out below. - 13.1. Structures Class of Utilization U5 State of Loading Q2 Group Classification . A5 Duty Factor . 0.95 Impact Factor . 1.15	To be complied as per RFP. 
51	67/ 13.2	Mechanisms / Class of Utilization / State of Loading / Mechanism Group Hoist T-5 L-3 M-6 Slew T-5 L-3 M-5 Luff T-5 L-3 M-5 Long Travel T-5 L-3 M-6	Mechanisms / Class of Utilization / State of Loading / Mechanism Group Hoist T-5 L-1 M-4 Slew T-5 L-1 M-4 Luff T-5 L-2 M-5 Long Travel T-5 L-2 M-5	State of loading for slew & luff to be as per FEM 1.001 3rd edition 1998 standards as indicated at Para 13/ Pg 67.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
52	67/ 14	14.2 The Indian Electricity Act 2003 & Indian Electricity Rules 1956, CEA safety regulation 2010 and its amendment as prevailing / latest. 14.3 The Indian Factories Act 1948 or its latest.	14.2 The Indian Electricity Act 2003 & Indian Electricity Rules 1956, CEA safety regulation 2010 and its amendment as prevailing / latest/ IEC. 14.3 The Indian Factories Act 1948 or its latest.	To be complied as per RFP. Requirements for cranes are indicated in the Rules/Acts. Global standards may be followed. However, stringency of these standards are required to be equal or more than specified standards and details of the same are to be submitted along with T bid, for examination by buyer.
53	71/ 22.2	Ambient temperature range - Typically 15° C to 50° C. Temperatures in direct sunlight may be considerably higher and consideration shall be given to this possibility in the location and specification of any potentially effected elements or components.	Max temperature sepcified in clause 26.1.8 , 98, 108 is 45° C. we will follow that for design.	To be complied as per RFP. To be designed for ambient temperature of 50° C as indicated in Para 22.2/ Pg 71.
54	71/ 23	Wind speeds. The crane shall be designed for a maximum in service wind speed of 20 m/sec / 72 KMPH. The crane and storm anchors shall be able to with stand the maximum out of service wind speed calculated in accordance with IS 875 (part 3) 1987. The maximum storm wind speed of 220 Km/h to be considered for designing the crane	Wind speeds. The crane shall be designed for a maximum in service wind speed of 20 m/sec / 72 KMPH. The crane and storm anchors shall be able to with stand the maximum out of service wind speed calculated in accordance with IS 875 (part 3) ~~1987~~ 2015. The maximum storm wind speed of ~~220 Km/h~~ to be considered for designing the crane is as per IS875 (part 3) 2015	To be complied as per latest wind code iaw Para 17 and 18 of Part IV of RFP.
55	75/ 36	Construction joints such as splice plates in the portal and jib, employing friction grip bolts or similar high strength friction fastenings shall be assembled with clean metal to metal surfaces. Such joints are then to be fully coated after completion. Other structural bolted joints shall be made by painting the contacting surfaces and assembling whilst the paint is still wet.	Construction joints such as splice plates in the portal and jib, employing friction grip bolts or similar high strength friction fastenings shall be assembled with clean metal to metal surfaces. Such joints are then to be fully coated after completion. ~~Other structural bolted joints shall be made by painting the contacting surfaces and assembling whilst the paint is still wet.~~	To be complied as per RFP.
56	76/ 38.2	The box / open type portal, fabricated out of plates and rolled sections, shall rest on compensating equalizers and bogies. The portal shall carry a column at the top of which a ring beam shall rest. A bearing shall be attached to the ring beam and a pinion is meshed to it with stew drive mounted on the machinery frame.	The box / open type portal, fabricated out of plates and rolled sections, shall rest on compensating equalizers and bogies. The portal shall carry a column at the top of which a ring beam shall rest. A bearing shall be attached to the ring beam and a pinion is meshed to it with ~~stew~~ slew drive mounted on the machinery frame.	As per RFP; slew drive.
57	76/ 38.4	The jib shall be hinged on the front part of the 'A' frame mounted on the machinery house. The jib shall be balanced by a Rocker Arm through tie rods which connects the jib with the Rocker Arm. Counter weights are placed on the other end of the Rocker Arm. The Rocker Arm hinged at the top of the 'A' frame. Luffing of the jib shall be affected by screw arrangement/ rack and pinion mounted midway up the 'A' Frame and connected at the front end to the jib.	The jib shall be hinged on the front part of the 'A' frame mounted on the machinery house. ~~The jib shall be balanced by a Rocker Arm through tie rods which connects the jib with the Rocker Arm. Counter weights are placed on the other end of the Rocker Arm. The Rocker Arm hinged at the top of the 'A' frame. Luffing of the jib shall be affected by screw arrangement/ rack and pinion mounted midway up the 'A' Frame and connected at the front end to the jib.~~	To be complied as per RFP.
58	76/ 38.5	The portal, column, 'A' Frame and jib shall be built in sections and assembled together permanently using high strength friction grip bolts.	The portal, column, 'A' Frame and jib shall be built in sections and assembled together permanently using high strength friction grip bolts, welded or pin connection.	To be complied as per RFP.

