

JHARKHAND STATE CRICKET ASSOCIATION

INTERNATIONAL CRICKET STADIUM, DHURWA, RANCHI

Annexure-1

RETRO-FITTING OF HIGH MAST LIGHTING SYSTEM

PREBID MEETING HELD ON 8-5-2023

Clarifications/consequent amendments in tender provisions

A.	M/S BAJAJ ELECTRICALS				
S. No.	Tender page and clause no.		Tender condition	Deviation/Clarification/ Exception/Assumption	JSCA'S CLARIFICATION
	Clause No	Page No			
1	SCHEDULE TO TENDER	3	Bid Security Deposit (EMD):- Rs.7,00,000/- (Rupees Seven Lakhs only) to be submitted along with the Bid only in the form of Demand Draft payable to Jharkhand State Cricket Association payable at Jamshedpur.	Kindly allow the EMD submission in the form of Bank Gurantee. Also pls share the format of bank gurantee.	EMD shall be in the form of Demand Draft.
2	SECTION – 2 ELIGIBILITY CRITERIA FOR BIDDERS	9	The Bidder must have experience, in his own name, of having executed High Mast [60 meter high or more] based Illumination systems for Stadiums hosting Cricket events or National Hockey, or Football for at least three stadiums during last ten (10) years out of which at least one High Mast Illumination System shall be based on High Power, High Efficiency, LED based luminaires (which are proposed for this tender) for National Stadiums, having hosted Day-Night matches approved by ICC/BCCI, and which must be operational for a period of at least 1 (one) year as on 31-03-2023.	We request this to be changed as per following for more particpataion. 1) Height of mast to be reduced to 50 Mtr. 2) Operational period of LED flood lighting of at least 1 (one) year as on 31-03-2023 to be removed and shall be replaced with operational .	1. We agree that bidder should have supplied and installed Mast height of minimum 50 metres. 2. The LED based High Mast lighting system for an international cricket stadium should be complete and operational and have demonstrated the lux levels of illumination of the ground areas as specified through a measurement test. The bidder to submit the Measurement sheet duly signed by the Owner's authorized representative. Further, atleast one International Match must have been successfully hosted at the venue with new flood light system.
3	BILL OF QUANTITIES (UN-PRICED)	32	Supply of Low intensity neon helix type aviation obstruction luminaires with lamps and accessories to be mounted on high masts (2 on each Mast) along with photo sensitive switch.	NEON avation lamps are obselete technology which is now upgraded with LED aviation lights.	State of Art LED based aviation lights should be offered
4	5.4 Specifications	26	Maintenance factor for the Illumination system during the lighting design shall be considered as 0.8. Flicker free lighting arrangement particularly in slow motion broadcast needed and conformity to the same shall be submitted	As per tender, Maintenance Factor 0.8. Required to change the same to 0.85. Flicker free lighting arrangement < 3% particularly in slow motion broadcast needed and conformity to the same shall be submitted.	JSCA agrees to revise the Maintenance Factor from 0.8 to 0.85. The Flicker shall be less than 1%.
5	Details Required.	-	-----	1) Plan AUTOCAD layout along with FOP dimension. 2) In attached input pdf High Mast location to be marked. 3)Height of main Camera & location . 4)Canopy Height . Kindly provide.	The drawings are enclosed. The Bidder undertakes to use these drawings solely for preparing a Bid and for execution of the Project in case of award of the contract.

