

Cochin Smart Mission Limited (CSML)

Cochin Smart Mission Limited
10th Floor, Revenue Tower, Park Avenue,
Kochi - 682 011, India.
Phone: 0484-2350355, 2380980
E-mail: csmltenders@gmail.com

TnD No.: CSML/ TND / 2018 /64 /130

Dt: 11/02/2019

To:

All participating Applicants

Dear Sir,

Sub: - Minutes of the Pre-Bid Meeting for the Request for Proposal (RFP) for **RFP for Implementation of Smart LED Lights in ABD area of Kochi smart city under smart city mission** - Reg.

Ref: (1) Tender ID: 2018_KMRL_206409_1
(2) CSML/Energy/RFP/002 Date: 26/12/2018

Other Ref: - (1) Corrigendum-3: TnD No.: CSML/ TND / 2018 /64 /0129 Date: 06/02/2019
(2) Corrigendum-2: TnD No.: CSML/ TND / 2018 /64 /0128 Date: 23/01/2019
(3) Corrigendum-1: TnD No.: CSML/ TND / 2018 /64 /0126 Date: 04/01/2019
(4) Notice inviting RFP No.: **CSML/Energy/RFP/002 Date: 26/12/2018**

With reference to the above, the **Minutes of the Pre-Bid Meeting** in respect of the above-mentioned Request for Proposal (RFP) is herewith enclosed. The Applicants shall make note of the same and submit their proposals accordingly.

Encl: 1) Minutes of the Pre Bid Meeting

Managing Director
Cochin Smart Mission Limited

Cochin Smart Mission Limited (CSML)

Minutes of the Pre-Bid meeting held 03:00 PM on 10/01/2019 at 10th Floor CSML office for RFP for Implementation of Smart LED Lights in ABD area of Kochi smart city under smart city mission.

Sl. No.		Designation	Organization
Members present:			
1	Mr. Ajayakumar	Team Leader	PMC- Smart City Kochi
2	Mr. Clipson Mathew	DGM	Cochin Smart Mission Ltd (CSML)
3	Mr. Korath Mathew	ICT Expert	PMC- Smart City Kochi
4	Mr. Karunakaran M N	Energy Specialist	PMC- Smart City Kochi
5	Mr. Saubhagya	Procurement Expert	PMC- Smart City Kochi
6	Mrs. Renuka	Construction Manager	PMC- Smart City Kochi
7	Mrs. Soumya V Pai	Document Controller	PMC- Smart City Kochi
Representative of firm / agency present			
1	Mr. Arunlal Babu	Asst Manager- Projects	Bajaj Electricals Ltd.
2	Mr. Naveen George	Account Executive	Stark Communications
3	Mr. V S Rajesh Kumar	Area Manager	Surya Roshni Ltd.
4	Mr. Sujith Everest	Area Head	Bajaj Electricals Ltd.
5.	Mr. R K Mukherjee	Senior Consultant	Bajaj Electricals Ltd.
6	Mr. Gaurav Chhabra	Asst General Manager	Havells
7	Mr. Dinu Benny	Asst Marketing Manager-Sales	Imperial Engineering Company
8	Mr. T K Mohanan	Channel Partner Kerala	International Trading Company
9	Mr. Vipin Antony	Sr. Manager- Group Business Development	Sterling & Wilson
10	Mr. Kannan M	Regional Application Specialist	Philips Lighting India Ltd
11	Mr. K Suresh Kumar	Public Relations Officer	KCP Engineers Pvt Ltd
12	Mr. HariKrishnan K	Site Engineer	Centrino Engineering Contractors & Advisors Ltd
13	Mr. Jithesh	Business Manager	UITS

Cochin Smart Mission Limited (CSML)

14	Mr. Vishal George	Managing Partner	Anton Cables
15	Mr. Emmanuel C Mathew	Supervisor	Anton Cables
16	Mr. T Vinod Kumar	Regional Manager	Mondel Heights
17	Mr. Akshay Pawane	Sales Head	Amnex
18	Mr. Praveen Menon	Advisor	Kreate Energy Pvt Ltd
19	Mr. Nithin Sabu	Project Manager	ULCCS
20	Mr. Ajith B Kumar	Head of Lot	ULCCS

CSML welcomed the members & representatives of the firms to the Pre-Bid Meeting & following clarifications are issued to the points raised (through email) by the firm.