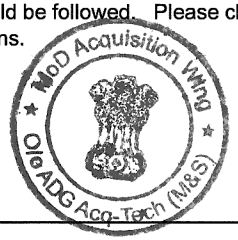


Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
59	77/ 38.9	The crane should be designed to stand in parked position with jib at minimum radius and storm rail clamps and storm anchors in place up to a wind speed (as per IS 875) of 61 m / sec. The crane should not trip or travel either under storm condition or with the jib removed. The stability of the crane should be in accordance with FEM (Federation European of Materials) specifications (widely used for material handling and lifting equipment).	The crane should be designed to stand in parked position with jib at minimum radius and storm rail clamps and storm anchors in place up to a wind speed (as per IS 875 part 3, 2015) ~~of 61 m / sec~~. The crane should not trip or travel either under storm condition or with the jib removed. The stability of the crane should be in accordance with FEM (Federation European of Materials) specifications (widely used for material handling and lifting equipment).	To be complied as per RFP.
60	77/ 40.1	The operator's cabin should be located in the front part of the machinery house in such a way that the operator gets an all-round visibility and has an uninterrupted view of the load in all positions. The cabin should be protected from rain. Manually and electrically operated wipers should be provided on the front window. All windows should be accessible from inside for manual cleaning. The cabin should be located at one side of the machinery frame.	The operator's cabin should be located in the front ~~part of the machinery house~~ electrical room in such a way that the operator gets an all-round visibility and has an uninterrupted view of the load in all positions. The cabin should be protected from rain. Manually and electrically operated wipers should be provided on the front window. All windows should be accessible from inside for manual cleaning. The cabin should be located at one side of the machinery frame.	To be complied as per RFP. Operator is required to have all round visibility of the work site during lifting operation. Additionally, safe entry and exit of operator from operator cabin is to be ensured. Vendor may submit field view diagram along with T Bid for examination.
61	77/ 40.2	The Operator cabin and electrical room in machinery house should be air tight to maintain a positive pressure and dust free condition. Dust tight seals should be provided on all doors, windows and cable entry points. The cabin should be constructed from a M.S. frame with minimum 2 meters' head room. Toughened glass should be provided on the cabin windows. The operator's seat should be upholstered with adjustable height and revolving facility.	The Operator cabin and electrical room in connection with machinery house should be air tight to maintain a positive pressure and dust free condition. Dust tight seals should be provided on all doors, windows and cable entry points. The cabin should be constructed from a M.S. frame with minimum 2 meters' head room. Toughened glass should be provided on the cabin windows. The operator's seat should be upholstered with adjustable height and revolving facility.	To be complied as per RFP. Positive pressure is to be maintained in electrical room and operator cabin, and the same may be co-located and independent.
62	78	Long Travel. The travel arrangement for the crane should be fully compensated at each corner. At least half the number of wheels at each corner should be driven by identical drive units. The drive assembly should comprise of suitable electric motors, reducers, oil tight gear boxes, with flexible couplings between gear box and the wheel or mounted directly on the travel wheel shafts. Travel wheels should be of forged steel, double flanged and should be driven by A.C. geared motors. LT motors should have electro-magnetic disc brakes integral with the motor. The drive units should be dust tight and suitable for outdoor installation with a weather protection of rating above IP66. All axles should be line axle type mounted on spherical roller bearings. The long travel components are to be erected as for the following. -	Long Travel. The travel arrangement for the crane should be fully compensated at each corner. ~~At least half the number of wheels at each corner should be driven by identical drive units~~. Number of driven and braked wheels shall be such that one long travel machinery per corner can be out of operation and cranes is still performing to specification in all operational conditions. needed number of driven wheels should be as per calculation and shall be driven and braked.The drive assembly should comprise of suitable electric motors, reducers, oil tight gear boxes, with flexible couplings between gear box and the wheel or mounted directly on the travel wheel shafts. Travel wheels should be of forged steel, double flanged and should be driven by A.C. geared motors. LT motors should have electro-magnetic disc brakes integral with the motor. The drive units should be dust tight and suitable for outdoor installation with a weather protection of rating ~~above IP66~~ minimum IP55. All axles should be line axle type mounted on spherical roller bearings. The long travel components are to be erected as for the following. -	To be complied as per RFP. MoD Acquisition Wing ★ O/o ADG Acq-Tech (M&S) ★
63	79/ 48.2	The long travel drives shall be located within the portal beams/horizontal beams, to avoid damage during working.	The long travel drives should be located within the portal beams/ horizontal beams or over bogie trucks, to avoid damage during work.	To be complied as per RFP.
64	79/ 48.8	Reputed make Geared motor with Integral electromagnetic disc brake arrangement for maintenance free and compact design shall be used.	Reputed make Geared motor or motor assembled with gear with Integral electromagnetic disc brake on motor shaft end arrangement for maintenance free and compact design shall be used.	To be complied as per RFP. May be provided by the designer.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
65	79/ 48.11	A minimum of 50% of the rail wheels shall be driven and braked. No open gearing is allowed. The drive and braking arrangement selected must allow movement of the crane by external means (in exceptional circumstances) without inducing any consequential damage. Clear spaces for movement both inside and outside of gantry legs shall be ensured while designing the system.	~~A minimum of 50% of the rail wheels shall be driven and braked~~. Number of driven and braked wheels shall be such that one long travel machinery per corner can be out of operation and cranes is still performing to specification in all operational conditions. needed number of driven wheels should be as per calculation and shall be driven and braked. No open gearing is allowed. The drive and braking arrangement selected must allow movement of the crane by external means (in exceptional circumstances) without inducing any consequential damage. Clear spaces for movement both inside and outside of gantry legs shall be ensured while designing the system.	To be complied as per RFP.
66	81/ 49.8	A rope tension or drum torque measuring devices shall be provided on all winches to provide continuous load indication readout to the operator cab. The hoists shall automatically apply load matching counter torque to the drums immediately prior to brake release, whether for further hoisting or lowering, to prevent load snatch. Lowering shall be automatically stopped if a slack rope condition is encountered.	A rope tension or drum torque measuring devices shall be provided on all winches or on torque arms of machinery gearbox to provide continuous load indication readout to the operator cab. The hoists shall automatically apply load matching counter torque to the drums immediately prior to brake release, whether for further hoisting or lowering, to prevent load snatch. Lowering shall be automatically stopped if a slack rope condition is encountered.	To be complied as per RFP. May be provided by the designer.
67	81/ 49.9	Normal lowering operations shall be by means of regenerative braking so as to provide continuously variable speed control. In addition, the hoists shall be equipped with two in number spring operated disc brakes with electro-hydraulic thrusters with hand release arrangement able to bring a lowering load, up to and including the test load, to a complete and smooth halt in the event of mains supply power failure or the application of an Emergency Stop button and safely hold the load at any position of the lift during normal operations.	Normal lowering operations shall be by means of regenerative braking so as to provide continuously variable speed control. In addition, the main hoist shall be equipped with two in number (one spring operated disc brakes with electro-hydraulic thrusters & one back up brake) ~~with hand release arrangement able to bring a lowering load~~, up to and including the test load, to a complete and smooth halt in the event of mains supply power failure or the application of an Emergency Stop button and safely hold the load at any position of the lift during normal operations. Aux hoist shall be equipped with two in number spring operated disc brakes with electro hydraulic thruster.	To be complied as per RFP. 
68	81/ 49.10	The winches shall each be fitted with an over-speed monitoring and prevention system able to apply the brakes to control the load if necessary. Additionally, the operator's cabin shall be provided with readouts depicting either the rope or the hook speed for each winch. Suitable over speed sensor on rope drum to stop when hook speed exceeds 10-15% of the rated speed to be provided.	Over speed protection has two stage. Inverter speed supervision and safety encoder from drum. To be able to se drum overspeed it might be necessary to set a bit higher depending of the Inverter SSU protection which usually is 110-115% speed.	To be complied as per RFP. To be designed for speed exceeding by 10-15% which also means Hook speed to be 110-115%.
69	81/ 49.11	The brake systems shall be designed for at least 3 times the hoist load. There shall be a positive mechanical link between the winch component that generates the braking effect and the supported load. An over-speed switch shall be fitted to the drum that, in an over-speed condition, will shut down the motion drive and apply the brakes.	The brake systems shall be designed for at least 3 times the hoist load. ~~There shall be a positive mechanical link between the winch component that generates the braking effect and the supported load.~~ An over-speed switch or safety encoder shall be fitted to the drum that, in an over-speed condition, will shut down the motion drive and apply the brakes.	To be complied as per RFP. Safety encoder only monitors the exact speed and position of the hoist system, whereas, overspeed switch triggers an emergency stop, without the need for manual intervention of the operator.
70	81/ 49.13	The upper and lower limits of the hoist motion shall have normal slow down and stop limit switches. The switches shall be wired into the control circuit. To safeguard against failure of the normal limits, an over hoist and lower limit shall be provided at a short distance beyond the normal stop limit.	Slowdown and stop limit is connected to PLC and ultimate stop is connected to fail safe PLC. This arrangement fulfil perfomance level C.	To be complied as per RFP. Both upper and lower limit switches for main and aux hook considered essential to ensure safe operation.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
71	82/ 49.16	Apart from the safety items mentioned any other safety requirements for the crane as per design code and crane classification shall be ensured by the supplier without any additional cost all safety critical parts of the control system shall be minimum performance level C as per ISO 13549-1.	Apart from the safety items mentioned any other safety requirements for the crane as per design code and crane classification shall be ensured by the supplier without any additional cost all safety critical parts of the control system shall be minimum performance level C as per ISO 13849-1.	To be complied as per Para 17 and 18 of Part IV of RFP for compliance as per ISO 13849-1.
72	82/ 49.17	The operation of the crane shall be so designed that a continuous variable speed with variable voltage variable frequency control over the full torque / speed range with micro positioning of the loads are possible. A drum speed indicator calibrated in m/min shall be fitted in the view of the driver. The control system is to include a full range of safety functions that, when activated, will cause the machinery to be switched off and the mechanical brake to be applied.	The operation of the crane shall be so designed that a continuous variable speed with variable voltage variable frequency control over the full torque / speed range with micro positioning of the loads are possible. A ~~drum~~ hook speed indicator calibrated in m/min shall be fitted in the view of the driver. The control system is to include a full range of safety functions that, when activated, will cause the machinery to be switched off and the mechanical brake to be applied.	To be complied as per RFP. Drum speed is proportional to Hook speed and hence the same may be provided.
73	82/ 49.18	The control system shall sense the load and control speed of the motors. The hoisting machineries shall be equipped with VWF control system with closed loop speed control with encoder. The synchronous speed shall be obtained by input reference from master controllers of the operation desk in the operator's cabin. Independent operation is required for main and aux hoists. Speed changing shall be interlocked with the load limiter and achieved by inverter control unit with loads less than 20% of rated load, hoist shall be able to run with double speed.	Is synchronous speed means only speed? Master controller is Joystick	To be complied as per RFP. Synchronous speed means speed of the hoist and slew and yes, Master controller is joystick.
74	82/ 49.19	In maintenance mode it shall be possible to bypass limits and interlocks to run motions at limited speeds.	In maintenance mode it shall be possible to bypass limits and interlocks to run motions at limited speeds except ultimate limits which cannot be bypassed.	To be complied as per RFP.
75	84/ 51	Luffing Mechanism. The screw type/ Rack and pinion luffing mechanism should be driven by a flange mounted motor through a totally enclosed gearbox. The reduction gear should be of high-quality steel and machine cut teeth running in oil bath and supported on anti-friction bearings. An spring operated disc brake with electro hydraulic thruster/ electro-magnetic brake should be mounted on the main drive shaft. The luffing mechanism components are to be erected as for the following. -	Luffing Mechanism. ~~The screw type/ Rack and pinion luffing mechanism should be driven by a flange mounted motor through a totally enclosed gearbox. The reduction gear should be of high-quality steel and machine cut teeth running in oil bath and supported on anti-friction bearings. An spring operated disc brake with electro hydraulic thruster/ electro-magnetic brake should be mounted on the main drive shaft. The luffing mechanism components are to be erected as for the following~~. - In single boom Jib crane Luffing mechanism includes 2 ropes, 1 drum, 1 motor, 1 gearbox, 2 failsafe electro hydraulic thruster disc brakes arrangement. ropes are passed from luffing machinery drum (which is inside machinery room) to A frame to boom luffing sheaves.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
76	84/ 51.1	In case of screw mechanism, the output drive gear should engage the gear on the outside of the nut, which works on the luffing screw. The entire arrangement consisting of the drive motor, gear reducer, nut and screw should be mounted on a trunnion block enabling the screw to align itself in the position required by the inclination of the jib. The connection between the screw spindle and the jib should be through self-aligning bearings. The screw/nut should be made of high-quality material and the screw should be provided with turned double/triple, squared/trapezoidal threads. For protection against atmospheric influences, the screw should be covered with telescope tubes at its front end.	~~In case of screw mechanism, the output drive gear should engage the gear on the outside of the nut, which works on the luffing screw. The entire arrangement consisting of the drive motor, gear reducer, nut and screw should be mounted on a trunnion block enabling the screw to align itself in the position required by the inclination of the jib. The connection between the screw spindle and the jib should be through self-aligning bearings. The screw/nut should be made of high-quality material and the screw should be provided with turned double/triple, squared/trapezoidal threads. For protection against atmospheric influences, the screw should be covered with telescope tubes at its front end.~~	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)
77	84/ 51.3	As a minimum, the luffing system employed shall be duplicated for safety, such that in the event of one element of the system failing the remaining eiement(s) will be able to securely retain the maximum possible load/outreach combination or in case of single machinery it shall be dimensioned to 150% of the load.	~~As a minimum, the luffing system employed shall be duplicated for safety, such that in the event of one element of the system failing the remaining eiement(s) will be able to securely retain the maximum possible load/outreach combination or in case of single machinery it shall be dimensioned to 150% of the load.~~	To be complied as per RFP.
78	84/ 51.4	Two sets of failsafe brake assemblies shall be installed on the drive each provided with a positive mechanical link between the applied load and the brake components.	Two sets of failsafe brake assemblies shall be installed on the drive ~~each provided with a positive mechanical link between the applied load and the brake components.~~	To be complied as per RFP. Provision to mechanically lock the brake assembly in case of failure of electro hydraulic thrusters. This will enhance safety aspect and ensure secondary line of safety.
79	84/ 51.5	Normal braking shall be regenerative, regulated by the control system, WVF drives to provide smooth operation and mechanical brakes shall be applied further. An over-speed sensing system shall be provided which will automatically shut down the motion and apply the brakes if activated. The luffing machineries shall be equipped with VVVF speed control system with closed loop speed control with encoder. The synchronous speed shall be obtained by input reference from master controller in the operation desk in the operator's cabin. The limits of luff travel in both directions shall be regulated by means of two sets of limit switches. This is for initially reducing the luff travel speed to preferably 10% of maximum and further switching off the drive and the brakes applied. As a safeguard against possible failure of the normal limit switches extra ultimate travel switch shall be installed and wired directly such that power supply gets tripped. After actuation of either of end limit switches, the luffing control system shall only allow movement of the jib in the opposite direction.	Normal braking shall be regenerative, regulated by the control system, WVF drives to provide smooth operation and mechanical brakes shall be applied further. An over-speed sensing system shall be provided which will automatically shut down the motion and apply the brakes if activated. The luffing machineries shall be equipped with VVVF speed control system with closed loop speed control with encoder. The synchronous speed shall be obtained by input reference from master controller in the operation desk in the operator's cabin. The limits of luff travel in both directions shall be regulated by means of two sets of limit switches or rotary cam switch and safety absolute encoder. This is for initially reducing the luff travel speed to preferably 10% of maximum and further switching off the drive and the brakes applied. ~~As a safeguard against possible failure of the normal limit switches extra ultimate travel switch shall be installed and wired directly such that power supply gets tripped~~. After actuation of either of end limit switches, the luffing control system shall only allow movement of the jib in the opposite direction.	To be complied as per RFP. Safety absolute encoder will only monitor the exact speed and position of the luff system, whereas, limit switch will trigger the safety mechanism, with initially reducing the speed to 10% of rated speed and thereafter cutting off of power supply when ultimate limit is touched. If Rotary cam switch function similar to limit switch, the same may be included as an option to provide design flexibility.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
80	84/ 51.6	Mechanical stoppers shall be provided at both ends in luffing mechanism in addition to limit switches and structural buffers. Weight & radius monitoring for hook, alarm and tripping shall be provided. Apart from the safety items mentioned, any other safety requirements for the crane as per design code and crane classification shall be ensured by the supplier without any additional cost.	Only in boom upwards position at min outreach. Downward boom need to be able to lower down to the boom rest.	To be complied as per RFP. Provision to shift mechanical stopper prior lowering of boom to ground level is to be provided by the crane designer, for ease of maintenance.
81	85/ 51.9	Tail portion of luffing connecting rod shall be protected. Luffing motor and brake shall be protected by steel cover case as applicable. Luffing drive mechanism shall be suitably lubricated and front portion of screw/ rack shall be covered with oil tight telescopic steel cover.	~~Tail portion of luffing connecting rod shall be protected. Luffing motor and brake shall be protected by steel cover case as applicable. Luffing drive mechanism shall be suitably lubricated and front portion of screw/ rack shall be covered with oil tight telescopic steel cover.~~	To be complied as per RFP.
82	85/ 51.13	In order to restrict the maximum and minimum radius, rotary limit switch should be provided. This limit switch should automatically interrupt the circuit and thus prevent over-traversing beyond extreme positions.	In order to restrict the maximum and minimum radius, rotary limit switch should be provided. This limit switch should automatically interrupt the circuit and thus prevent over-traversing beyond extreme positions or rotary cam with safety absolute encoder in such manner that performance level c is fulfilled.	To be complied as per RFP. Safety absolute encoder will only monitor the parameter, whereas, limit switch will trigger the safety mechanism.
83	85/ 52.2	All components of the lifting gear, including the wire ropes and theiranchorages should be complying of the Indian Dock Labour Regulations andcertified as such by a competent authority of the manufacturer	Design standards given in clause 17 would be followed. Please clarify about Indian dock labour safety regulations. 	To be complied as per RFP. Indian dock labour safety regulations specify guidelines for lifting appliances safe working conditions, safety of crew and prevention of unsafe lifting applications, and the same are to be followed by the contracted firm.
84	86/ 52.4	Lifting Hooks. The lifting latch should be forged steel. It should be of Ramshorn type with spring lock.	Lifting Hooks. The lifting ~~latch~~ hook should be forged steel. It should be of Ramshorn type with spring lock.	To be complied for lifting hook as per heading of Para 52.4 of Appendix A of RFP.
85	86/ 52.7	Rope Sheaves. Sheaves should be made of cast steel or rolled steel and mounted on anti-friction bearings. Swivelling hook should be supported on a thrust bearing. Sheaves should be enclosed in fabricated boxes for rope guide and protection.	We will follow clause 52.3 Pulleys (Pulleys are already described in clause 52.3)	To be complied as per Para 52.3/ Pg 85.
86	86/ 52.8	Test certificates, in accordance with the Indian Dock Labour (Safety) Regulations should be supplied for the hook, chain, swivel, rings, shackle, wire ropes, etc. and cleared by third party inspector.	Design standards given in clause 17 would be followed. Please clarify about Indian dock labour safety regulations.	To be complied as per RFP. Indian dock labour safety regulations specify guidelines for lifting appliances safe working conditions, safety of crew and prevention of unsafe lifting applications, and the same are to be followed by the contracted firm.
87	86/ 52.9	Bearings. Anti-friction bearings shall be provided for the primary stage of hoisting, luffing, slewing and travelling gear reducers, the driven shaft of luffing motor, sheaves of the jib top and hook. Other bearings may be of sleeves type removable bronze linings.	Bearings. Anti-friction bearings shall be provided for the primary stage of hoisting, luffing, slewing and travelling gear reducers, the driven shaft of luffing motor, sheaves of the jib top and hook. ~~Other bearings may be of sleeves type removable bronze linings~~.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
88	86/ 52.10	All rotating bearings shall be of the low friction type of a reputable make and have a service life compatible with that of the equipment on which installed. All exposed bearings (not in gearboxes etc) shall incorporate two seals per side to separately exclude foreign materials and retain the lubricant. Pre-lubricated sealed for life bearings shall not be used on any of the major crane components. Grease nipples shall be provided wherever necessary.	All rotating bearings shall be of the low friction type of a reputable make and have a service life compatible with that of the equipment on which installed or as per machinery classification. All exposed bearings (not in gearboxes etc) shall incorporate two seals per side to separately exclude foreign materials and retain the lubricant. Pre-lubricated sealed for life bearings shall not be used on any of the major crane components. Grease nipples shall be provided wherever necessary.	To be complied as per RFP.
89	86/ 53	Gear Boxes/ Reducers. All gearboxes shall be procured from the recommended makers list. The gearboxes shall be sized to withstand all normal service loads likely to be imposed and to have a predicted life equal to that of the crane. Gear boxes shall be provided with Catalogue rating and Selection chart of the manufacturer and basis of selection. The criteria and supporting calculations used in selecting the individual gearboxes shall be submitted.	Gear Boxes/ Reducers. All gearboxes shall be procured from the recommended makers list. The gearboxes shall be sized to withstand all normal service loads likely to be imposed and to have a predicted life equal to that of the crane or as per related machinery classification. Gear boxes shall be provided with Catalogue rating and Selection chart of the manufacturer and basis of selection. The criteria and supporting calculations used in selecting the individual gearboxes shall be submitted.	To be complied as per RFP.
90	87/ 58	All gears except open gears should be completely covered and oil tight. The gear box housing should be of cast steel / fabricated and stress relieved as per Indian or equivalent EN standards. Housings shall be painted inside with oil resistant paint after proper surface preparation. Gear boxes should be so designed that the gears which they enclose should be automatically splash lubricated. Practicable measures should be taken to prevent leakage of oil from gear boxes.	All gears except open gears should be completely covered and oil tight. The gear box housing should be of cast steel / fabricated and stress relieved as per Indian or equivalent EN standards or OEM's internal practices. Housings shall be painted inside with oil resistant paint after proper surface preparation. Gear boxes should be so designed that the gears which they enclose should be automatically splash lubricated. Practicable measures should be taken to prevent leakage of oil from gear boxes.	To be complied as per RFP.
91	87/ 60.3	Lubrication of A 'frame, jib and rocker arm.	Lubrication of A 'frame, jib and rocker arm or lattice boom hinge.	To be complied as per RFP.
92	87/ 60.4	The luffing spindle shall be automatically lubricated through an automatic pump, which will ensure continuous lubrication with required quantity of pressure, and pump will trip in case of change in quantity and pressure. (Shall be given to all possible important areas)	Not applicable for single boom jib crane.	To be complied as per RFP.
93	89/ 69	**Holes**. All holes for fitted bolts and pins should be drilled and reamed.	Most of the joints will be welded. However pin connection will be made as per required tolerances without reaming.	To be complied as per RFP. Pin connection to be made as per required tolerances with reaming to ensure proper fitment of fasteners.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
94	89/ 71	The proposed power feeding arrangement to the crane is using cable reel drum. The reel drum at the crane shall be selected considering the cable diameter, weight and cable length required to cover the travelling distance of the crane. Stall torque motor-based cable reeling drums with slipring type motors. The reeling cable drum, cables and all accessories including slip rings, interlocking switches, etc. shall be supplied and installed by crane supplier. Control panel as required shall be provided. The limit switches of long travel shall operate in parallel cable reel to provide protection. The cable shall be sized to compensate for voltage drop along its length and shall be capable of handling full load current when all motions are working at full load. The capacity calculation of cable shall be submitted for approval and any comments offered in this regard shall be addressed without any price implication. The crane supplier shall provide a switch with IP65 protection inside cable pit for terminating the required runs of incoming cables from substation.	The proposed power feeding arrangement to the crane is using cable reel drum. The reel drum at the crane shall be selected considering the cable diameter, weight and cable length required to cover the travelling distance of the crane. Stall torque motor-based cable reeling drums with slipring type motors/ Induction Motor. The reeling cable drum, cables and all accessories including slip rings, interlocking switches, etc. shall be supplied and installed by crane supplier. Control panel as required shall be provided. The limit switches of long travel shall operate in parallel cable reel to provide protection. The cable shall be sized to compensate for voltage drop along its length and shall be capable of handling ~~full load current when all motions are working at full load~~ two heaviest movement with full load in 50% operational wind condition or all movements without load ~~current when all motions are working at full load~~. The capacity calculation of cable shall be submitted for approval and any comments offered in this regard shall be addressed without any price implication. The crane supplier shall provide a switch with IP65 protection inside cable pit for terminating the required runs of incoming cables from substation.	To be complied as per RFP.
95	90/ 74	Termination boxes and associated cable glands on the cable reeling system shall be watertight, complying with protection code IP 65 as a minimum. Power take off from the cable to the crane shall be through a totally enclosed slip-ring collector. The enclosure shall be provided with an anti-condensation heater and weatherproofed (protection code IP 65). A dedicated separate earthing slip-ring shall be provided for the cable reel itself. Spare slip rings shall also be provided. Each ring shall have minimum two copper graphite spring loaded brush and all the rocker arms shall be mounted on the common assembly to avoid misalignment. The current carrying capacity of the rings shall be minimum 3 times the full load current up to 100 amps and 2 times for higher rating. The insulation of the ring shall be from high impact polycarbonate or epoxy and shall be able to withstand 3 times the full load voltage. The slip ring shall be made of brass conforming to IS 6912.1985 or copper. Adequate precautions shall be taken for insulation in view of high moisture content and salinity in the atmosphere.	Termination boxes and associated cable glands on the cable reeling system shall be watertight, complying with protection code IP 65 as a minimum. Power take off from the cable to the crane shall be through a totally enclosed slip-ring collector. The enclosure shall be provided with an anti-condensation heater and weatherproofed (protection code IP 65). A dedicated separate earthing slip-ring shall be provided for the cable reel itself. Spare slip rings shall also be provided. Each ring shall have minimum two copper graphite spring loaded brush and all the rocker arms shall be mounted on the common assembly to avoid misalignment. The current carrying capacity of the rings shall be minimum 3 times the full load current up to 100 amps and ~~2 times~~ 1.2 times for higher rating. The insulation of the ring shall be from high impact polycarbonate or epoxy and shall be able to withstand 3 times the full load voltage. The slip ring shall be made of brass conforming to IS 6912.1985 or copper. Adequate precautions shall be taken for insulation in view of high moisture content and salinity in the atmosphere.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
96	90/ 78	Lighting. All lights shall be LED type (weather proof lights). All lights and lamps shall be readily and safely accessible for replacement. The floodlights shall be positioned to allow such replacement be undertaken during normal crane operations safely, without the use of temporary platforms or scaffolding. Walkways and floodlights shall have provision to control from the operator's cabin and access locations on the crane depending on the movement of man and material. All main lighting circuits shall operate on 240 V, 50 Hz supply. UPS system with battery backup (for 4Hours) and independent emergency lighting circuit shall be provided to enable personnel to safely exit the crane in the event of a total mains power failure. This emergency lighting shall give a minimum level of illumination 20 lux in all working and accessible areas of the crane including stairways, electrical control room and machinery room. Portable automatic recharging hand lamps including plug points for charging shall also to be provided in the operator's cabin, control room, machinery room(s) and also the following to be provided.	Lighting. All lights shall be LED type (weather proof lights). All lights and lamps shall be readily and safely accessible for replacement. The floodlights shall be positioned to allow such replacement be undertaken during normal crane operations safely, without the use of temporary platforms or scaffolding. Walkways and floodlights shall have provision to control from the operator's cabin and access locations on the crane depending on the movement of man and material. All main lighting circuits shall operate on 240 V, 50 Hz supply. UPS system with battery backup (for ~~4Hours~~ 1-2 hours) and independent emergency lighting circuit shall be provided to enable personnel to safely exit the crane in the event of a total mains power failure. This emergency lighting shall give a minimum level of illumination 20 lux in all working and accessible areas of the crane including stairways, electrical control room and machinery room. Portable automatic recharging hand lamps including plug points for charging shall also to be provided in the operator's cabin, control room, machinery room(s) and also the following to be provided.	To be complied as per RFP.
97	91/ 78.1	Emergency lights with minimum 4 hrs backup shall be given with suitable batteries invertors etc.	Emergency lights with minimum 4 2 hrs backup shall be given with suitable batteries invertors etc.	To be complied as per RFP.
98	91/ 79	**Control Panels**. VWF Drive based PLC Control Panel should be provided for Main Hoist and Aux Hoist, Slew, Luff and Long Travel motions. A protective panel should also be provided which should feed power to all the motion panels. Control and indicator circuits external electrical panels and cubicles should be on 110V AC.	**Control Panels**. VWF Drive based PLC Control Panel should be provided for Main Hoist and Aux Hoist, Slew, Luff and Long Travel motions. A protective panel should also be provided which should feed power to all the motion panels. Control and indicator circuits external electrical panels and cubicles should be on 110V AC or 24VDC.	To be complied as per RFP.
99	91/ 81	Motors. All motors shall be AC squirrel cage, 3 phase 415V + 10%, 50Hz + 3% suitable for speed control by WFD drive. Motors for various drives /motions of the crane should be suitable for inverter use and must have 'H' class insulation. Main Hoist, Luff and Slew LT motors should be suitable for 60% CDF and 150 starts/ hr.	Motors. All motors shall be AC squirrel cage, 3 phase 415V + 10%, 50Hz + 3% or upto 500VAC, 50/60Hz suitable for speed control by WFD drive. Motors for various drives /motions of the crane should be suitable for inverter use and must have 'H' or F class insulation. Main Hoist, Luff and Slew LT motors should be suitable for 60% CDF for main, aux, luffing & 40% CDF for slew, gantry travel motors and 150 starts/ hr.	To be complied as per RFP.
100	92/ 83	The hoist motors shall be capable of withstanding an over speed of 15%. All motors shall have their windings suitably impregnated to withstand tropical duties and to insulation Class H, duty S3 suitable for variable frequency variable voltage drives.	The hoist motors shall be capable of withstanding an over speed of 15%. All motors shall have their windings suitably impregnated to withstand tropical duties and to insulation Class H or F, duty S3 suitable for variable frequency variable voltage drives.	To be complied as per RFP.
101	93/ 86.1	240 V, single phase, Min 32A (2 Nos.- each with socket & outlet) 50 Hz supply. 2 nos. - inside operator's cabin 2 nos. - inside each electrical control room 2 nos. - inside machinery room 2 nos. - in crane tower/post	240 V, single phase, Min ~~32A~~ 16A (2 Nos.- each with socket & outlet) 50 Hz supply. 2 nos. - inside operator's cabin 2 nos. - inside each electrical control room 2 nos. - inside machinery room 2 nos. - in crane tower/post	To be complied as per RFP.
102	93/ 86.3	415 V, 3 phase, 50 Hz, 63A- Welding Set Supply. 2 Nos- inside machinery house.	415 V, 3 phase, 50 Hz, ~~63A~~ 32A- Welding Set Supply. 2 Nos- inside machinery house.	To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
103	95/ 93	Terminations of all cables shall be made with solder less crimped lugs. All connector and terminals blocks shall be installed in single stack manner, such that easy access shall be made to the cables terminations. All connections shall be made with due consideration for the safety of maintenance staff. Not more than two cables shall be terminated at any terminal point. Al! terminals shall be properly insulated with PVC sleeves. Use of PVC tapes on the terminals shall not be allowed.	Terminations of all cables shall be made with solder less crimped lugs. All connector and terminals blocks shall be installed in single stack manner, such that easy access shall be made to the cables terminations. All connections shall be made with due consideration for the safety of maintenance staff. Not more than two cables shall be terminated at any terminal point. Al! terminals shall be properly insulated with PVC sleeves or OEM's electrics factory standard to be used. Use of PVC tapes on the terminals shall not be allowed.	To be complied as per RFP.
