



श्यामा प्रसाद मुखर्जी पोर्ट, कोलकाता
SYAMA PRASAD MOOKERJEE PORT, KOLKATA
Formerly Kolkata Port Trust

BID DOCUMENT

TENDER

FOR

Design, Supply, Delivery, Installation and Commissioning of
Energy Efficient Smart LED Lighting Solution at NSD, KDS, SMP, Kolkata

BY

SYAMA PRASAD MOOKERJEE PORT, KOLKATA

Tender No. SMP/KDS/Mech/SE-I/ASDV/585 Dt. 19.07.2021

ISSUED BY

**Chief Mechanical Engineer
Mechanical and Electrical Engineering Department
SYAMA PRASAD MOOKERJEE PORT, KOLKATA
8, Garden Reach Road
KOLKATA-700 043**

19th July-2021

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SYAMA PRASAD MOOKERJEE PORT, KOLKATA
Mechanical & Electrical Engineering Department

1.0 NOTICE INVITING TENDER

Tender No: SMP/KDS/Mech/SE-I/ASDV/585

Dated: 19.07.2021

Open E-Tender under single stage two-part system (Part-I: Techno-Commercial Bid and Part-II: Price Bid) are invited for the following work from reputed, bonafide and resourceful bidders which include the company, firm, consortium, group of companies and joint venture or any of their partners or members jointly or severally, who will be pre-qualified in terms of the Pre-qualification criteria indicated herein below as well as set out in the bid document.

The Bid Document may be seen from the Central Public Procurement Portal (CPPP) and RailTel e-Nivida Portal. Corrigenda or clarifications, if any, shall be hosted on the above-mentioned website only. The tender is also published on SMP, Kolkata website (www.kolkataporttrust.gov.in).

SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMP, Kolkata) intends to outsource the work "Design, Supply, Delivery, Installation and Commissioning of Energy Efficient Smart LED lighting solution at Netaji Subhas Dock (NSD)" of Kolkata Dock System with 5 years comprehensive CAMOC post 1 year warranty.

ESTIMATED VALUE OF THE TENDER IS INDIAN RUPEES (INR) 6, 28, 10,600.
PERIOD OF CONTRACT: 5 YEARS CAMOC Post 1 YEAR WARRANTY (excluding execution time of 150 Days.)

2.0 SCHEDULE OF TENDER (SOT)

a. Tender No.	Tender No:
b. Mode of Tender	e-Procurement System (Online two-part Techno-Commercial Bid and Price Bid through RailTel E-wizard Portal: https://kopt.enivida.in/ The intending bidders are required to submit their offers electronically through e-tendering portal. No physical tender is acceptable by SYAMA PRASAD MOOKERJEE PORT, KOLKATA.
c. Estimated cost	Rs. 6,28,10,600.00 (exclusive of GST)
d. Earnest Money Deposit.	The Bid security declaration in the prescribed format
e. Tender Document fee.	The intending bidders shall be required to submit also the tender fee of Rs.3000/- (Rupees Three Thousand only) including GST to SYAMA PRASAD MOOKERJEE PORT, KOLKATA separately as per tender stipulation. Bidders are requested to submit Tender fee through online RailTel E-wizard Portal (https://kopt.enivida.in/). Otherwise,

	<p>scanned copy of the Tender fee is required to be submitted along with the bid offer. The original Tender fee instrument shall be submitted within 3 days from the closing of online submission of tender.</p> <p>Recognized MSMEs (Udyam registration) and Startups (DPIIT certificate of recognition) are exempted from submission of Tender Document Fee. If MSMEs intend to participate in the tender, for the items they are not registered during Udyam registration, then they will have to deposit tender document fee.</p> <p>In case of failure of submission of Tender fee as applicable, the bid will be summarily rejected, treating the same as non-responsive.</p>
f. Date of NIT available to parties to download.	20.07.2021 from 12.00 hrs.
g. Site inspection followed by Pre-Bid Meeting date and time	29.07.2021 on 12.00 hrs.
h. Last date of submission of EMD & Bid Document Fee to SMP, Kolkata.	09.09.2021 before 14.30 hrs.
i. Date of starting of e-Tender for submission of online Techno-Commercial Bid and price Bid at RailTel E-wizard Portal.	09.08.2021 from 12.00 hrs.
J. Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid.	06.09.2021 before 14.30 hrs.
k. Date & time of opening of Part-I (i.e., Techno-Commercial Bid) date of opening of Part-II i.e., price bid shall be informed separately.	07.09.2021 at 14-30 hrs.

Note: In the event of any unforeseen closure of work / holiday on any of the above day, the same will be opened / held on the next working day without any further notice.

Chief Mechanical Engineer
Mechanical & Electrical Engineering Department
Tender Inviting Authority

3.0 Important Instructions for e-Tender:

Bidders are requested to use internet browsers like Firefox version above 50 / Internet Explorer version 8 or above, and Java 8 Update 151 or 161, etc.

Further, bidders are requested to go through the following information and instructions available on the RailTel E-wizard Portal <https://kopt.enivida.in/> before responding to this e-tender:

- Bidders Manual Kit
- Help for Contractors
- FAQ

Contact Persons (SYAMA PRASAD MOOKERJEE PORT, KOLKATA):

In case of any clarification, please contact SMP, Kolkata (before the scheduled time of the e- tender).

Contact person (SMP, Kolkata):

1. Mr. Shoven Mukherjee
Dy. Chief Mechanical Engineer-I
Mobile No. 9836298678
Email: shoven@kolkataporttrust.gov.in
2. Mr. Rakesh Kumar
Superintending Engineer (Elect)
Mobile No. 9836298625
Email: rkumar@kolkataporttrust.gov.in
3. Mr. Utsab Mukherjee
Executive Engineer (Elect)
Mobile No. 9038915015
Email: utsabmukherjee@kolkataporttrust.gov.in
4. Mr. Amit Sanyal
Executive Engineer (Elect)
Mobile No. 9674720093
Email: asanyal@kolkataporttrust.gov.in

Contact persons (RailTel e-wizard/e-Nivida Portal):

Please feel free to contact eNivida Helpdesk (as given below) for any queries relating to the process of online bid submission or queries relating to e-tender Portal (<https://kopt.enivida.in/>) in general may be directed to the Helpdesk Support.

1. Phone No. 7278929467/8448288981
2. Mail id: - eprocurement@railtelindia.com

4.0 PRE-QUALIFICATION CRITERIA:

The pre-qualification criteria shall be as follows:

S#	Eligibility Criteria	Document Required
1.	<p>The company should be registered company in India under the Companies Act, 1956 or a partnership firm registered under LLP Act, 2008 or Partnership Firm under Partnership Act, 1932 and Registered with the Goods and Service Tax Authorities. Should have been operating for the last three financial years (2018-19, 2019-20, 2020-21).</p> <p>(In case of mergers / acquisition / restructuring or name change, the date of establishment of the earlier / original partnership firm/limited company will be taken into account).</p>	<p>1. Copy of valid certificate of incorporation. 2. Copy of Goods and Service Tax Registration Certificate. 3. Balance sheet for last 3 financial years. 4. In case audited balanced sheet for FY 2020-21 is not available Chartered Accountant Certificate with UDIN registration regarding turnover for FY 2020-21 may be submitted.</p>
2	<p>The bidder organization should have achieved an average annual turnover of Rs 1, 88,43,180 over the last three financial years.</p> <p>Eligible MSMEs and Startups¹ may avail 50% relaxation in average annual turnover.</p>	<p>1. Company's Annual Reports, Audited Balance Sheet and Profit and loss account for last 3 years (i.e., 2018-19, 2019-20, and 2020-21). 2. In case audited balanced sheet for FY 2020-21 is not available Chartered Accountant Certificate with UDIN registration regarding turnover for FY2020-21 may be submitted.</p>
3	<p>The bidder should not have been blacklisted/ debarred/ deregistered/ banned by SMP Kolkata or any Govt. organization. If found, the bid shall be disqualified.</p>	<p>Affidavit</p>
4	<p>The bidder should have experience of having completed similar works² during the last 7 years ending 31st March 2021, should be either of the following:</p> <p>a) 3 (three) similar works, each costing³ not less than INR 2,51,24,240 or equivalent; OR b) 2 (two) similar works, each costing³ not less than INR 3,14,05,300 or equivalent; OR c) 1 (one) similar work costing³ not less than INR 5,02,48,480 or equivalent;</p> <p>Eligible MSMEs and Startups¹ may avail 50% relaxation in project cost described in above criteria.</p>	<p>Work Order and Completion Certificate.</p>

1. Eligible MSMEs – Udayam Registration, Eligible Startups – DPIIT certificate of recognition
2. Here “similar works” shall mean experience of carrying out Design, Supply, Delivery, Installation and Commissioning of Energy Efficient Smart Outdoor LED lighting solution with Centralised Control & Monitoring System for any Govt. / Semi-Govt. / PSUs/ private organizations. The Tenderer shall have to upload documents, viz. order letter, performance/completion certificates to establish his credentials. Work experience as a supply contractor shall not be considered as requisite qualification.
3. Cost of similar works is considered exclusive of GST.

5.0 TENDER AUTHORITY

Chief Mechanical Engineer,
Mechanical & Electrical Engineering Department,
8, Garden Road Road, Kolkata-700 043.
Phone:-Extn: , Fax:
E-mail: cme@kolkataporttrust.gov.in
Website: www.kolkataporttrust.gov.in

6.0 INSTRUCTION TO BIDDERS

- 6.1 Tender with supporting documents shall be submitted online as stipulated in the tender.
- 6.2 The bidder before filing and submitting the Tender is expected to thoroughly examine the Tender Documents including all instructions, forms, terms, specifications, schedules and reference drawings. Failure/omission to furnish this information required by the tender Document on submission of a bidder which is not substantially responsive to the tender requirement will result in the rejection of such tender.
- 6.3 Mere downloading of Tender Document shall not mean that a particular Bidder will be automatically considered qualified and their bid will be entertained. Such qualifications will be reviewed at the time of evaluation of bids.
- 6.4 In case there is an unscheduled Holiday / Bandh / Strike/ COVID-19 Lockdown on the prescribed last date of submission, the next working date will be treated as the scheduled prescribed day for the same.
- 6.5 Tender Document (Non-transferable) will be available in the website: www.kolkataporttrust.gov.in /RailTel E-wizard Portal. Parties downloading the tender document from SMP, Kolkata's website should ensure submission of either the Receipt from Treasurer, SMP, Kolkata or Demand Draft towards Tender Fee, failing which the tender will not be considered.
- 6.6 SYAMA PRASAD MOOKERJEE PORT, KOLKATA reserve the right to reject any/all tenders or to accept any tender in whole or in part without assigning any reason whatsoever.
- 6.7 Further amendments, if any, would also appear in the same website.

7.0 MODE OF SUBMISSION OF BID

7.1 The tenders are to be submitted online in two parts i.e., Part-I & Part-II. Part-I should constitute the Technical Bid and Terms and Conditions of offer and Part-II should constitute only the Price Bid without any deviation and condition.

Part-I (Techno-Commercial) will contain the scan copy of the following documents:

- a. Brief particulars of the Firm mentioning company's registration.
- b. Document relating to details of Similar Works previously carried out/ ongoing by the firm with value& period of each work.
- c. Performance Certificates of previous/ongoing works carried out.
- d. Audited Balance Sheet and Profit and Loss Account for last 3 years (i.e., 2017-18, 2018-19 and 2019-20).
- e. Treasury Receipt (TR) of the cost of bid document and EMD or Original Bank Draft / Bankers Cheque payable to 'SYAMA PRASAD MOOKERJEE PORT, KOLKATA'.
- f. A Separate letter addressing to CME, Mechanical & Electrical Engineering Department, confirming that the tenderer has accepted all terms and conditions laid down in the Bid document.
- g. Details of Supervision and Liaison set up planned to be used for supervision and co-ordination of the work.
- h. Signed blank copy of Price Bid format. The bidder should, in any case whatsoever, not submit the filled price bid document along with technical bid submission. If filled price bid document is found to be submitted with technical offer, then the bidder's offer will be disqualified.
- i. Form of Tender duly filled in bidder's Letter Head (Format in GCC).
- j. A declaration that the firms / group of companies / consortium have not been debarred / de-listed by any Govt. / Quasi-Govt. / Public Sector Undertakings.
- k. Complete and signed copy of the enclosed 'Integrity Pact' (Format at **Annexure-II**).
- l. Completed relevant formats in case of JV/ Consortium.
- m. Authentic documents relating to registration under GST Authority and ESI Authority as applicable.
- n. Current Trade License as applicable.
- o. Provident Fund Registration Certificate as applicable.
- p. A declaration from the bidder that he or she will not be associated with any other bidding firms or company.
- q. Power of attorney in connection with signing the tender document. (Original is to be submitted later)
- r. Memorandum & Article of Association in case of Limited Company.
- s. The Partnership Deed in case of Partnership Firm.
- t. Partnership Agreement under Liability Partnership Act
- u. All form and formats duly filled in as given at Appendixes.
- v. Copy of PAN/TAN
- w. Copy of GSTN

7.1.1 The Service Provider shall submit the documents as per the Check List above (Clause-7.1) at the time of submission of the bid online. However, the bids will be summarily rejected without any reference to

the bidder if the documents mentioned against Sl. No. a, b, c, d, e, r, s and t as applicable, are not submitted with the bid.

7.1.2 THE DOCUMENTS UPLOADED BY BIDDER(S) WILL BE SCRUTINISED. IN CASE ANY OF THE INFORMATION FURNISHED BY THE BIDDER IS FOUND TO BE FALSE DURING SCRUTINY, EMD OF DEFAULTING BIDDER(S) WILL BE FORFEITED. PUNITIVE ACTION INCLUDING SUSPENSION AND BANNING OF BUSINESS CAN ALSO BE TAKEN AGAINST DEFAULTING BIDDER(S). The original documents will have to be produced/shown by the bidder to SMP, Kolkata, as and when required, failure of compliance may lead to rejection of bid.

7.2 Part-II (Price Bid), price shall be quoted online as per the format without any condition or deviation.

7.3 Deadline for submission of Tender

The completed tender shall be submitted online within the prescribed date as indicated in the SOT.

8.0 OTHER INSTRUCTIONS

8.1 Bidders are advised to submit quotation online based upon technical specification, terms and conditions, Scope of Work contained in the Bid Documents and General Conditions of Contract (GCC) and not to stipulate any deviation. The General Conditions of Contract of SMP, Kolkata shall be applicable wherever relevant. The GCC may be downloaded from SMP, Kolkata website (<https://kolkataporttrust.gov.in/>), 'Homepage - Rule and Regulations - Non-Service Regulations'- 'General Conditions of Contract-Forms and Agreements'. Should it, however, become unavoidable, deviations should be suggested during pre-bid meeting. SMP, Kolkata reserves the right to accept or reject the suggested deviations. No deviation from the laid down conditions of the Bid Document is firm unless it is notified by SMP, Kolkata.

8.2 SYAMA PRASAD MOOKERJEE PORT, KOLKATA will not be responsible for any costs or expenses incurred by the Bidder in connection with the preparation and submission of his bid or for any other expenses incurred in connection with such bidding.

8.3 The work is to be done as described in Bid Document. The bidders who need clarifications on any specific issue shall inform the Engineer in writing well in advance of the date of pre-bid discussion at the address given in the next clause.

8.4 The bidders are advised to examine the tender documents carefully and if the bidders find any discrepancy or omission in the Bid Document or have any doubt as to the meaning or intent of any part thereof, they shall at once inform the Engineer before the Prebid meeting. No individual reply to the above will be sent but general clarification will be uploaded after considering the same in the Prebid meeting. No interpretations shall be made by any Bidder as to the meaning, if any, of the provisions of the Bid documents on the basis of

verbal communication. Every request for any clarification/ interpretation shall be in writing, addressed and forwarded to the Engineer who shall be the point of contact at the following address:

Chief Mechanical Engineer,
Mechanical and Electrical Engineering Department,
SYAMA PRASAD MOOKERJEE PORT, KOLKATA,
8, Garden Reach Road,
Kolkata-700 043

- 8.5 The bidders may please note that SYAMA PRASAD MOOKERJEE PORT, KOLKATA will not entertain any correspondence or queries on the status of the offers received against this Bid.

Bidders are also requested not to depute any of their personnel or agents to visit SYAMA PRASAD MOOKERJEE PORT, KOLKATA's Offices for making such inquiries. Should SYAMA PRASAD MOOKERJEE PORT, KOLKATA find it necessary to seek any clarification, technical or otherwise, the concerned bidder will be duly contacted by SYAMA PRASAD MOOKERJEE PORT, KOLKATA.

- 8.6 Canvassing in any form by the Bidder or by any other agency acting on behalf of the Bidder after submission of the bid will disqualify the said bidder. SYAMA PRASAD MOOKERJEE PORT, KOLKATA may reject, accept or prefer any bid without assigning any reason whatsoever.
- 8.7 Fax/e-mail offers/ physical offer will not be considered. Bidders should prepare their Bid themselves. Bids prepared by agents will not be recognized. SMP, Kolkata will not be liable for any financial obligation in connection with any work until such time SMP, Kolkata communicates to the successful bidder in writing its decision to entrust the work (covered by the Bid document).
- 8.8 Amendment of Tender Documents.

At any time prior to the deadline for the submissions of tenders, SMP, Kolkata may, for any reason, whether on its own initiative or in response to a clarification requested by a prospective Tenderer/ bidder, modify the Tender Documents by issuance of addenda, which shall be in writing and uploaded in the same websites. Such addenda will form part of their Tender. The Tender Document shall be deemed to be amended only by way of the amendments mentioned above. Any other communication issued to the Tenderers/ bidders shall not be construed as amendment to the Tender Document.

9.0 EARNEST MONEY DEPOSIT:

- 9.1 The bidders shall be required to submit a bid security declaration as per given format (annexure I) in lieu of submission of EMD. MSME shall be issued Tender Documents free of cost and shall be exempted from paying Earnest Money Deposit (EMD).

10.0 SECURITY DEPOSIT

- 10.1 The successful tenderer shall have to submit Security Deposit amount computed as per the undernoted percentage on the evaluated value of the tender as accepted by Syama Prasad Mookerjee Port, Kolkata in Demand Draft or in the form of Bank Guarantee as per the format provided in GCC in favour of "Syama Prasad Mookerjee Port, Kolkata" from a National/Scheduled Indian Bank from its branch at Kolkata.: -

Security Deposit
3% of the Total value of the work (excluding CAMOC value)

In case Bank Guarantee is issued by a branch outside Kolkata, the same shall be counter-guaranteed by a Kolkata branch of the same bank. The Bank Guarantee shall remain valid for 3 months beyond the warranty period of contract. The Security Deposit will be released within 90 days after successful completion of the warranty period of the contract without any interest.