Cochin Smart Mission Limited (CSML)

Pre-Bid Queries & Clarifications RFP for Implementation of Smart LED Lights in ABD area of Kochi smart city under smart city mission.

Sl. No.	RFP Document Reference (Clause No.)	RFP Document Reference (Page No.)	Content of the RFP requiring clarification	Change Requested/ Clarification required	Clarifications
1.	1. INSTRUCTION TO BIDDERS 1.3 Bid Submission Instructions 1.3.7 Authentication of Bid	23	b) The Bidder should submit a Power of Attorney as per the format set forth in Annexure 6, authorizing the signatory of the Bid to commit the Bidder.	Request you to consider Bidder's Existing Power of Attorney and Authority letter.	No change in clause
2.	1. INSTRUCTION TO BIDDERS 1.4 Evaluation Process 1.4.3 Technical Presentation	26	c) The venue and time of Technical Presentation of the technically qualified bidders will be intimated to them by email and the Technical presentation will be reviewed by a technical committee / independent agency to determine whether the technical proposals are meeting the light requirements. The Technical Presentations of the bidder which is not meeting the technical specifications shall be liable be disqualified.	We request CSML to provide us 15 days advance notification for preparation of presentation	This clause stands Deleted. But All Bidder who have submitted the bid shall have to make a table top presentation with one of the sample lights as detailed in revised clause 1.4.1. Refer Corrigendum.
3.	1. INSTRUCTION TO BIDDERS	26	d) The technically qualified bidders have to arrange all the materials like	We request CSML to remove this clause. We are arranging and configuring live	This clause stands Deleted. But All Bidder who have submitted

Cochin Smart Mission Limited (CSML)

	<p>1.4 Evaluation Process</p> <p>1.4.3 Technical Presentation</p>		<p>luminaires, poles, control panels, cables, manpower, calibrated testing instruments etc. for Technical Presentation, at their own cost. CSML will not provide any type of material or manpower support to the bidders.</p>	<p>setup is not possible at bidding stage, hence we can provide simulation and presentation of solution & product demo sample can be shown at table top.</p>	<p>the bid shall have to make a table top presentation with one of the sample lights as detailed in revised clause 1.4.1.</p> <p>Refer Corrigendum.</p>
<p>4.</p>	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.3 Technical Presentation</p>	<p>26</p>	<p>f) The Bidder whose GTP meets the technical specifications of lights, light poles and CCM as per the RFP has to make a live demo of their lighting system with two light poles and LED light fittings of their design on selected road stretch. The lux level offered by each agency against the lux level requirement of each category of road shall be measured using “nine-point method” by an independent agency. The Bidder whose lighting level meets the lux level and uniformity requirement as per National Lighting Code, / IS: 1944 (Part I & II), 1970 only be eligible for participation in the Financial Bid.</p>	<p>Few suggestions to maintain common platform among all the bidders,</p> <ol style="list-style-type: none"> 1. Lighting level measurement to be conducted in the same street/ road in the same grid area for all the bidders. 2. To do so CSML to provide poles and brackets. 3. Light fittings of each bidders to be installed in the same street light poles and bracket. 4. Once lighting level is measured for the installed light fixture those fixtures to be uninstalled and fittings of other bidder in the same post to carry out lighting level measurement. <p>This will avoid any disputes which may</p>	<p>This clause stands deleted.</p> <p>Refer Corrigendum.</p>

Cochin Smart Mission Limited (CSML)