104	95/ 98	Control Equipment. The main machinery house shall be suitably ventilated. The Operator Cabin and electrical rooms where PLC and drive panels are installed shall be air conditioned. Industrial type air conditioners shall be used. The temperature shall be adjustable between 18°C to 26 °C. The cooling capacity shall be based on full load conditions and for an outside maximum ambient temperature of 45 °C under full sun radiation and an outside maximum humidity of 98%. Heat load calculations shall be submitted for approval during detailed design stage. The crane heating, ventilation and air-conditioning systems shall be part of the lighting and auxiliary circuits, and thus independent of the main machineries. Industrial air conditioners shall be provided for electrical room (E-Room) only. For the crane operator's cabin, conventional / general air conditioners shall be provided.	Control Equipment. The main machinery house shall be suitably ventilated. The Operator Cabin and electrical rooms where PLC and drive panels are installed shall be air conditioned. Industrial type air conditioners or redundant split unit type air condition unit shall be used. The temperature shall be adjustable between 18°C to 26 °C. The cooling capacity shall be based on full load conditions and for an outside maximum ambient temperature of 45 °C under full sun radiation and an outside maximum humidity of 98%. Heat load calculations shall be submitted for approval during detailed design stage. The crane heating, ventilation and air-conditioning systems shall be part of the lighting and auxiliary circuits, and thus independent of the main machineries. Industrial air conditioners shall be provided for electrical room (E-Room) only. For the crane operator's cabin, conventional / general air conditioners shall be provided.	As per RFP; to be designed for ambient temperature of 50° C as indicated in Para 22.2/ Pg 71.
105	96/ 100	All components of the PLC 's shall be suitable for extended industrial use within the particular operating and climatic environment applicable to this crane. Power failure protection shall be provided to ensure continued safe operation. UPS (Minimum 4 Hr rating) shall also be provided for PLC, drive control unit and HMI. The PLC I/O ports shall have provision for adding additional I/O in the future. In this regard, spare I/O slots shall be available in the system.	All components of the PLC 's shall be suitable for extended industrial use within the particular operating and climatic environment applicable to this crane. Power failure protection shall be provided to ensure continued safe operation. UPS (Minimum 2Hr rating) shall also be provided for PLC, drive control unit and HMI. The PLC I/O ports shall have provision for adding additional I/O in the future. In this regard, spare I/O slots shall be available in the system.	To be complied as per RFP.
106	96/ 101	The PLC 's shall be provided with programming and monitoring facilities for maintenance and fault logging. Self-diagnostic capability shall be incorporated in PLC both on line during operation and when powered up. All faults shall be visually displayed and signalled by the sounding of an audible alarm, with mute facility, within the operator's cabin. There shall be provision for data storage facility, data transfer facility with open protocol to the laptop (crane supplier's scope) from PLC room and Operator's cabin.	The PLC 's shall be provided with programming and monitoring facilities for maintenance and fault logging. Self-diagnostic capability shall be incorporated in PLC both on line during operation and when powered up. All faults shall be visually displayed and signalled by the sounding of an audible alarm, with mute facility, within the operator's cabin. There shall be provision for data storage facility, data transfer facility with ~~open protocol~~ or profinet communication to the laptop (crane supplier's scope) from PLC room and Operator's cabin.	To be complied as per RFP.
107	96/ 102	Only authorized users shall be permitted access for using application software in PLC, VWF Drive, HMI & Crane Management System. The parameters shall be viewable without password. The PLC shall have internal hardware and software supervision checking. When a fault is detected, all outputs shall be set to zero and the program execution shall be stopped having an ramp stop or emergency stop as the result depending of the fault criticality. The PLC system shall receive all operator's control signals, limit switch signals and the protection and status signals from the drive and field controls.	Only authorized users shall be permitted access for using application software in PLC, VWF Drive, HMI & Crane Management System. The parameters shall be viewable without password excluding few safety critical parameters. The PLC shall have internal hardware and software supervision checking. When a fault is detected, all outputs shall be set to zero and the program execution shall be stopped having an ramp stop or emergency stop as the result depending of the fault criticality. The PLC system shall receive all operator's control signals, limit switch signals and the protection and status signals from the drive and field controls.	To be complied as per RFP. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
108	96/ 103	It shall perform the logical control functions and transmits the control signals. Analogue inputs shall include load measuring device in control room, wind speed monitor etc. The central unit of the PLC shall be located in an enclosure in the electrical control room. PLC programming shall be ensured for entire safe operations of the crane including avoidance of human error (Passwords if any to be shared with Manager Yard Utility).	It shall perform the logical control functions and transmits the control signals. Analogue inputs shall include load measuring device in control room, wind speed monitor etc. The central unit of the PLC shall be located in an enclosure or in electrical room panel assembly in the electrical control room. PLC programming shall be ensured for entire safe operations of the crane including avoidance of human error (Passwords if any to be shared with Manager Yard Utility).	To be complied as per RFP. PLC can be located in panel assembly in electrical room with proper air condition system installed. Bird and pest infestation control should be suitably implemented.
109	96/ 104	Load cum radius indicators display units are required in Operator's cabin. Required media converters, interfacing cables and media shall be considered open protocol scheme.	Load cum radius indicators display units are required in Operator's cabin. Required media converters, interfacing cables and media shall be considered ~~open protocol scheme~~. Profinet or profisafe communication	To be complied as per RFP. System integrator/ programmer should hand over the program along with all parameter settings to user including license key and support for minimum seven years after years. The VVFD-PLC integration to be undertaken as required. However, there should be a provision to operate all motions independently in case of fault in any of the drive.
110	97/ 106	Size of the HMI monitor shall be minimum of 15 inches (diagonal) and shall be provided as a touch screen system in Operator's cabin. HMI shall be capable to communicate with the PLC processor in open protocol.	Size of the HMI monitor shall be minimum of 15 inches (diagonal) and shall be provided as a touch screen system in Operator's cabin. HMI shall be capable to communicate with the PLC processor in open protocol. Profinet or profisafe	To be complied as per RFP.
111	97/ 107	Mimic panel of the crane shall be considered in the master display and subsequent screens shall be linked to the same for intuitive operation of the operator ergonomically from the seat. HMI shall be positioned suitably for the same. Alarms and fault history, operational status of machineries, all interlocks including limit switches, temperature of drive and PLC room, Operator room, anemometer speed, drive status-e.g. Current, speed, voltage and failure etc. shall be displayed in HMI. Prior to the testing of the crane, screen details shall be shared to user department / ND (V) for suggestions.	Mimic panel of the crane shall be considered in the master display and subsequent screens shall be linked to the same for intuitive operation of the operator ergonomically from the seat. HMI shall be positioned suitably for the same. Alarms and fault history, operational status of machineries, all interlocks including limit switches, temperature of drive and PLC room (electrical room), Operator room, anemometer speed, drive status- e.g. Current, speed, voltage and failure etc. shall be displayed in HMI. Prior to the testing of the crane, screen details shall be shared to user department / ND (V) for suggestions.	To be complied as per RFP. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
112	97/ 108	Drives and Controls. The drive system shall preferably comprise of separate converter and inverter system for each of the motions or common DC bus system where converters are common for multiple motions and Individual inverter shall be provided for each motion. The converter system shall comprise of AFEs. All inverters shall be heavy duty, vector type catered for crane application with suitable firmware. The heavy-duty current rating of the inverters shall be 1.25 times of the motor rated name plate current or as per calculations and standards, whichever is higher considering ambient temperature of 45°C. The heavy-duty current rating of the converters be 1.25 times the inverter induced currents.150% overload for 60 seconds and 200% overload for 3 seconds shall be ensured. The electrical drive controls shall provide power for the rapid and precise handling of lifting hooks by use of variable speed control system for hoisting, luffing, slewing and travelling motions. The AFEs shall maintain TDH <5% at input power side. AFEs shall be selected considering negative supply voltage tolerance also. Drives shall be provided with HMI for reading parameters like I, V, load, speed, etc and suitable communication modules for communication with control system. In case of frequency converters with AFE, displays shall be made to suite the conditions according to drive system. HMI system shall be capable to uploading and downloading parameters, hot swapping, etc. The drive units shall be located in the electrical control room in enclosures. All motions shall be controlled with speed feedback encoder as closed loop vector inverter control. The master controller shall generate a signal, which shall be led to the control unit. The control unit shall feed the motor with a frequency controlled by the signal from the master controller and with a voltage, which is dependent on the frequency. All VWF drives with AFEs, ACBs, MCCBs, contactors shall be at least UL listed. VWF Drive should be protected from Overload protection, Short circuit protection, Over/ under voltage protection, Over temperature protection, Ground fault protection, EMC protection, corrosion protection, Vibration protection and moisture protection.	Drives and Controls. The drive system shall preferably comprise of separate converter and inverter system for each of the motions or common DC bus system where converters are common for multiple motions and Individual inverter shall be provided for each motion. The converter system shall comprise of AFEs. All inverters shall be heavy duty, vector type catered for crane application with suitable firmware. The heavy-duty current rating of the inverters shall be 1.25 times of the motor rated name plate current or as per calculations and standards, ~~whichever is higher considering ambient temperature of 45°C~~. The heavy-duty current rating of the converters be 1.25 times the inverter induced currents.150% overload for 60 seconds and 200% overload for 3 seconds shall be ensured. The electrical drive controls shall provide power for the rapid and precise handling of lifting hooks by use of variable speed control system for hoisting, luffing, slewing and travelling motions. The AFEs shall maintain TDH <5% at input power side with reasonable load from power network. AFEs shall be selected considering negative supply voltage tolerance also. Drives shall be provided with HMI for reading parameters like I, V, load, speed, etc and suitable communication modules for communication with control system. In case of frequency converters with AFE, displays shall be made to suite the conditions according to drive system. HMI system shall be capable to uploading ~~and downloading parameters, hot swapping,~~ etc. The drive units shall be located in the electrical control room in enclosures or open panel mounted in air conditioned electrical room. All motions shall be controlled with speed feedback encoder as closed loop vector inverter control. The master controller shall generate a signal, which shall be led to the control unit. The control unit shall feed the motor with a frequency controlled by the signal from the master controller and with a voltage, which is dependent on the frequency. All VWF drives with AFEs, ACBs, MCCBs, contactors shall be at least UL listed. VWF Drive should be protected from Overload protection, Short circuit protection, Over/ under voltage protection, Over temperature protection, Ground fault protection, EMC protection, corrosion protection, Vibration protection and moisture protection.	As per RFP; Crane to be designed for ambient temperature of 50° C as indicated in Para 22.2/ Pg 71. 
113	98/ 111	Main Switchboards, Motor Controls and Distribution Boards. All cabinets shall be considered and designed in line with industrial standards for powder coated premium quality sheet metals. Quality workmanship and statutory clearances as per CEA regulations shall be maintained around the panels. As a minimum, following instruments shall be provided in crane monitoring system or a readily visible location(s) within the main control panel(s).	Main Switchboards, Motor Controls and Distribution Boards. All cabinets or panel mounts in electrical room shall be considered and designed in line with industrial standards for powder coated premium quality sheet metals. Quality workmanship and statutory clearances as per CEA regulations shall be maintained around the panels. As a minimum, following instruments shall be provided in crane monitoring system or a readily visible location(s) within the main control panel(s).	To be complied as per RFP.
114	98/ 113.3	The electrical compartment shall be enclosed and positively pressured to preclude dust and dirt entry.	The electrical compartment shall be enclosed and natural ventillated ~~positively pressured to preclude dust and dirt entry.~~	To be complied as per RFP.
115	99/ 113.8	Chances of direct contact with electrical and control systems components including drives shall be fully avoided. The IP of control system field elements located outside shall be minimum IP56 or above.	Chances of direct contact with electrical and control systems components including drives shall be fully avoided. The IP of control system field elements located outside shall be minimum ~~IP56~~ IP65 or above.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
116	99/ 114.1	04 nos 1000W lamps/ 500 Watt LED flood lights should be placed on top of the operator's cabin.	04 nos 1000W lamps/ 500 Watt LED flood lights should be placed on top of the operator's cabin/ Suitable Position.	To be complied as per RFP. May be planned by the designer.
117	100/ 115.4	Load error value should not be exceeded 1%.	Load error value should not be exceeded 5%.	To be complied as per RFP.
118	100/ 115.5	Load cell should be fixed in either Hook or Drum	Load cell should be fixed in either Hook or Drum **or machinery torque arm**	To be complied as per RFP.
119	101/ 117	Limit Switches and External Interlocks. All limit should be connected in the control circuit and should be of self-resetting type except for ultimate limits. Following limit switches should be provided.	Limit Switches and External Interlocks. All limit should be connected in the control circuit via PLC and should be of self-resetting type except for ultimate limits. Following limit switches should be provided.	To be complied as per RFP. May be provided by designer.
120	101/ 118.2	A radius indicator to indicate the position of the jib.	Only the ourtreach and angle of the boom will be indicated	To be complied as per RFP.
121	101/ 119.2	Overhead electronic audio-visual alarm and automatic trip for load main and aux hoist, luffing, slewing and long travel.	~~Overhead electronic audio-visual alarm and automatic trip for load main and aux hoist, luffing, slewing and long travel.~~	To be complied as per RFP.
122	102/ 119.41	Double Travel limit switches for over hoist and over lowering.	Double Travel limit switches or safety encoders for over hoist and over lowering.	To be complied as per RFP.
123	102/ 119.12	Continuous load indicator (Digital) of reputed make in operator's cabin. Also, two large LED based Repeater Displays of size 300mm display height for Continuous Load Indication should be provided on two opposite sides on portal legs of the crane at suitable height. SLI system Error load/radius should not be varied more than 1% at any instant.	Continuous load indicator (Digital) of reputed make in operator's cabin. Also, two large LED based Repeater Displays of size 300mm display height for Continuous Load Indication should be provided on two opposite sides on portal legs of the crane at suitable height. SLI system Error load/radius should not be varied more than +/-5% at any instant.	To be complied as per RFP.
124	102/ 121	Rail Clamps (Hydraulic operated). The rail clamps I locking arrangements should be provided to clamp the crane anywhere along travel rails/ rail tracks. The clamps should have sufficient tangential holding force to safely hold the crane in locking position during non-operating wind conditions. The rail clamps should be quick acting mechanically operated hydraulically released type. The clamp jaws should grip the rail from top/side. The jaws should have replaceable hardened steel teeth. When released, the clamps should not drag on the rails. Limit switches should be provided for interlocking the clamps with the long travelling mechanism to ensure that the long travel motors cannot be started with the clamps engaged. Clamps should be operable from the cabin.	Conflicting with clause 48.6. About Rail clamp in clause 48.6 it is specified that it should be able to keep the Crane stopped in any position with operating wind max pressure. We will follow clause 48.6	To be complied as per RFP.
125	103/ 126.2	Crane Fault Monitoring, Diagnosis and Rectification Facility. A comprehensive fault monitoring shall be provided as an integral part of the control equipment. This shall be designed to provide circuit testing and rapid fault finding. This Facility shall give full details on a test board in the PLC room or in computerised crane monitoring system and a fault indication in the operator's cabin. It shall cause the crane to stop, if the condition so warrants. It shall in any case warn an operator that either a serious fault that needs urgent attention or a lesser fault, that can be attended to later is present. All alarms and faults shall be displayed. All events e.g. operation of limit switch and all other safety devices including anemometer shall be displayed. Fault and diagnose messages shall involve drive control internal, motor, interlocking and communication problems. The fault and diagnose messages shall be stored in a memory and are displayed in the order of occurrence	Crane Fault Monitoring, Diagnosis ~~and Rectification Facility~~. A comprehensive fault monitoring shall be provided as an integral part of the control equipment. This shall be designed to provide circuit testing and rapid fault finding. This Facility shall give full details on a test board in the PLC room or in computerised crane monitoring system and a fault indication in the operator's cabin. It shall cause the crane to stop, if the condition so warrants. It shall in any case warn an operator that either a serious fault that needs urgent attention or a lesser fault, that can be attended to later is present. All alarms and faults shall be displayed. All events e.g. operation of limit switch and all other safety devices including anemometer shall be displayed. Fault and diagnose messages shall involve drive control internal, motor, interlocking and communication problems. The fault and diagnose messages shall be stored in a memory and are displayed in the order of occurrence	To be complied as per RFP. The purpose of facility envisaged is clearly indicated in description. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
126	104/ 128	Erection and Installation. Prior to erection, the Supplier should prepare an erection schedule, drawings, programme and also prepare a list of equipment to be used for erection of each component and the complete crane and submit the same to the Buyer. All statutory and safety requirements/rules of the following acts shall be complied with while working in Buyer's premises during installation of the cranes. -	Erection and Installation. Prior to erection, the Supplier should prepare an erection schedule, drawings, programme and also prepare a list of equipment to be used for erection of each component and the complete crane and submit the same to the Buyer. All statutory and safety requirements/rules of the following acts or equivalent IEC shall be complied with while working in Buyer's premises during installation of the cranes. -	To be complied as per RFP.
127	104/ 129	Paint and painting procedure	Surface preperation and painting system for the steel structure in accordance with ISO-12944-5-2018-C5-07 and colour scheme shall be mutually agreed.	To be complied as per RFP.
128	106/ 130	Galvanizing. All stairs, walkways, pipes, tubes and all fittings associated with these should be galvanized in accordance with BS 729 Part I after they are thoroughly cleaned, degreased and de-rusted by pickling.	Galvanizing. All stairs, walkways, pipes, tubes and all fittings associated with these should be galvanized in accordance with ~~BS 729 Part I~~ EN ISO 1461 or EN ISO 14713 after they are thoroughly cleaned, degreased and de-rusted by pickling.	To be complied as per RFP. All components of the cranes where operator/ maintainer will be required to reach and are exposed to weather, including stair and platform, are required to be galvanized.
129	108/ 135	Performance Tests. The Contractor shall perform fitness tests of the crane to include functional, load tests, endurance and trial operations type work. Upon receipt of the intimation from the contractor, the Employers representatives and personnel will be available to witness the test. The contractor with his own engineers and operators will perform the performance tests under the supervision of the employer. The performance tests to include, inter alia.	Performance Tests. The Contractor shall perform fitness tests of the crane to include functional, load tests, ~~endurance~~ and trial operations type work. Upon receipt of the intimation from the contractor, the Employers representatives and personnel will be available to witness the test. The contractor with his own engineers and operators will perform the performance tests under the supervision of the employer. The performance tests to include, inter alia.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)
130	109/ 135.12	Full load test with 100% SWL of the crane for each motion in each direction.	If overload test is executed with nominal speed, 100% test can be consider as optional	To be complied as per RFP. Post successful completion of full load test at all speeds, overload test (125%) at nominal speed is undertaken. Therefore, full load test cannot be optional.
131	109/ 135.16	Current measurement of individual components at no load and full load.	For main motion drives.	To be complied as per RFP.
132	111/ 138.18	Profibus Communication/other communication system troubleshooting, fault finding and swapping of item	Profibus or profinet Communication/other communication system troubleshooting, fault finding and swapping of item	To be complied as per RFP.
133	87/ 60.3	Lubrication of A 'frame, jib and rocker arm	Manual group lubrication will be provided for A frame. Jib and rocker arm are not there for single jib.	To be complied as per RFP.
134	85-86/ 52.3 & 52.7	Pulleys should be of cast steel/ fabricated but in 52.7 it was mentioned as Sheaves should be made of cast steel or rolled steel and mounted on anti-friction bearings.	Both the clause are contradictory. Sheaves will be fabricated type with antifirction bearing.	To be complied as per RFP.
135	66/ 11.4.7	Anemometer (Ultrasonic)	Anemometer (Ultrasonic)/ Electronic Speed Sensor with Cup Type.	To be complied as per RFP.
136	10/ 12	Validity of Bids . The Bids should remain valid till 18 months from the last date of submission of the Bids.	Reduce bid validity to 90 days; extension only upon mutual agreement.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
137	10/ 13.2	Earnest Money Deposit. To safeguard against a bidder withdrawing or altering its bid during the bid validity period, Bid Security (also Known as EMD) is to be obtained from the bidder except for cases upto Rs 100 Crores as follows.- "EMD TABLE"	Kindly confirm the applicable Earnest Money Deposit (EMD) amount to avoid any ambiguity. The EMD schedule provided in the tender specifies different EMD values based on different ranges of Project Value / Estimated Contract Value. However, the Estimated Value of Contract for the subject tender has not been explicitly mentioned. Therefore, we request you to confirm the applicable EMD amount to be considered for this tender.	To be complied as per RFP.
138	11/ 13.4	The EMD be valid for eighteen months or till signing of contract, whichever is later. The EMD shall be extended from time to time as required by the Buyer and agreed by the Bidder. No interest shall be payable by the Buyer to the Bidder(s) on the EMD for the period of its currency. For unsuccessful bidders EMD will be returned on declaration of successful bidder.	Limit EMD validity to bid validity period (**90 Days**) plus 45 days.	To be complied as per RFP.
139	11/ 13.6	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.	The clause does not clearly define the circumstances triggering forfeiture. The wording "without assigning any reason" can lead to broad interpretation. Hence request to kindly modify the clause as follows. 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 with~~out~~ assigning ~~any~~ justified reason for imposing sanction for violation of this pact.	To be complied as per RFP.
140	21/ 4	Delivery period for supply and handing over (post commissioning) of level luffing jetty cranes to the Buyer would be from the date of release of advance payment by the Buyer to the Seller (T0) as per table mentioned below. Please note that Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Buyer, with applicability of LD clause.	Delivery period for supply and handing over (post commissioning) of level luffing jetty cranes to the Buyer would be from the date of release of advance payment by the Buyer to the Seller (T0) as per table mentioned below. ~~Please note that Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period~~. Extension of contracted delivery period will be at the sole discretion of the Buyer, with applicability of LD clause for the Delay Solely attributable to the Seller. For Delays not attributable to the Seller, suitable Extension of time along with Cost compensation shall be provided without imposition of LD.	To be complied as per RFP. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
141	23/ 4	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 Contract or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India or showing or forbearing to show favour or disfavour to any person in relation to the present Contract or any other Contract with the Government of India. 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 relevant sections of Bhartiya Nyaya Sanhita or the Prevention of Corruption Act, 1988 (as amended in 2018) 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 has been committed, shall be final and binding on the Seller.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.	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 Contract or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract ~~or any other Contract~~ with the Government of India or showing or forbearing to show favour or disfavour to any person in relation to the present Contract ~~or any other Contract~~ with the Government of India. 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 relevant sections of Bhartiya Nyaya Sanhita or the Prevention of Corruption Act, 1988 (as amended in 2018) or any other Act enacted for the prevention of corruption, shall entitle the Buyer to cancel ~~the~~ this Contract ~~and all or any other Contracts~~ with the Seller and recover from the Seller the amount of ~~any~~ actual documented loss arising from such cancellation. A decision of the Buyer or his nominee with appropiate justification or evidence to the effect that a breach of the undertaking has been committed, shall then be final and binding on the Seller.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.	To be complied as per RFP.
142	25/ 8	Liquidated Damages (LD). In the event of the Bidder's failure to submit the Documents, supply the stores/goods, perform services, conduct trials, installation of equipment, training and MET as per schedule specified in this contract, the BUYER may, at his discretion withhold cost of the specific lot/batch or 1% of the total contract price, 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 total 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).	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 total contract price, 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~~ 5% of the total 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~~ added in delivery period to arrive at the contractual delivery Period).	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
143	25/ 9	Payment Deductions and Damages for Shortfalls in CMC Services. In case the cumulative downtime exceeds 30 (working days) in the Year, payment will be deducted. The total downtime will be calculated at the end of the Year and payments will be deducted. The total payments to be deducted will be calculated as follows.- 9.1. Payments would be deducted on pro-rate basis for the duration, by which cumulative downtime exceeds 30 (working days), as follows.- 9.1.1. Per year CMG= X1' 9.1.2. Period by which cumulative downtime exceeds the specified cumulative downtime, in days = 'Y1' 9.1.3. Payment Deduction= 'Z1', Where Z1 = [(X1/ Number of days in the year) * Y1]	In case the cumulative downtime exceeds 30 (working days) in the Year excluding the Preventive or Regular/Routine Maintenance as per O&M manual, payment will be deducted. The total downtime will be calculated at the end of the Year and payments will be deducted. The total payments to be deducted will be calculated as follows.- 9.1. Payments would be deducted on pro-rate basis for the duration, by which cumulative downtime exceeds 30 (working days) excluding the Preventive or Regular/Routine Maintenance as per O&M manual, as follows.- 9.1.1. Per year CMG= X1' 9.1.2. Period by which cumulative downtime exceeds the specified cumulative downtime, in days = 'Y1' 9.1.3. Payment Deduction= 'Z1', Where Z1 = [(X1/ Number of days in the year) * Y1]	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)
144	25/ 9.2	In addition, damages would be deducted to the sum of 0.1% of the per annum CMG cost per day, for the duration, by which cumulative downtime exceeds the maximum permissible cumulative downtime per year, subject to the maximum value of this damages not being higher than 5% of the annual CMC cost.	The Bidder/Seller has requested deletion of this clause, as Clause 9.1 already specifies the applicable penalty provisions	To be complied as per RFP.
145	25/ 10.1	**Termination of Contract**. The Seller fails to honour any part of the Contract including failure to deliver the contracted stores/ render services/ achieve milestones in time as per the Contract for causes not attributable to Force Majeure for more than (03 months) as related to the delivery period as per the Contract, or for a period greater than 50% of the scheduled delivery period for the overall Contract, whichever is earlier.	The Seller fails to honour any part of the Contract including failure to deliver the contracted stores/ render services/ achieve milestones in time as per the Contract for causes not attributable to Force Majeure or for reasons beyond the controll of Seller, for more than (03 months) as related to the delivery period as per the Contract, or for a period greater than 50% of the scheduled delivery period for the overall Contract, whichever is earlier.	To be complied as per RFP.
146	26/ 10.6	Any special circumstances that are to be recorded to justify the termination of the Contract.	Any special circumstances mutually accepted by both the parties that are to be recorded to justify the termination of the Contract.	To be complied as per RFP.
147	26/ 11	**Notices**. Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by email or registered pre-paid mail/ airmail, addressed to the last known address of the party to whom it is sent. The seller is to acknowledge receipt within seven days of receiving the notice. If such an acceptance or communication conveying any objection to certain part of the notice is not received within seven days, then it would be deemed that the notice is fully accepted by the seller and all obligations of seller will be applicable under the notice.	Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by email or registered pre-paid mail/ airmail, addressed to the last known address of the party to whom it is sent. The seller is to acknowledge receipt within seven days of receiving the notice. If ~~such an~~ acceptance or communication conveying any objection to certain part of the notice is not received within 21 ~~seven~~ days from the receipt / acknowledgement of said notice by the Seller, then it would be deemed that the notice is fully accepted by the seller and all obligations of seller will be applicable under the notice.	To be complied as per RFP.
148	28/ 16.6	**Integrity Pact Clause**. Undertaking on behalf of a Bidding company will be made "in the name and on behalf of the company's Chief Executive Officer".	Undertaking on behalf of a Bidding company will be made "in the name and on behalf of the company's Chief Executive Officer" or the Person holding Power of Attorney.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
149	29/ 17	**Denial Clause**. In case the delay in delivery is attributable to the Seller or a non-Force Majeure event, any statutory increase in, or fresh imposition of any taxes/duty, including customs duty, leviable in respect of the Stores specified in the said Contract, and/ or upward rise in prices due to the PV clause, and/ or any adverse fluctuation in foreign exchange, are to be borne by the Seller during the extended delivery period, while the Buyer reserves the right to get any benefit of a decrease in price on any aforesaid ground.	In case the delay in delivery is solely attributable to the Seller or a non-Force Majeure event solely attributable to the Seller, any statutory increase in, or fresh imposition of any taxes/duty, including customs duty, leviable in respect of the Stores specified in the said Contract, and/ or upward rise in prices due to the PV clause, and/ or any adverse fluctuation in foreign exchange, are to be borne by the Seller during the extended delivery period, while the Buyer reserves the right to get any benefit of a decrease in price on any aforesaid ground.	To be complied as per RFP.
150	30/ 1	Performance-cum-Warranty Bank Guarantee (PWBG) - A Performance-cum-Warranty Bank Guarantee (PWBG) of 5% 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 Appendix 'D' of RFP.	A Performance-cum-Warranty Bank Guarantee (PWBG) of 5% 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 for the justified reasons solely attributable to the Seller/Bidder, 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 Appendix 'D' of RFP. In the event of sucessful completion of the work by the Seller the complete BGs along with invoked amount, if any, shall be returned to the Seller upon completion of Warranty period +3 months.	To be complied as per RFP. 
151	30/ 3.1 & 3.2	Contract Price and Requirement of Bank Guarantees – 3.1. Total Contract Price. The Total Contract Price will be the final price negotiated by CNC including taxes and duties applicable at the time of signing of Contract. 3.2. Base Contract Price. The Base Contract Price will be considered as Total Contract Price excluding taxes and duties applicable at the time of signing of Contract and excluding the Total Price of CMC.	3.1. Total Contract Price. The Total Contract Price will be the final price negotiated by CNC excluding the Total Price of CMC, but including taxes and duties applicable at the time of signing of Contract. 3.2. Base Contract Price. The Base Contract Price will be considered as Total Contract Price excluding taxes and duties applicable at the time of signing of Contract and excluding the Total Price of CMC.	To be complied as per RFP.
152	31/ 4(1)	Advance Payment Stage - 15% of Base Contract Price Against appropriate Advance Payment Bank Guarantee (APBG) of equivalent amount valid till installation and commissioning.	Advance Payment Stage - 15% of Base Contract Price Against appropriate Advance Payment Bank Guarantee (APBG) of equivalent amount valid till ~~installation and commissioning.~~ supply of materials of individual crane.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
153	31/ 4(2)	Stage 1 - 10% of Base Contract Price On submission of design, GA drawings, Quality Assurance Program (QAP) and work plan/PERT Chart duly approved by TPIA to NHQ/DoDY for each crane against Bank Guarantee (BG) of equivalent amount valid till commissioning of cranes.	Stage 1 - 10% of Base Contract Price On submission of ~~design~~, GA drawings, Quality Assurance Program (QAP) and work plan/PERT Chart duly approved by TPIA to NHQ/DoDY for each crane against Bank Guarantee (BG) of equivalent amount valid till ~~commissioning of cranes~~. supply of materials of individual crane.	
154	31/ 4(3)	Stage 2 - 10% of Base Contract Price On submission of finalised design and placement of PO for structural steel and major mechanical/electrical crane components for each crane duly certified by TPIA against Bank Guarantee (BG) of equivalent amount valid till commissioning of cranes.	Stage 2 - 10% of Base Contract Price On submission of ~~finalised design and placement of~~ unpriced PO for structural steel and major mechanical/electrical crane components for each crane duly certified by TPIA against Bank Guarantee (BG) of equivalent amount valid till ~~commissioning of cranes.~~ supply of materials of individual crane.	
155	31/ 4(4)	Stage 3 - 35% of Base Contract Price On completion of required structural work at OEM premises duly certified by TPIA and delivery/receipt of sub-structural parts/bought-out items/raw material etc. for each crane against Bank Guarantee (BG) of equivalent amount valid till commissioning of cranes.	Stage 3 - 35% of Base Contract Price On completion of required structural work at OEM premises duly certified by TPIA and delivery/receipt of sub-structural parts/bought-out items/raw material etc. for each crane against Bank Guarantee (BG) of equivalent amount valid till ~~commissioning of cranes~~. supply of materials of individual crane.	
156	31/ 4(5)	Stage 4 - 20% of Base Contract Price On delivery and completion of erection of crane structure and fitment of components on each crane at I/N jetty duly witnessed by user and TPIA against Bank Guarantee (BG) of equivalent amount valid till commissioning of cranes.	Stage 4 - 20% of Base Contract Price along with 100% GST on Pro-rata basis as per approved billing breakup On delivery ~~and completion of erection~~ of crane structure, ~~and fitment of~~ components of~~n each~~ crane at I/N jetty duly witnessed by user and TPIA ~~against Bank Guarantee (BG) of equivalent amount valid till commissioning of cranes~~.	
157	32/ 4(6)	Stage 5 - 10% of Base Contract Price On completion of setting to work/ testing/ tuning/ training/ commissioning of each crane duly witnessed by user and TPIA.	Stage 5 - 10% of Base Contract Price On completion of ~~setting to work/ testing/ tuning/ training~~/ erection & commissioning of each crane duly witnessed by user and TPIA. In case Erection / Commissioning is delayed beyond 01 (one) month from the actual agreed schedule as per Contract due to reasons not attributable to the Seller; the corresponding payment towards Erection & Commissioning shall be released against submission of Bank Guarantee of equivalent amount, valid till 3 months. In the event, Erection / Commissioning is not conducted even after the said 03 months as mentioned above, parties shall mutually discuss and decide on further continuation of obligations with commercial implication therewith and the Warranty period.	To be complied as per RFP.



Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
158	32/ N/1 & 2	Note.- 1. PWBG will be retained till 90 days beyond the date of warranty. 2. APBG and BGs for Stages 1 to 4 will be retained till final commissioning of individual cranes as per delivery schedule. It shall be proportionately and automatically reduced until full extinction along with and prorate to the value of each crane commissioned and evidenced by relevant document.	Note.- 1. PWBG will be retained till 90 days beyond the date of warranty. 2. APBG and BGs for Stages 1 to 3 4 will be retained till ~~final commissioning~~ supply of materials of of individual cranes as per delivery schedule. It shall be proportionately and automatically reduced until full extinction along with and prorate to the value of each crane commissioned and evidenced by relevant document.	To be complied as per RFP.
159	32/ 5.1	5.1. 100% of the annual value of CMC of respective yard {ND(Mbi) and ND(Vzg)} (after deducting LD, if applicable) for five years post warranty of the equipment will be made on Annual basis on submission of a User Completion Certificate (UCC) from Naval Dockyards (Mbi) and (Vzg) and relevant invoice of the vendor. The UCC will be required to be signed by the authorised representative of buyer. Payment of taxes, duties and statutory levies will be made on actual on submission of requisite documentary proof to paying authority. The CoA will be the nodal agency for final certification of the work done, scrutiny and processing of bills for payment, establishing disallowance/deductions and Liquidated damages (LD) for issues pertaining to CMC.	20% of the CMC order value shall be paid as an advance against submission of an equivalent Bank Guarantee, valid until completion of the CMC period. The Advance Bank Guarantee shall be reduced quarterly based on recoveries made from the service invoices. The balance 80% of the CMC order value, along with 100% applicable GST, shall be paid against the monthly RA bills. Kindly confirm the above payment terms.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)
160	34/ 8.1	The following Fall Clause will form part of the contract placed on successful Bidder. 8.1. The price charged for the stores supplied under the Contract by the Seller shall in no event exceed the lowest prices at which the Seller sells the stores or offers to sell stores of identical description to any persons/ organisation, including the Purchaser or any Department of the Central Government or any Department of a State Government or any statutory Undertaking of the Central or State Government, as the case may be, during the period till performance of all obligations including warranty under the Contract/all Supply Orders placed during the currency of the Rate Contract (as applicable), is completed	The following Fall Clause will form part of the contract placed on successful Bidder. 8.1. The price charged for the stores supplied under the Contract by the Seller shall in no event exceed the lowest prices at which the Seller sells the stores or offers to sell stores of completely identical Specifications ~~description~~ to any persons/organisation, including the Purchaser or any Department of the Central Government or any Department of a State Government or any statutory Undertaking of the Central or State Government, as the case may be, during the period till performance of all obligations including warranty under the Contract/all Supply Orders placed during the currency of the Rate Contract (as applicable), is completed	To be complied as per RFP.
161	34/ 8.2	If at any time, during the said period, the Seller reduces the sale price, sells or offers to sell such stores to any person/ organisation, including the Buyer or any Department of the Central Government or any Department of a State Government or any statutory Undertaking of the Central or State Government, as the case may be, at a price lower than the price chargeable under the Contract, the Seller shall forthwith notify such reduction or sale or offer of sale to the Procuring Entity and the price payable under the Contract for the stores, shall stand correspondingly reduced.....	If at any time, during the said period, the Seller reduces the sale price, sells or offers to sell such stores (Completely identical specifications) to any person/ organisation, including the Buyer or any Department of the Central Government or any Department of a State Government or any statutory Undertaking of the Central or State Government, as the case may be, at a price lower than the price chargeable under the Contract, the Seller shall forthwith notify such reduction or sale or offer of sale to the Procuring Entity and the price payable under the Contract for the stores, shall stand correspondingly reduced.....	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
162	34/ 8.3	The Seller shall furnish the following certificate to the Paying Authority, along with each bill for payment for supplies made against the Contract/Rate Contract.-	The Seller shall furnish the following certificate to the Paying Authority, along with ~~each~~ final bill for payment for supplies made against the Contract/Rate Contract.-	To be complied as per RFP.
163	36/ 10.1	Should the stores or any instalment thereof not be delivered within the time or times specified in the Contract documents, or if defective delivery is made in respect of the stores or any instalment thereof, the Buyer shall, after granting the Seller 45 days to cure the breach, be at liberty, without prejudice to the right to recover Liquidated Damages (LD) as a remedy for breach of Contract, to declare the Contract as terminated, either wholly or to the extent of such default.	Should the stores or any instalment thereof not be delivered within the time or times specified in the Contract documents for reasons solely attributable to the Seller, or if defective delivery is made in respect of the stores or any instalment thereof, the Buyer shall, after granting the Seller 45 days to cure the breach, be at liberty, without prejudice to the right to recover Liquidated Damages (LD) as a remedy for breach of Contract, to declare the Contract as terminated, either wholly or to the extent of such default.	To be complied as per RFP.
164	36/ 10.5	The manner and method of such procurement from other source shall be at the discretion of the Buyer, and it shall not be necessary for the Buyer to notify the Seller of such procurement.	The manner and method of such procurement from other source shall be at the discretion of the Buyer, and it shall ~~not~~ be necessary for the Buyer to notify the Seller of such procurement and related costs associated with it.	To be complied as per RFP.
165	40/ 18	**Quality Assurance**. The Seller would provide the Quality Assurance Plan (QAP) and Standard Acceptance Test Procedure (ATP) duly approved by third party inspection agency within 02 and 03 month of this date of contract for Stage 1. Buyer reserves the right to modify the ATP. Seller would be required to provide all test facilities at his premises for acceptance and inspection by Buyer. The details in this regard will be coordinated during the negotiation of the contract. The item should be of the latest manufacture, conforming to the current production standard and having 100% defined life at the time of delivery.	The Seller would provide the Quality Assurance Plan (QAP) and Standard Acceptance Test Procedure (ATP) duly approved by third party inspection agency within 02 and 03 month of this date of contract for Stage 1. Buyer reserves the right to modify the ATP after mutual discussion. Seller would be required to provide all test facilities at his premises for acceptance and inspection by Buyer. The details in this regard will be coordinated during the negotiation of the contract. The item should be of the latest manufacture, conforming to the current production standard and having 100% defined life at the time of delivery.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)
166	40/ 19	Inspection Authority The third-party inspection i.a.w. approved OAP and ATP would be carried out by IRS (Indian Register of Shipping)/ LRS (Lloyds Register Services) / BVQI) at the cost of the Supplier. However, review of documents and witness at Customer Hold Points (CHP) as per approved QAP will also be carried out by Navy representative (DoDY/ User/ any other representative authorised by ordering agency).	The third-party inspection i.a.w. approved OAP and ATP would be carried out by ~~IRS (Indian Register of Shipping)~~ IR Class Systems and Solutions Pvt Ltd. (ISSPL)/Apave TIV India Pvt Ltd /~~LRS (Lloyds Register Services)~~ LRQA Inspection Services India LLP / BVQI (Bureau Veritas India Private Limited) at the cost of the Supplier. However, review of documents and witness at Customer Hold Points (CHP) as per approved QAP will also be carried out by Navy representative (DoDY/ User/ any other representative authorised by ordering agency).	To be complied as per RFP. Inspection Authority to be authorised TPIA. Few examples were quoted in the RFP. Any other TPIA authorised may be engaged as the inspection agency.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
167	40/ 21	The Supplier is required to propose the inspection schedule to third party inspecting agency for approval. Once approved, the Supplier has to ensure that the approved inspection schedule is handed over to the Buyer, ND(Mbi) and ND(Vzg) within one week. All equipment, assemblies, sub-assemblies, components including bought-outs and all material shall be subjected to third party inspection/ testing at the stages of manufacture and during erection, testing and commissioning at site as per approved OAP/ ATP duly vetted by third party inspection agency and approved by the buyer after award of Contract. The supplier has to intimate request for review/ witness at CHP at least 45 days in advance to the respective agencies. NHQ/DODY, ND(Mbi) and ND(Vzg) reserves the right to visit OEM premises for any inspections carried out by third party agency.	The Supplier is required to propose the inspection schedule to third party inspecting agency for approval. Once approved, the Supplier has to ensure that the approved inspection schedule is handed over to the Buyer, ND(Mbi) and ND(Vzg) within one week. All equipment, assemblies, sub-assemblies, components including bought-outs and all material shall be subjected to third party inspection/ testing at the stages of manufacture and during erection, testing and commissioning at site as per approved OAP/ ATP duly vetted by third party inspection agency and approved by the buyer after award of Contract. The supplier has to intimate request for review/ witness at CHP at least ~~45~~ 14 days in advance to the respective agencies. NHQ/DODY, ND(Mbi) and ND(Vzg) reserves the right to visit OEM premises for any inspections carried out by third party agency.	To be complied as per RFP.
168	43/ 26.1.2	**Warranty**. The Seller warrants for a period of 24 months from the date of installation and commissioning, that the goods/stores supplied under the contract and each component used in the manufacture thereof shall be free from all types of defects/failures.	The Seller warrants for a period of 24 months from the date of installation and commissioning of individual crane or 30 months from the date of Last Major dispatch of corresponding crane, that the goods/stores supplied under the contract and each component used in the manufacture thereof shall be free from all types of defects/failures.	To be complied as per RFP.
169	43/ 26.1.3	If within the period of warranty, the goods 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, within a maximum period of 15 days of notification of such defect received by the Seller, provided that the goods are used and maintained by the Buyer as per instructions contained in the Operating Manual. Warranty of the equipment would be extended by such duration of downtime, the down time would be maintained by the user in the logbook, Spares required for warranty repairs shall be provided free of cost by the Seller. 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.	If within the period of warranty, the goods are reported by the Buyer to have failed to perform as per the specifications due to defective design, materail and workmenship excluding the items subject to normal wear and tear, the Seller shall either replace or rectify the same free of charge, within a maximum period of ~~15~~ 30 days of notification of such defect received by the Seller, provided that the goods are used and maintained by the Buyer as per instructions contained in the Operating Manual. Warranty of the equipment would be extended by such duration of downtime, the down time would be maintained by the user in the logbook, Spares required for warranty repairs shall be provided free of cost by the Seller. Notwithstanding the above, the aggregate warranty in no circumstance shall exceed 30 months from the date of commissioning of individual crane. 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.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
170	44/ 26.1.4	The Seller hereby warrants that necessary service and repair back up during the warranty period, including routine maintenance beyond Unit Level of the equipment, shall be provided by the Seller and he will ensure that the downtime is within 05% of the warranty period,	Not acceptable. As per standard industry practice, warranty services do not include regular or periodic maintenance, breakdown maintenance other than the Seller's fault, consumables, operational spares, or operation of the equipment. These items are excluded from the Seller's scope of warranty. The warranty shall be limited solely to defects arising from defective design, material, or workmanship. Such warranty coverage shall be applicable only provided that the equipment is operated, handled, and maintained strictly in accordance with the Seller's instructions and recommendations as stipulated in the Operation & Maintenance (O&M) Manual. Hence kindly delete this clause.	To be complied as per RFP.
171	44/ 26.1.6	If a particular equipment/ goods fails frequently and/or, the cumulative down time exceeds 15% of the warranty period, the complete equipment shall be replaced free of cost by the Seller within a stipulated period of 60 days of receipt of the notification from the Buyer. Warranty of the replaced equipment would start from the date of acceptance after Joint Receipt Inspection by the Buyer/date of installation and commissioning,	Request to delete this clause, as the warranty provisions have already been adequately covered under the preceding clauses. Furthermore, the crane is a custom-designed and engineered equipment, not a standard catalogue or off-the-shelf product. Therefore, replacement of the entire equipment within 60 days is practically impossible and not feasible. Additionally, the remedial measures and liabilities relating to defects in design, material, and workmanship are already covered under the warranty provisions. Hence, this clause is redundant and may be deleted.	To be complied as per RFP.
172	45/ 28.2	Comprehensive Maintenance Contract (CMC) Response Time. The response time of the Seller should not exceed 24 hours from the time the breakdown intimation is provided by the Buyer.	Response Time. The response time of the Seller should not exceed ~~24~~ 48 hours from the time the breakdown intimation is provided by the Buyer.	To be complied as per RFP.
173	46/ 28.3	Serviceability/ operational availability of 92% per year is to be ensured. This amounts to total maximum down time of 30 days per year. Also, unserviceability should not exceed 07 days at one time. Required spares to attain this serviceability may be stored at site by the Seller at his own cost. Total down time would be calculated at the end of the year. If down time exceeds permitted down time, LD would be applicable for the delayed period.	Serviceability/ operational availability of 92% per year is to be ensured. This amounts to total maximum down time of 30 days per year excluding the Preventive or Regular/ Routine Maintenance as per O&M manual . Also, unserviceability should not exceed 07 days at one time. Required spares to attain this serviceability may be stored at site /seller's place by the Seller at his own cost. Total down time would be calculated at the end of the year. If down time exceeds permitted down time, LD would be applicable for the delayed period.	To be complied as per RFP.
174	46/ 28.6	During the CMC period, the Seller shall carry out all necessary servicing/ repairs to the equipment/ system under CMC at the current location of the equipment/ system. Prior permission of the Buyer would be required in case certain components/ subsystems are to be shifted out of location. On such occasions, before taking over the goods or components, the Seller will give suitable bank guarantee to the Buyer to cover the estimated current value of items being taken over.	There is already a Contract Performance Bank Guarantee (CPBG) in place for the CMC. Therefore, submission of an additional Bank Guarantee is not justified and shall not be applicable. The existing CPBG adequately secures the contractual obligations under the CMC. Accordingly, this requirement may be deleted. 28.6. During the CMC period, the Seller shall carry out all necessary servicing/ repairs to the equipment/ system under CMC at the current location of the equipment/ system. Prior permission of the Buyer would be required in case certain components/ subsystems are to be shifted out of location. ~~On such occasions, before taking over the goods or components, the Seller will give suitable bank guarantee to the Buyer to cover the estimated current value of items being taken over.~~	To be complied as per RFP. 