- 10.2 Chief Mechanical Engineer, Mechanical & Electrical Engineering Department shall have the right to ask for the extension of the above Bank Guarantee till such time the Contractual obligations are fulfilled, and the Contractor will be duty bound to extend the same.
- 10.3 After the issuance of 'Work order', Security Deposit will have to be submitted within 15 working days and a formal agreement is to be executed immediately thereafter as per format provided in GCC. The contractor shall commence the work within the prescribed mobilization period after issuance of work order. The contract shall be deemed to be in effect from the date of successful commencement of work.

11.0 INSTRUCTION FOR FILLING THE BIDS

- 11.1 The bids can only be submitted in the name of the bidder.
- 11.2 The Bid and any annotations or accompanying documentation shall be in English language only and in metric system.
- 11.3 Bidders shall sign their proposal and all attached documents with the exact name of the firm who has downloaded the bid document.
- 11.4 Bidders shall clearly indicate their legal constitution and the person signing the tender and also shall state his capacity and also the source of his ability to bind the bidder. The power of attorney or authorization or resolution or any other document constituting adequate proof of the ability of the signatory to bind the bidder, shall be annexed to the bid. SYAMA PRASAD MOOKERJEE PORT, KOLKATA may reject outright any bid unsupported by adequate proof of the signatory's authority.
- 11.5 The tender shall be completed in all respect and shall be submitted together with requisite information and appendices. It shall be completed free from

ambiguity, change or inter-lineation.

- 11.6 Bidders should indicate at the time of quoting against this bid their full postal /e-mail address and telephone and fax numbers.
- 11.7 Bidders shall set their quotations online as per BOQ format and without any qualifications.
- 11.8 Price Bids, containing any sort of qualifying expressions will be rejected.
- 11.9 SYAMA PRASAD MOOKERJEE PORT, KOLKATA reserves the right to ask any one of the bidders, who have submitted their price quotations to submit a break-up of the submitted prices with adequate justification to establish for each such component. Bidders shall confirm in writing in the form of Tender that should SYAMA PRASAD MOOKERJEE PORT, KOLKATA deem it necessary to ask for such a break up of quoted price, they will be duty bound to do so as requested by SMP, Kolkata and they shall be further duty bound to provide justification to the same, failing which or if their justification of prices are found unacceptable to SMP, Kolkata, their Tender may be cancelled by SYAMA PRASAD MOOKERJEE PORT, KOLKATA.

12.0 Technical Evaluation:

The prospective bidders (if not OEM) have to submit the following documents from OEM (LED Luminaries and Driver Manufacturer) pertaining to the mandatory requirements. If the prospective bidder is OEM, they have to submit all the mandatory documents.

Mandatory requirements are applicable for all the Type of Luminaries.

a) Mandatory Requirements:

i) LED LUMINARIES' MANUFACTURER REQUIREMENTS:

- LED Luminaries manufacturer shall have complete in house design, development, production and testing facility for manufacturing of LED luminaries in India. **(Supporting Documents - Confirmation on official letter head giving details of said facilities with undertaking for allowing verification of same by SMP, Kolkata or their authorised representative. In house NABL accredited Lab certification, if required manufacturing facilities visit by SMP, Kolkata officials or their authorised representative will be conducted).**
- LED Luminaries Manufacturer should have In-House NABL Accredited Photometry Laboratory. **(Supporting Document -NABL Accredited Photometry Laboratory certification).**
 - LED Luminaries Manufacturer shall have company service network in Kolkata; India to ensure response time of two working days. **(Supporting Document -Confirmation on official letter head giving details of company service network in Kolkata with undertaking of timely service within two Working days).**
- The manufacturer of LED Luminaries should be an ISO 9000:2008/

ISO 9001:2015 and ISO 14001:2015 certified organization.
(Supporting Document -ISO certification accredited by an IAF member).

- LED Manufacturer should have separate valid BIS registration number for both luminaries and driver. Driver should have the registration of BIS of the OEM of driver manufacturer. **(Supporting Document –Separate BIS Registration Certificate for Luminaries and Driver).**

ii) ENVIRONMENT WITH FACILITIES FOR ASSEMBLY OF LED MODULES AND PCBs:

- Automatic Pick and Place machine for LEDs and electronic components. **(Supporting Document- Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory).**
- Temperature controlled automatic wave soldering machine with auto fluxing facility for through hole devices. **(Supporting Document- Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory).**
- Automatic temperature-controlled re-flow soldering machine for surface mounted devices. **(Supporting Document- Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory).**
- Heat / Humidity chamber having minimum range of 0-50°C with alternate arrangement of standby power supply for carrying out endurance tests. **(Supporting Document- Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory).**
- Electronic driver testing meter with programmable Input Supply to vary input voltages. Meter shall be able to report input parameters like wattage, PF, THD, Input Current and Output Voltage, Output Current etc. **(Supporting Document- Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory).**
 - Integrating sphere for LM 79 / IS 16106:2012 testing of CCT & CRI. **(Supporting Document- Details of the machine with a valid Calibration certificate of the Integrating Sphere from a NABL Accredited calibration laboratory).**
 - Mirror Type-C Gonio-Photometer for LM79 / IS16106:2012 testing for Photometric & Electrical parameters. **(Supporting Document-Details of the Mirror Type Gonio-Photometer with a valid Calibration certificate of the Photometer from a NABL Accredited calibration laboratory).**

- Ingress Protection Testing Facility for testing of outdoor products with Dust and Rain Jet Chamber. **(Supporting Document- Details of the machine with a valid Calibration certificate of the Ingress Protection Testing Facility from a NABL Accredited calibration laboratory up to their claim of IP66 or IP 67 Luminaries).**
- Impact testing facility. **(Supporting Document- Details of the machine with a valid Calibration certificate of the Ingress Protection Testing Facility from a NABL Accredited calibration laboratory up to their claim of IK 07 or IK 08 Luminaries).**

iii) LED LUMINARIES' REQUIREMENT:

- LED Chip Efficacy shall not be less than 130 Lumen/watt and System Efficacy shall be greater than 110 Lumens/Watt@ drive current. In respect of LEDs of higher power ratings, drive current greater than 350 mA can be accepted if the LED's LM 80/IS: 16105 test reports support the same. **(Supporting Document- LM-79 Report from NABL accredited Lab)**
- LED used should be of SMD (Surface Mounted Device) type. **(Supporting Document-LED Luminaire Data Sheet and Approved make of LED Chip- CREE / LUMILEDS / NICHIA / OSRAM).**
- The LEDs shall comply with Photo biological safety norms as per IEC 62471/ EN62471/ IS: 16108 and should fall in the exempt or low risk group of outdoor Luminaries. **(Supporting Document - Report from Internationally/Nationally accredited Lab.)**
- Rated Minimum life span of LEDs (L70B50) used in the Luminary shall be greater than 50,000 Hrs. at the soldering point temperature of 105 C & at the luminary driving current. **(Supporting Document -TM-21 life projection calculation along with LM80 for all three ambient temperatures of 55, 85, 105 Deg. C as per applicable standard shall be submitted to substantiate that the life of LED Chip (L70B50) shall be more than 50000 burning hours.)**
- Secondary Lens/Optics: Luminaries should have secondary optical lens of type PMMA (Poly-Methyl Methacrylate Acrylic)/Borosilicate glass/Polycarbonate. Also, the lens shall have maximum temperature withstand capacity of 120 Deg. C. **(Supporting Document -LED manufacture datasheet and type test report certificate from NABL Accredited lab.)**
- Colour temperature of the proposed white colour LED shall be 5700K (i.e., 5665K +/- 355K, as per ANSI standard C78.377A). **(Supporting Document-LED manufacture datasheet and soft copy of IES file &LM 79 report from NABL accredited Lab).**
- Colour Rendering Index (CRI): Greater than or equal to 70. **(Supporting Document -LED manufacture datasheet and soft copy of IES file, LM 79 Report from NABL accredited Lab).**
- LED Module PCB: MCPCB is to be used for SMD Technology for LED wattage in excess of 0.5 W. The minimum thickness should be 1.5mm for outdoor Luminaries. **(Supporting Document - LED**

manufacturer datasheet and type test report from NABL accredited Lab).

- Junction temperature of LED Chip shall not exceed 105 Deg. C in case of SMD. **(Supporting Document - LED manufacture datasheet and thermal and temperature rise type test report).**
- No Visible flickering (flicker free) to prevent eye strain, uniform and Glare free, No UV/IR Radiation. **(Supporting Document – LED Luminaire manufacturer Data Sheet, Spectral distribution of the led).**
- The LED Flood Lights should be Integral type.
- Luminaire manufacturer shall produce certificate of association with LED manufacturer for minimum 2 years.
- There should not be any assembly of 2 or more nos. of less wattage LED luminaires to achieve the offered LED Luminaire Wattage. Accordingly, the driver unit should be a single one and not assembled one.
- The label should mention: Name of Manufacturer, model name and number, system lumen pack, nominal CCT, Wattage of fitting, Date of Manufacture, and other labelling details as per IS. Stickers are not permitted for labels.

iv) LED DRIVER:

- Type: Wirelessly/Remotely dimmable LED driver, registered as per product type under BIS-CRS Compulsory Registration Scheme. Driver should also be Constant Current Type. **(Supporting Document – LED Driver manufacturer Data Sheet).**
- Electrically Isolated Driver. **(Supporting Document – LED Driver manufacturer Data Sheet).**
- Minimum Efficiency of Driver: 85%. **(Supporting Document – Driver manufacturer datasheet and type test report)**
- Dimming Range and nature of dimming as per scope of work. **(Supporting Document – LED Luminaire manufacturer datasheet).**
- Power factor of complete fitting ≥ 0.95 . **(Supporting Document – LED Luminaire datasheet).**
- Surge Protection: Minimum 4 kV is to be used in series with every driver with failsafe (i.e., without leading to fire hazard) and extra Min 10 kV Surge Protection device, external to the driver circuit, but within the same housing needs to be used. Failed status of surge devices should be clearly visible through flag/indication. **(Supporting Document – LED Luminaire datasheet and type test report).**
- Total Harmonic Distortion (THD): Less than 10% at full load. **(Supporting Document – LED Luminaire manufacture datasheet).**
- Potted LED Driver: Driver should be half Silicone gel potted driver for better heat dissipation and should be vibration proof for driver circuit component to increase longevity. Thermal conductivity should be greater than 0.6 W/mk. **(Supporting Document – Driver Destructive test report for checking of potted driver needs to be done).**

- IP Protection: 66 or above. **(Supporting Document -Driver manufacturer datasheet and type test report)**
- Power Supply shall be connected to the LED PCBs through proper connectors.
- Protection:
 - I. Short Circuit Protection.
 - II. Open Circuit Protection.
 - III. Reverse Polarity Protection.
 - IV. over Voltage Protection. Driver shall withstand min 340V for 2 hours and min 300V for 48 hours without failure. **(Supporting Document - Driver manufacturer datasheet and type test report).**
- Driver shall comply with the safety requirements laid down in IEC: 61347-2-13/EN: 61347-2-13/IS: 15885-2-13. **(Supporting Document- IEC:61347-2-13/ EN: 61347-2-13/IS:15885-2-13 Test conformance Report)**
- Driver shall comply with the performance requirements as per IEC: 62384/IS: 16104. **(Supporting Document -IEC: 62384/IS: 16105 Test Reports).**
- Driver PCB should be FR4 Grade (Heat Resistive) having min thickness of 1.6 mm. **(Supporting Document - Driver manufacturer datasheet).**
- Junction/channel temperature of switching devices like MOSFET & Transistors is to be provided. **(Supporting Document - Driver manufacturer datasheet).**
- Wide Operating Voltage Range. **(Supporting Document - Driver manufacturer datasheet).**
- Driver should have effective heat sink. Maximum driver case temperature must be declared for the luminaries. **(Supporting Document - Driver manufacturer datasheet).**

v) LUMINARY SYSTEM:

- Housing: Made of pressure die cast Aluminium (LM6/ADC12/LM24) having sufficient area with fins /heat sink for heat dissipation. **(Supporting Document - LED Luminaire manufacturer datasheet)**
- Cover Type: Heat Resistant Toughened Clear Glass or UV Stabilized Polycarbonate Cover. **(Supporting Document - LED Luminaire manufacturer datasheet).**
- Connecting wires used inside the luminaries shall be Low Smoke, Fire retardant (FRLS). **(Supporting Document - LED Luminaire manufacturer datasheet).**
- Luminaries should be provided with mounting bracket (GI or Stainless Steel). **(Supporting Document - LED Luminaire manufacturer datasheet).**
- Ambient temperature to be considered: 35+ degrees centigrade. **(Supporting Document - LED Luminaire manufacturer datasheet).**
- Humidity to be considered: 10% to 90% RH. **(Supporting**

Document - LED Luminaire manufacturer datasheet).

- Separate Driver and Optical compartments to be provided for efficient heat management and to ensure sustainable operation. **(Supporting Document - LED Luminaire manufacturer datasheet).**

vi) ADDITIONAL TEST REPORTS TO BE SUBMITTED FOR COMPLIANCE WITH IS 10322-5-5 (2013) FOR FLOOD LIGHTING LUMINAIRE.

Bid evaluation shall comprise of type test certificate and the verification of relevant documents. Manufacturers or bidders shall submit a declaration about the product details supported by type test certificate from an independent third party NABL accredited laboratory against the specified test standard.

In case of non-compliance in any of the above parameter, the bid shall be rejected.

vii) CCMS PANEL BOX/CONTROLLER - OUTDOOR FEEDER PILLAR WITH INTELLIGENT SMART LIGHTING CONTROL SYSTEM AT THE BASE OF MAST/LATTICE TOWER FOR GROUP CONTROL.

CCMS Panel Box/Controller should be made with minimum 2mm thick Metal Enclosure Grey Powder Coating / Painting having minimum IP65 Protection. The Gland plate should be minimum 3 mm thick. The Panel will have the following components:

- This hardware should consist of minimum of 10KV Surge Protection Device (SPD) designed to protect the sensitive electrical and electronic equipment from damage by vulnerable high surges or over voltage transients, etc.
- MCBs, Contactors and Fuses which protects system and operators in case of electrical malfunction, these should be rated above the lighting load requirement. The CCMS Panel /Controller Panel Should provide protection from Short Circuit, Overload, etc.
- It should allow manual override of the system with Isolator during maintenance and system faults.
- CCMS Panel Box/Controller should consist of an Energy Meter of suitable Current Rating, Accuracy Class 1.0/0.5/0.5S, rated frequency 50Hz, at rated voltage and unity power factor.
- The system should monitor energy parameters and communicate it with Cloud i.e., Voltage per phase, Current per phase, PF per phase, Metering KWH cumulative, Metering KVAH, Number of operational light, Number of non-operational lights, Failure of contactor, Status of the incoming supply (power failure), High /low voltage, Overload on the phases, etc.
- The CCMS Panel/Controller will continuously monitor to detect events like tamper, faulty lights, etc. and generates alerts by sending SMS/email.
- CCMS Panel/Controller Should support GSM/GRPS/3G/4G reliable and safe connectivity with cloud or any other communication

technology to communicate with cloud.

- The CCMS Panel/Controller should have enough 3 Phase 4 Wire Terminal Blocks for Termination of Incoming and outgoing 3.5C 25 Sq.mm AL 1.1KV Grade Cable.
- Fire Resistant, PVC insulated, 1.1KV Grade copper wires of suitable sizes are to use for interconnection inside the CCMS Panel /Controller.
- The CCMS Panel/Controller should be able to wirelessly/Remotely control with the LED Luminaire installed on the Lantern carriage on the Top of the High Mast and the LED Luminaires installed on the Top platform of Lattice Tower in a secure manner without data loss.
- The CCMS Panel /Controller or any devices or equipment should be installed with suitable mechanical/civil protection for protection of the devices.

viii) INSTALLATION OF LED LUMINAIRES:

- 3 Core/5 Core, 1.5 Sq.mm, PVC insulated Flexible Copper Cables should be used for interconnection from the Joint Box on the High Mast Carriage to LED Luminaires in High Masts and from Top Platform DB to Luminaires in case of Lattice Towers.
- Installation and commissioning of LED floodlight/Street Light luminaire along with all its accessories on high mast/Lattice Tower/ Light Pole/Structures with proper clamping arrangement etc. complete in all respect.
- The LED Flood Lights should be installed on the carriage without causing any unbalance. Bidder to confirm structural suitability of the mast for light fittings proposed by them.

ix) INSTALLATION OF CCMS PANEL/CONTROLLER BOX:

- Construction of RCC foundation for the above CCMS Panel Box/Controller Box including supply of foundation accessories consisting of cement, reinforcement steel bars, bricks, sand, stone chips, shuttering materials, labour etc. complete and refilling of earth up to the existing ground level after curing. Installation of the CCMS Panel Box/Controller Box by grouting the stand in concrete.
- Finishing the end of the above XLPE armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials.
- Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of the above XLPE armoured cable.
- Supply and laying of 3.5 C, 25 sq.mm, XLPE insulated Armoured Al cable in hard standing with suitable size HDPE Pipe protection.
- Interconnection of the earth pit and connecting the equipment's body to earth electrode station including Supply & Fixing of 25 mm X 6mm galvanized (HotDip) MS flat as required and connection to equipment's incl. drilling holes, with bolts, nuts, washers, etc.
- Earthing with 50 mm dia ISI Medium GI pipe 3.64 mm thick x 3.00 Mts. long and 1 x 4 SWG GI (Hot Dip) wire (4 Mts. long), 13 mm dia x 80 mm long GI bolts, double nuts, double washers incl. S & F 15 mm dia GI pipe protection (1 Mts. long) to be filled with bitumen partly under the ground level and partly

above ground level driven to an average depth of 3.65 Mts. below the ground level and also providing masonry enclosure on the top of the earth electrode of overall size 86.36 cm x 86.36 cm x 46 cm deep (below Ground level) complete with cemented brick work(1:6) of 25 cm width duly plastered with cement mortar (inside) CI hinged inspection cover of size 36.56 cm x 35.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe and treating of soil by using salt and charcoal as required. (1 no. for each CCMS Panel Box).

x) ADDITIONAL MANDATORY REQUIREMENT FOR LED STREET LIGHT LUMINAIRE:

- The Wattage of the Street Light Luminaries should not be more than 140 Watt. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- All the mandatory requirement clauses in technical evaluation above also apply to the Street Lights.
- The Street Lights should be Integral type. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- Minimum Lumen output 16200 Lm. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- Model and make of LED Street Lights fittings.**(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- The Driver should be Wirelessly Dimmable Driver. **(Supporting Document – Driver manufacturer Data Sheet).**
- The LED Street Light Luminaire Should is wirelessly individually controlled dimmable type. **(Supporting Document – Luminaire manufacturer Data Sheet).**
- Dimming Range Should be 10% to 100% of full Glow.
- Smooth dimming or step dimming ≥5 Steps will be accepted.

TEST REPORTS TO BE SUBMITTED FOR COMPLIANCE WITH IS 10322-5-3 (2012) FOR STREET LIGHTING LUMINAIRE-

Bid evaluation shall comprise of type test certificate and the verification of relevant documents. Manufacturers or bidders shall submit a declaration about the product details supported by type test certificate from an independent third party NABL accredited laboratory against the specified test standard.