				<p>arise during lighting level measurement. We request CSML to provide with grid details such as distance between the post and the fist grid point similarly distance between grid point to grid point.</p>	
5.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.1 Eligibility Criteria FOR BIDDER:</p>	28	<p>b) The bidder could be either a manufacturer or an authorized supplier of LED type street lights having installation, commissioning, operation & maintenance agency. If the bidding firm is not manufacturer of LED street light fixtures, he must submit copy of authorization from the LED street light manufacturer stating that it will supply LED street light fixtures and its spares as per technical specifications of this tender. One bidder can give offer with the authorization of only one manufacturer only. Multiple authorizations shall not be acceptable. However, a manufacturer can give its authorization to more than one bidder. If manufacturer directly submits the bid, he cannot submit more than one bid (whether as sole bidder or in consortium). Successful bidder should have A-Class electrical</p>	<p>It is advisable to consider light fittings and controller from the same manufacturer this will ease the process of integrating individual light point control and group monitoring in CCMS by the bidder. If in case the lighting manufacturer and the control manufacturer are different then that may arise lag of co-ordination between both the manufacturer in the longer run.</p>	<p>This is modified so that the bidder can give offer with the authorization of only one manufacturer for one category such as Decorative type light fixtures in smart road be from one manufacturer and for access road can be from another manufacturer. Similarly, the feeder pillar can be from another manufacturer.</p> <p>Refer Corrigendum.</p>

Cochin Smart Mission Limited (CSML)

			license issued by Kerala State Electrical Inspectorate or any other state /UT in India. The license must be submitted at the time of agreement.		
6.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.1 Eligibility Criteria FOR BIDDER:</p>	29	<p>j) All experience certificates of Govt/Semi government/Government undertaking within India only be considered on production of completion certificate from Competent Authority The Completion certificate must clearly indicate(1)Name of Work(2)date of commencement of work(3).date of completion of work(4).nature of work(5).work has been competed satisfactorily.(6).contract value ,billing amount.(7).Performance of the contractor</p>	<p>Credentials of Publicly listed companies in India and Global Experience of Group Companies should also be considered</p>	Refer Corrigendum.
7.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p>	29	<p>The Sole Bidder or the consortium members put together should have average annual turnover of at least Rs.9.01 crores in lighting business in last three financial years (2015-16, 2016-17 and 2017-18) including lighting manufacturing business as per last audited financial year ending March 2017.</p>	<p>Since it is a smart street light tender, it is requested to modify consortium criteria point-II as a company with experience of "Supply, Design, Installation and Commissioning of Smart Street Light system including Controllers and smart light management software. Operation and Maintenance of street lights can be handled by OEM itself.</p>	<p>The Consortium eligibility criteria has been modified.</p> <p style="text-align: center;">Refer Corrigendum.</p>

Cochin Smart Mission Limited (CSML)

	<p>1.4.7.1 Eligibility Criteria FOR BIDDER:</p> <p>PQ2: Turnover</p>		<p>The consortium can be among (i) LED street light manufacturer, (ii) a company with experience of O&M of street lighting & (iii) a All MV / Class A Electrical contractor registered in Kerala or any other state/UT in India.</p>	<p>Please change the clause to "The consortium can be among (i) LED street light manufacturer, (ii) a company with experience of O&M of street lighting, (iii) an All MV / Class A Electrical contractor registered in Kerala or any other state/UT in India & (iv) a System Integrator"</p>	<p>Modified: The scope of work is modified with LT overhead cabling work. As per KSEB terms and condition, for executing this work, bidder must have tie-up with local contractor having license from Kerala Electrical Inspectorate. Therefore, the above cannot be changed.</p> <p>Refer Corrigendum</p>
<p>8.</p>	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.1 Eligibility Criteria FOR</p>	<p>30</p>	<p>1) The Sole Bidder or all members of its consortium put together should have successfully supplied, installed and commissioned one Smart Lighting project in at least 1 city / ULB of cost not less than Rs. 12.02 Crores in last 5 (Five) years starting from 1st December 2013 to 30th November 2018. The date of work order and date of completion as mentioned in certificate must fall in between above time period.</p>	<p>1) The Sole Bidder or all members of its consortium put together should have successfully supplied, installed and commissioned two Smart Lighting project cumulatively of cost not less than Rs. 12.02 Crores in last 5 (Five) years starting from 1st December 2013 to 30th November 2018. The date of work order and date of completion as mentioned in certificate must fall in between above time period.</p>	<p>PQ 3 Criteria is revised. Pls. (1) The Sole Bidder or all members of its consortium put together should have successfully supplied, installed and commissioned one Smart Lighting project in at least 1 city / ULB of cost not less than Rs. 14.35 Crores in last 5 (Five) years starting from 1st December 2013</p>

Cochin Smart Mission Limited (CSML)