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
175	New Clause Proposed	Limit of Liability	The aggregate liability of the Contractor, arising out of or in connection with the Scope of Work, shall not exceed twenty percent (20%) of the Contract Price, provided that no such limit shall apply in respect of the Contractor's liability for fraud, gross negligence, confidentiality, intellectual property, data privacy, statutory penalties only.	To be complied as per RFP.
176	10/ 13	**Exemption from Earnest Money Deposit (EMD)**	**Exemption from Earnest Money Deposit (EMD)** The RFP does not specify any provision regarding exemption from submission of Earnest Money Deposit (EMD). However, Braithwaite & CO. Ltd. is a Central Public Sector Undertaking (CPSU) under the Ministry of Railways, Government of India. As per applicable Government guidelines and prevailing provisions for eligible CPSUs, we are generally entitled to exemption from submission of EMD in Government tenders.	To be complied as per RFP.
177		**Provision for Splitting of Order**	**Provision for Splitting of Order** The present RFP does not contain any provision for splitting the order among more than one successful bidder. It appears that the entire order for all seven ELL cranes may be awarded to a single bidder. Considering the magnitude and technical requirement of the project, we request that a suitable provision for splitting the order among technically qualified and capable bidders may kindly be incorporated. This will be ensure wider and fair participation by competent manufacturers having proven capability for the design and manufacture of ELL cranes of the respective capacities. Further, appropriate criteria for participation and allocation of quantities/capacities among successful bidders may kindly be clearly specified in the tender to ensure transparency.	To be complied as per RFP.
178	21/ 4		**Delivery and completion schedule** In the absence of an order-splitting provision, it is understand that single bidder may be required to manufacture, supply, erect and commission all seven ELL cranes within a period of 36 months. Considering the complexity and magnitude of ELL cranes, the proposal completion period may be challenging if the entire order is awarded to a single manufacturer. The design engineering, procurement, manufacturing, erection and commissioning of even a single ELL cranes generally requires a substantial execution period.	To be complied as per RFP. MoD Acquisition Wing O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
179	45/ 28	CMC clause	**Provision of spares for CMC** The requirement for comprehensive annual maintenance contract (CAMC) for all seven ELL cranes may require the contractor to maintain a substantial inventory of critical and consumable spares. Maintaining such a large inventory would involve considerable upfront investment. Further, under the CAMC arrangement, the contractor may have to procure and maintain various spares, whereas payment would generally be received only against the actual spares replaced or consumed. This may result in significant blocking of working capital and increase the overall cost of the CAMC.	To be complied as per RFP.
180	31/ 4	Payment term	**Payment Terms** It is not financially feasible for us to keep 90% of the total contract value covered through bank Guarantees for a period of three years, particularly considering the substantial volume and value of the work involved. The financial burden and BG charges associated with such an arrangement would be extremely high. Further, a Performance Bank Guarantee (PBG) equivalent to 10% of the contract value is also required to be maintained for more than five years, which would result in an additional significant financial burden on the contractor.	To be complied as per RFP.
181	15, 16/ 18.1, 18.2, 18.3		Please clarify whether past experience of supplying, erecting and commissioning Level Luffing Cranes outside India will be considered for meeting the eligibility criteria.	To be complied as per RFP. Overseas project experience may be considered.
182	50/ 2		Please clarify whether bidders are permitted to quote for individual types/categories of cranes or whether the bid must cover the complete requirement of all seven cranes.	To be complied as per RFP. Partial bidding not permitted.
183	15,16,17, 18 and 19/ 18.1, 20.2, 20.3, 21.3, 21.6, 21.7, and 21.8		Clause 21.3 states that credentials of partners of Joint Ventures cannot be clubbed for compliance with pre-qualification criteria. However, Clauses 18.1, 20.2, 20.3, 21.6, 21.7 and 21.8 refer to Consortium/JV. Kindly clarify whether the credentials and experience of consortium members can be considered collectively for meeting the Pre-Qualification criteria particularly the experience and past-performance requirements under clause 18. Or whether each consortium member/lead partner is required to independently meet all applicable PQ requirements.	Each consortium member/ lead partner is required to independently meet all applicable PQ requirements as per Para 21.3 of Part I of RFP.
184	10/ 13.3.2	Insuance Surety Bond	Please provide the applicable format and guidelines for submission of an Insurance surety bond under this RFP.	Format of Insurance security bond is available on MoD website.
185	19/ 21.12	Defence Industrial Licence (IL) . Clarification regarding Applicability	Whether the Level Luffing Jetty cranes under the subject RFP are covered under any category of the Defence Products List requiring a Defence Industrial Licence. Specifically, clarification may kindly be provided whether these cranes fall under "Special Naval Equipment" under the category "Warships of all kinds" in Annexure-I to Press Note No 1 (2019 series).	Defence Industrial license not applicable. However, vendor must confirm holding of industrial license as per DAP-20.
186			Whether the tender is open for global/international participation.	No. Tender is not open for global/ international participations.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
187			If so, whether EMD submission in an equivalent foreign currency is permissible.	Not applicable
188			The currency applicable for submission of the price bid and execution of the contract.	Indian Rupees
189			The import duty and related taxes and duties are eligible for exemption.	Not applicable
190			The applicable payment terms for the foreign seller/OEM.	Part IV of RFP refers
191			Whether an online pre-bid meeting facility will be arranged for foreign suppliers/OEMs.	No.
192	4/ 5.5	Class-I/ Class-II Local Suppliers and Non-Local Suppliers (as defined by DPIIT) shall be eligible, subject to certain conditions as mentioned in the RFP.	Non-local suppliers shall be eligible	Para 5.5 clearly states its applicability subject to certain conditions as mentioned in RFP. The qualification Criteria mentioned at Para 21.5 of part I of the RFP stipulates only Indian firms are eligible to participate in this tender as single bidder/ lead partner.
193	5/ 5.6	Bidders from specified countries sharing land borders with India (excluding those in development partnership with India, or where lines of credit have been extended by the GoI) shall be eligible to bid, subject to certain conditions as mentioned in the RFP.	As per the applicable provisions, the local content contribution for a non-local supplier may be in the range of **0% to 20%.** Further, **Clause No 5.6** and **Clause No 16 – Declaration of Eligibility** also appear to permit bidders from countries sharing a land border with India, subject to approval from the Competent Authority.	Not applicable as clarified above
194	9/ 7	Clarification Regarding Contents of the RFP	In view of the technical complexity/ requirements of the project (ex. 4 different type across 2 naval yards), may please consider extension in due date for submission of queries/ clarification.	Not relevant at this stage
195	10/ 13.2	EMD (Bid Security)	Value of EMD submitted by bidder may disclose Bidder's quoted price range as per the table. To bring bidders in common platform and to protect disclosure of Bidder's Price, request the Buyer to define the applicable EMD amount directly based on estimate.	As per DAP 20. To be complied as per RFP.
196	15/ 18.1	The Bidder *(manufacturer or lead partner of consortium/ JV or principal of authorised representative – hereinafter referred simply as 'The Bidder')* should have regularly for at least the last **three** years, ending 31st March of the previous financial year (hereinafter called 'The Relevant Date'), designed, manufactured, supplied, erected and commissioned **Level Luffing Jetty Cranes**, with the same or higher specifications (hereinafter called 'The Product'); and	This clause required the Bidder to have, for at least the last three years ending 31 Mar 2026, regularly designed, manufactured, supplied, erected and commissioned Level Luffing Jetty Cranes of the same or higher specification. In this regard, will the track record of a Consortium's or JV's partner be considered towards satisfying this criteria and to revise the definition of "The Product", accordingly.	To be complied as per RFP. Credentials of Consortium/JV partner can be used for Qualification criteria independently as per Para 21.3 of Part I of RFP.
197	16/ 18.2	The bidder should have designed, manufactured, supplied, erected and commissioned at least **03** numbers (herein after referred as 'The Qualifying Quantity') of 'The Product' in at least one of the last five years ending on 'The Relevant Date'; and out of which	In view of amendment sought in clause 18.1, Buyer to Consider track record for Qualifying Quantity of 3 units may through the JV or Consortium partner's supply record and the period mentioned as 'last five years ending on 'The Relevant Date' may restrict participation.	To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
198	16/ 18.3	At least **02** numbers of offered version/ model of 'The Product' should be in successful operation for at least **02** years on the date of bid opening. OR The Government Entities/ PSU/ CPSU/ DPSU, who are the OEMs/ Licensed Manufacturers of Level Luffing Jetty cranes, and should have supplied Level luffing jetty cranes of minimum 40 Ton capacity and above to the Central Govt Department/ State Govt Department/ Central Autonomous Body/ State Autonomous Body/ Central Public Sector Undertaking/ State Public Sector Undertaking/ State Public Sector Undertaking/ City Development Authority/ Municipal Corporation of City formed under any act by Central/ State Govt and published in Central/ State Gazette/ Private Port Operators/ Industrial clients in the past.	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP.
199	16/ 18.5	The bidder should give a certificate from their clients that Level Luffing jetty cranes supplied by them are running successfully with no defect in the major components viz. Structural members ('A' frame, Boom, Jib, Pulley, support structures etc.), Gears, Wheels, Wheel Bogies/ Carriages etc. for at least 02 years period immediately after commissioning in the previous 10 years from the date of opening of technical Bid. Further, the cranes/ crane supplied by the bidder should not have suffered any such defects of major components during on-site pre-commissioning activities, testing/ commissioning. Buyer has the right to check the above aspects from the customers of the bidder. Towards this, the bidder, as part of technical bid, shall submit the contract details of customers to whom similar cranes (or higher capacity) Level Luffing Jetty cranes have been supplied by bidder in the past 10 years.	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered MoD Acquisition Wing O/o ADG Acq-Tech (M&S)	To be complied as per RFP.
200	16/ 18.7	The bidder is required to **submit copies of the necessary documents** pertaining to experience and past performance including completed work orders with cost, customer contact details and satisfactory work completion certificates of similar work. NHQ reserve the right to seek any additional information and right to accept/ reject the bid.	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP.
201	17/ 19	The Bidder' must have an annual capacity to design, fabricate, manufacture, supply, erect and commission at least 'The Qualifying Quantity	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP.
202	17/ 20.4	Working Bid Capacity (Note. In case of JV, the working bid capacity will be applied for each partner to the extent of his proposed participation in the execution of the contract.)	Working Bid Capacity (Note. In case of JV / Consortium Partner, the working bid capacity will be applied for each partner to the extent of his proposed participation in the execution of the contract.)	To be complied as per RFP. It is applicable for both JV and consortium.
203	17/ 20.5	The bidder shall submit the following along with Working Bid Capacity	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP. JV/ consortium partner credentials can be used for working bid capacity.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
204	18/ 21	Additional Criteria	Similar to clause 21.1, 21.2 & 21.3, request Buyer for addition of a clause for consortium partner to jointly meet the pre qualification criteria.	To be complied as per RFP.
205	19/ 21.7	Single bidder/ Lead partner shall carry out the manufacturing, installation and commissioning of cranes. Entire responsibility (Technical & Commercial) of this project will be with the Lead partner irrespective of the consortium/ JV agreement.	Amendment sought. Single bidder/ consortium partner shall carry out the manufacturing, installation and commissioning of cranes. Entire responsibility (Technical & Commercial) of this project will be with the Lead partner irrespective of the consortium/ JV agreement.	To be complied as per RFP.
206	20/ Note 2	Along with all the necessary documents/ certificates required as per the tender conditions, the Bidder should furnish a brief write-up, backed by adequate data, explaining his available capacity (both technical and financial), for manufacture and supply of the required goods/equipment, within the specified time of completion, after meeting all his current commitments.	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP.
207	20/ Note 3.1	*All copies of supply/work order/s; respective completion certificate/s and contact details of clients; documents issued by the relevant Industries Department/ National Small Industries Corporation (NSIC)/ manufacturing licence; annual report, etc., in support of experience, past performance and capacity/capability, should be authenticated by the person authorised to sign the Tender on behalf of the Bidder. Original documents must be submitted for inspection, if so demanded.*	In view of amendment suggested at clause 18.1 & 18.2, suitable amendment to be considered	To be complied as per RFP.
208	21/ 4	Delivery Period – Definition of 'T0'	Delivery periods, (24/28/32/36 months) are stated with reference to 'T0' (date of Advance Payment). Since there are 4 separate delivery groups across 2 yards, request confirmation whether 'T0' is a single common date for the entire contract, or determined separately for each delivery group/ crane.	T0 is the single common date for the entire contract.
209	35/ 9	Exchange Rate Variation Clause	Considering the 18-month validity period and 36-month delivery period and also considering the current situation of war/ supply chain disruption/ currency fluctuation, we humbly request Buyer for inclusion of price variation clause for material and manpower with escalation linked to applicable indices to meet out market fluctuations and to avoid contingency loading in quoting price and enable more competitive bidding.	To be complied as per RFP.
210	43/ 26.1.3	Warranty – Defect Rectification Timeline	Para 26.1.3 requires the "Seller to repair damage caused by operator neglect, misuse, or transportation at a cost 'mutually agreed' between the Buyer and the Seller". As such damage is not attributable to any defect in the Seller's design, material or workmanship, it falls outside the scope of warranty. Request the Buyer to delete the reference to 'mutually agreed' cost and confirm instead that such repairs are chargeable in full to the Buyer at the Seller's standard rates, consistent with standard industry practice that warranty exclusions arising from Buyer-side causes are borne entirely by the Buyer	To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
211	44/ 26.1.4	Warranty – Defect Rectification Timeline	Para 26.1.4 requires the Seller to provide 'routine maintenance beyond Unit Level' during the warranty period, and to ensure downtime is maintained within 5% of the warranty period. We have two concerns with this clause. First, the Seller's warranty obligation should be limited to rectification of defects arising from design, material or workmanship, consistent with the standard scope of warranty. Provision of routine maintenance beyond defect rectification is outside maintenance beyond defect rectification is outside the scope of warranty and, where applicable, should instead be addressed as a chargeable service or under the CMC (Para 28 – Paid Service). Request the Buyer to delete the reference to 'routine maintenance beyond Unit Level' from this clause. Second, crane downtime is also influenced by factors outside the Seller's control, including the operating skill of the Buyer's personnel and site/ environmental conditions, etc. Fixing a uniform 5% downtime threshold during the warranty period does not account for this variability. Request the Buyer to delete the 5% downtime requirement under this clause	To be complied as per RFP.
212	44/ 26.1.6	Warranty – Defect Rectification Timeline	Para 26.1.6 requires complete free-of-cost replacement of the equipment where cumulative downtime exceeds 15% of the warranty period, or where a particular equipment fails frequently. As any defect giving rise to such downtime or repeated failure would already be covered and rectified under the standard warranty repair/ replacement provision (Para 26.1.1 – 26.1.3), this clause introduces an additional remedy (replacement of the entire equipment) that is not necessary once standard warranty rectification is available. Request the Buyer to delete Para 26.1.6 in its entirety, such that any defect, however frequent or prolonged, is handled through the standard warranty repair/ replacement mechanism under Para 26.1.1 – 26.1.3	To be complied as per RFP.
213	44/ 27.1	Product Support (20 years)	The 20-year Product Support obligation under Para 27.1 is noted. As the RFP does not specify the method by which the scope of spares/ components to be covered, or their pricing, is to be determined over this period, request the Buyer to confirm whether the Seller is required to submit a defined list of spares/ components deemed necessary for the 20-year Product Support period along with the bid, with the cost of such listed items included within the Contract Price (Base Contract Price) at the time of contract signing, rather than being determined and procured separately at the time each future requirement arises.	To be complied as per RFP.