List of Type Test for Bid Evaluation

S. No.	Test Requirements	Clause reference as per IS 10322 (Part 5/Sec 3)	Test methods	
			Clause	Reference Standard
1	Construction	7	7	IS 10322 (Part 5/Sec 3)
2	Creepage distances and clearances	8	8	IS 10322 (Part 5/Sec 3)
3	Provision for Earthing	9	9	IS 10322 (Part 5/Sec 3)

4	Terminals	10	10	IS 10322 (Part 5/Sec 3)
5	External and Internal wiring	11	11	IS 10322 (Part 5/Sec 3)
6	Protection against electric shock	12	12	IS 10322 (Part 5/Sec 3)
7	Thermal test (normal operation)	13	13	IS 10322 (Part 5/Sec 3)
8	Endurance tests and thermal tests (abnormal operation)	13	13	IS 10322 (Part 5/Sec 3)
9	Resistance to dust and moisture	14	14	IS 10322 (Part 5/Sec 3)
10	Insulation resistance and electric strength	15	15	IS 10322 (Part 5/Sec 3)
11	Resistance to heat, fire and tracking	16	16	IS 10322 (Part 5/Sec 3)
12	Mechanical strength test	Clause 4.13	Clause 4.13	IS 10322 (Part 5/Sec 3)
13	Resistance to corrosion	Clause 4.18	Clause 4.18	IS 10322 (Part 5/Sec 3)

xi) ADDITIONAL MANDATORY REQUIREMENT FOR INDIVIDUALLY CONTROLLED LED FLOOD LIGHT LUMINAIRE –

- The Wattage of the individually wirelessly controlled dimmable LED Flood Light Luminaires should not be more than 400 Watt, with beam angle of 60 degree. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- All the mandatory requirement clauses in technical evaluation above also apply to the individually wirelessly controlled dimmable LED Flood Light luminaire.
- The LED Flood Lights should be Integral type. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- Minimum Lumen output 44000 Lm. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- Model and make of LED Flood Light Luminaire. **(Supporting Document – LED Luminaire manufacturer Data Sheet).**
- The Driver should be Wirelessly Dimmable Driver. **(Supporting Document – Driver manufacturer Data Sheet).**
- The LED Flood Light Luminaire should be individually controlled type. **(Supporting Document – Driver manufacturer Data Sheet).**
- Dimming Range Should be 10% to 100% of full Glow.
- Smooth dimming or step dimming ≥ 5 Steps will be accepted.

QCBS PARAMETERS FOR EVALUATION:

Note: Bids of only those bidders who fulfil Pre-Qualification criteria as specified in section 4.0 will qualify for QCBS based technical evaluation. Bids of those bidders who do not fulfil Pre-Qualification criteria will be rejected and no further evaluation shall be conducted.

Evaluation of Serial No. 6 to 15 is applicable for Wirelessly/Remotely Controlled Dimmable LED Flood Light luminaire to be installed in High Mast /Lattice Towers for Group Control. Individually wirelessly controlled dimmable LED Street Light Luminaire and Individually wirelessly controlled dimmable LED Flood Light Luminaires are not considered in QCBS Evaluation. They should be compliant with both the mandatory requirements and additional mandatory requirements mentioned in technical evaluation above.

S#	Parameters	Document Required	Max Marks
	Company Profile		
1	Profile of company in terms of experience, number of years in business in India since incorporation <ul style="list-style-type: none"> • 7 or more than 7 Years – 5 Marks • 5 or more than 5 Years but less than 7 years – 3 Marks • 3 or more than 3 Years but less than 5 Years – 1 Marks • Less than 3 Years – Non-compliance 	1. Copy of valid Certificate of Incorporation. 2. Copy of GST certificate.	05
2	Average turnover of the organisation: <ul style="list-style-type: none"> • Above Rs 8 Crore over last three financial years ending at 31.03.2021 – 05 Marks. • Between Rs 5 Cr to 8 Cr –4 Marks. • Between Rs 2 Cr to 5 Cr – 3 Marks. • Below Rs 2 Cr – 1 Mark. 	Company's Annual Reports, Audited Balance Sheet and Profit and loss account for last 3 years (i.e., 2018-19, 2019-20, and 2020-21). In case audited balanced sheet for FY 2020-21 is not available Chartered Accountant Certificate with UDIN registration regarding turnover for FY 2020-21 may be submitted.	05
	Similar Work Experience		
3	Experience in Transportation Sector – (Rail Terminal/ Airport Terminal/ Road Transport Depots/ Port including Land Port/CFS): <ul style="list-style-type: none"> • 3 Projects - 05 Marks, • 2 Projects -04 Marks, • 1 Project - 02 Marks. • Nil – 0 	1. Work Order 2. Completion Certificate/ Performance Certificate	05

S#	Parameters	Document Required	Max Marks
4	<p>Experience of Supply, Installation, commissioning and Maintenance of LED High Mast/Lattice Tower Lighting System of minimum 10Nos. along with cabling jobs, Feeder Pillar Box and other ancillaries:</p> <ul style="list-style-type: none"> • 3 Projects - 05 Marks, • 2 Projects -03 Marks, • 1 Project -01 Mark. • Nil – 0 	<ol style="list-style-type: none"> 1. Work Order 2. Completion Certificate/ Performance Certificate 	05
5	<p>Experience of Supply, Installation, Commissioning and Maintenance of Smart LED Flood Lights/Smart LED Street Lights with Smart/Web Enabled Centralised Control and Monitoring System with dimming functionality (Project valuing at least 1.26 Cr excluding GST only shall be considered):</p> <ul style="list-style-type: none"> • 3 Projects - 05 Marks, • 2 Projects -03 Marks, • 1 Project -01 Mark. • Nil – 0 	<ol style="list-style-type: none"> 1. Work Order 2. Completion Certificate/ Performance Certificate 	05
	Technical Solution		
6	<p>LED Chip Efficacy:</p> <ul style="list-style-type: none"> • Efficacy (Lumen /Watt) ≥ 160 = 05 Marks. • Efficacy (Lumen /Watt) $\geq 150 < 160$ = 03 Marks. • Efficacy (Lumen /Watt) $\geq 140 < 150$ = 01 Mark. • Efficacy (Lumen/Watt) $\geq 130 < 140$ = 0 Mark. • Efficacy (Lumen/Watt) < 130 = non-Compliance. 	LED's LM 79 reports from NABL Accredited lab to support the same. LED Chip manufacturer data sheet.	05
7	<p>LED System efficacy:</p> <ul style="list-style-type: none"> • Efficacy (Lumen /Watt) ≥ 140 = 5 Marks. • Efficacy (Lumen /Watt) $\geq 120 < 130$ = 3 Marks. • Efficacy (Lumen /Watt) $\geq 110 < 120$ = 1 Marks. • Efficacy (Lumen /Watt) < 110 =Non-Compliance. 	LED's LM 79reportfrom NABL Accredited Lab to support the same. LED Luminaire manufacturer data sheet.	05
8	Nature of Dimming:	Self-Declaration. Proposed Technical	05

S#	Parameters	Document Required	Max Marks
	<ul style="list-style-type: none"> Continuous Dimming- 5 Marks. ≥7 Step Dimming = 3 Marks. ≥5 Step Dimming = 1 Mark. Less than 5 Step Dimming= Non-Compliance. 	Solution. LED Luminaire Data sheet.	
9	LED Driver Efficiency: <ul style="list-style-type: none"> Efficiency ≥ 95 % = 5 Marks. 95 % > Efficiency ≥ 90 % = 3 Marks. 90 % > Efficiency ≥ 85 % = 1 Mark. Efficiency < 85 % = Non-Compliance. 	Luminaire Driver Datasheet. LED Driver Type Test certificate from NABL Accredited Lab.	05
10	External Surge Protection: <ul style="list-style-type: none"> 20 KV ≥ SP = 4 Marks. 20 KV > SP ≥ 15 KV = 3 Marks. 15 KV > SP ≥ 10 KV = 2 Marks. SP < 10 KV= Non-Compliance. 	Type Test Certificate from NABL accredited Lab. Luminaire Driver Datasheet.	04
11	Internal Surge Protection: <ul style="list-style-type: none"> SP ≥ 10 KV = 4 Marks. 10 KV > SP ≥ 6 KV = 3 Marks. SP > 6KV ≥ 4 KV = 2 Marks. SP < 4 KV = Non-Compliance. 	Type Test Certificate from NABL accredited Lab. Luminaire Driver Datasheet.	04
12	Isolated Driver: <ul style="list-style-type: none"> 2 or 3 Stage Isolated Driver=1 Marks. 1 Stage Isolated Driver= 0 Mark. Non-Isolated Driver =Non-Compliance. 	Type Test Certificate from NABL accredited Lab. Luminaire Driver Datasheet.	01
13	Maximum Wattage of LED Flood Light Luminaires including Driver without Dimming: <ul style="list-style-type: none"> Less Than 350 Watt = 4Marks. More Than 350 but less than 400 Watt = 2Mark. More Than 400 Watt = 0 Mark. 	Luminaire Data Sheet.IES file & LM-79 from NABL accredited Lab.	04
14	Thermal conductivity of potting material: <ul style="list-style-type: none"> Thermal Conductivity ≥ 1W/mK= 1Mark. Thermal Conductivity < 1W/mk =0 Marks. Thermal Conductivity < 0.6 W/mK= Non-Compliance. 	Driver manufacturer datasheet and type test report from NABL accredited Lab.	01
15	Impact Protection of Luminaire: <ul style="list-style-type: none"> IK ≥ 08 = 1 Marks. 	Driver manufacturer datasheet and Type Test	01

S#	Parameters	Document Required	Max Marks
	<ul style="list-style-type: none"> • 08>IK ≥ 07 = 0 Mark. • IK <07 = Non-Compliance. 	report from NABL accredited Lab.	
16	Proposed Technical Solution for the Project:	<p>Written PDF document giving details of the vendor's proposed technical solution for the project in maximum of 15 Pages.</p> <p>This should include Details:</p> <ul style="list-style-type: none"> - • Communication Protocols used. • CCMS panel/Controller. • Network Architecture. • Cloud based web accessible Command, Control and Monitoring Software. • Network Devices. • Details of the Dash Board. • Network architecture for sending Alerts over SMS and Email. • Details of Cloud Server and Storage. • Details of Network Security and encryption used. • Dimming Technology Employed. • Energy Efficient Smart Lighting Solution as a whole, etc. 	20 Marks.
	Approach & Methodology		
17	<p>Approach & Methodology</p> <ul style="list-style-type: none"> • Understanding of Project - 05 Marks • Presentation – 10 Marks 	<p>Understanding of the project should be described in the form of written text (maximum of 3 pages). The Power Point presentation shall be submitted along with other</p>	20

S#	Parameters	Document Required	Max Marks
	<ul style="list-style-type: none"> Value Addition with innovative Solution – 05 Marks 	<p>technical documents. The Bidder will be invited to present same power point presentation in front of Committee / Competent Authority to evaluate the presentation.</p> <p>Value Addition with innovative Solution should be described in the form of written text (maximum of 3 pages).</p>	

For each technical proposal, the total points that can be awarded for the bidder is 100, the minimum technical score (T) that Bidder requires to qualify for opening of the financial proposal is 70.

The Highest evaluated Technical Proposal (Th) shall be given maximum Technical Score (Ts) of 100. The formula for determining the technical score (Ts) all other proposal is calculated as follows:

$T_s = 100 \times T/Th$, in which “Ts” is the Technical Score, “Th” is the highest technical score given and “T” is the Technical Score of the proposal under consideration. The technical scores will be calculated up to 2 decimal points..

13.0 JOINT VENTURES/CONSORTIUM AND OTHER FORMS OF ASSOCIATION:

13.1 In case the tender is submitted in joint venture/consortium, the Tenderer shall submit the following confirmation along with their offer submitted for this tender.

- i) All joint venture agreements/ consortium agreements, technical collaboration agreement shall ensure that all parties of the joint venture/consortium are individually and jointly responsible for the tender conditions and such agreements are legally valid.
- ii) Joint venture/consortium should be in the nature of legally acceptable agreements and such agreements should be notarized.
- iii) Such joint venture/consortium agreement should clearly set out and contain explicitly the scope and responsibilities of all the partners in the joint venture/consortium in terms of their respective financial and technical commitments/contribution. However, the partners of the JV/consortium shall be equally, severally and jointly responsible.
- iv) One of the members of the consortium shall be authorized as being in-charge (lead member), and this authorization shall be evidenced by a

- power of attorney duly signed by the authorized signatories of the consortium Members as per the format enclosed in the tender document as **(Annexure-III)**.
- v) The validity of the joint venture/consortium agreement entered upon on the award of Letter of Acceptance (LOA)/ work order by the port should continue for entire period of contract as specified in the tender. All such agreements shall be irrevocable for the above periods.
 - vi) Firms with at least 26% equity shareholding each shall be allowed to jointly meet the eligibility criteria.
 - vii) Where the tenderer is a consortium the aggregate net cash accruals, net worth and average annual financial turnover of the individual members forming the consortium shall be submitted.
 - viii) It is clarified that an unsuccessful bidder or JV/Consortium shall not be permitted to join a successful JV/Consortium whose bid is accepted at a later date.
 - ix) In case of a Consortium, the combined Technical and Financial Capability of those members who have and shall have an equity share of at least 26% (twenty six per cent) each in the Special Purpose Vehicle (or SPV) as explained in this tender document, should satisfy the above conditions of eligibility, provided that each such member shall, for a period of 2 (two) years from the date of commercial operation of the contract, hold equity share capital not less than 26% (twenty six per cent) of the subscribed and paid up equity of the SPV.

13.2 FURTHER CONDITIONS FOR JV/CONSORTIUM:

Intending tenderer(s), as Consortium, is eligible to participate in the tender. The term 'Tenderer' used in this document would apply to either a Single Entity or a group of entities, i.e., a Consortium. Further, the Tenderer may be a natural person, private entity, government owned entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement to form a Consortium. A Consortium shall be eligible for consideration subject to the conditions set out in this tender document.

- (a) The Tenderer shall not have a conflict of interest that affects the Tendering Process. Any Tenderer found to have a **Conflict of Interest** shall be disqualified. A Tenderer shall be deemed to have a **Conflict of Interest** affecting the Tendering Process, if:
 - (i) The Tenderer, its Member or Associate (or any constituent thereof) and any other Tenderer, its Member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Tenderer, its Member or an Associate thereof (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Tenderer, its Member or Associate, as the case may be) in the other Tenderer, its Member or Associate is less than 5 per cent of the subscribed and paid up equity share capital thereof;

provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act 1956/ section 2(72) of the Companies Act, 2013, or any of its subsequent amendment. For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

aa) Where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and

bb) Subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb). (i) if the shareholding of such person in the intermediary is less than 26% of the subscribed and paid-up equity shareholding of such intermediary;

OR

(ii) A constituent of such Tenderer is also a constituent of another Tenderer;

OR

(iii) Such Tenderer, or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Tenderer, or any Associate thereof or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Tenderer, its member or any Associate thereof;

OR

iv) Such Tenderer has the same legal representative for purposes of this tender as any other Tenderer;

OR

v) Such Tenderer, or any Associate thereof has a relationship with another Tenderer, or any Associate thereof, directly or through common third party/parties, that puts either or both of them in a position to have access to each other's' information about, or to influence the Tender of either or each other.

(b) A Tenderer shall be liable for disqualification if any legal, financial or technical adviser of SMP, Kolkata in relation to the Tender is engaged by the Tenderer, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Tender. For the avoidance of doubt, this disqualification shall not apply where such

adviser was engaged by the Tenderer, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this Tender. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the contract.

Explanation: In case a Tenderer is a Consortium, then the term Tenderer, as used above, shall include each Member of such Consortium.

Note:

Notwithstanding anything to the contrary contained in this tender document, in the event of any member of any Consortium suffering from a Conflict of Interest, the offer of such consortium shall be treated as disqualified. However, in the event of similar situation arising / detected after placement of LOI, the same shall have to be addressed and resolved by the Consortium, failing which the contract, if entered into, shall be terminated.

In this regard, it must be borne in mind that suppression of such Conflict of Interest, if detected later, shall not absolve the Consortium of its responsibility and appropriate action shall be initiated in terms of the provision of the tender.

The Tenderer(s) shall have valid documents as listed in various clauses of this tender document and submit the same in the manner as stipulated.

13.3 Technical & Financial Capability:

The tenderer (whether a single entity or a consortium) must satisfy pre-qualification criteria as stipulated in the tender.

13.4 Assessment of eligibility:

13.4.1 In case of a Consortium, the combined Technical and Financial Capability of those members who have and shall have an equity share of at least 26% (twenty six per cent) each in the Special Purpose Vehicle (or SPV) as explained in this tender document, should satisfy the above conditions of eligibility, provided that each such member shall, for a period of 2 (two) years from the date of commercial operation of the contract, hold equity share capital not less than 26% (twenty six per cent) of the subscribed and paid up equity of the SPV.

13.4.2 The entity claiming the capability should have held, in the company owning the eligibility, a minimum of 26% equity during the entire period for which the eligible experience is being claimed.

13.4.3 Experience of any activity relating to an eligible activity shall not be claimed by more than one member of a consortium. In other words, no double counting by a consortium in respect of the same experience shall be permitted in any manner whatsoever.

13.4.4 The Tenderer shall submit a Power of Attorney as per format given at **Appendix-2**, authorizing the signatory of the Tenderer to submit the tender.

13.4.5 Where the 'Successful Tenderer' is a 'Consortium', it shall be required to form an appropriate 'Special Purpose Vehicle' or SPV, incorporated under the Indian Companies Act 1956, to execute the Contract Agreement and execute

the contract. It shall, in addition to forming the SPV, comply with the following additional requirements:

- a. Members of the Consortium shall nominate one member as the 'Lead Member' who shall have an equity share holding of at least 26% of the paid up and subscribed equity of the SPV. The nomination(s) shall be supported by a Power of Attorney, as per the format at **Appendix -3**, signed by all the other members of the Consortium;
- b. The Tender shall contain the information required for each member of the Consortium as per **Appendix-4**.
- c. The Tenderer shall include a brief description of the roles and responsibilities of individual members of the consortium, particularly with reference to technical and financial obligations, as per **Appendices-5 & 6**.
- d. An individual (single entity) Tenderer participating in the instant tender shall not be a member of any other Consortium participating in the instant tender; further, a member of a particular Consortium shall neither submit any tender individually nor shall be a member of any other Consortium participating in the instant tender;
- e. Members of the Consortium shall enter into a binding Joint Bidding Agreement (JBA) (substantiated in the form specified at **Appendix-7**, for the purpose of submitting Tender. The JBA, to be submitted along with the Tender, shall, inter alia:
 - i) Convey the intent to form an SPV with shareholding / ownership equity commitment(s) in accordance with this tender, which would enter into the Contract Agreement and subsequently perform all the obligations of SMP, Kolkata in terms of the said agreement, in case the Contract is awarded to the Consortium;
 - ii) Clearly outline the proposed roles and responsibilities, if any, of each member; Commit the minimum equity stake to be held by each member;
 - iii) Commit the minimum equity stake to be held by each member;
 - iv) Commit that each of the members, whose experience will be evaluated for the purposes of this Tender, shall subscribe to 26% (twenty-six per cent) or more of the paid up and subscribed equity of the SPV and shall further commit that each such member shall, for the contract period from the date of commencement of operation under the contract, hold equity share capital not less than 26% (twenty-six per cent) of the subscribed and paid-up equity share capital of the SPV;
 - v) Members of the Consortium undertake that they shall collectively hold at least 51% (fifty-one per cent) of the subscribed and paid-up equity of the SPV at all times until the completion of two years from the date of commencement of the contract and
 - vi) Include a statement to the effect that all members of the Consortium shall be liable and responsible jointly and severally for all obligations of SMP, Kolkata in relation to the contract throughout the contract period.