	BIDDER: PQ3: Experience			<p>We request your good self to waive off in PQ3 for supplied installed and commissioned one smart lighting project at least 1 city/ULB of cost not less than 12.02 crore in last 5 years starting from 1st Dec 2013 to 30th Nov 2018 .and also request you to include Surya name also in the LED Light Fixtures and Post Top Layers.</p> <p>Since LED Smart lighting is a new technology and number of similar executed projects are less, we would like to request you to kindly consider the experience of ongoing works as well. This can facilitate wider participation and competitive bidding.</p>	<p>to 30th November 2018. The date of completion as mentioned in certificate must fall in between above time period.</p> <p>(2) The bidder should have at least three-year experience (up to the date of publication of this RFP) of implementation of street light project with centralized control of at least 2000 lighting fixtures in urban area and</p> <p>(3) Completed one project of operation and maintenance of street /central lighting of at least 3500 lighting fixtures for an urban area.</p> <p>The experience as an approved subcontractor will be considered only when it is in agreement with the main contractor and should be with the legal contract along with certificate from the concerned department.</p>
				Request you to change the value to Rs.10 Cr for single order and multiple order with value of Rs.12 Cr.	
				Request CSML to consider changes as (1). The Sole Bidder or all members of its consortium put together should have successfully supplied, installed and commissioned one LED street Lighting project in at least 1 city / ULB of cost not less than Rs. 12.02 Crores in last 5 (Five) years starting from 1st December 2013 to 30th November 2018	Refer Corrigendum
9.	1. INSTRUCTION TO BIDDERS 1.4 Evaluation	30	(2) The bidder should have at least three-year experience (up to the date of publication of this RFP) of implementation of Flood Lighting,	Request CSML to consider changes as (2) The bidder should have at least three-year experience (up to the date of publication of this RFP) of	PQ 3 Criteria is revised. Pls. (1) The Sole Bidder or all members of its consortium put

Cochin Smart Mission Limited (CSML)

	<p>Process</p> <p>1.4.7 Pre- Qualification Criteria</p> <p>1.4.7.1 Eligibility Criteria FOR BIDDER:</p> <p>PQ3: Experience</p>		<p>street light project with centralized control of at least 2000 lighting fixtures in urban area and in hand order for operation and maintenance of Flood Lighting, street /central LED lighting of at least 1000 lighting fixtures for an urban area. The experience as a approved subcontractor will be considered only when it is in agreement with the main contractor and should be with the legal contract along with certificate from the concerned department.</p>	<p>implementation of Flood Lighting, street light project of at least 2000 lighting fixtures in urban area and in hand order for operation and maintenance of Flood Lighting, street /central LED lighting of at least 1000 lighting fixtures for an urban area. The experience as an approved subcontractor will be considered only when it is in agreement with the main contractor and should be with the legal contract along with certificate from the concerned department.</p>	<p>together should have successfully supplied, installed and commissioned one Smart Lighting project in at least 1 city / ULB of cost not less than Rs. 14.35 Crores in last 5 (Five) years starting from 1st December 2013 to 30th November 2018. The date of completion as mentioned in certificate must fall in between above time period.</p> <p>(2) The bidder should have at least three-year experience (up to the date of publication of this RFP) of implementation of street light project with centralized control of at least 2000 lighting fixtures in urban area and</p> <p>(3) Completed one project of operation and maintenance of street /central lighting of at least 3500 lighting fixtures for an urban area.</p> <p>The experience as an approved subcontractor will be considered only when it is in agreement with the main contractor and should be with the legal contract along with certificate from the concerned department.</p>
--	--	--	---	---	---

Cochin Smart Mission Limited (CSML)