MoD Acquisition Wing
Dte ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
214	45/ 27.2	Maintenance Period	Para 27.2 states that the Seller agrees to undertake a Maintenance Contract for a period of 5 years, and Para 27.5 similarly refers to a 5-year maintenance contract as part of the Engineering Support Package. Separately, Para 28 sets out a distinct Comprehensive Maintenance Contract (CMC) for a period of 5 years commencing after expiry of the 2-year warranty ("Paid Service") Request the Buyer to clarify whether Para 27.2/27.5 and Para 28 (CMC) refer to one and the same 5-year maintenance obligation, or whether these are intended to be two separate and additional maintenance contracts running concurrently. If they are intended to be the same obligation, or whether these are intended to be two separate and additional maintenance contracts running concurrently. If they are intended to be the same obligation, request the Buyer to consolidate these provisions under a single clause (Para 28) to avoid any ambiguity or duplication in scope, pricing, and contractual obligations.	As per RFP; Quoted Paras are same.
215	45/ 28.1.1	CMC – Preventive Maintenance Visits (Paid Service)	Preventive Maintenance Service under Para 28.1.1 requires the Seller to provide a minimum of four visits per year (quarterly) to each operating base, to carry out OEM-recommended routines, functional checkups and minor adjustments. Request the Buyer to confirm that these four scheduled visits, being carried out in the absence of any reported defect, are a paid/ compensated service included within the agreed CMC contract price, rather than additional visits to be performed free of charge beyond the CMC consideration; and to confirm that any visit requested by the Buyer beyond the agreed four per year would be subject to separate agreement and compensation.	As per RFP; the Seller is required to make minimum 04 visits for preventive maintenance service, in the absence of any reported defect.
216	45/ 28.1.2	CMC – Breakdown Maintenance Scope MoD Acquisition Wing O/o ADG Acq-Tech (M&S)	Breakdown Maintenance Service under Para 28.1.2. requires the Seller to render service upon intimation any breakdown during the CMC period. As the CMC (Para 28) is a distinct, separately-priced maintenance service commencing after expiry of the 24-month Warranty (Para 26) – rather than an extension of the Seller's warranty obligations; request the Buyer to confirm that breakdowns arising in the normal course of operation (including component wear and equipment malfunction), and is not limited to defects attributable to the seller's original design or manufacture. Request the Buyer to further confirm that breakdown caused by improper operation, unauthorised modification, accident, or misuse of the crane by the Buyer's personnel are excluded from the Seller's breakdown maintenance obligation under the CMC, consistent with the exclusion under Para 28.3	To be complied as per RFP. Seller is required to ensure serviceability/ operational availability of 92% as per Para 28.3 during the CMC period.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
217	45/ 28.3	CMC – Serviceability Guarantee (92%)	Crane serviceability is also affected by factors outside the Seller's control, including site conditions, environmental factors, and the skill and operating practices of the Buyer's personnel. A fixed, unconditional availability guarantee of this nature is neither appropriate nor sustainable for equipment of this type. Request the Buyer to delete Para 28.3 in its entirety. Maintenance performance under the CMC should instead be governed solely by the response-time (Para 28.2 refer to our query) and repair - turnaround (Para 28.4) obligations already provided elsewhere in this Section	
218	46/ 28.4	CMC – Repair Turnaround time / spare readiness	Para 28.4 fixes a maximum repair turnaround time of 7 days for equipment/ system, and further requires that spares be maintained in a serviceable condition to avoid complete breakdown of the equipment/ system. As CMC is a paid maintenance service (not a warranty obligation), and as the actual repair turnaround time necessarily depends on site conditions, the nature and extent of the specific defect, and the condition of the equipment at the time of breakdown, a uniform 7-day maximum applicable to all cases is not workable. Request the Buyer to delete the fixed 7-day turnaround requirement, and instead confirm that repair turnaround time is to be assessed on a case-by-case basis depending on the nature of the defect Separately, the requirement that spares be maintained in serviceable condition 'to avoid complete breakdown' effectively imposes an open-ended spares-availability guarantee on the Seller. Request the Buyer to delete this requirement, noting that the scope, quantity and stocking responsibility for spares under the CMC should instead be governed by mutual agreement between the Buyer and Seller, as separately addressed in our comments on Para 28.3	To be complied as per RFP.