6				Please confirm that the High Mast control Panel can be re-utilized after dismantle the ballast, capacitors for driver installation.	JSCA confirms that Ignitor/starter panel for Metal Helaide Lamps can be used for mounting the drivers after refurbishing of the same. The cable length between these panels to the Luminaire varies from 110 to 150 metres. The bidders to ensure that the drivers are capable of driving the Luminaire upto the cable distance as indicated above.
7				We request for time extension of 10 days for bid submission after receipt the reply query from your end.	The Last date of submission of offer is extended to 29-5-2023 (upto 11:00 hours).
B. SURYA					
1	Clause 1, Section-2	9	1. The bidder must be a legally valid entity either in the form of a Public Limited/Private Limited company established under the Companies Act/Registered Partnership Firm/Proprietorship Firm registered under relevant Act and an Original Equipment Manufacturer [OEM] of High Energy, High Efficiency, LED based Luminaires complete with drivers and established turnkey contractor engaged in executing High Mast based Flood light systems for International Stadiums in India.	1. The bidder must be a legally valid entity either in the form of a Public Limited/Private Limited company established under the Companies Act/Registered Partnership Firm/Proprietorship Firm registered under relevant Act and an Original Equipment Manufacturer [OEM] or Electrical Contractor of High Energy, High Efficiency, LED based Luminaires complete with drivers and established turnkey contractor engaged in executing High Mast based Flood light systems for International Stadiums in India.	There shall be no change in the Criteria as the LED Luminaires and Drivers are the critical items.
2	Preferred Makes	31	Preferred makes of LED Luminaires, Cables	To include Surya	1. Not acceptable. 2. Fort Gloster make of cable is accepted.
3	Experience	9	1. The Bidder must have experience, in his own name, of having executed High Mast [60 meter high or more] based Illumination systems for Stadiums hosting Cricket events or National Hockey, or Football for at least three stadiums during last ten (10) years out of which at least one High Mast Illumination System shall be based on High Power, High Efficiency, LED based luminaires (which are proposed for this tender) for National Stadiums, having hosted Day-Night matches approved by ICC/BCCI, and which must be operational for a period of at least 1 (one) year as on 31-03-2023.	1. The Bidder must have experience, in his own name, of having executed High Mast based Illumination systems based on High Power, High Efficiency, LED based luminaires (which are proposed for this tender) for National Stadiums hosting Cricket events or National Hockey, or Football for atleast one stadium during last 5 years having hosted Day-Night matches approved by ICC/BCCI, and which must be operational for a period of at least 1 (one) year as on 31-03-2023.	Considering the adequacy of experience, the changes sought by Surya are not accepted.

4	Value of orders executed	9	1. The value of such work successfully carried out should be at least : one single work order of more than or equal to Rs.7.50 Crore (Rupees Seven Crores Fifty Lakhs only), or two orders of Rs.4.75 crores (Rupees Four Crores Seventy Five Lakhs only) or three orders of Rs.3.8 Crores (Rupees Three Crores Eighty Lakhs only) , during last five years. Photo copies of LOI/orders and completion certificate are required to be submitted along with the bids as documentary evidence.	The Gross Value of such work successfully carried out should be at least one single work order of more than or equal to Rs. 5.00 Cr (Rupees Five Crores Only), during last five years. Photo copies of contract Agreement and completion certificate are required to be submitted along with the bids as documentary evidence.	Changes suggested by Surya are not acceptable to JSCA.
5	Turnover Requirement	9	1. The Bidder should have an average turnover of Rs.4.00 crores (Rupees Four Crores only) during last three financial years i.e. till 31.03.2022. The bidder shall submit audited and certified copies of Balance sheet with the bid.	The Bidder should have an average turnover of more than Rs.10.00 crores (Rupees Ten Crores only) during last three financial years i.e. till 31.03.2022. The bidder shall submit audited and certified copies of Balance sheet with the bid.	Tender provision shall prevail
C. LIGHTING TECHNOLOGIES					
1	Last date for Bid Submission	3	Last date and time for submission of Tender 22-5-2023 (upto 15:00 hours)	As LED Retrofit design requires detailed study and design as per existing conditions, we humbly request 1 week extension for the bid submission as the design working can be started from the date of Prebid clarifications and the receipt of detailed CAD drawing from JSCA.	The Last date of submission is extended to 29-5-2023 (upto 11:00 hours and opening of technical part at 12:00 hours).
2		Clause 5.4 Page 25	Specification	We request JSCA to provide the exact dimensional details for FOP separately for Pitch, Infield, Outfield, Boundary to ensure all vendors consider uniform parameters for design. Also considering the latest broadcasting trends and No of cameras being 22 Nos or more for international matches, We request to add the vertical requirements for all 4 orthogonal cameras specifying the location and height of camera to ensure best quality Lighting for broadcasting We also request JSCA to provide following details in CAD format for the precise Lighting design a) Plan drawing with existing mast locations & camera Locations b) Section drawings of gallery canopeis to consider obstruction in lighting design.	FOP:- 100' - (30.5m) by 110' - (33.5m) Infield:- 30 yards - 100.6 m radius Outfield:- 75 yards - 68.6 m radius Boundary:- 80 yards - 73.2m radius Coordinates of cameras on North and South and the canopy height is enclosed at Annexure-2. Soft copies of drawings as per list are enclosed separately. There are no further information available with JSCA. Bidders to note.