- f. Except as provided under the Tender Document, including its Addendum, if any, there shall not be any amendment to the said JBA without the prior written consent of SMP, Kolkata.

13.4.6 The Single Entity participating in the tender or all the members of the Consortium participating in the tender must not have been debarred by the Central / State Government or any Entity controlled by them or any other legal authority for participating in any tender / contract / agreement of whatever kind. An undertaking in this regard shall be given by the Tenderer in the Covering Letter as per Appendix-8.

13.4.7 A Tenderer including any Consortium Member or Associate shall, in the last 3 (three) years ending on the day preceding to the day of issue of the tender, have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Tenderer, Consortium Member or Associate, as the case may be, nor has been expelled from any project or contract by any public entity nor have had any contract terminated by any public entity for breach by such Tenderer, Consortium Member or Associate as per Appendix-8.

13.4.8 In computing the Technical Capability and Financial Capacity of the Tenderer / Consortium Members, the Technical Capacity and Financial Capacity of their respective Associates would also be eligible hereunder.

Note:

For purposes of this Tender, 'Associate' means, in relation to the Tenderer/Consortium Member, a person who controls, is controlled by, or is under the common control with such Tenderer/Consortium Member. As used in this definition, the expression 'control' means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person by operation of law.

13.5 Change in composition of the Consortium:

13.5.1 Change in the composition of a Consortium shall not be permitted by SMP, Kolkata either during the 'Techno-commercial Evaluation Stage' [i.e., from the 'date of issuance of Tender.' up to the 'date of notification of the techno-commercially valid tenders'] or during the 'Price-Evaluation Stage' [i.e., from the 'date of notification of the techno-commercially valid tenders' up to the 'date of placement of Letter of Intent (LOI)]. The same may be permitted only after placement of LOI where:

- a. The reason for such change with proof, if applicable, shall be submitted along with the application. Request for change without any valid reason will not be entertained by SMP, Kolkata.
- b. The Lead Member continues to be the Lead Member of the Consortium;
- c. (i). In case of substitution, the substitute is at least equal, in terms of Technical & Financial Capability, to the Consortium Member who is sought to be substituted. In this regard, documents shall have to be furnished to establish that the proposed member is in possession of experience and having financial health at least equal to that of the substituted member during

the period as stipulated in the pre-qualification criteria of the tender. (ii). In case of removal of any member without substitution, the remaining member(s) shall full fill the pre-qualification criteria of the tender. (iii). In case of induction of any additional member(s), documents shall have to be furnished to establish experience and financial health of the proposed additional member.

- d. The new Member(s) expressly adopt(s) the Tender already made on behalf of the Consortium as if it/they were a party to it originally, and is/are neither a Tenderer/Member/Associate of any other Consortium participating in this tender nor a single entity having participated in this tender.

13.5.2 Approval for change in the composition of a Consortium shall be at the sole discretion of SMP, Kolkata and must be approved by SMP, Kolkata in writing. SMP, Kolkata reserves the right to reject any tender if:

- a. At any time, a material misrepresentation is made or uncovered, **OR**
- b. The Tenderer does not provide, within the time specified by SMP, Kolkata, the supplemental information sought by SMP, Kolkata for evaluation of the Tenderer.

Note: If the Tenderer is a Consortium, then the entire Consortium may be disqualified / rejected. If such disqualification / rejection occurs after the tenders have been opened and the Lowest Tenderer gets disqualified / rejected, then the Authority reserves the right to take any such measure as may be deemed fit in the sole discretion of SMP, Kolkata, including annulment of the Tendering Process.

13.5.3 If any Tenderer, after downloading the tender document, makes any modification / alteration in the Tender Document, the tender submitted by the said Tenderer will be rejected outright.

14.0 PRICING OF THE BID:

14.1 General: The Bid shall be quoted in and as per format of Price Bid and BOQ.

14.2 Currency of Quotations:

The bidder shall indicate the prices in Indian Rupees only. The bidder shall not quote in any currency other than Indian Rupees (INR).

14.3. Price Bid Evaluation:

The price bid evaluation shall be based on total cost including CAMOC cost of 5 years. The lowest evaluated financial proposal (Fs) will be given a maximum financial score (Fm) of 100 points. The formula for determining financial score of other proposal will be computed as follows:

$Fs = 100 \times Fm/F$, in which "Fs" is the financial score, "Fm" is the lowest price, and "F" is the price of proposal under consideration. The financial scores will be calculated up to 2 decimal points.

14.4 Validity of Price Bid:

Price Bid shall be valid for acceptance for a minimum period of 180 (one hundred eighty) days from the date of opening of Part-I (Techno-commercial Bid).

15.0 Final Evaluation:

The Proposal shall be ranked as per the combined technical (Ts) and Financial (Fs) score using the weights (T = the weight given to technical proposal (0.7); P = the weight given to Financial Proposal (0.3); T + P=1) as follows:

$S = T_s \times T + F_s \times P$ shall be the first ranked applicant (having the highest combined score). The Second rank applicant shall be kept in reserve and may be invited for negotiation in case first ranked bidder withdraws or fail to with the requirement specify with in RFP. In case the highest combined score is the same for more than one bidder, the bidder with the higher financial bid score will be the first ranked applicant.

16.0 DUTIES & TAXES:

- a. The prices quoted shall be as per BOQ including all statutory levies excluding GST. The Total cost as mentioned in the BOQ would be the basis of evaluation.
- b. Supplier / Service Provider to confirm that the GST amount charged in invoice is declared in its returns and payment of taxes is also made.
- c. The Supplier / Service Provider agrees to comply with all applicable GST laws, including GST acts, rules, regulations, procedures, circulars & instructions thereunder applicable in India from time to time and to ensure that such compliance is done within the time prescribed under such laws. Supplier / Service Provider should ensure accurate transaction details, as required by GST laws, are timely uploaded in GSTN. In case there is any mismatch between the details so uploaded in GSTN by Supplier / Service Provider and details available with SYAMA PRASAD MOOKERJEE PORT, KOLKATA, then payments to Supplier / Service Provider to the extent of GST relating to the invoice/s under mismatch may be retained from due payments till such time SYAMA PRASAD MOOKERJEE PORT, KOLKATA is not sure that accurate tax amount is finally reflected in the GSTN to SMP, Kolkata's Account and is finally available to SYAMA PRASAD MOOKERJEE PORT, KOLKATA in terms of GST laws and that the credit of GST so taken by SYAMA PRASAD MOOKERJEE PORT, KOLKATA is not required to be reversed at a later date along with applicable interest.
- d. SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMP, Kolkata) has the right to recover monetary loss including interest and penalty suffered by it due to any non-compliance of tax laws by the Supplier / Service Provider. Any loss of input tax credit to SYAMA PRASAD MOOKERJEE PORT, KOLKATA for the fault of supplier shall be recovered by SYAMA PRASAD MOOKERJEE PORT, KOLKATA by way of adjustment in the consideration payable.
- e. Supplementary invoice/debit note/credit note for price revisions to enable SYAMA PRASAD MOOKERJEE PORT, KOLKATA to claim tax benefit on the same shall be issued by you for a particular year before September of the

succeeding Financial Year.

- f. The purchase order/work order shall be void, if at any point of time you are found to be a black listed dealer as per GSTN rating system and further no payment shall be entertained.
- g. If any new taxes and duties, increase in existing taxes and duties are imposed by the central / state government and is applicable in this contract, these shall be paid by SMP, Kolkata in addition as the same are not included in the quoted rates.

17. Asset Transfer:

The contractor shall handover all assets and other associated infrastructure of the solution from the date of expiry of the contract unless SMP, Kolkata management has given extension period. All the cloud storage data should be handed over to SMP, Kolkata on Memory storage devices provided by SMP, Kolkata.

18. Acceptance of the Energy Efficient Smart LED Lighting Solution at KDS, SMP, Kolkata.

Commissioning of the Smart Energy Efficient Smart LED Lighting Solution at NSD is subject to acceptance of solution by the Engineer of the contract.

19.0 INTERPRETATION OF TERMS

In the Contract and specifications, the following words and expressions shall have the meanings as follows:

- 19.1 THE TRUSTEES - The expression 'THE TRUSTEES' means the Board of Trustees for the SMP, Kolkata.
- 19.2 THE CHAIRMAN means the Chairman of the Board and includes the person appointed to act in his place under Section 14 and 14A of the Major Port Trusts Act, 1963.
- 19.3 THE DEPUTY CHAIRMAN, Kolkata means the Deputy Chairman, KDS, or, as the case may be, a Deputy Chairman of a Board and includes the person appointed to act in his place under section 14 of the Major Port Trusts Act, 1963.
- 19.4 THE CHIEF HYDRAULIC ENGINEER, HYDRAULIC STUDY DEPARTMENT - The expression 'The Chief Hydraulic Engineer, Hydraulic Study Department' means the office holding that post under the Trustees and includes his successors in office.
- 19.5 THE CHIEF ENGINEER, CIVIL ENGINEERING DEPARTMENT - The expression 'The Chief Engineer, Civil Engineering Department' means the office holding that post under the Trustees and includes his successors in office.

- 19.6 THE CHIEF MECHANICAL ENGINEER, MECHANICAL& ELECTRICAL ENGINEERING (M & EE) DEPARTMENT - The expression 'The Chief Mechanical Engineer, Mechanical & Electrical Engineering Department' means the office holding that post under the Trustees and includes his successors in office.
- 19.7 THE ENGINEER - The expression 'The Engineer' means the Chief Mechanical Engineer, Mechanical and Electrical Engineering Department for the purpose of this contract only.
- 19.8 THE ENGINEER'S REPRESENTATIVE - The expression 'The Representative' means any officer or person from time to time deputed by the Trustees or Engineer of the Contract to act on their behalf for the purpose of this contract.
- 19.9 DAY - means duration of 24 hours commencing at 00.00 hours midnight till 24.00 hours and includes Sundays and Holidays.
- 19.10 MONTH – means English Calendar Month.
- 19.11 LETTER OF INTENT- "Letter of Intent" means the formal acceptance by SMP, Kolkata of the Tender.
- 19.12 TENDER - "Tender" means the Contractor's priced offer to SMP, Kolkata for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Intent.

SPECIAL CONDITIONS OF CONTRACT

20.0 GENERAL:

1. The provisions of the Special Conditions of Contract & Technical Specifications shall be deemed to override the provisions of the General Conditions of Contract, only to the extent of such repugnancy or variations in the Special Conditions of Contract & Technical Specifications, as are not possible of being reconciled with the provisions of General Conditions of Contract.

2. **Preference to Make in India:** The policy of the Govt. of India to encourage “Make in India” and promote manufacturing and production of goods and services in India as per the “Public Procurement (Preference to Make in India), Order 2017- Revision regarding”, circulated by the Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India vide Order No. P-45021/2/2017-PP (BE-II) dated 04.06.2020; subsequently revised vide Order No. P-45021/2/2017-PP (BE-II) dated 16.09.2020 will be applicable for this tender.

3. **Bidder from a country sharing land border with India:** Any bidder from a country which shares land border with India will be eligible to bid as per the OM No. F6/18/2019-PPD dated 3.07.2020 circulated by the Department of Expenditure (Public Procurement Division), Ministry of Finance, Govt. of India.

4. **Import from Prior Reference countries:** Attention is invited to the provision contained in Ministry of Power, Govt. of India’s Order no. 25-11/06/2018-PG dated 02.07.2020 which reads that “Any import of equipment/components/parts from “prior reference” countries as specified or by persons owned by controlled by or subject to the jurisdiction or the directions of these prior reference countries will require prior permission of the Govt. of India.” It is hereby clarified that for the purpose of aforesaid stipulation, “prior reference” country means a country which shares a land border with India. Attention is further invited to Ministry of Power, Govt. of India’s Order no. 25-4/1/2019-PG-Part (1) dated 02.07.2020 wherein it is clarified that “Notwithstanding above, it is further clarified that the restrictions related to “prior reference” countries will not apply in the following cases:

(i). The bidders/imports from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development of projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of Ministry of External affairs.

(ii). Bona fide procurements made through GeM without knowing the country of bidder till the date fixed by GeM for the purpose.

(iii). Bona fide small procurements, made without knowing the country of bidder and

(iv). In projects which receives international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed.”

5. Whenever instances of submission of fraudulent/misleading document(s) are detected by the Port Authorities, appropriate penal action will be unleashed. It must be realised that submission of fraudulent/forged document(s) to a government department is not only a Civil/contractual offence, but might attract Criminal Culpability under Indian Penal Code. Competent Authority will take Range of punitive actions as per guidelines in case of detection of such fraud/forgery/deliberate misrepresentation of documents during the bidding process or afterwards.

21.0 SCOPE OF WORK:

Design, Supply, Delivery, Installation, Testing & Commissioning of Energy Efficient Smart LED lighting solution in NSD, Kolkata Dock System.

Features of the Scope of Work -

1. Design, Supply, Delivery, Installation, Testing and Commissioning of Energy Efficient LED Flood Light Luminaire with Smart wirelessly/Remotely controlled dimmable LED driver for Group Control.
2. Design, Supply, Delivery, Installation, Testing and Commissioning of Energy Efficient LED Street Light Luminaire with Smart Wirelessly individually controlled dimmable LED Driver for individual control.
3. Design, Supply, Delivery, Installation, Testing and Commissioning of Energy Efficient LED Flood Light Luminaire with Smart wirelessly individually controlled dimmable LED driver for individual control.
4. The existing HPSV SONT Light fittings at NSD will be replaced by Energy Efficient Smart LED Luminaires which includes the light fittings of all the Lighting towers of NSD, Street light Poles and other outdoor Light fittings installed at different areas of dock like on buildings, gates, etc.
5. Design, Supply, Delivery, Installation and Commission of Command, Control and Monitoring System (CCMS) for implementation of Energy Efficient Smart LED Lighting Solution at Netaji Subhash Dock (NSD).
6. CCMS should provide Group Control treating all light fittings on an individual High Mast and lattice tower as a single group.
7. CCMS should provide individual level control and monitoring for wirelessly individually controlled dimmable Energy Efficient LED Street Light Luminaire and for individually wirelessly controlled dimmable Energy Efficient LED Flood Light Luminaire installed on different structures like buildings and gates, poles, etc.
8. By giving commands on the CCMS web accessible central management and control software Interface, the authorised personnel can control and monitor all the groups and the individually controlled LED Luminaires.
9. Cloud server should be such that during the duration of the contract all the monitoring and operations data should be stored in cloud storage for the entire contract period and should be accessible to authorised personnel's of SMP, Kolkata for future analysis and for preparation of analytics reports. After the end of the contract, the party has to handover all the past data in any portable storage device as mutually agreed by selected bidder and SMP, Kolkata.
10. A reliable communication link should be setup between the devices and cloud server in the proposed network architecture to eliminate loss of data and to securely transfer the data.

11. A user friendly dash board should be developed. The content of the Dash board will be finalized during the execution of the project. A proposed sample of the Dash board should be submitted with the proposed solution.

12. The CCMS system should give alerts and daily status reports to minimum 10 authorised personnel via SMS, and Email.

13. CCMS system should give details of no. of operational and non-operational luminaries. The time of non-functioning of a LED fitting should be denoted with a Date & time stamp & duration of failure should also be recorded and the time of functioning should be denoted with a Date & time stamp with duration.

14. CCMS should record and monitor various parameters of each group like Input RMS Current, Input RMS voltage; Power Factor, load in KW/KVA, Energy Consumption, dimming level, Time of switch on and off of each group, etc. should be accessible over the web-accessible central management and control software.

15. Setting time for Scheduled ON/OFF of groups via the web accessible central management and control software.

16. Setting time for Scheduled ON/OFF of Individually controlled and monitored Street Light LED Luminaires and LED Flood Lights installed on structures. Remote dimming of individually controlled LED Light fittings from CCMS Web interface. CCMS System should record and monitor various parameters of the individually controlled LED Luminaires like input RMS Current, input RMS Voltage, Power Factor, Load in watts, Energy consumption, Dimming Level, time of switch on and off, etc., which should be accessible over the web-accessible central management and control software.

17. The Group will be marked as per High Mast Number / Lattice Number and Location wise, the details of which will be provided by SMP, Kolkata.

18. The Energy Efficient Smart Lighting Solution should be designed to maintain a minimum of 25 Lux at a radius of 40 Meters on the circumference of each 25 Meters High Mast / 27.5-Meter-High Lattice Tower considering the High Mast/Lattice Tower to be at the centre of the circle. A Dialux/Calculux Report should be submitted for compliance with Grid size of 5 m x 5 m and maintenance factor of .8. A High Mast will be given to the Highest Scoring party after evaluation for physical checking at site with a calibrated lux meter for compliance. The solution is to be designed considering a maximum of 12 Energy Efficient LED Flood Light Luminaires per High Mast. The solution is to be designed considering a maximum of 12 Energy Efficient LED Flood Light Luminaires at the Top Platform of Lattice Tower.

19. After maximum dimming of LED Lights, The Energy Efficient Smart Lighting Solution should be designed to maintain a minimum of 10 Lux at a radius of 40 Meters on the circumference of each 25 Meters High Mast / 27.5-Meter-high Lattice Tower considering the High Mast/Lattice Tower to be at the centre of the circle. A Dialux/Calculux Report should be submitted for compliance with Grid size of 5 m x 5m and maintenance factor of .8. A High Mast will be given to the Highest Scoring Party after evaluation for physical checking at site with a calibrated lux meter for compliance. The solution is to be designed considering a maximum of 12 Energy Efficient LED Flood Light Luminaires per High Mast. The solution is to be designed

considering a maximum of 12 Energy Efficient LED Flood Light Luminaires at the Top Platform of Lattice Tower.

20. The cost of Supply, Delivery, Installation and Commissioning on a given High Mast Tower on a pilot basis for physical verification has to be borne by the contractor in case of non-compliance.

21. After go live of the project, if the maximum lumen output of the LED Luminaires reduces and the condition of minimum 25 Lux at a radius of 40 meters from the High Mast is not satisfied, the lumen depreciated Luminaires should be replaced/repair and reinstalled within 2 days.