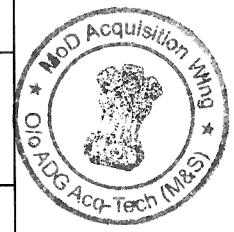
MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
219	53	Boom Type - Single Jib Auxiliary hoist	Single Jib having 4 chord boom with luffing cylinder mounted below boom and operator cabin at top. The round tower design guarantees and high stiffness and torsional strength, It improve force flow from boom to the tower and roller bearing through the undercarriage into the ground. By utilising a round tower design, the force flow into the slewing bearing is uniformly distributed, thus greatly increasing the bearings life. 5 Tons at 50m to be replaced by 5 Tons at 48 m for ND (Mbi) location. Our crane total outreach is 48 m. Please remove auxiliary hoist/ hook. We confirm that without the need of auxiliary hook our crane can fulfil the operational requirement and lifting capacity and exceeds the operational requirement. Further auxiliary hook is an outdated technology and have various disadvantages as below.- 1. User have to maintain two different hooks. 2. user have to maintain two different set of ropes 3. User have to maintain two different winches which leads to higher maintenance. 4. Chance of collision as both the hooks are mounted near by – Safety concern. 5. Due to above reason operational and maintenance cost will be on higher side compare to single jib/ boom. 6. The auxiliary hook design is outdated technology and not consider for new latest technology port development. Hence, we request to consider only single main boom without auxiliary hook and wish to inform that LIEBHERR have supplied more than 164+ cranes in India and more than 2000+ similar cranes worldwide.	To be complied as per RFP.
220	78	VVFD Drive	Please delete VVFD drive in all pages and replace by Electro hydraulic motor / pump driven mechanism. All main gears (hoisting, slewing, luffing and travelling) are operated by a closed loop hydraulic system.	To be complied as per RFP.
221	67	Group Classification A5	Please change A7 from A5 The crane is strictly designed and manufactured in compliance to Authorities, Regulations of EN, FEM, DIN, VDE, VDI, IEC, Design and structure comply with EN13000 and EN14985	To be complied as per RFP.
222	77/ 38.10	Luffing Mechanism	Luffing cylinder mounted above boom and rope driven mechanism	To be complied as per RFP.
223			The crane is strictly designed and manufactured in compliance to Authorities, Regulations of EN, FEM, DIN, VDE, VDI, IEC, Design and structure comply with EN13000 and EN14985	No addition recommended. To be complied as per RFP.

MoD Acquisition Wing
O/o ADG Acq-Tech (M&S)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
224	103/ 126	Crane Management System	Replace with LiDAT SmartApp System Litronic is a modular system, which consists of a high performance central processing unit with VME-bus and several Input/ Output-modules. All these I/O moudles are linked together with a CAN bus (Controller Area Network bus) performing digitised data transmission. Only one cable is needed for this connection so the wiring is reduced to a minimum. This guarantees high safety and reliability under extreme environmental conditions. All components are designed to work in a wide temperature range and are shock proof as well as resistant against humidity. Another feature of this system is the possibility to easily extend it for further applications.	To be complied as per RFP.
225	10/ 12	Validity of Bids. The bids should remain valid till 18 Months from the last date of submission of the bids.	In the current market scenario with volatility, it is difficult to maintain such a long validity of bid without price escalation. We have regularly bid in such kind of tenders, where in bid validity is not asked more than 90 days.	To be complied as per RFP.
226	10/ 13.3.1	Bank Guarantee from any Indian Public or Private Scheduled Commercial Bank notified by RBI of first class banks of international repute. The format of the Bank Guarantee for Bid Security is provided at Annexure I to Appendix 'C'.	Bank Guarantee from any Indian Public or Private Scheduled Commercial Bank notified by RBI of first class banks of international repute.	To be complied as per RFP. Citi Bank is a scheduled Commercial Bank but not under Public or Private.
227	30/ 1	Special Conditions of RFP	We have executed such type of work orders, and the PBG, as requested, is in the range of 3% of the value of the Total contract Price, including taxes and duties.	To be complied as per RFP.
		Performance-cum-Warranty Bank Guarantee (PWBG). A Performance-cum- Warranty Bank Guarantee (PWBG) of 5% 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 **Appendix 'D'** of RFP.	**Performance-cum-Warranty Bank Guarantee (PWBG).** A Performance-cum- Warranty Bank Guarantee (PWBG) of **3%** of value of the Total Contract Price including taxes and duties would be furnished by the Bidder in the form of a Bank Guarantee to sequentially act as Performance Bank guarantee till the delivery and as Warranty Bank Guarantee on delivery. The PWBG shall be submitted by the Bidder within one month of signing of contract and shall be valid for a period, until three months beyond the warranty period, as specified in the RFP. If at any stage, the Performance Guarantee is invoked by the Buyer either in full or in part, the Bidder shall make good the shortfall in PWBG within 30 days by an additional Bank Guarantee for equivalent amount. In the event of failure to submit the required Bank Guarantee against invoked Performance Guarantee, equivalent amount will be withheld from the next stage payment till the shortfall in the Bank Guarantee is made good by the Bidder. The prescribed format of the Performance-cum-Warranty Bank Guarantee is placed at **Appendix 'D'** of RFP.	To be complied as per RFP. 
228	30/ 2	**Performance Bank Guarantee (PBG) for CMC.** The Bidder will be required to furnish a Performance Bank Guarantee (PBG) by the way of a Bank Guarantee of a sum equal to 5% of the Total Price of CMC for contracted duration prior to expiry/return of the PWBG of the Main Contract. Performance Bank Guarantee should be valid for 03 months beyond the period of the CMC. The format of the Performance Bank Guarantee is to be as per **Appendix 'E'** of RFP.	**Performance Bank Guarantee (PBG) for CMC.** The Bidder will be required to furnish a Performance Bank Guarantee (PBG) by the way of a Bank Guarantee of a sum equal to **3%** of the Total Price of CMC for contracted duration prior to expiry/return of the PWBG of the Main Contract. Performance Bank Guarantee should be valid for 03 months beyond the period of the CMC. The format of the Performance Bank Guarantee is to be as per **Appendix 'E'** of RFP.	To be complied as per RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
229	32/ 5.1	100% of the annual value of CMC of respective yard {ND(Mbi) and ND(Vzg)} (after deducting LD, if applicable) for five years post warranty of the equipment will be made on Annual basis on submission of a User Completion Certificate (UCC) from Naval Dockyards (Mbi) and (Vzg) and relevant invoice of the vendor. The UCC will be required to be signed by the authorised representative of buyer. Payment of taxes, duties and statutory levies will be made on actual on submission of requisite documentary proof to paying authority. The CoA will be the nodal agency for final certification of the work done, scrutiny and processing of bills for payment, establishing disallowance/ deductions and Liquidated damages (LD) for issues pertaining to CMC.	We request payment for CMC on a half-yearly basis rather than an annual basis to maintain smooth cash flow.	To be complied as per RFP.
230	21/ 4	Delivery Period	We have executed similar work orders, and with experience, the timeline required for crane design, approval, manufacturing, testing and commissioning, the timeline mentioned for the crane capacity is very stringent as compared to the complex nature of the work. We propose the revised timeline.	To be complied as per RFP.
231		Completion of setting to work/ testing/ tuning/ training/ commissioning of 30T Crane {SBW(O), ND(Mbi)} and 25T Crane {N-21/22 Jetty, ND(Vzg)} duly witnessed by user and TPIA. T0 +24 months	T_0 +36 months	
232		Completion of setting to work/ testing/ tuning/ training/ commissioning of 30T Crane {IBW, ND(Mbi)} and 60T Crane {IDS Berth, ND(Vzg)} duly witnessed by user and TPIA. T0 +28 months	T_0 +40 months	
233		Completion of setting to work/ testing/ tuning/ training/ commissioning of 30T Crane {Destroyer Wharf, ND(Mbi)} and 80T Crane {N-19/20 Jetty, ND(Vzg)} duly witnessed by user and TPIA. T0 + 32 months	T_0 +44 months	
234		Completion of setting to work/ testing/ tuning/ training/ commissioning of 30T Crane {SBW(N), ND(Mbi)} duly witnessed by user and TPIA. T0 + 36 months	T_0 +48 months	



Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
235	25/ 8	**Liquidated Damages (LD).** In the event of the Bidder's failure to submit the Documents, supply the stores/ goods, perform services, conduct trials, installation of equipment, training and MET as per schedule specified in this contract, the BUYER may, at his discretion withhold cost of the specific lot/batch or 1% of the total contract price, 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 total 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).	**Liquidated Damages (LD).** In the event of the Bidder's failure to submit the Documents, supply the stores/ goods, perform services, conduct trials, installation of equipment, training and MET as per schedule specified in this contract, the BUYER may, at his discretion withhold cost of the specific lot/batch or **1% of the Basic Contract Price**, 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 **5%** of the total 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).	To be complied as per RFP. 
236	40/ 18	**Quality Assurance.** The Seller would provide the Quality Assurance Plan (QAP) and Standard Acceptance Test Procedure (ATP) duly approved by third party inspection agency within **02 and 03** month of this date of contract for Stage 1. Buyer reserves the right to modify the ATP. Seller would be required to provide all test facilities at his premises for acceptance and inspection by Buyer. The details in this regard will be coordinated during the negotiation of the contract. The item should be of the latest manufacture, conforming to the current production standard and having 100% defined life at the time of delivery.	We request that DoDY provide Standard QAP.	To be complied as per RFP. Standard QAP to be prepared by TPIA and approved by Buyer.
237	40/ 19	**Inspection Authority.** The third-party inspection i.a.w. approved QAP and ATP would be carried out by IRS (Indian Register of Shipping) / LRS (Lloyds Register Services) / BVQI) at the cost of the Supplier. However, review of documents and witness at Customer Hold Points (CHP) as per approved QAP will also be carried out by Navy representative (DoDY/ User/ any other representative authorised by ordering agency).	The third-party inspection i.a.w. approved QAP and ATP would be carried out by IRS (Indian Register of Shipping)/ LRS (Lloyds Register Services) / BVQ at the cost of the supplier. However, review of documents and witness at Customer Hold Points (CHP) as per approved QAP will also be carried out by Navy representative (DoDY/ User) any other representative authorised by ordering agency).	To be complied as per RFP. Inspection Authority to be authorised TPIA. Few examples were quoted in the RFP. Any other TPIA authorised may be engaged as the inspection agency.
238	45/ 27.1	The Seller agrees to provide Product Support for the stores, assemblies/ subassemblies, fitment items and consumables, Special Maintenance Tools (SMT)/ Special Test Equipment (STE) subcontracted from other agencies/ manufacturer by the Seller for a maximum period of **20 years** including **02 years** warranty period after the commissioning of Cranes.	For electrical parts, we will provide support for a maximum period of **15 years**, including 02 years warranty period after the commissioning of the cranes. The electrical parts get obsolete with the time and get updated with the technology.	To be complied as per RFP
239	46/ 28.2	**Response Time.** The response time of the Seller should not exceed **24 hours** from the time the breakdown intimation is provided by the Buyer.	With the location and gate pass procedure the response time of the Seller should be around **48 hours** from the time the breakdown intimation is provided by the Buyer.	To be complied as per RFP
240	46/ 28.4	Maximum repair turnaround time for equipment/ system would be **07** days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/ system.	We ensure that the maximum repair turnaround time for equipment/ system would be **07 days unless any major breakdown, which will be mutually communicated to the user departments.**	To be complied as per RFP
241	65/ 11.1.10	Jib/ Boom and Goose Neck	Kindly confirm type of Jib – Single/ Double	Single Jib as mentioned in Para 3 to 9 of Appendix A of RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
242	66/ 11.4.3	5 Ton capacity electrically operated EOT crane in machinery house for maintenance works	For ELL cranes, in the machinery house for maintenance activates there is no EOT crane provision, instead of EOT crane there is provision of 5Ton capacity **electrically operated hoist** in machinery house for maintenance works.	To be complied as per RFP. 5 Ton capacity electrically operated EOT/ monorail service crane in machinery house for maintenance work is required.
243		Operational Speed	We are of the opinion, such high operating speed are not required. Indicating here the speeds of our earlier executed order with you.	To be complied as per RFP. Max speed mentioned. Vendor to suitably design the operation speed within the range as per RFP.
244	53/ 3.8	Luff = 15 m/min	Luff = 7.5 m/min	
245	55/ 4.8	Luff = 15 m/min	Luff = 7.5 m/min	
246	56/ 5:8	Luff = 15 m/min	Luff = 7.5 m/min	
247	58/ 6.8	Luff = 15 m/min	Luff = 7.5 m/min	
248	59/ 7.8	Luff = 20 m/min	Luff = 7.5 m/min	
249		LT = 20 m/min	LT = 15 m/min	
250	61/ 8.8	Luff = 20 m/min	Luff = 7.5 m/min	
251		LT = 20 m/min	LT = 15 m/min	
252	62/ 9.8	Luff = 20 m/min	Luff = 7.5 m/min	
253		LT = 20 m/min	LT = 15 m/min	
254	63/ 10	Common Requirement		
255	64/ 10.5	Crane Management System		To be complied as per RFP. Crane management system is required on the crane with provision to extract parameter/ diagnostic data.
256		(i) Crane operation monitoring and management	Crane monitoring system will be available on crane	
257		(ii) Crane fault monitoring, diagnosis and rectification		
258	66/ 12	Recommended Make of Major Sub-Assemblies		Only preferred makers indicated. Use of additional makers of requisite quality, reliability and assured product support may be considered. However, in case of any performance issues, the liability of replacing with preferred makers would be of OEM.
259		Master Controller	Additional makes to be added – Spohn and Burkhardt	
260		RCC	Additional makes to be added – Spohn and Burkhardt	
261		VVF Drives	Additional makes to be added – System Houses	
262		Gearboxes	Additional makes to be added – Mukand	
263		SLI	Additional makes to be added – NRE, DEYS	To be complied as per RFP. View poor reliability additional makes not recommended
264	71/ 26	**Operating conditions.** The cranes are to be stable in still air conditions with 160% of the safe working load upon the hook. The maximum permissible linear rail loading shall not be exceeded for any possible load, outreach and operating or out of service combinations including, inter alia, dead loads, live load, inertia forces and wind storm loadings. The highest loading for any condition shall always remain within the permitted rail load.	The cranes are to be stable in still air conditions with **140%** of the safe working load upon the hook with **no movement.**	To be complied as per RFP.
265	72/ 28.4	All drawings other than shop fabrication / manufacturing drawings. These will include but not be limited to assembly, sub assembly, key components etc.	There is no clear mention about the type of drawings required.	To be complied as per RFP. All drawings required to undertake maintenance and life cycle management of the equipment to be submitted by the OEM. This includes structural, mechanical, cables and electrical equipment.
266	72/ 28.11	Spare parts details with address of suppliers.	We will share the list of spare parts.	To be complied as per RFP.



Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
267	73/ 29.18	Structural arrangement drawings with materials and quantities.	As per IP Policy cannot be shared.	To be complied as per RFP. Structural arrangement drawings with materials and quantities as required to be submitted as per RFP, for life cycle management of the equipment and for QC of buyer.
268	74/ 29.26	The contractor should submit the list of spares along with price and validity and list of OEM/ Designer recommended mandatory spares (to be supplied within the cost of crane) to be submitted in Technical bid.	**Kindly confirm** that price to be submitted in Technical bid.	Cost may be left blank for T bid evaluation.
269	78	Detailed scope of work for Mechanical Components		To be complied as per RFP.
270	78/ 48	**Long Travel**. The travel arrangement for the crane should be fully compensated at each corner. At least half the number of wheels at each corner should be driven by identical drive units. The drive assembly should comprise of suitable electric motors, reducers, oil tight gear boxes, with flexible couplings between gear box and the wheel or mounted directly on the travel wheel shafts. Travel wheels should be of forged steel, double flanged and should be driven by A.C. geared motors. LT motors should have electro-magnetic disc brakes integral with the motor. The drive units should be dust tight and suitable for outdoor installation with a weather protection of rating above IP66.	It is mentioned that the double-flange wheel in LT travel.	To be complied as per RFP.
271	78/ 48	**Long Travel**. The travel arrangement for the crane should be fully compensated at each corner. At least half the number of wheels at each corner should be driven by identical drive units. The drive assembly should comprise of suitable electric motors, reducers, oil tight gear boxes, with flexible couplings between gear box and the wheel or mounted directly on the travel wheel shafts. Travel wheels should be of forged steel, double flanged and should be driven by A.C. geared motors. LT motors should have electro-magnetic disc brakes integral with the motor. The drive units should be dust tight and suitable for outdoor installation with a weather protection of rating above IP66.	We requested that the drive units should be dust tight and suitable for outdoor installation with a weather protection of rating above IP 55.	To be complied as per RFP



Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
272	89/ 71	The proposed power feeding arrangement to the crane is using cable reel drum. The reel drum at the crane shall be selected considering the cable diameter, weight and cable length required to cover the travelling distance of the crane. Stall torque motor-based cable reeling drums with slipring type motors. The reeling cable drum, cables and all accessories including slip rings, interlocking switches, etc. shall be supplied and installed by crane supplier. Control panel as required shall be provided. The limit switches of long travel shall operate in parallel cable reel to provide protection. The cable shall be sized to compensate for voltage drop along its length and shall be capable of handling full load current when all motions are working at full load. The capacity calculation of cable shall be submitted for approval and any comments offered in this regard shall be addressed without any price implication. The crane supplier shall provide a switch with IP65 protection inside cable pit for terminating the required runs of incoming cables from substation.	We request that the termination boxes of CRD be dust-tight and suitable for outdoor installation with a weather protection rating above IP 55.	To be complied as per RFP
273	92/ 74	Termination boxes and associated cable glands on the cable reeling system shall be watertight, complying with protection code IP 65 as a minimum. Power take off from the cable to the crane shall be through a totally enclosed slip-ring collector. The enclosure shall be provided with an anti-condensation heater and weatherproofed (protection code IP 65). A dedicated separate earthing slip-ring shall be provided for the cable reel itself. Spare slip rings shall also be provided. Each ring shall have minimum two copper graphite spring loaded brush and all the rocker arms shall be mounted on the common assembly to avoid misalignment. The current carrying capacity of the rings shall be minimum 3 times the full load current up to 100 amps and 2 times for higher rating. The insulation of the ring shall be from high impact polycarbonate or epoxy and shall be able to withstand 3 times the full load voltage. The slip ring shall be made of brass conforming to IS 6912.1985 or copper. Adequate precautions shall be taken for insulation in view of high moisture content and salinity in the atmosphere.	We request that the termination boxes of CRD be dust-tight and suitable for outdoor installation with a weather protection rating above IP 55. 	To be complied as per RFP
274	30T crane - Destroyer Wharf and IBW Jetty ND(Mbi)	Jetty rail span – 10.67 m	Jetty rail span around 5 m (based on recent site visit)	As per RFP; Four 30T Crane are envisaged in the Project with two 30T cranes having distance between rails as 10.67 m and two 30T cranes having distance between rails as 5.36m. Further, the vendors may ascertain installation of these cranes as per Site visit indicated at Para 7 of Part I of RFP.

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
275	30T crane – SBW(O) and (N) Jetty ND(Mbi)	Jetty rail span – 5.36m	Jetty rail span – around 10 m (based on recent site visit)	As per RFP; Four 30T Crane are envisaged in the Project with two 30T cranes having distance between rails as 10.67 m and two 30T cranes having distance between rails as 5.36m. Further, the vendors may ascertain installation of these cranes as per Site visit indicated at Para 7 of Part I of RFP.
276	Hoisting speed	10 m/min	Main Hoist - 10 m/min, Aux Hoist – 15 m/min	To be complied as per RFP. Max speed mentioned. Vendor to suitably design the operation speed within the range as per RFP.
277	30T crane – ND(Mbi)	Slew Speed – 05 rpm	Slew speed - 0.33 rpm	
278	60T crane IDS Berth ND(Vzg)	Slew Speed – 05 rpm	Slew Speed 0.33 rpm	
279	25T Crane N21/22 Jetty ND(Vzg)	Luff Speed – 20 mpm	Luff Speed – 15 mpm	
280	60T Crane IDS Berth ND(Vzg)	Luff Speed – 20 mpm	Luff Speed - 15 mpm	
281	80T crane N 19/20 jetty ND(Vzg)	Luff Speed – 20 mpm	Luff Speed - 15 mpm	
282	Luff, Slew Mechanism	T5 L3 M5	T5 L2 M5	State of loading for slew & luff to be as per FEM 1.001 3rd edition 1998 standards as indicated at Para 13/ Pg 67.
283	71/ 25	**Stability**. The stability of the Crane should be in accordance with FEM 1.001 (Federation European of Materials) specifications (widely used for material handling and lifting equipment). Load testing will be 125% of SWL (Safe Working Load) for static and 110% of SWL will be dynamic.	The crane will be stable in accordance with the requirement of FEM 1. Basic stability of crane will be checked to keep stabilizing movement more than tippling moment with the 1.6 times safe working load without wind or inertia forces. 2. Dynamic stability of crane will be checked to keep stabilizing moment more than tipping moment with the 1.35 times safe working load with wind and inertia forces. 3. Backward stability of crane will be checked to keep stabilizing moment more than tipping moment with the 0.2 times safe working load acting upwards with wind but without inertia forces.	To be complied as per RFP
284	71/ 26	**Operating conditions**. The cranes are to be stable in still air conditions with 160% of the safe working load upon the hook. The maximum permissible linear rail loading shall not be exceeded for any possible load, outreach and operating or out of service combinations including, inter alia, dead loads, live load, inertia forces and wind storm loadings. The highest loading for any condition shall always remain within the permitted rail load.	To be deleted	To be complied as per RFP

MoD Acquisition Wing
O/o ADG Acq-Tech (MS)

Ser	RFP Page & Para No.	RFP Reference	Vendor Queries	MoD Remarks
285	84/ 51	Luffing Mechanism. The screw type/ Rack and pinion luffing mechanism should be driven by a flange mounted motor through a totally enclosed gearbox. The reduction gear should be of high-quality steel and machine cut teeth running in oil bath and supported on anti-friction bearings. An spring operated disc brake with electro hydraulic thruster/ electro-magnetic brake should be mounted on the main drive shaft. The luffing mechanism components are to be erected as for the following. -	The jib is luffed in and out by a screw spindle, pin connected to it. The spindle is moved by revolving nut which is driven by motor through gear reducer. Drive unit is supported on hinge bearing at A frame. Screw spindle is protected by telescopic over at one end and other end by fixed over. OR The jib is luffed in and out rope operated through winch with Helical Gear box & Single layer rope drum OR Rack and Pinion type.	To be complied as per RFP.
286	86/ 52.6	**Slew Bearing**. The top revolving portion of the crane should be supported on a large diameter slew ring bearing of Rothe-Erde, Germany / Robello of U.K. INA of Germany ,Rollix of France, Liebherr Germany, SKF France only. Any other country make slew ring bearing will not be acceptable. The bottom half of this bearing should be securely fixed to the top of the crane carriage and the top half should be fixed to the underside of the revolving structure. The operation should be with integral gear engaged pinions for obtaining necessary slew motion. The bearing should be capable of dealing with all axial loads and overturning moments.	Slew ring bearing of Rothe – Ede **India** / Germany MoD Acquisition Wing O/o ADG Acq-Tech (M&S)	To be complied as per RFP. Preferred makers mentioned. .
287	99/ 113	**Air Conditioned Room for Electrical Panel**	All Driver Panel will be Individual Air conditioned Panel Instead of Air conditioned E- house.	To be complied as per RFP. Centralized Air conditioning with adequate redundancy to be provided to ensure optimum availability of the equipment.
288	Minimum radius of man Hook	**10 Meter**	12 m.	To be complied as per RFP.
289	Location of Operator's cabin	**Maximum at height of 15- 20 m from ground**	Maximum at height of 20-25 m from ground	To be complied as per RFP.
290	71/ 22.2	Ambient temperature range - Typically 15° C to 50° C. Temperatures in direct sunlight may be considerably higher and consideration shall be given to this possibility in the location and specification of any potentially effected elements or components.	45 deg max will be considered for design of mech. Component while for electrical, 50 deg. Max be considered.	To be complied as per RFP.
291	71/ 23	**Wind speeds**. The crane shall be designed for a maximum in service wind speed of 20 m/sec / 72 KMPH. The crane and storm anchors shall be able to with stand the maximum out of service wind speed calculated in accordance with IS 875 (part 3) 1987. The maximum storm wind speed of 220 Km/h to be considered for designing the crane.	Steady wind pressure over exposed area of crane during any motion with any load under service condition – 20 m/s. Travel to the parking area – Up to 26 m/s. The crane shall be designed to stand in parked position with jib at minimum radius and storm rail clamps and storm anchors in place up to a wind speed of 50 m/s	To be complied as per RFP.
292	Additional safety features		Emergency Brake on Rope Drum for Luff Hoist only	To be complied as per RFP.
293	10/ 13	EMD	Companies registered under MSME are exempt from EMD charges. This is not mentioned in RFP. Kindly confirm if Varya tech register under MSME can claim exemption and need not pay the EMD charges	To be complied as per RFP.

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294	15/ 18.1	Should have regularly in the last 3 years desiged, manufactured and erected ELL cranes of same or higher specifications (hereinafter called 'The product')	The min tonnage as per this statement is 25T whereas we have recently supplied 20T to Govt PSU in India. However our partner - Ganz has delivered cranes of higher capacity to 40 countries across the globe. Request to consider these supplies too.	To be complied as per RFP.
295	16/ 18.2	Should have designed, manufactured and erected ELL cranes at least 03 numbers (hereinafter called 'The Qualifying quantity')	The Min qty mentioned is 3 nos where Varya has recently supplied 2 numbers to Govt PSU in India and our Partner - Ganz has delivered multiple cranes across the globe. Request to consider these supplies too.	To be complied as per RFP.
296	17/ 20.1	Avg annual turnover of the Bidder during last 3 years should be at least 75 Crs	Request to reduce the value of average turnover to 50 Crs.	To be complied as per RFP.
297	17/ 20.4	Working Bid capacity - It should be equal or more than the estimated cost of contract Working Bid capacity = [2xAxN]-B (A-avg anuual turnover of 5 years, N no of year 3 yrs, B-Value of existing commitments -orders in hand)	Request to reduce the value of average turnover to 50 Crs.	To be complied as per RFP.
298	18/ 21.2	For existing successful past supplies - If the bidder does not meet any one or more of the requirements above such a bidder would also be considered to be qualified. In view of his proved credentials for the maximum quantity supplied by him in such recent past	Varya has successfully supplied cranes to Govt PSU. The client is happy with the performance for the past 2 years. In view of the above clause. Request to qualify Varya as an existing successful past supplier	To be complied as per RFP.
299	21/ 1	Schedule of requirements - Scope of work is for these 7 cranes	Request to split this tender of 7 cranes into 2 tenders. One tender for ND - Mumbai for 4 cranes and another tender of 3 cranes for ND Vizag which will help in having more bidders who can bid for either or both of the tenders. The evaluation to be done separately for each tender.	To be complied as per RFP.
300	21/ 4	Delivery period. T0 is date when Advance payment for that crane is received	Request to share the plan for release of Advance payment as the worst case scenario would be If advance of all 7 cranes is received at once then duration is 36 months for 7 cranes which gives less time for executing the order	To be complied as per RFP.
301	21/ 8	Liquidated Damages (LD) - The client may withhold the cost of specific lot or 1% of the total contract price. The buyer may also deduct delay percentage as per formula given subject to Max 10% of total contract price of the delayed stores/services.	Request to avoid withholding the amount against deliveries as PBG of 5% is already in place with client. Also to calculate LD of 0.5% per week for the value of pending activities instead of total contract value.	To be complied as per RFP.
302	30-31/ Part IV	Payment terms . 1 Performance cum warranty Bank Guarantee (PWBG) - 5% of Total contract price 2 Performance Bank guarantee for CMC - 5% of Total CMC price 4 Payment and BG as per below table is valued against Base contract price i.e. total base price excluding taxes and CMC value	In respect of stage payments we shall submit Bank guarantees against stage 0 - Advance payment of 15% and stage 1 - payment against GA 10%. Applying BG on remaining stages will only increase the project cost and nullifies the benefits of stage payment being released.	To be complied as per RFP. 

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303	49/ Part V	Evaluation criteria and Price Bid Issues - BID format Ser No. Description Qty 2.1 Crane 7 nos 2.2 Tools & eqpt 1 set for each crane 2.3 Technical literature 3 copies each crane 2.4 Training 1 for each site 2.5 CMC 7 cranes for 5 yrs	Request to share the list of tools, eqpt so that all bidders quote against it and leaves no room for doubts	To be complied as per RFP. List to be provided by the bidders.
304	66/ 12	Recommended Makers of Major Sub-Assemblies	Request to include the following makes who are established suppliers Motors . WEG, Nord, SEW, Leroy Somer Master Contoller . Schneider Gear Couplings . Gosan, Bubenzer, Galvi Thruster Brakes . Antec, EMTC Slew Bearing . DGWL Germany Lifting Hook . Gosan, DWH Wheel forgoing . Gosan or equivalent reputed make Gear boxes . SEW, NORD or equiv. reuted make RRC . ARCON Teleradio, Spohn & Bukhardt CRD, Cable . Hartmann & Kong Load measuring system . Pat kruger	Only preferred makers indicated. Use of additional makers of requisite quality, reliability and assured product support may be considered. However, in case of any performance issues, the liability of replacing with preferred makers would be of OEM.
305	83/ 50.9	**Slewing Mechanism** - The brakes to be Electro Hydraulic type	We will be offering electromagnetically disc brakes equipped with motors instead of electro hydraulic type which is superior and proven	To be complied as per RFP.
306	102/ 121	Rail clamps (Hydraulic operated)	We will be offering Electrically actuated Rail clamps instead of hydraulicly operated which is superior and proven	
307	54, 58/ 18	Jetty rail span specified as 10.67 meter for 30/5T ELL Cranes at Destroyer Wharf and IBW Jetty of ND(Mbi)	It is 5.36 meter 	As per RFP; Four 30T Crane are envisaged in the Project with two 30T cranes having distance between rails as 10.67 m and two 30T cranes having distance between rails as 5.36m. Further, the vendors may ascertain installation of these cranes as per Site visit indicated at Para 7 of Part I of RFP.
308	56,57/ 18	Jetty rail span specified as 5.36 meter for 30/5T ELL Cranes at SBW(O) and SBW(N) Jetty of ND(Mbi)	It is 10.67 meter	As per RFP; Four 30T Crane are envisaged in the Project with two 30T cranes having distance between rails as 10.67 m and two 30T cranes having distance between rails as 5.36m. Further, the vendors may ascertain installation of these cranes as per Site visit indicated at Para 7 of Part I of RFP.
309	53/ 3	Boom type - Single Jib for 30/5T and 60/10T ELL Cranes	Please add option of Double jib with Four bar linkage mechanism which is also proven design since years.	To be complied as per RFP.
310	31/ 4	Clause No. 3 . Requirement of Bank Guarantees Clause No. 4 . Payment Terms	Our request to add Insurance Surety Bond wherever Bank Guarantees are required	Amplified in para 13.3 of part I of RFP. To be complied as per RFP.