3		Clause 5.5 Page 26	Flood Lights [Luminaires with LEDs	We humbly request JSCA to conside below critical parameters in LED Luminaire system to ensure reliability and best quality Lighting system for JSCA 1. Television Lighting consistancy Index (TLCI) >90 as per EN12193 to ensure best quality broadcasting in 4K telecast. 2. Since Life and Lumen depreciation of the Luminaire depend on the thermal design of the Luminaire , we request JSCA to consider the thermal design of the Luminaire should be using Passive cooling which esnure best reliability and avoids dependency on external cooling devices and avoid frequent failures	The Lighting system shall be designed for a TLCI of > 90 as per EN12193. The luminaires shall have natural cooling as far as possible. In case, forced cooling is offered, the Bidder shall clearly indicate the diagnostic tools made available to monitor the functioning of the fans in electrical room at ground floor and tripping of the particular Luminaire to prevent burnout of the same. Bidder shall clearly indicate the features.
4		22	Technical Specification	As the technical understanding, Lighting design and solution feasibility are very crucial for the LED retrofitting in stadium, we request JSCA to give oppurtunity to bidders to present their solution post opening of Technical bid , which will help JSCA to evaluate the bidders understanding on the requirement, feasibility of the solution provided as well as the benefits to JSCA on the proposal before opening of the price Bid.	JSCA agrees to the proposal: Each bidders shall be allowed 30 minutes for making a presentation on the day of opening of tender from 14:30 hours onwards.The Bidders are requested to make presentation.
C. SIGNIFY INNOVATIONS INDIA LTD.					
1	Turnover	CheckList Point 14 page 4	Original certificate from a Chartered Accountant for Turnover from High Mast Business enclosed.	Since it is a retrofitment job of Luminaire, so turnover from High mast bussiness is not relevant. Request you to remove this clause.	Tender provision shall prevail.
2	Technical Details	CheckList Point 16 page 4	Technical Bid includes complete details about the System covering, High Mast, Luminaires, PLC/control system, etc.	Since it is a retrofitment job of Luminaire, it is suggested that details about system covering and luminaires to be submitted.	The tender is for System not just replacement of Luminaires.Tender provision shall prevail.
3	Eligibilty Criteria	Page 9	1. The Bidder must have experience, in his own name, of having executed High Mast [60 meter high or more] based Illumination systems for Stadiums hosting Cricket events or National Hockey, or Football for at least three stadiums during last ten (10) years out of which at least one High Mast Illumination System shall be based on High Power, High Efficiency, LED based luminaires (which are proposed for this tender) for National Stadiums, having hosted Day-Night matches approved by ICC/BCCI, and which must be operational for a period of at least 1 (one) year as on 31-03-2023.	Since the current installation is at 65m, so the bidder should have experience and credentials of working at this height and this point is very much relevant for this work.	JSCA amended that bidder should have experience of High Mast of 50 m and more.
4	Technical Specifications	Page 25 clause 5.4	Maintenance factor for the Illumination system during the lighting design shall be considered as 0.8. Flicker free lighting arrangement particularly in slow motion broadcast needed and conformity to the same shall be submitted.	Since it is a LED based solution it is sugested that maintenace factor of 0.85 to be considered.	The tender clause is amended to specify 0.85 maintenance factor.