22. The SONT HPSV Fittings installed on Street Light Poles and Structures will be replaced by Energy Efficient Smart Wirelessly individually controlled Dimmable LED Luminaires on one-to-one basis.

23. The system should be operated as per requirement of Dock Safety Regulation, 1990. Illumination in the dock working area should be maintained at a of minimum 25 Lux and passage for dock worker and other than working area 10 Lux as per Dock safety regulation 1990. The Dimming of the LED Light fittings will be done as per the instruction of Traffic Department of SMP, Kolkata, KDS, at places where there will be no operations.

24. Dismantling of existing HPSV SONT Fittings from High Mast, Lattice, Pole and structures and handing over to NSD Electrical Section.

25. Phase cut type of dimming or switching type of dimming will not be accepted. In dimming condition each discrete LED of the individual luminaire should be in glowing condition with reduced light output as per given command.

26. One-year warranty of the illumination solution post go-live with 5 years of Comprehensive Annual Maintenance & Operation Contract.

27. All associated hardware, software, network, internet connectivity, civil, electrical, manpower and any other requirements towards successful implementation, commissioning and operation for the project is required to be made by the Service Provider (SP) at his own cost, charges, expenses, risks including accidental damages, Insurance, licenses, etc. including other arrangements, if any, at KDS, SMP, Kolkata. However, during the Warranty and CAMOC period SP will be permitted to replace the faulty parts by its equal or high spec parts at no extra cost to SMP, Kolkata.

28. SMP, Kolkata will provide necessary permission for installation of required devices, if any, inside the dock area for successful implementation of the said solution subject to technical feasibility.

29. Web Accessible solution should provide remote monitoring and control of the Energy Efficient Smart LED Luminaires through communication networks securely.

30. The solution should provide capturing and monitoring the relevant data from the CCMS Panel/Controller Box to check the status of all the electrical parameters of the

Group.

31. The solution should provide automatic ON and OFF feature of LED Luminaire groups based on ON/OFF timing Set through the CCMS Web Accessible solution interface. The solution should facilitate easy and remote configuration / programming of the system from a web-based interface that can be changed as per requirement.

32. The solution should facilitate Fault Monitoring and Report generation.

33. The CCMS Software should be designed for 1500 luminaires capable to be expandable as and when required in steps.

34. The CCMS Panel/Controller Box should have battery backup to store the data in case of power failure.

35. The solution should facilitate asset mapping through GPS coordinates of each CCMS panel/controller Box on existing maps.

36. The CCMS Panel/Controller box for group control and Controller for individual control should have inbuilt memory buffer storage to store data in case of Communication network failure and transfer it as soon as the link is resumed.

35. The solution should comprise of cloud-based arrangement ensure reliable data transmission without loss and data storage for the contract period.

36. Cloud Server uptime should be minimum 99.99% with disaster backup and sufficient storage capacity and processing power to ensure stable operation of the system.

37. The cloud should have enough storage memory to store all the monitoring and controlling data for the total contract duration.

38. For CLOUD server, the CLOUD registration shall be done in the name of Client/ Owner. Only Administrative rights shall be provided to the CONTRACTOR during the contract period. The CLOUD services shall be intact during the contract period. The CLOUD shall not be OEM specific and shall be independent of OEM so that after the completion of contract period there should be no dependence on OEM for cloud services.

39. The solution should ensure secure and safe database management and trouble-free operation of software and allied systems. It should have a self-diagnostic and self-healing feature to identify fault and resume the system by isolating it within shortest possible time.

40. The Electrical parameter data should be sent at uniform intervals as programmed.

41. CCMS Panel /Controller should provide the following minimum (but not limited to) alerts:

- Load & mains failure.
- Luminaire failure alert & restoration.
- High/low mains voltage alert & restoration.
- Low power factor, etc.

42. The system should act in such a way that even if the Controller/CCMS Panel fails due to any reason, the luminaire should remain 'ON' if the luminaire is healthy.
43. CCMS Panel/Controller Box should have facility to carry out switching operations based on astronomical calendar of the location.
44. CCMS Panel/Controller Box should have the facility for localized operation & maintenance in case of emergency or during maintenance with proper safety arrangements.
45. The CCMS Panel /Controller Box should have the ability to communicate with CLOUD via cellular networks (GSM/GPRS/3G/4G) or any other communication technology and with LED Wirelessly controlled luminaire (If required) via other communication technology. All data are to be secured by encryption.
46. The Wirelessly individually controlled LED Luminaires should have the ability to communicate with cloud via Cellular networks (GSM/GPRS/3G/4G) or other communication technology or the Wirelessly individually controlled LED luminaire controller can also form a network to communicate with the Gate way to communicate with the cloud. All data are to be secured by encryption.
47. The Controller for wirelessly individually controlled LED Luminaires should be able to send data regarding various electrical parameters, ON/OFF status, etc to cloud directly or via Gateway device as well as should be able to receive commands from CLOUD.
48. The CCMS Panel Box/Controller Box and its communication module should be provided with battery backup or equivalent to help store all the data and send a main power failure alarm to the Cloud before it shuts down safely.
49. The Web accessible application should facilitate to communicate, control and configure each Controller or CCMS Panel remotely. Remote configuration includes setting new ON/OFF timings, dimming of luminaires, etc.
50. The Web accessible application should be able to display LED luminaire glowing and non-glowing duration controlled by a particular CCMS Panel/Controller box in case of Group control and individual LED Luminaires in case of individually controlled.
51. The application should help users to generate various reports related to the system performance parameters such as energy consumption report, luminaire and system failure report, actual hours of operation, Group uptime (%), Group downtime (%), Luminaire Dimming level, etc. based on historical data on daily, monthly, quarterly or annually basis as the case may be from the data/readings received. The reports should be generated in Excel or PDF or Graphical format.
52. The application should provide a map that gives an overview of all CCMS Panel Boxes for High Mast and Lattice Towers on a GIS map.
53. The application should offer asset management feature and allow user to locate CCMS Panel Box and individually controlled LEDs through GPS coordinates.
54. The application should provide a comprehensive dashboard with status of

Groups and individually controlled luminaires, real time faults of various groups and LED Luminaires, system uptime %, Energy consumption, graphical representation of cumulative data, no. of operational and non- operational luminaires etc.

55. The application should have required protection like Firewall, Malware, Antivirus etc., as per industry security standards. The application software should be flexible to cater to customized requirement which are not foreseen at this point of time but are deemed necessary during the execution and O&M.

56. The application should display the following minimum faults in system generated alarms:

- Phase-wise currents on crossing threshold values.
- Phase-Phase or Phase-Neutral voltages on crossing threshold values - Under/over voltage detection.
- Main power failure.
- Low Power Factor.
- Failure of LED Luminaires.

The application should have facility assign access to the concerned authorities for control and monitoring from their mobile or laptop. The application should provision for notification of all alarms via SMS, and Email to authorised persons.

57. Maintenance of High Mast Double Drum Winch, Wire rope, Trailing cable, Main power supply incoming cable of CCMS/Controller Box, Pulley, Carriage, Aviation Light, and Repair of High Mast Motor is beyond the scope of this contract.

58. Maintenance of Platform DB and power supply incoming cable of CCMS/Controller Box is beyond the Scope of this contract.

59. If SMP Kolkata authority requires to cover additional area adjacent to NSD, successful bidder shall execute the same as per the rate quoted by them in the price bid.

21.1.1 MIS Reports:

- a) Providing the energy consumption of all the groups.
- b) Providing luminaire and system failure report.
- c) Providing information related to actual hours of operation and uptime of system.
- d) Providing information related to various electrical parameters such as RMS voltage and current, power factor, Load, energy consumption, etc.
- e) Provision needs to be arranged for any other reports as required by SMP, Kolkata from time to time.

21.2 API based Integration with Port Operation System (POS) & Enterprise Business System or Solution (EBS) or Port authorized agency of SMP, Kolkata: If required, the selected SP is responsible for integration of proposed solution with SMP, Kolkata's/ it's authorized agency's computerized software system (EBS/ERP POMS or any other system required by Port or its authorized agency) without any additional cost to SMP, Kolkata.

21.3 Audit of proposed Web accessible solution: SP will submit software audit report accredited by any Govt. empanelled agency at his own cost before go-live of the project.

21.4 SP will provide suitable and sufficient manpower for the commissioning, go-live, daily execution, monitoring and maintenance support of the solution at KDS, SMP Kolkata.

21.5 SCOPE OF WORK DURING WARRANTY PERIOD AND COMPREHENSIVE ANNUAL MAINTENANCE& OPERATION CONTRACT PERIOD OF FIVE YEARS:

1. After successful installation and commissioning by the Successful SP and acceptance by SMP, Kolkata, annual maintenance and operation shall be carried out by the successful tenderer during the warranty period and thereafter for a further period of five years beyond warranty period.

2. The successful tenderer shall submit the maintenance schedule to SMP, Kolkata for approval based on SMP, Kolkata's recommendation to carry out the maintenance work during CAMOC period.

3. The successful tenderer shall complete the preventive maintenance activities every month and shall record the same in the register duly signed by SP representative. The said record may be counter-signed by the officials of SMP, Kolkata.

4. This is a comprehensive Annual Maintenance & Operation Contract for Energy Efficient Smart LED Lighting Solution in NSD, Kolkata Dock System, where SP shall at its own cost and expense attend, replace faulty items and install new spares in the normal course of operation as well as attend failures/breakdown of the Solution for efficient, reliable and smooth operation of solution under AMC. During the warranty & maintenance & operation period the SP shall arrange to transport man and material at its own cost as and when required for maintenance of the solution.

5. During 1 year warranty period and the five-year period of the Comprehensive Annual Maintenance & Operation Contract, the SP shall also render round-the-clock service for operation and maintenance of the entire solution with their personnel.

6. During warranty and comprehensive maintenance & Operation contract period, the SP shall provide at least 01 (One) technical personnel who will be stationed at SMP, Kolkata to take care of the entire solution so that uninterrupted operation is carried out. SP will be responsible for supply of maintenance spares and consumables during the entire period and SP representative will operate as per the direction of officials of SMP, Kolkata.

7. All type of portable testing instruments required for proper testing of solution should be available at site.

8. SP shall provide the contact details, mobile No. and E mail id of deputed persons for this Job.

9. The SP shall provide PPE's (Personal Protective Equipment) such as, helmet, safety shoe etc. to all workers and shall also provide job specific PPE's e.g., safety

belts for working at heights; protective face and eye shield, goggles, hand gloves for welding / gas cutting works; protective foot wear and gloves for hot works; facemasks, gloves and overalls for painting works, mixing and handling materials etc as directed by the Engineer.

10. The contractor/SP shall adhere to necessary safe practice, guard against hazardous and unsafe working conditions and follow all safety precautions for prevention of injury or accidents and safeguarding life and property. The contractor shall comply with relevant provisions of Dock Workers (Safety, Health and Welfare) Act – 1986 and Dock Workers (Safety, Health and Welfare) Regulation – 1990.

11. All representatives and workers of the SP shall possess the RFID based Dock Permit issued by Permit Office at the recommendation of concerned officer/Engineer on monthly or daily basis, free of cost. A token charge as per applicable rate per person per occasion will be levied for creation of new IDs in the permit system. A separate receipt indicating the details of the ID along with the amount charged will be issued which may be kept for future reference.

12. The SP shall bear all the costs for deployment of the necessary manpower and shall be responsible for all liabilities regarding payment, termination, leave, and statutory contributions etc. for his personnel without any obligation /involvement /liability on the part of Syama Prasad Mookerjee Port, Kolkata.

13. Any non-performance on the part of the SP due to any industrial relations problem, non-supply of spares, etc. shall draw penalty for the Service Provider as per penalty clause. Syama Prasad Mookerjee Port, Kolkata reserves the right to get the work done through any other agency or departmentally and the difference of cost shall be borne by the contractor under “Risk purchase”.

14. Syama Prasad Mookerjee Port, Kolkata will provide, as may be available, space for office, stores and working area to the contractor on chargeable basis as per prevailing applicable TAMP rate of SMP, Kolkata which may undergo change during the tenure of contract.

15. The SP shall have to specify the requirement of spaces after inspecting the area/sites as mentioned in above. Water and toilet facilities, as available within the area/sites, will be extended to the SP’s personnel free of cost. Electricity, if available will be provided free of cost for carrying out the contractual works.

16. The contractor or his employees shall not use the premises allotted to him for any purpose other than for carrying out the work allotted as per the contract and shall not act in any manner as to cause any nuisance or annoyance to SMP, Kolkata or the participants /visitors at the port.

17. Labour License: Within 3 weeks from the date of issuance of the order, the contractor shall have to apply for labour license for the maximum number of workers / personnel to be deployed for the work. Necessary certificate shall be issued by the Engineer or his representative against a request from the SP.

18. The contractor shall have to arrange at his own cost for all necessary insurance coverage for men and materials to be used this contract.

19. All dismantled unserviceable materials are to be disposed of beyond the office compound and as per instructions of SMP, Kolkata or in conformity with the Municipal Corporation Rule at the contractor's own cost.

20. The Contractor shall arrange all necessary tools, tackles, equipment, measuring & testing equipment etc. required for the repair & maintenance work at no extra cost to Syama Prasad Mookerjee Port, Kolkata.

21. The contractor, after commissioning of the solution, shall impart training to the Port Personnel for understanding of the solution and its operation to the satisfaction of the Engineer without any extra cost to SMP, Kolkata.

22. The operation and comprehensive maintenance support are to be rendered by the contractor concurrently with the responsibilities of warranty period on commissioning.

23. The contractor has to provide manpower to independently run operation and monitoring of the LED Luminaires as per the instruction of SMP, Kolkata officials. SP will prepare reports; monitor the parameters of entire solution from the web accessible CCMS application for any alerts, and malfunction or abnormality.

24. Appropriate up-keeping, maintenance, and operation of all network, hardware, and software components, and ensure smooth functioning of the smart lighting solution throughout the entire contract period. After completing life of equipment's, the same equipment's shall be replaced with new hardware / software of same or better specifications free of cost throughout the Contract period. During the guarantee period, if any hardware or software needs to be replaced, the same will be replaced with same or higher configuration free of cost.

25. The LED luminaires or driver or any component while replacing the SP should provide the Specification data sheet and the model no. to SMP, Kolkata officials for verifying that the replaced spare part is the same or its upgraded model. Any other test report for the replaced LED Luminaires, driver, etc., can be asked for compliance with the originally supplied LED Luminaires specifications and other accessories specification which was supplied and installed during commissioning of the project.

26. SMP, Kolkata shall not be liable to pay for any sought of damages to equipment installed by the Service Provider suitable mechanical or civil protection should be done to protect the devices.

27. Any defect and /or deficiency in the equipment supplied shall have to be made good by the contractor before any bill is passed for payment. Payment will be made on the basis of actual performance as per penalty clause.

28. The contractor/SP shall at its own cost and arrangement promptly repair / replace or restore any of the solution associated infrastructure or any part thereof which may be lost, damaged or destroyed.

29. The SP shall at its own cost and arrangement obtain and maintain all required statutory clearances, permissions, spectrum or software license or any

proprietary license as may be required by law for operation and maintenance of the proposed solution.

30. The SP shall comply with the requirements of all the Acts, Laws, Statutes, Bylaws, Rules and Regulations for the purpose of fulfilling all the obligations of the contract which shall include but not limited to the Major Port Trust's Act, 1963, the Indian Contract Act, the Dock Workers (Safety, Health & Welfare) Regulations, 1987, Motor Vehicles Act, Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, Industrial Dispute Act, 1947, Shops and Commercial Establishment Act, Factory Act, 1948, Workmen's Compensation Act, 1923, ESI Act, 1948, Payment of Wages Act, 1963, Bonus Act, Employees Provident Funds & Misc. Provisions Act, 1952 etc. and such other applicable Central / State Acts from time to time and take such steps as may be deemed necessary in this regard. All of the Acts, Laws, Statutes, Bylaws, Rules and Regulations, mentioned above are intended to be illustrative, not exhaustive.
31. In case of SMP, Kolkata assets/property/employee suffers damage or sustaining injury (fatal/non-fatal) as the case may be due to operation of proposed solution/ system provided by SP, the contractor/ SP shall be solely accountable for all liabilities and losses thereof. In case of loss or damage of any property or any material belonging to SMP, Kolkata, the contractor shall immediately pay the required cost for making good the losses, as will be ascertained by SMP, Kolkata official, or in lieu thereof, the contractor may also repair / replace the damaged property to the satisfaction of SMP, Kolkata official, within the period to be indicated by SMP, Kolkata.
32. Maintenance of High Mast Double Drum Winch, Wire rope, Trailing cable, Main power supply incoming cable of CCMS/Controller Box, Pulley, Carriage, Joint Box, Aviation Light, Repair of High Mast Motor is beyond the scope of this contract.
33. Maintenance of Platform DB and power supply incoming cable of CCMS/Controller Box is beyond the Scope of this contract.

21.5.1 Penalty Clause:

1. The breakdown call is to be attended within 30 minutes of oral/written communication and is to be commissioned within 2 days' time. Non-commissioning of equipment's within 2 days will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay from 3rd day onwards. In case commissioning is not possible due to reasons such as lockdown, natural calamity or any other reason which is acceptable to CME, an additional time for commissioning may be granted by CME at his discretion. Non-commissioning of equipment's within additionally granted time will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay after the end of additionally granted time. Here breakdown means non-functioning of any hardware component of the solution like any component of driver, controller, luminaire, CCMS Panel Box, Networking devices, etc.
2. In case there is any software, Application, Cloud related failure of the solution the same should be attended and rectified within 4 hours from written communication to the SP. In case the failure is not rectified within 4 hours, the

SP will have to pay to the trustee penalty from 5th hour onwards an hourly proportionate value @ 0.1% of the yearly CAMOC value/day for delay.

3. After go live of the project, if the lumen output of the LED Luminaires reduces and the condition of minimum 25 Lux at a radius of 40 meters from the High Mast is not satisfied, the lumen depreciated luminaires should be replaced/repair and reinstalled within 2 days. Non-commissioning of equipment's within 2 days will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay from 3rd day onwards. In case commissioning is not possible due to reasons such as lockdown, natural calamity or any other reason which is acceptable to CME, an additional time for commissioning may be granted by CME at his discretion. Non-commissioning of equipment's within additionally granted time will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay after the end of additionally granted time.
4. After go live of the project, if the lumen output of the LED Street light/ individually controlled LED Flood Light reduces due to any form of malfunctioning the lumen depreciated LED Street/ individually controlled LED Flood luminaires should be replaced/repair and reinstalled within 2 days. Non-commissioning of equipment's within 2 days will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay from 3rd day onwards. In case commissioning is not possible due to reasons such as lockdown, natural calamity or any other reason which is acceptable to CME, an additional time for commissioning may be granted by CME at his discretion. Non-commissioning of equipment's within additionally granted time will attract penalty and the SP will have to pay to the trustee @ 0.1% of the yearly CAMOC value/day for delay after the end of additionally granted time.