					Refer Corrigendum
				We request you to consider the Highway street Lighting Experience along control/monitoring system. Work experience with private client also need to be considered as the Turnkey contracts along with Civil work is taken by civil infrastructure companies and Electrical/lighting work is given by these companies to electrical companies like us. In such case Department does not give electrical work directly, hence it is difficult to arrange credentials directly with the name of Department. Hence, we request you to consider Highway street lighting and completion certificate from private client also.	Highway Lighting can be considered only if it has smart element such a CCMS panel, automatic light monitoring and control, dimming, monitoring of various parameters like, voltage, current, pf, energy, on/off can be controlled from a centralized monitoring system. Experience certificate shall be given as supporting document. Refer Corrigendum for smart light features.
				We request you to consider the past Experience of Operation and maintenance for conventional Light Fittings also. LED being new technology, it is difficult to have credential of Operation and maintenance for LED Light fittings.	No change in clause
10.	1. INSTRUCTION TO BIDDERS 1.4 Evaluation Process	30	LM 79 test reports for proposed LED street lights from NABL accredited laboratory and LM 80 report from proposed LED manufacturer	We request CSML to consider this certificate at time of LOI	No change in clause

Cochin Smart Mission Limited (CSML)

	<p>1.4.7 Pre- Qualification Criteria</p> <p>1.4.7.1 Eligibility Criteria FOR BIDDER:</p> <p>PQ6: Certification</p>				
11.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre- Qualification Criteria</p> <p>1.4.7.2 CONSORTIUM conditions to be met are as follows:</p>	31	<p>c) The consortium agreement should be submitted with the bid. The agreement should be on non-judicial stamp paper of Rs 200 and duly notarized, Members should be jointly and severally responsible.</p>	<p>We request CSML to remove Jointly responsible cause to motivate OEM to participate along with lead bidder under consortium agreement, As OEM is responsible for supply and warranty of product, whereas implementation & OM Support is lead bidder responsibility</p> <p>hence We recommend following changes to this clause as</p> <p>c) The consortium agreement should be submitted with the bid. The agreement should be on non-judicial stamp paper of Rs 200 and duly notarised, Each member should be severally responsible of their scope.</p>	No change in clause
12.	<p>1. INSTRUCTION TO BIDDERS</p>	31	<p>e) The consortium agreement should clearly mention the roles and</p>	<p>We recommend following changes in this clause</p>	No change in clause

Cochin Smart Mission Limited (CSML)

	<p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.2 CONSORTIUM conditions to be met are as follows:</p>		<p>responsibilities of each company in the consortium and percentage share of each member.</p>	<p>e) The consortium agreement should clearly mention the roles and responsibilities of each company in the consortium</p>	
13.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.3 Technical Evaluation Criteria (Supporting documents to be attached)</p>	32	<p>Experience of implementing Smart Lighting system (supply installation and commissioning) comprising minimum 1500 lights in India Copy of the Client Certificate as a proof has to be attached</p>	<p>We request you to consider Highway Street Lighting Experience with control system with private client also.</p>	No change in clause.
14.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation</p>	32	<p>Experience of implementing Smart Lighting system (supply installation and commissioning) comprising minimum 1500 lights in India</p>	<p>We recommend following changes in this clause</p> <p>Experience of implementing LED street</p>	Refer Corrigendum

Cochin Smart Mission Limited (CSML)

	<p>Process</p> <p>1.4.7 Pre- Qualification Criteria</p> <p>1.4.7.3 Technical Evaluation Criteria (Supporting documents to be attached)</p>		<p>Copy of the Client Certificate as a proof has to be attached. Marks shall be awarded on the basis of individual projects. Bidder can submit multiple projects subject to maximum marks.</p>	<p>Lightning system (supply installation and commissioning) comprising minimum 15000 lights in India</p>	
15.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre- Qualification Criteria</p> <p>1.4.7.3 Technical Evaluation Criteria (Supporting documents to be attached)</p>	32	<p>Experience in Operation and Maintenance project of Street Lighting system comprising of minimum 1500 lights in a city / ULB of India in a single Contract Copy of the Client Certificate as a proof has to be attached</p>	<p>We request you to consider Experience with conventional type Light Fixtures also.</p>	<p>No change in clause.</p>

Cochin Smart Mission Limited (CSML)