5	Technical Specifications	Page 25 clause 5.4	Maintenance factor for the Illumination system during the lighting design shall be considered as 0.8. Flicker free lighting arrangement particularly in slow motion broadcast needed and conformity to the same shall be submitted.	As per EN12193 standards to have the flicker free pictures the flicker factor should be <1%.	Flicker factor shall be <1%.
6	Technical Specifications	26	The Enclosure shall be IP 66 class.	It is suggested that the luminaire should have IK rating of minimum 08.	IP66 stays. It is for ingress of water, etc.
7	Technical Specifications	26	The LED driver unit shall operate on voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral.	It is suggested that the input voltage range should be 230-400V AC	The tender clause stays. The voltage indicated are for single phase & phase- phase supply.
8	Technical Specifications	26	The driver shall be designed to protect against damage resulting from electrical shorts and overloaded circuits. The driver shall have standard built-in surge protection of 2.5kV (min).	Each driver should have minimum 10kv inbuilt surge protection.	The tender clause stays.
9	Technical Specifications	27	A bird guard against birds and similar intruders shall be provided	Each driver should have minimum 10kv inbuilt surge protection. 9 27 5.5.2 FEATURES (o) A bird guard against birds and similar intruders shall be provided Luminaire should have Impact Resistance of minimum IK08.	The Luminaire enclosure shall conform to IK08
10	Not in Tender		ROHS compliant (LED & LED Chips)	It is important that the LED's should be free of all types of hazardous elements therefore it is suggested that the LED chip should be ROHS compliant. The report of the same to be submitted along with the bid document.	The Bidders to comply with Statutory requirements.
11	Not in Tender		IEC 60598 certified	IEC 60598-2-5:2015 specifies requirements for floodlights for use with electrical light sources on supply voltages not exceeding 1000 V.It is suggested that the luminaire should comply to ENEC/IEC60598 and test report of the same to be submitted along with the bid.	The Equipment and system shall comply with latest applicable standards as per the requirements of ICC/BCCI .
12	Not in Tender		Electromagnetic compatibility (EMC)	It is suggested that the driver should comply to the following standards for better reliability: Electromagnetic compatibility (EMC) EN 55015:2013/A1:2015, EN 61000-4-2, -3, -4, -5, -6, -8, -11:2014, EN 61000-3-2, -3:2013	The Equipment and system shall comply with latest applicable standards as per the requirements of ICC/BCCI .
13	Not in Tender		Efficiency - lumen output per watt	It is suggested that the luminaire should have efficacy of >= 100lm/w	The Luminaire shall have output of more than 100 lm/w.
14	Not in Tender		SDCM	The SDCM (MacAdam ellipse) rating is a measurement of the consistency of color in lighting. During the usage of the luminaire the color shift from the luminaire should be minimal and it is suggested that the luminaire should have SDCM	
15	Not in Tender		High Colour Rendering Index and Television Colour Consistency (TLCI) of the luminaire	TLCI has been developed specifically as a metric for colour reproduction on television.It is suggested that the luminaire should have TLCI of atleast 90 and documentry evidence from 3rd party lab to be submitted along with the bid.	The Lighting system shall be designed for a TLCI of > 90 as per EN12193.