21.6 Coverage area/ sites:

The proposed solution will cover the High Mast towers, Lattice towers, Street Light Poles and other Flood Light Fittings installed on different structures at NSD of Kolkata Dock System, SMP, Kolkata.

21.6 Other important information:

All prospective bidders are requested to visit the complete site before attending Pre-bid meeting for thorough understanding of the various aspects of the Project Energy Efficient Smart Light Solution at NSD, KDS, SMP, Kolkata.

21.7 Data Ownership:

SMP, Kolkata will have sole right on the data/ information and reports generated by proposed solution and SP will be bound to share complete data with SMP, Kolkata without any cost implication from day one. Selected bidder/ SP may have to share the information with legally/ contractually engaged service providers or any other authorized parties/ agencies as directed by SMP, Kolkata. The selected bidder must not share the data to any other party or agencies without prior permission of SMP, Kolkata and should maintain confidentiality as per GoI (Govt. Of India) IT acts and Cyber security policy & guidelines. At the end of the contract, the SP shall transfer all business data of the entire solution/ project in storage to be provided by SMP, Kolkata and the SP shall destroy all data stored in their cloud storage and system.

21.8 (a). In case of SMP, Kolkata assets/property/employee suffers damage or sustaining injury (fatal/non-fatal) as the case may be due to operation of proposed solution/ system provided by SP, the contractor/ SP shall be solely accountable for all liabilities and losses thereof. In case of loss or damage of any property or any material belonging to SMP, Kolkata, the contractor/SP shall immediately pay the required cost for making good the losses, as will be ascertained by SMP, Kolkata official, or in lieu thereof, the contractor/SP may also repair / replace the damaged property to the satisfaction of SMP, Kolkata official, within the period to be indicated by SMP, Kolkata.

(b). In case of loss of life or injury caused to any person, the SP shall immediately pay the required compensation (as may also be decided by the statutory / competent authority) to the affected party.

Note: In case of non-compliance with the above provisions, SMP, Kolkata will be at liberty to realize the cost of compensation from any amount due to the contractor/SP.

The contractor/SP shall allow SMP, Kolkata or any statutory authority to inspect the proposed solution and other associated infrastructure installed and operated by the contractor/SP under the provisions of the contract at all / any point of time and take such action as may be directed by SMP, Kolkata or the said statutory authority with regard to any or all the proposed solutions and other associated infrastructure.

The contractor/SP shall be responsible for payment of taxes, duties, cess, assessment or any other charges which may be levied by any statutory authority during the currency of the contract. If during the period of the contract, any new tax / duty / cess or any other charge is imposed/levied by the Government / any statutory authority having impact on the payable amount to the contractor/SP only to the extent of the services to be rendered after commencement of contract, then the same would be paid by SMP, Kolkata to the contractor/SP at actual on production of relevant proof.

SMP, Kolkata is covered by the “International Ship and Port Facility Security (ISPS) Code”. The general security of the entire dock area at KDS is provided by Central Industrial Security Force (CISF) as in existence now. However, if any localized security for the proposed solution and other associated infrastructure to be set up by the contractor/SP inside the dock is required, the same is to be provided by the contractor/SP at its cost, arrangement and liability.

The contractor/SP will be allowed to install telephone(s) and other communication arrangements within the dock area for communication purpose at its own cost and arrangement.

The contractor/SP shall have to obtain required permits for entry into the dock for its employees, workmen, security personnel, vehicles, tools and tackles, equipment and accessories etc. following the procedure of SMP, Kolkata in vogue at KDS. The required permits will be given free of cost only and RFID card and Tags will be given on chargeable basis.

21.9 CONFIDENTIAL INFORMATION, SECURITY AND DATA: The SP will promptly on the commencement of the contract period supply to SMP, Kolkata the following:

- I. Information relating to the current services rendered and performance data relating to the performance of sub-contractors/Sub-Service providers in relation to the services;
- II. Documentation relating to Project's Intellectual Property Rights;
- III. Project data and confidential information;
- IV. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable Project or its nominated agencies, or its Replacement SP to carry out due diligence in order to transition the provision of the Services to Project or its nominated agencies, or its Replacement SP (as the case may be).

If there is any update and changes made during the contract, SP needs to submit the revised documents during the contact period.

21.10 RIGHTS OF ACCESS TO PREMISES: At any time during the contract period including extension period (if any), where assets pertaining to the proposed solution are located at the SP's premises, the SP will be obliged to give rights of access to (or, in the case of Assets located on a third party's premises) SMP, Kolkata, and/or any replacement SP in order to make an audit and study of the assets/ systems.

21.11 Facilities/ infrastructure provided by SMP, Kolkata:

- i. Provide Map (non-geo-spatial map) of NSD
- ii. SMP, Kolkata will provide raw power/ electricity for the equipment load may be provided on free of cost.
- iii. Dock pass/permits will be given free of cost. However, RFID card and Tags will be issued on chargeable basis.

22.0 GUARANTEED AVAILABILITY:

Refer to Scope of Work and Penalty clause.

23.0 Delay/ Extension of Completion Time/ Liquidated Damage/ Termination Contract:

23.1 Should the quantum of extra or additional work of any kind or delayed availability of the Trustees' materials to be supplied as per contract or exceptionally adverse climatic conditions and natural phenomenon or strikes, lockouts, civil commotions or other special circumstances of any kind beyond the control of the Contractor/SP cause delay in completing the work, the contractor/SP shall apply to the Engineer in writing for suitable extension of completion time within 7 days from the date of occurrence of the reason and the Engineer shall there upon consider the stated reasons in the manner deemed necessary and shall either reject the application or determine and allow in writing the extension period as he would deem proper for completion of the work, with or without the imposition of "Liquidated Damaged" on the Contractor/SP and his decision shall be binding on the contractor. If an extension of completion time is granted by the Engineer, the Liquidated damage shall apply from its date of expiry, if the work be not completed within the extended

time, unless stated otherwise in the decision communication by the Engineer, as aforesaid.

23.2. a) If the Contractor/SP fails to complete the work within the stipulated dates or such extension thereof as communicated by the Engineer in writing, the contractor/SP shall pay as compensation (Liquidated Damage) to the Trustees and not as a penalty, 1/2 % (half percent) of the total value of work (contract price) as mentioned in the latter of acceptance of the tender/offer, for every week or part thereof the work remains unfinished. Provided always that the amount of such compensation shall not exceed 10% the said value of work.

b) Without prejudice to any of their legal rights, the Trustees shall have the power to recover the said amount of compensation/damage in Sub-Clause (a) of this clause, from any money⁶ due or likely to become due to the contractor/SP. The payment or deduction of such compensation/damage shall not relieve the Contractor/SP from his obligation to complete the work or from any of his other obligations/liabilities under the contract and in case of the Contractor's/SP's failure and at the absolute discretion of the Engineer, the work may be ordered to be completed by some other agency at the risk and expense of the Contractor/SP, after a minimum three days' notice in writing has been given to the contractor by the Engineer or his Representative.

23.3 Without being liable for any compensation to the Contractor/SP, the Trustees may, in their absolute discretion, terminate the contract due to occurrence of any of the following reasons and decision of the Trustees in this respect, as communicated by the Engineer shall be final and conclusive:

- a) The Contractor/SP has abandoned the contract.
- b) In the opinion of the Engineer, either the performance of the Contractor/SP is not satisfactory or the work is not getting completed within the agreed period on account of Contractor's lapses.
- c) The Contractor/SP has failed to commence the work or has without any lawful excuse under these conditions, has kept the work suspended despite receiving the Engineer's or his Representative's written notice to proceed with the work.
- d) The Contractor/SP has failed to remove materials from site after receiving from the Engineer or his Representative the written notice stating that the said materials or work are rejected by him.
- e) The Contractor/SP is not executing the work in accordance with the contract or is persistently or flagrantly neglecting to carry out his obligations under the contract.
- f) Any bribe, commission, gift or advantage is given, promised or offered by or on behalf of the contractor/SP to any officer, servant or representative of the Trustees or to any person on his or their behalf in relation to the obtaining or to the execution of the contract.
- g) The Contractor/SP is adjudged insolvent or enters in to composition with his creditors or being a company goes in to liquidation either compulsorily or voluntarily.

23.4.1 Upon receipt of the letter of termination of work, which may be issued by the Engineer on behalf of the Trustees, the Contractor/SP shall hand over the

entire Trustees' tools, plant and materials issued to him at the place to be ascertained from the Engineer, within 7 days of receipt of such letter.

23.4.2 In all such cases of Termination of work, the Trustees shall have the power to complete the Work through any other agency of the Contractor's/SP's risk and expense and the Contractor/SP shall be debited any sum or sums that maybe expended in completing the work beyond the amount that would have been due to the contractor/SP, had he duly completed the whole of the work in accordance with the contract.

23.4.3 The Trustees shall have the power to retain all moneys due to the Contractor/SP until the work is completed by other agency and the Contractor's/SP's Liabilities to the Trustees and known in all respect.

24.0 Adequacy of the tender:

The intending tenderers are expected to visit the sites and satisfy themselves on the actual site conditions before tendering. Whatever information given in the tender document is only intended as a general guidance for the contractor and no warranty is given for the correctness of the same.

The information being provided in the Tender document does not relieve the Bidders from carrying out the works to suit the specified needs. The Bidder shall inspect the site and may conduct trials at their own cost and risk and use any and every other method to ensure the adequacy of their offer including the suitability and capability of the equipment proposed to be deployed for execution of the work.

24.1 Implementation and Execution Time:

The bidder should complete the design, supply, commissioning and go-live of the project within 150 days from the date of issuance of the work order.

25.0 PAYMENT TERMS:

Payment to the Successful Bidder will be made stage-wise as indicated below:

I) 30 % payment of the total value of the work other than CAMOC against complete supply and delivery of all LED Luminaires and accessories, CCMS Panel/Controller with all its components, all Cables and accessories, all earthing items, on production of challans at site together with required Test Certificates, etc. from appropriate authorities including inspection certificate of KoPT's representative, as applicable and on submission of Custodian Certificate.

II) Payment for 45 % of the project cost other than CAMOC amount will be made against installation, testing, commissioning of the entire solution and taking over of the commissioned job by SMP, Kolkata and submission of bills, along with job completion certificate of entire solution as a whole.

Any defect and /or deficiency in the items supplied shall have to be made good by the contractor before any bill is passed for payment. Payment will be made on the basis of actual measurement.

IV) Payment for remaining 25 % of the project amount will be distributed among the 5-year CAMOC period, where 5 % payment be released for each year of CAMOC in addition to yearly CAMOC bill payment.

V) No payment will be made by KDS, SMP, Kolkata to the contractor/SP during i.e., Warranty Period. However, copies of maintenance job card, duly signed by KDS officials as per schedule, are to be submitted. The Scope of Work of 5-year CAMOC applies to Warranty period. Penalty clause also applies to Warranty, where the amount will be deducted from the security deposit held.

Payment against 5 Year Comprehensive Annual Maintenance & Operation post Warranty Period:

I) Payment will be made on pro-rata monthly basis on successful maintenance of the solution. Copies of maintenance job card, Maintenance log sheets and details, with details of scheduled and break down maintenance with replacement of faulty components (If any) by its spare within agreed time, duly signed by KDS Officials, are to be submitted along with monthly bills. Penalty (if any) for violation of service level agreement will be deducted from the CAMOC bills.

GST will be paid extra on actual as per prevalent rates.

26.0 LIAISON OFFICER:

A Liaison Officer should be deployed by the Contractor/SP for interacting /communicating between SMP, Kolkata, and other concerned officials at Kolkata. Such liaison officer shall have Mobile Phone in Kolkata with residential landline telephone facility. He should be a person having experience in the field of High Mast Illumination System.

27.0 EVALUATION AND COMPARISON OF BIDS:

27.1 SYAMA PRASAD MOOKERJEE PORT, KOLKATA reserves the right to accept price part of the offer (part-II) of only such bidders who achieve minimum technical score of 70 as described in section 12 along with fulfilling mandatory requirements and whose commercial proposals are complete and acceptable. SYAMA PRASAD MOOKERJEE PORT, KOLKATA's decision in this regard shall be final and binding on the bidder. SYAMA PRASAD MOOKERJEE PORT, KOLKATA may not open the price part of the offer (Part-II) of the bidders who fail to achieve minimum technical score of 70 or do not fulfil the mandatory requirements or whose commercial proposals are incomplete or unacceptable.

27.2 SYAMA PRASAD MOOKERJEE PORT, KOLKATA will not be duty bound to notify the names of unsuccessful bidders nor the reasons for the same.

27.3 SYAMA PRASAD MOOKERJEE PORT, KOLKATA also reserves the right to obtain revised commercial bid, if necessary, from the technically acceptable bidders.

27.4 The Bids received and accepted will be evaluated using Quality and Cost Based Selection (QCBS) as indicated in the section 15.

28.0 BID OPENING:

Part-I: Technical and Commercial Aspects

Part-II: Price part of the offer

Price Bid of only those Bidders, who achieve minimum technical score of 70 (as per section 12) along with fulfilling mandatory requirements and whose

commercial proposals are complete and acceptable, shall be opened on the scheduled date or a subsequent date which will be intimated at least 24 hours in advance.

29.0 THE GENERAL CONDITIONS OF CONTRACT OF SMP, Kolkata SHALL BE APPLICABLE WHEREVER RELEVANT:

The GCC may be downloaded from SMP, Kolkata website (<https://kolkataporttrust.gov.in/>), 'Homepage - Rule and Regulations - Non-Service Regulations'- 'General Conditions of Contract- Forms and Agreements'.

30.0 INSURANCE:

The "Energy Efficient Smart LED Lighting Solution" and all other ancillary equipment may be insured with any reputed Indian Insurance company registered with IRDA at his own cost by the SP. SMP, Kolkata shall not be responsible in any manner for any accidental damages or loss occurred to the equipment/ assets of the proposed solution.

All persons deployed by the contractor/SP for the subject work shall be insured by the contractor at his/ her own cost. SMP, Kolkata shall not be responsible in any manner for any accident to the personnel engaged by the Contractor or persons deployed (if any) during the operation and maintenance of the solution or otherwise.

31.0 TERMINATION OF CONTRACT:

31.1 Without being liable for any compensation to the Contractor, the Trustees may, in their absolute discretion, terminate the contract and enter upon the site and works and expel the Contractor there from after giving him a minimum one month's notice in writing, due to occurrence of any one or more of the following reasons and the decision of the Trustees in this respect, as communicated by the Engineer shall be final, binding and conclusive:

- a) If the Contractor fails to commence operation within 120 days from the date of issue of 'Work Order'. However, Engineer shall have the discretion to grant additional time if he is satisfied that the grounds for delay are beyond the control of the Contractor.
- b) The Contractor has abandoned the contract.
- c) The Contractor has failed to commence the works or has without any lawful excuse under these conditions, has kept the work suspended for at least 15 days despite receiving the Engineer's or his Representative's written notice to proceed with the work.
- d) The Contractor is not executing the work in accordance with the contract or is persistently or flagrantly neglecting to carry out his obligations under the contract.
- e) Any bribe, commission, gift or advantage is given, promised or offered by or on behalf of the Contractor to any officer, servant or representative of the Trustees or to any person on his or their behalf in relation to the obtaining or to the execution of the contract.

f) The Contractor is adjudged insolvent or enters into composition with his creditors or being a company goes into liquidation either compulsory or voluntary.

31.2 In all such cases of Termination of work, the Trustees shall have the power to complete the work through any other agency at the Contractor's risk and expense and the Contractor shall be debited any sum or sums that may be expended in completing the work beyond the amount that would have been due to the Contractor, had he duly completed the whole of the work in accordance with the contract.

32.0 LAW OF THE LAND:

32.1 All relevant rules and regulations and laws regarding Trade Union, Labour, Marine and Pollution Control must be complied with by the contractor at their own cost. SMP, Kolkata shall be at liberty to deduct appropriate amount from the pending bills of the contractor in case the contractor fails to comply with the relevant rules and regulations and the consequential damages are to be borne by SMP, Kolkata.

32.2 The Contractor shall at all times observe and comply with all prevailing laws including regulations that are relating to works under the scope of the contract. The contractor shall follow instructions in this regard given by SMP, Kolkata. The Contractor shall carry out his work strictly in a manner which shall not obstruct or endanger the usual operation and capacity of Cargo Handling Equipment, RFID based PACS system and approaches thereto.

32.3 The Contractor shall take all possible precautions and measures to secure the efficient protection of the docks, against pollution of whatever nature during the execution of the work. He shall not allow at any time as refuse including plastic, rubbish, etc. in whatever nature to be thrown into the water by his workmen or any other agency employed by him.

33.0 COMPLIANCE OF LABOUR ACTs:

The contractor shall comply with the Contract labour (Regulation and Abolition) Act, 1970, Employees State Insurance Act (if applicable), Workmen's Compensation Act, 1923, Minimum Wage Act, 1948 and Employer's Insurance and any other Labour and other Laws in force as on date (contractor being deemed to be the employer in all cases).

34.0 ARTICLE OF VALUE:

All articles of value or antiquity and structures and other remains of geological or archaeological interest found shall be deemed to be the property of the Trustees. The Contractor shall take every precaution to prevent damage to any such article and shall immediately report to the Engineer of the Contract or his representative in writing of such discovery and carry out, at the Trustees' expenses, Engineer's order as to their retrieval.

35.0 FORCE MAJEURE:

i) In the event of either party being rendered unable by 'force majeure' to perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such 'force majeure', shall upon notification to the

other party, be suspended for the period during which 'force majeure' event lasts. The cost and loss sustained by either party shall be borne by respective parties.

ii) The term 'Force Majeure' as employed shall mean acts of God, earthquake, war, revolt, riot, fire, strike (excluding that of Contractor's Suppliers or Sub-Contractor's Employees) and hurricane. Time of performance shall be extended by the period of delay, which is directly caused by the 'force majeure'. Upon the occurrence of such cause and upon its termination the party alleging that it has been rendered unable, as aforesaid, shall notify the other party in writing immediately but not later than 48 (Forty-eight) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in supports of its claim.

iii) Time for performance of the relative obligation suspended by the 'force majeure' shall stand extended by the period for which such cause lasts.

36.0 INTERPRETATION OF CONTRACT DOCUMENTS, DISPUTES & ARBITRATION:

36.1 In all disputes, matters, claim demands or questions arising out of or connected with the interpretation of the contract including the meaning of Specifications, Drawings & Instruction or as to the quality of workmanship or as to the materials used in the work or the execution of the work whether during the progress of the works or after the completion and whether before or after the determination, abandonment or breach of the contract, the decision of the Engineer shall be final binding on all parties to the contract and shall forthwith be given effect to by the Contractor.

36.2 If the Contractor is dissatisfied with any such decision of the Engineer / his representative, he shall within 15 days after receiving notice of such award / decision, requires that the matter shall be referred to Chairman or BoT, SMP, Kolkata for taking a view on the dispute.