16.	<p>1. INSTRUCTION TO BIDDERS</p> <p>1.4 Evaluation Process</p> <p>1.4.7 Pre-Qualification Criteria</p> <p>1.4.7.3 Technical Evaluation Criteria (Supporting documents to be attached)</p>	32	<p>Experience in operation of maintenance of Smart Street light system with luminaires in a single project. Multiple projects also will be considered. Copy of the Client Certificate as a proof has to be attached. Marks shall be awarded on the basis of individual projects. Bidder can submit multiple projects subject to maximum marks</p>	<p>We recommend following changes. Experience in Operation of maintenance of LED street light system with luminaries in a single project. Multiple projects also will be considered. Copy of the Client Certificates as a proof has to be attached. Marks shall be awarded on the basis of individual projects. Bidder can submit multiple projects subjects to maximum marks. NOTE: As in country there few numbers of completed projects and considering smart lighting at this will limit competition rather than promoting more participation from interested parties</p>	<p>No change in clause.</p>
17.	<p>2. SCOPE OF WORK AND TERMS OF REFERENCE</p> <p>2.4 Centralized control and light monitoring system</p>	40	<p>a) Centralised Control and Monitoring System (CCMS) shall have a web-server to receive all data from the streetlight controllers and voltage controllers</p>	<p>Is communication through CCMS a must? We think that direct communication between LED lights and cloud server over NB-IoT is 100% reliable, safe and guaranteed. What is the proposed communication technology between CCMS and individual lights?</p>	<p>Specification of street Light Management System is revised.</p> <p>Refer corrigendum</p>
18.	<p>2. SCOPE OF WORK AND TERMS OF REFERENCE</p> <p>2.4 Centralized control and light monitoring system</p>	40	<p>1) d) Bulk messaging facility to be given, so that any common changes can be effected into the controller equipment</p>	<p>This will not be needed because we use NB-IoT for communication and it is based on IPV6</p>	<p>Specification of street Light Management System is revised.</p> <p>Refer corrigendum</p>

Cochin Smart Mission Limited (CSML)

19.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.6 Street lighting management system:	42	The system can be turnkey solutions for centrally managed, dimmable, energy saving street lights. The system shall have extremely high up time and enables fast reactions to fault states. The system shall allow tailoring and be easily upgradable by adding new modules with additional functionalities for future scalability.	<ul style="list-style-type: none"> Does its means, the entire street light and flood light also need to be provided with dimmable options? <p>Does this mean all the LED street lights & LED flood lights irrespective of wattage need to be provided with dimmable drivers.</p>	All light fixtures in smart roads, High mast system and light fixtures above 9000 lumens in access roads need to be with dimmable driver.
20.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.6 Street lighting management system:	42	All communication between central controller and LED luminaries shall be through power cables. No additional cable shall be required for communication.	We recommend changes as All communication between central controller and LED luminaries shall be through power cables/ wireless.	Specification of street Light Management System is revised. Refer corrigendum
21.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.6 Street lighting management system:	42	f) Prevent unauthorized physical access to the street light control box.	Let us know what kind of provision is required for prevention of unauthorized Physical access. Any software or Physical Key?	Specification of street Light Management System is revised. Refer corrigendum
22.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.6 Street lighting	43	k) Electrical cabinet monitoring configurations shall be enabled remotely and can be changed at any time. Electrical meter readings shall be available on demand as well as in configurable time intervals.	Is electrical meter readings of individual street lights expected? What is the minimum time period required when the time period is configurable?	The Normal energy meter is required for each feeder pillar only and but micro energy meter is required in light fixture with Individual light controller to measure to energy.

Cochin Smart Mission Limited (CSML)

	management system:		Graphical view of the electrical consumption readings shall be available online for monitoring of the hourly electricity consumption.		
23.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work	44	c) The bidder has to submit the complete implementation plan along with the name of official with contact number and duties who has to be deputed in the site for execution of project and after execution maintain the AMC activities up to the project period.	<ul style="list-style-type: none"> Please allow submission of detailed plan of execution after award of the work after detailed survey 	<p>No change in clause.</p> <p>The contractor shall submit the detailed work execution plan within 15 days after the LOI is issued to him.</p>
24.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work	45	w) The bidder will be fully responsible for all kind of theft.	<p>Liability of theft should not be with us as we do not have any control over the same.</p> <p>Is it applicable prior to installation or post installation? If it is post installation how can the bidder be responsible for any theft.</p>	<p>The Clause remains unchanged.</p> <p>The operation and maintenance of the street light system is done by the contractor. And the contractor must hand over the entire system fully operational during handing over after the completion of O& M period.</p>
25.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work	46	z) Erection of Lighting Poles, Fixtures, Lighting at site including designed standard earthing arrangement. cc) Trenchless boring for road crossing if required.	There is chance of water line / Gas line below the ground where trenching is to be done. Request you provide data regarding the same. Request you to provide layouts of the Roads to be illuminated with such Key data.	The vendor must coordinate with respective departments and get relevant information/ data of services/ pipe lines / cables before making HDD work.