16	Not in Tender		Operating temperature range (Ta)	It is suggested that the operating range of the luminaire should be -40 °C upto +55 degree C	Ambient Temperatures are specified.
17	Not in Tender		BIS Certification	The BIS certificate of the luminaire & driver Separately should be submitted with the Bid	The submission of certificates along with the Bid is required in support of the Technical Bid.
18			Luminaire construction	It is preferable that the proposed luminaire should be a single module luminaire for precise aiming with the aiming tool, as one light will have one light center.	The Bidder to follow his own practice. The desired output shall be achieved by Aiming devices supplied.
19			LM-79, LM-80	It is suggested that bidder to furnish LM-79 report of the proposed luminaire and LM80 along with the Bid.	The Bidders may submit the certificates/reports as they deem fit.
20	Scope of Work			Understood that net Warranty is for 2 + 5 = 7 Years from date of handover to J.S.C.A. PI confirm?	As per tender, warranty for luminaries and drivers should be for 7 years.
	Scope of Work			Customer mentioned Comprehensive Annual Maintenance for 5 Years What will scope of Services during initial 2 Years?	First 2 years of free warranty maintenance.
	Scope of Work			What will be scope of Comprehensive Maintenance? Does this includes un-installation of faulty luminaries & re-installation of repaired luminaries?	The maintenance shall include everything for High Mast Lighting system including un-installation re-installation of new Luminaires, etc., free of cost for 7 years, JSCA will not provide any support.
	Scope of Work			Maintenance of man-ride shall be in Customer scope. Man-rider should be in safe working condition. PI confirm	The AMC shall be in Contractor's scope and shall include the maintenance of Man Rider for all the 7 years.
21	Scope of Work			Maintenance of man-ride shall be in Customer scope. Man-rider should be in safe working condition. PI confirm	The AMC shall include the maintenance of Man Rider for all the 7 years.
				Do we need to give rate card during bid or this will be based on Customer requirement later.	The rates for 5 years are to be given now which will remain valid till end of 5 years of AMC period.
22	Guarantee & Warranty	Page 17 of 44		Customer mentioned to replace Luminaires in case of failure & No repair of luminaire shall be accepted. This clause is not acceptable as we 1st attempt to repair the faulty fixtures against manufacturing issues. In case failure is beyond repair than full fixture replacement shall be done. Repair or replacement shall be done against manufacturing issues.	No change in Tender condition is acceptable to JSCA.
23	Price Schedule AMC	44		Will Customer pay separately during AMC period (1st Year to 5th Year) or this will be bundled in overall price & shall be paid in advance along with supply & Installation ? Please confirm.	AMC charges shall be paid quarterly on completion of the quarter.
24	Operation of system			Cost/event depend on type of event e.g.: One Day match, T20 match, 5 days Test match etc. Which event should be considered.	One-day and T20 matches are planned at present.

25	General			Limitation of Liability	<p>The bidder shall, indemnify and hold harmless JSCA from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which JSCA may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing by reason of the installation of the Facilities by the bidder.</p> <p>If any proceedings are brought or any claim is made against JSCA arising out of the matters referred to above, JSCA shall promptly give the bidder, a notice thereof, and the bidder may at its own expense conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the bidder fails to notify JSCA within seven (7) days after receipt of such notice that it intends to conduct such proceedings, then JSCA shall be free to conduct the same on its own behalf at the Risk & Cost of the Contractor. JSCA shall, at the Contractor's request, afford all available assistance to the Contractor. For this, the expenses, if any shall be borne and paid by the Contractor.</p>
26	Payment Terms			<p>Advance 10% of the Contract Value to be given along with the PO(Not to be adjusted against Running Bill), 70% of the Material Supply Cost against Documentary Proof of dispatch of LED Lumianires with Drivers from the Manufacturer to the site of the Owner, and further 20% of the Material cost would be paid upon Installation of the same on the High Mast. 90% of the Total Installation and Commissioning Cost shall be paid upon due completion of each item.</p>	No change in Tender conditions.
27	Bid Security Deposit			Can Signify give Bid security deposite in the form Bank gurantee.	No change in Tender conditions.
28	Due date of Tender			We request you to extend the last date and time for submission by 10 days.	Extension granted till 29.05.2023 at 11:00 hours.