36.3 If there is still no settlement as mentioned at Clauses – 36.1 & 36.2, the dispute or differences or claims as the case may be, shall be finally settled by binding arbitration under the Arbitration and Conciliation Act, 1996 including all amendments thereof. The arbitration shall be by a panel of three Arbitrators, one to be appointed by each party and the third to be appointed by the two arbitrators appointed by the parties. A party requiring arbitration shall appoint an Arbitrator in writing, inform the other party about such appointment and call upon the other party to appoint its Arbitrator and inform the other party within 60 days. If the other party fails to appoint its Arbitrator, the party appointing Arbitrator shall take steps in accordance with Arbitration and Conciliation Act, 1996, including any amendment thereof.

36.4 Notwithstanding anything contained herein above, Employer also reserve the right to invoke arbitration in all disputes, matters, claim demands or questions arising out of or connected with the interpretation of the contract including the meaning of

Specifications, Drawings & Instruction or as to the quality of workmanship or as to the materials used in the work or the execution of the work whether during the progress of the works or after the completion and whether before or after the determination, abandonment or breach of the contract etc.

36.5 The place/ jurisdiction of arbitration shall be in Kolkata, West Bengal, India.

36.6 The fees and expenses of the arbitrators and all other expenses of the arbitration shall be initially borne and paid equally by respective Parties subject to determination by the arbitrators. The arbitrators may provide in the arbitral award for the reimbursement to the successful Party of its costs and expenses in bringing or defending the arbitration claim, including legal fees and expenses incurred by the Party.

36.7 Pending the submission of and / or decision on a dispute, difference or claim or until the arbitral award is published; the Parties shall continue to perform all of their obligations under this Agreement without prejudice to a final adjustment in accordance with such award.

36.8 The request for arbitration, the answer to the request, the terms of reference, any written submission, any order and ruling shall be in English language and if oral hearings take place, English shall be the language to be used in the hearing.

36.9 Any decision or award resulting from arbitration shall be final and binding upon the Parties. The Parties hereto agree that the arbitral award may be enforced against the Parties to the arbitration proceeding or their assets wherever they may be found and that a judgment upon the arbitral award may be entered in any court having jurisdiction thereof.

PROVIDED ALWAYS AS FOLLOWS:

- a) The Contractor shall have to raise disputes or differences of any kind whatsoever, in relation to the execution of the work to the Engineer within 30 days from the date of occurrence of the cause of dispute and before the preparation of the final bill, giving detailed justifications, in the context of contract conditions.
- b) No dispute or difference on any matter whatsoever pertaining to the contract can be raised by the Contractor after submission of certificate in form G.C.3 by him.
 - c) Contractor's claim/dispute raised beyond the time limits prescribed in Sub-clauses (a) & (b) herein above, shall not be entertained by the Engineer and / or by any Arbitrator, subsequently.

37.0 INTEGRITY PACT:

The selected bidder will have to enter into an Integrity Pact with the Port as per format enclosed at Annexure-I or as per latest GCC. (On Non-Judicial Stamp Paper of Rs. 50/-). All blank spaces to be filled in as appropriate. At present for implementation of Integrity Pact, Ms. Bulbul Sen, IRS (Retd.) & Shri Subhashish Sarkar have been appointed by SMP, Kolkata as Independent External Monitor (IEM).

Bulbul Sen, IRS (Retd.),
B-104 Narayantara Aptts.
Block 8 B, Sec-7,
Dwaraka,
Delhi-110075,
E-mail: bsensarkar@gmail.com.

Shri Subhashish Sarkar,
Flat No.406, Block-III,
Kirti Apartments,
Mayur Vihar Phase-I Extension,
Delhi-110091,
Mob. No. 9811707230,
E-mail: subhashishsarkar53@yahoo.com.

However, SYAMA PRASAD MOOKERJEE PORT, KOLKATA reserves the right to change the Independent External Monitor (IEM) which will be intimated to the bidder accordingly.

BILL OF QUANTITIES

PREAMBLE TO BILL OF QUANTITIES

38. GENERAL:

38.1 The Bill of Quantities must be read with the General Conditions of Contract, the Special Conditions of Contract and the Particular Specifications of Work and the Bidder is deemed to have examined the above documents and to have thoroughly familiarized himself with the total scope of work and its mode of execution.

38.2 The quantities given in the Bill of Quantities are approximate only and are given to provide a common basis for tendering. Payment will be made according to the quantities of each item of work actually carried out at the accepted rates as per Order Letter. The measurements of each item of work shall be measured jointly by the Engineer or his Representative.

38.3 General direction and description of work or materials given elsewhere in the contract documents are not necessarily repeated in the description of items in the Bill of Quantities.

38.4 Where separate items such as mobilization, demobilization, temporary works etc., have not been provided in the Bill of Quantities for works required under the Contract, then the cost of such works shall be deemed to have been included in the prices and rates of other items.

38.5 Without affecting the generality of the foregoing provisions, the prices entered in the Bill of Quantities by the Contractor shall include inter-alia, all costs and expenses involved in or arising out the followings:

- a) The provision, storage, transport, handling, use distribution and maintenance of all materials, plans, equipment machineries and tools including all costs, charges dues demurrages or other outlays involved in the transportation.
- b) The provision and maintenance of all his staff and labours and their payments, accommodation, transport, taxes and other requirements.
- c) Setting out including measurement and supervision.
- d) The provision, storage, transport, use handling, distribution and maintenance of consumable stores, fuel.
- e) All First Aid, Welfare and safety requirements.
- f) Damage caused to the works, plants, materials and consumables stores caused by weather.
- g) License, fees and other charges for compliance of Government Acts and Rules that are in force and applicable.

38.6 The Contractor should be held responsible for the safe custody of materials, machineries etc. at site procured by him or issued to him by the Trustees.

38.7 If it is found on the examination of the tender that there is a discrepancy between the total amount of the bill of quantities and the amount arrived at by valuing the quantities set out there in the rates or prices set against them by the tenderer, calculation of the total amount will be made on the basis of unit rates multiplied by the quantities.

38.8 The tenderer must not keep any column or space blank in any item of the BOQ; else the tenderer is liable for disqualification

39.0 FORMAT OF PRICE BID:**BILL OF QUANTITIES**

SL.No.	DESCRIPTION	Quantity (SET)	Unit Rate (Rs.)	Total Amount
1	Supply, Delivery, Testing, Installation, and Commissioning of wirelessly/ remotely controlled dimmable Energy Efficient Smart LED Flood Light Luminaires as a Complete Set on High Mast Carriage /Lattice Tower Top Platform as per technical specifications including Controller /CCMS Panel Box and all other required accessories for each group as a whole. (This is inclusive of all LED Luminaires to be installed on a High Mast or Lattice Tower including all accessories for a Group/Tower).	64		
2	Supply, Delivery, Testing, Installation, and Commissioning of individually wirelessly controlled dimmable Energy Efficient Smart LED Street Light Luminaires on as per technical specifications including individual controller and all required accessories.	100		
3	Supply, Delivery, Testing, Installation, and Commissioning of Individually wirelessly controlled dimmable Energy Efficient Smart LED Flood Light Luminaires including individual controller to be installed on structures as per technical specifications.	150		
4	Software, networking and any other related cost for successful implementation and running of the solution for the entire contract period.	1		
5	Cloud Cost for the entire contract period.	1		

6	CAMOC for 1 st Year after 1 year warranty period.	1		
7	CAMOC for 2 nd Year after 1 year warranty period.	1		
8	CAMOC for 3 rd Year after 1 year warranty period.	1		
9	CAMOC for 4 th Year after 1 year warranty period.	1		
10	CAMOC for 5 th Year after 1 year warranty period.	1		
	Total Amount			

- Above rate will be applicable for additional requirement for 1 year from the date of go-live.

***Note:**

- I. GST shall not be considered for evaluation. However, GST will be paid as per applicable rate.

Annexure A

INFORMATION TO BE FURNISHED BY THE VENDOR.

[LIST OF DOCUMENT TO BE SUBMITTED]

Documents to be submitted in Techno commercial Bid

Sl#	Description	Supporting Document Required	Complied (Yes/No)	Remarks
1.	Complete in-house design, development, production and testing facility of LED Luminaire manufacture.	Confirmation on official letter head giving details of said facilities with undertaking for allowing verification of same by KoPT. NABL accredited Lab certification.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires.(If OEMs are different).
2.	In House NABL Accredited Photometry Laboratory.	NABL Accredited Photometry Laboratory certification.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires.(If OEMs are different).
3.	Service Network of LED Manufacturer in Kolkata.	Confirmation on official letter head giving details of company service network in Kolkata with undertaking of timely service within two working days.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
4.	ISO 9001:2015, ISO 14001: 2015	ISO certification accredited by an IAF member.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
5.	BIS Registration	Separate BIS Registration Certificate for both Luminaries and driver System.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires .
6.	Automatic Pick and Place machine for LEDs and electronic components.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
7.	Temperature controlled automatic wave soldering with auto fluxing facility	Details of the machine with a valid Calibration certificate of the		Required from Luminaire Manufacturer (OEM)

	for through hole devices.	machine from a NABL Accredited calibration laboratory.		for all three types of luminaires . (If OEMs are different).
8.	Automatic temperature-controlled re-flow soldering machine for surface mounted devices.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
9.	Heat / Humidity chamber having minimum range of 0-50°C with alternate arrangement of standby power supply for carrying out endurance tests.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
10.	Electronic driver testing meter with programmable Input Supply to vary input voltages. Meter shall be able to report input parameters like wattage, PF, THD, Input Current and Output Voltage, Output Current, etc.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
11.	Integrating sphere for LM 79 / IS 16106:2012 testing of CCT & CRI.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
12.	Mirror Type-C Gonio-Photometer for LM79 / IS16106:2012 testing for Photometric & Electrical parameters.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
13.	Ingress Protection Testing Facility for testing of outdoor products with Dust and Rain Jet Chamber.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
14.	Impact testing facility.	Details of the machine with a valid Calibration certificate of the machine from a NABL Accredited calibration laboratory.		Required from Luminaire Manufacturer (OEM) for all three types of luminaires . (If OEMs are different).
15.	LED Chip Efficacy.	LM-79 from NABL accredited Govt.Lab.		Required for all three types of luminaires
16.	LuminariesSystemEfficacy.			

17.	LED(SMD) with Approved Make.	LED Luminaires Data Sheet.		Required for all three types of luminaires
18.	Photo biological safety norms.	Report from Internationally/ nationally accredited lab.		Required for all three types of luminaires
19.	LED Life.	LM80/IS:16105 Test Reports along with TM21 extrapolation from international accredited TPI of the L80B50 reported life.		Required for all three types of luminaires
20.	Secondary Optics Type.	LED manufacturer datasheet and type test report.		Required for all three types of luminaires
21.	Colour Temperature.	LED manufacturer datasheet and softcopy of IESfile & report from NABL accredited Lab.		Required for all three types of luminaires
22.	CRI	LED manufacturer datasheet and soft copy of IES file, LM 79 Report from NABL accredited Lab.		Required for all three types of luminaires
23.	LED Module MCPCB	LED manufacturer datasheet and type test report.		Required for all three types of luminaires
24.	Junction temperature of LED Chip	LED manufacturer datasheet and thermal and temperature rise type test report.		Required for all three types of luminaires
25.	No Flicker, Uniform and Glare free.	LED manufacturer datasheet.		Required for all three types of luminaires
26.	No UV/IR Radiation.	LED manufacturer datasheet, Spectral Distribution of LED.		Required for all three types of luminaires
27.	Luminaire manufacturer shall produce certificate of association with LED manufacturer for minimum 2 years.	Certificate of Association.		Required for all three types of luminaires
28.	Model no.& make of LED Luminaries.	Manufacturer Datasheet.		Required for all three types of luminaires
29.	Driver should also be Constant Current Type.	LED Driver manufacturer Data Sheet.		Required for all three types of luminaires
30.	Electrically Isolated	LED Driver		Required

	Driver.	manufacturer Data Sheet.		for all three types of luminaires
31.	Minimum Efficiency of Driver	Driver manufacturer datasheet and type test report.		Required for all three types of luminaires
32.	Dimming Range and Nature of Dimming.	Driver manufacturer datasheet.		Required for all three types of luminaires
33.	Power factor of complete fitting	Supporting Document – LED Luminaire datasheet.		Required for all three types of luminaires
34.	Surge Protection.	LED Luminaire datasheet and type test report.		Required for all three types of luminaires
35.	Total Harmonic Distortion (THD)	LED Luminaire datasheet.		Required for all three types of luminaires
36.	Potted LED Driver.	Driver Destructive test report for checking of potted driver needs to be done		Required for all three types of luminaires
37.	IP Protection: 66 or above.	Driver manufacturer datasheet and type test report.		Required for all three types of luminaires
38.	Protection.	Driver manufacturer datasheet and type test report.		Required for all three types of luminaires
39.	Thermal conductivity of potting materials	Driver manufacturer datasheet and type test report from NABL accredited Lab.		Required for all three types of luminaires
40.	Driver safety requirements	IEC:61347-2-13/ EN: 61347-2-13/IS:15885-2-13 Test conformance Report.		Required for all three types of luminaires
41.	Driver performance requirements	IEC: 62384/IS: 16105 Test conformance Reports.		Required for all three types of luminaires
42.	Driver PCB should be FR4 Grade (Heat Resistive), Wide Operating Voltage Range, Housing, Maximum driver case temperature, Luminaires should be provided with mounting bracket, Ambient temperature, Humidity, Separate Driver and Optical compartments.	Driver manufacturer datasheet or luminaire manufacturer datasheet as applicable.		Required for all three types of luminaires

43.	IS 10322-5-3 (2012) for Street Lights.	Manufacturers or bidders shall submit a declaration about the product details supported by conformance with standard test report from an independent third party NABL accredited laboratory against the specified test standard.		Required for Street Light.
44.	IS 10322-5-5 (2013) for Flood Light Luminaire.	Manufacturers or bidders shall submit a declaration about the product details supported by conformance with standard test report from an independent third party NABL accredited laboratory against the specified test standard.		Required for both the flood lights.
45.	Minimum 25 Lux at a radius of 40 meter.	Dialux or Calculux Report.		Applicable for Group control.
46.	Minimum 10 Lux at a radius of 40 meter after maximum dimming.	Dialux or Calculux Report.		Applicable for Group control.
47.	Minimum Lumen Output	Driver manufacturer datasheet.		Required for individually controlled Street Light and Flood Light.

- Any other document not listed above but asked for technical evaluation mentioned in the tender document should be included in this list.

Annexure-I

BID SECURITY DECLARATION FROM BIDDERS IN LIEU OF EMD
(On Bidder's letter head)

I/We, the authorized signatory of M/S

.....
Participating in the subject Tender No, for
the job of

.....
....., do hereby declare:

- i. That I/we have availed the benefit of waiver of EMD while submitting our offer against the subject tender and no EMD being deposited for the said tender.
- ii. That in the event we withdraw/modify our bid during the period of validity OR I/we fail to execute formal contract agreement within the given timeline OR I/we fail to submit a performance security within the given timeline OR I/we commit any other breach of tender conditions which attracts penal action of forfeiture of EMD then I/we will be suspended from being eligible for bidding/award of all future contract(s) of Syama Prasad Mookerjee Port, Kolkata for a period of two years from the date of committing such breach.

Signature and seal of authorized signatory of bidder

Name of authorized signatory.....

INTEGRITY PACT

Between
SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMP, Kolkata) hereinafter
referred to as “The Principal/ Employer”

And

..... Here in after referred to as
“The Bidder/Contractor”.

Preamble

The principal intends to award, under laid down organizational procedures, contract/s for.....The Principal values full compliances with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/ or contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM) appointed by the principal, will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

NOW, THEREFORE

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to currency of the contract to be entered into with a view to :-

Enabling the PRINCIPAL / EMPLOYER to get the contractual work executed and / or to obtain / dispose the desired said stores / equipment at a competitive price in conformity with the defined specifications / scope of work by avoiding the high cost and the distortionary impact of corruption on such work / procurement /disposal and Enabling BIDDERS /CONTRACTORS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will abstain from bribing and other corrupt practices and the PRINCIPAL/EMPLOYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

Section-1: Commitments of the Principal/employer.

- (1) The Principal commits itself to take measures necessary to prevent corruption and to observe the following principles: -
 - a. No employee of the Principal, personally or through family members, will, in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any materials or immaterial benefit which the person is not legally entitled to.
 - b. The Principal will, during the tender process, treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not

provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

- c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC)/ Prevention of Corruption (PC) Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section-2: Commitments of the Bidder(s)/Contractor(s)

- (1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bid or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s)/Contractor (s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purpose of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details including information contained or transmitted electronically.
 - d. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section-3: Disqualification from tender process and exclusion from future contracts.

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as considered appropriate.

Section- 4: Compensation for Damages.

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand or recover the damages equivalent to Earnest Money Deposit / Bid Security.
- (2) If the Principal has terminated the contract according to Section 3 or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section -5: Previous transgression.

- (1) The Bidder declares that no previous transgressions occurred in the last 3 years from the date of signing the Integrity Pact with any other Company in any country conforming to the anti corruption approach or with any other Public Sector Undertakings /Enterprise in India, Major Ports, / Govt. Departments of India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as considered appropriate.

Section- 6: Equal treatment of all Bidders / Contractors/ Subcontractors.

- (1) The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section-7: Other Legal actions violating Bidder(s)/Contractor(s)/ Sub contractor(s).

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

Section-8: Role of Independent External Monitor (IEM).

- (a) The task of the monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- (b) The monitors shall not be subject to instructions by the representatives of the parties and shall perform their functions neutrally and independently.
- (c) Both the parties accept that the Monitors have the right to access all the documents relating to the contract.
- (d) As soon as the Monitor notices, or has reason to believe, a violation of this pact, he will so inform the authority designated by the Principal and the Chief Vigilance Officer of SYAMA PRASAD MOOKERJEE PORT, KOLKATA.
- (e) The BIDDER / CONTRACTOR(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the PRINCIPAL including that provided by the BIDDER / CONTRACTOR. The demonstration of a valid interest, unrestricted and unconditional access to his contract documentation, if any. The same is applicable to Sub-contractors. The Monitor shall be under contractual obligation to treat the information and documents of the Bidder / Contractor / Subcontractor(s) with confidentiality.
- (f) The Principal / Employer will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor, the option to participate in such meetings.
- (g) The Monitor will submit a written report to the designated Authority of Principal / Employer / Chief Vigilance Officer of SYAMA PRASAD MOOKERJEE PORT, KOLKATA within 8 to 10 weeks from the date of reference or intimation to him by the Principal / Employer / Bidder / Contractor and should the occasion arise, submit proposals for correcting problematic situation. BIDDER / CONTRACTOR can approach the Independent External Monitor (s) appointed for the purposes of this Pact.
- (h) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or to take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (i) If the Monitor has reported to the Principal substantiated suspicion of an offence under the relevant IPC/PCA and the Principal / Employer has not, within reasonable time, taken visible action to proceed against such offence or

reported to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

- (j) The word 'Monitor' would include both singular and plural.

Section-9: Facilitation of Investigation:

In case of any allegation o violation of any provisions of this Pact or payment of commission, the PRINCIPAL / EMPLOYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER / CONTRACTOR shall provide necessary information and documents **in English** and shall extend all possible help for the purpose of such examination.

Section-10: Pact Duration:

The pact begins with when both parties have legally signed it and will extend up to 2 years or the complete execution of the contract including warranty period whichever is later. In case bidder / contractor is unsuccessful this Integrity Pact shall expire after 6 months from the date of signing of the contract.

If any claim is made / lodged during this time, the same shall be binding and continue to the valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman of SMP, Kolkata.

Section-11: Other provisions:

- (1) This agreement is subject to Indian law. Place of performance and jurisdiction is the Registered Office of the Principal in Kolkata.
- (2) Changes and supplements as well as termination notices need to be made in writing in English.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners of consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & on behalf of Bidder/Contractor)
(Office Seal)

For & on behalf of the Principal)
(Office Seal)

Place.....

Date.....

Witness 1:
(Name & Address)

Witness 2:
(Name & Address)

FORMAT IN CASE OF JOINT VENTURE/CONSORTIUM AGREEMENT
(To be submitted on stamp paper)

This Joint venture/consortium agreement is made at _____ on _____ day of _____ 20---- between M/s. _____ (please indicate the status viz. Proprietor, firm, Company) represented through its proprietor /partner or Director (hereinafter referred to as "first Party") and M/s. _____ (Please indicate the status viz. Proprietor, Firm, Company) represented through its proprietor /partner or Director (hereinafter referred to as "Second Party") WHEREAS the First party is engaged in the business of _____

AND WHEREAS THE Second Party is engaged in the business of _____

AND WHEREAS both the parties are desirous of entering into a joint venture /consortium for carrying on the work of SYAMA PRASAD MOOKERJEE PORT, KOLKATA in connection with work of _____ (please mention the work of the tender).

AND WHEREAS the First Party and Second Party have agreed to form joint venture/consortium for execution of subject works.

NOW THIS DEED WITNESSED AS UNDER:

1. That under this Joint Venture/consortium Agreement the work will be done jointly by the first party and second party in the name and style of M/s _____.

2. It is further agreed by the Joint Venture/consortium Partner that _____ of M/s. _____ has been nominated as Lead Partner for the execution of the works.

3. That all the parties shall be liable jointly, equally and severally for the satisfactory execution of the contract in all respect in accordance with terms and conditions of the contract and the lead partner shall be authorised to incur liabilities and receive instruction for and on behalf of any and all the partners and parties of the Joint Venture/consortium and the entire execution of the contract including payment shall be done exclusively with the lead partner.

4. THE PROPOSED PARTICIPATION SCOPE OF ACTIVITIES TO BE PERFORMED AND RESPONSIBILITIES OF EACH:

The proposed administrative arrangement, participation, scope of activities to be performed and responsibilities for the execution of the work of each party shall be asunder:

First Party:

Second Party:

5. The turnover and experience of each party is as under:

First Party:

Second Party:

6. Subject to **Cluase-4**, the parties shall depute their experienced staff as required for the works and plants, equipment, machinery etc. as requires for execution of works, will be deployed by each Joint Venture/consortium partners for execution of the contract.

7. In the event of default by any partner in the execution of the part of the contract, the Lead Partner will have the authority to assign the work to any other party acceptable to the SYAMA PRASAD MOOKERJEE PORT, KOLKATA to ensure the satisfactory execution of that part of the contract.

8. The Registered Office of the Joint Venture/Lead Partner of the consortium shall be at _____

9. The Joint Venture/consortium shall regularly maintain in the ordinary course of business a true and correct account of all its incoming and outgoing and also of its assets and liabilities in proper books or account which shall ordinarily be kept at place of business and after Completion of above mentioned work all account shall be taken.

10. Opening and operation of Bank Account:

The Joint Venture/consortium shall open and maintain bank account(s) at _____

_____The Lead Partner as mentioned in Clause (2) above shall have the power to receive the payments on behalf of the Joint Venture/consortium and to give discharge on behalf of the Joint Venture/consortium.

IN WITNESS WHEREOF the Parties hereto have signed hereunder at _____ on this _____ day of _____

Party of First Part

Party of Second Part

Witness:

1)

2)

(I) Details in respect of the Company /Firm (Indian /Foreign).

Sl. No.	Name of Firms / Bidders.	Date of registration of the Company.	Address of Head Office, Regional Office and Registered Office.	Previous name of the company if any.	Details of earlier approvals, if any (ref. No. & date)

(II) Details in respect of Director.

Sl. No.	Full name of Board of Directors.	Present position held with date (since when).	Date of Birth.	Parentage.	Present & Permanent address.	Nationality.	Passport No. and issue date if any.	Contact address & telephone number.
1	2	3	4	5	6	7	8	9

(III) Details of Shareholders of applicant company (All firms /companies/entities/individuals having shareholding more than 10 %):

Sl. No.	Full name.	Parentage Father/Mother.	Date of Birth.	Permanent address.	Present address.	Present position held in the company if any.	Nationality (if holding dual nationality, both must be clearly mentioned).	% of shares held in the Company.

(IV) Details of criminal cases, if any against the Company / Director (s) as per Annexure.

SECRET

Self declaration for company of Director(s) for whom security clearance is sought.

- a. Name and address and registration number of the company:
- b. Name and address of owners, promoters and directors of the company:
 - 1. -----
 - 2. -----
 - 3. -----
 - 4. -----
- c. Is the company owners, promoters or directors listed above the subject of any
 - 1. Preventive detention proceedings (PSA/NSA etc.): Yes / No.
 - 2. Criminal proceedings : Yes / No.
- d. If, Yes. Please provide following details.
 - 1. Detention / Case /FIR/ Warrant number:
 - 2. Police station / District / Agency:
 - 3. Section of law:
 - 4. Name and place of the court:
- e. The above mentioned details are in respect of both India and any other foreign country.

Note: The above self declaration is required to be filled and signed by the authorised signatory of the company.

Format For Power Of Attorney For Signing of Tender

(To be executed before Notary Public on a Non-Judicial Stamp Paper of at least Rs 10)

Dated: _____

POWER OF ATTORNEY
To whomsoever it may concern

Mr. _____ [Name of the Person(s)], residing at _____ [Address of the person(s)], acting as _____ (Designation of the person and name of the firm), and whose signature is attested below, is hereby authorized on behalf of _____ [Name of the Tenderer (in case of a consortium, name of the lead member)] to sign the tender [(Tender No.and (Tender subject- "....."))] and submit the same and is hereby further authorized to provide relevant information/ document and respond to the enquiry's etc. as may be required by SYAMA PRASAD MOOKERJEE PORT, KOLKATA (SMP, Kolkata) in respect of the tender.

And I/ we hereby agree that all acts, deeds and things lawfully done by our said attorney shall be construed as acts, deeds and things done by us and I/ we undertake to ratify and confirm all and whatsoever that my / our said attorney shall lawfully do or cause to be done for me / us by virtue of the power hereby given.

(Attested signature of Mr. _____)

For _____ (Name of the Tenderer / Consortium Members with Seal)

Note –

(In case of Consortium, representative of all members must sign)

Format for Power Of Attorney For Lead Member Of Consortium

(To be executed before Notary Public on a Non-Judicial Stamp Paper of at least Rs 10)

POWER OF ATTORNEY

Whereas KOLKATA DOCK SYSTEM, SYAMA PRASAD MOOKERJEE PORT, KOLKATA (“the Authority”) has invited tenders from interested parties for “.....” (Tender No.).

Whereas,,, And (collectively the “ Consortium”) being members of the Consortium are interested in bidding for the Tender in accordance with the terms and conditions of the Tender Document and other connected documents in respect of the said tender, and

Whereas, it is necessary under the Tender Document for the members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium’s bid for the Tender and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, M/s. having our registered office at, M/s..... having our registered office at, M/s. having our registered office at, and M/s. having our registered office at, [the respective names and addresses of the registered office] (hereinafter collectively referred to as the “Principals”) do hereby designate, nominate, constitute, appoint and authorize M/s. having its registered office at, being one of the members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the “Attorney”). We hereby irrevocably authorize the Attorney to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Contract, during the execution of the contract, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the Consortium and submission of its bid(s) for the tender, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in Pre Bid and other conferences/meetings, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of bid(s) of the Consortium and generally to represent the Consortium in all its dealings with the Authority, and/or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium’s bid(s) for the tender and/or upon award thereof till the Agreement is entered into with the Authority.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us / Consortium.

IN WITNESS HEREOF WE HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF20**

For
.....
(Name & Title)

For
.....
(Name & Title)

For
.....
(Name & Title)

Witnesses:

1.

2.

.....

(To be executed by all the members of the Consortium)

Profile of the Tenderer

1.
 - (a) Name
 - (b) Country of incorporation
 - (c) Address of the corporate headquarters and its branch office(s), if any in India.
 - (d) Date of incorporation and commencement of business.

2. Brief description of the Company including details of its main lines of business and proposed role and responsibilities in connection with implementation of the tender.

3. Details of individual(s) of the tenderer (Lead Member in case of Consortium) who will serve as the point of contact/ communication with SMP, Kolkata.
 - (a) Name :
 - (b) Designation :
 - (c) Company :
 - (d) Address :
 - (e) Telephone Number :
(Land & Mobile)
 - (f) E-Mail Address :
 - (g) Fax Number :

4. Details of Authorized Signatory of the Tenderer:
 - Name :
 - Designation :
 - Company :
 - Address :
 - Telephone No. :
(Land & Mobile)
 - Fax No. :
 - Email Address :

5. In case of a Consortium:
 - a. The information above (1-4) should be provided for all the members of the consortium.

b. information regarding role of each member should be provided as per table below:

Sl. No.	Name of Member	Role
1.		
2.		
3.		
4.		

Signature of Power of Attorney Holders

Name:

Designation:

Date:

Seal

SYAMA PRASAD MOOKERJEE PORT, KOLKATA
KOLKATA DOCK SYSTEM

Energy Efficient Smart LED Lighting Solution at NSD, KDS, SMP, KOLKATA

	Name of the similar project / work executed successfully.	Period of the project	Value of the project
Single Entity			
Consortium Member 1			
Consortium Member 2			

Instructions:

1. The single entity tenderer / each member of consortium should furnish its details in the appropriate column.
2. The description of each of the project shall have to be provided while giving the following details:
 - (a) Location of the project
 - (b) Contact details of the concerned dredging projects
 - (I) Name of Contact Person(s)
 - (ii) Designation(s)
 - (iii) Address
 - (IV) Telephone/Mobile No.
 - (v) Fax
 - (vi) Email

Signature of Power of Attorney Holder(s).....

Name:

Designation:

Date:

Seal:

CERTIFIED BY

Name of Chartered / Certified Accountant Firm

Registration Number & other details

Name of the Signatory.....

Signature

Designation

UDIN

Date

Seal

Details Of Financial Capability of the Tenderer

(In Rs. Crore)

Applicant Type	Annual Financial Turn Over
	Average on last 3 years
Single entity Tenderer	
Consortium Member 1	
Consortium Member 2	
Consortium Member 3	
Consortium Member 4	

Please add more rows depending upon Consortium Members.

Instructions:

1. The Single Entity Tenderer/ each members of Consortium should submit its details in the appropriate column.

Signature of Power of Attorney Holder(s).....

Name:

Designation:

Date:

Seal

CERTIFIED BY

Name of Chartered Accountant Firm

Registration No. & other details

Name of the Signatory

Signature

Designation

UDIN

Date

Joint Bidding Agreement

(To be executed on Non-Judicial Stamp Paper of at least Rs. 60/-)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 20...

AMONGST

1. {..... Limited, a company incorporated under the Companies Act, 1956/2013} and having its registered office at (here inafter referred to as the **"First Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. {..... Limited, a company incorporated under the Companies Act, 1956/2013} and having its registered office at (here inafter referred to as the **"Second Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. {..... Limited, a company incorporated under the Companies Act, 1956/2013 and having its registered office at (hereinafter referred to as the **"Third Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)}

AND

4. {..... Limited, a company incorporated under the Companies Act, 1956/2013 and having its registered office at (hereinafter referred to as the **"Fourth Part"** which expression shall, unless repugnant to the context include its successors and permitted assigns)}

The above-mentioned parties of the FIRST, SECOND, {THIRD and FOURTH} PART are collectively referred to as the **"Parties"** and each is individually referred to as a **"Party"**

WHEREAS,

- (A) [SYAMA PRASAD MOOKERJEE PORT, KOLKATA, established under the Major Port Trusts Act-1963 and having Principal Office at 15, Strand Road, Kolkata-700001 (hereinafter referred to as the **"SMP, Kolkata"** which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited offers by its Request through NIT No. dated (The **"TENDER DOCUMENT"**) for selection of successful tenderer for the contract as proposed in the said tender document.

- (B) The Parties are interested in jointly bidding for the Project as members of a Consortium and in accordance with the terms and conditions of the tender document and other documents in respect of the work, and
- (C) It is a necessary condition under the tender document that the members of the Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Offer.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the tender document.

2. Consortium

2.1 The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) for the purposes of jointly participating in the Tendering Process for the Work.

2.2 The Parties hereby undertake to participate in the Tendering Process only through this Consortium and not individually and/ or through any other consortium constituted for this work, either directly or indirectly or through any of their Associates.

3. Covenants

The Parties hereby undertake that in the event the Consortium is declared the successful tenderer and awarded the contract, it shall incorporate a special purpose vehicle (the “**SPV**”) under the Indian Companies Act 1956/2013 for entering into an Agreement with the SMP, Kolkata and for performing all its obligations as the successful tenderer in terms of the Agreement for the Project.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Consortium during the tendering process and till all the obligations of the SPV shall become effective;
- (b) Party of the Second Part shall be {the Technical Member of the Consortium ;}
- {(c) Party of the Third Part shall be the Financial Member of the Consortium; and}

{{(d) Party of the Fourth Part shall be the Operation and Maintenance Member/ Other Member of the Consortium.}}

[Note: Status of the members in (b), (c) and (d) are only illustrative. More/less parties may form the Consortium and changes may be made accordingly to the JBA]

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the work and in accordance with the terms of the tender document till completion of the contract.

6. Shareholding in the SPV

6.1 The Parties agree that the proportion of shareholding among the Parties in the SPV shall be as follows:

First Party:

Second Party:

{Third Party :}

{Fourth Party :}

6.2 The Parties undertake that a minimum of 26% (twenty six per cent) of the subscribed and paid up equity share capital of the SPV shall, at all times till completion of two years from the date of commencement of the contract, be held by the Parties of the First, {Second and Third} Part whose experience and net-worth have been reckoned for the purposes of pre-qualification in terms of the tender document.

6.3 The Parties undertake that they shall collectively hold at least 51% (fifty one per cent) of the subscribed and paid up equity share capital of the SPV at all times till completion of two years from the date of commencement of the contract.

6.4 The Parties undertake that they shall comply with all the requirements as stipulated in the tender document vide N.I.T. No. dated

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power to enter into this Agreement with SMP, Kolkata;
- (b) The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and SMP, Kolkata to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) Require any consent or approval not already obtained;
 - (ii) Violate any Applicable Law presently in effect and having applicability to it;
 - (iii) Violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
 - (iv) Violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - (v) Create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- (c) This Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- (d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the Financial Close of the contract is achieved under and in accordance with the terms of the tender, in case the contract is awarded to the Consortium. However, in case the Consortium is either not pre-qualified for the work or does not get selected for award of the contract, the Agreement will stand terminated in case the Tenderer is not pre-qualified or upon return of the Earnest Money by the SMP, Kolkata to the Bidder, as the case may be.

9. Miscellaneous

9.1 This Joint Bidding Agreement shall be governed by laws of India.

9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the SMP, Kolkata.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED
For and on behalf of
LEAD MEMBER by:

(Signature)
(Name)
(Designation)
(Address)

SIGNED, SEALED AND DELIVERED
For and on behalf of
SECOND PART by

(Signature)
(Name)
(Designation)
(Address)

SIGNED, SEALED AND DELIVERED
For and on behalf of
THIRD PART by:

(Signature)
(Name)
(Designation)
(Address)

SIGNED, SEALED AND DELIVERED
For and on behalf of
FOURTH PART by

(Signature)
(Name)
(Designation)
(Address)

In the presence of:

1. 2.

Notes:

1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executants (s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and SMP, Kolkata to execute this Agreement on behalf of the Consortium Member.
3. For a Joint Bidding Agreement executed and issued overseas, the document shall be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.

Covering Letter

Dated:

To,
CHIEF MECHANICAL ENGINEER, KDS
SYAMA PRASAD MOOKERJEE PORT, KOLKATA,

Dear Sir,

1. I/we, _____ (Name of tenderer) having examined the Tender Document and understood its contents, hereby submit our tender for at KOLKATA DOCK SYSTEM, SYAMA PRASAD MOOKERJEE PORT, KOLKATA.
2. All information provided in the tender including Addenda and in the Appendices are true and correct and all documents accompanying such tender are true copies of their respective originals.
3. I/We shall make available to SYAMA PRASAD MOOKERJEE PORT, KOLKATA (hereinafter referred to as SMP, Kolkata) any additional information it may find necessary or require to supplement or authenticate the Tender.
4. I/we acknowledge the right of SMP, Kolkata to reject our tender without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
5. I/we also certify the following
 - a. I/we / any of the consortium members (as the case may be) have not been debarred by the Central/State Govt. or any entity controlled by them or any other legal authority for participating in any tender / contract / agreement of whatever kind
 - b. I/we certify that in the last three years, I/We/any of the consortium members or our / their associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award, nor been expelled from any project or contract by any public authority/entity nor have had any contract terminated by any public authority / entity for breach on our part.
6. I/we declare that:
 - a) I/we have examined and have no reservations to the Tender Document, including the Addenda issued by SMP, Kolkata thereon.

- b) I/we hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any corrupt, fraudulent or coercive practices to influence the evaluation process of the tender.
7. I/we understand that SMP, Kolkata reserves the right to accept or reject any tender and to annul the tendering process and reject all tenders at any time without any liability or any obligation for such acceptance, rejection or annulment without assigning any reason thereof.
8. _____ (Name of Tenderer) hereby undertakes that I/we will abide by the decision of SMP, Kolkata in the matter of examination, evaluation and selection of successful tenderer and shall refrain from challenging or questioning any decision taken by SMP, Kolkata in this regard.

Thanking you,

Yours faithfully,

Signature of Power of Attorney Holder(s).....

Name:

Designation:

Date:

Seal

Assignment Name:		Country:
Location within Country:		Name of Key Professional
Description of Client:		No. of Staff:
Address:		No. of Staff Months:
Start Date (Month / Year)	Completion Date (Month / Year)	Approx. Value of Services:
Name of JV/Association Firm(s) if any:		No. of Months of Professional Staff provided by Associated Firm(s) NA
Status of your Company in the Assignment i.e., Sole/Lead Member/Other Member/Associate S		
Narrative Description of Project:		
Description of Actual Services Provided by your Company:		