Cochin Smart Mission Limited (CSML)

<p>26.</p>	<p>2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work</p>	<p>46</p>	<p>z) Erection of Lighting Poles, Fixtures, Lighting at site including designed standard earthing arrangement.</p> <p>gg) Supply, installation and commissioning Galvanized iron poles with cross arm and insulators and lighting bracket for roads and maintaining service connection (electric supply) to the existing consumers and installation of LED street light fixtures on the new poles.</p>	<p>There are multiple cables (HT, LT, local TV cable, telephonic etc.) cables are present. Who will take care of those unauthorized cables apart from LT line?</p>	<p>Underground Ducts will be provided for data cables/ TV and telecom cables vide separate Smart Road & Access Road package. The respective service provider will be instructed to lay the cables in the duct once the cable ducts are installed by another contractor.</p>
<p>27.</p>	<p>2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work</p>	<p>46</p>	<p>z) Erection of Lighting Poles, Fixtures, Lighting at site including designed standard earthing arrangement.</p> <p>jj) Civil foundations as recommended by the manufacturers of Lighting control panels, lighting pole and mounting arrangement for Control panel and junction box etc shall be done in coordination with contractor of road project. All the civil works such as excavation of earth for earthing system, laying of Hume pipes/ HDPE pipes/ DWC pipes in concreting, back filling of cable trench, providing man holes as required for cable laying and jointing as per standards.</p>	<p>90% of the Road is already made. Trenching, cabling is to be done by cutting the existing roads. Refilling of the excavated portion can be done however Remaking of Road need to be taken care by CSML Only. Remaking of Road is civil specialized job and Electrical contractor may not be able to do it, hence we request you to get it done through another Civil contractor.</p>	<p>The lighting contractor must coordinate with civil contractor of Smart Road & Access Road for laying cables in median, making foundations of poles / feeder pillars so that double work is avoided. In case, the lighting contractor fails to do so, he shall have to restore the original condition of roads once the civil work for foundation/ trench is completed at its own cost & risk.</p> <p>Unchanged: The finalization of civil contractor for Smart & access Road work in ABD area is in progress and will be taken up</p>

Cochin Smart Mission Limited (CSML)

					along with lighting project. If any work done by the Lighting contractor after the completion of the civil work, the lighting contractor is to restore the original condition of roads.
28.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work 2.8.12 Operation and maintenance: (h)	49	h) To replace the damaged component in the lighting system if the same is damaged to accident or any other reason. The Contractor has to replace the damaged component on his own cost.	How can the bidder be responsible for any damage which occurs due to natural calamities or due to any other un avoidable reason which is not in control of the bidder?	The clause remain unchanged: The operation and maintenance of the street light system is done by the contractor. And the contractor has to hand over the entire system fully operational during handing over after the completion of O& M period. The contractor has to insure the products against natural calamities & other risk envisaged.
29.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work 2.11 Contract period	53	Total Contract period is of 18 months + 5 years for O&M from date of work order but Contractor must complete supply, installation and commissioning work within 18 months of award of work. The Contractor shall be responsible for management, operation & maintenance of tender work awarded to him for a period of 5 years from the date of completion of installation work, (18 months from signing of agreement). During the maintenance period of 5 years,	How can the bidder be responsible for any damage which occurs due to natural calamities or due to any other un avoidable reason which is not in control of the bidder?	The clause remain unchanged: The operation and maintenance of the street light system is done by the contractor. And the contractor has to hand over the entire system fully operational during handing over after the completion of O& M period. The contractor has to insure the products against natural calamities & other risk envisaged.

Cochin Smart Mission Limited (CSML)

			if any damage / failure occurs due to any reason whatsoever the Contractor will have to repair / replace/ maintain/ install whatever needed as per site conditions at his own cost& risk basis. The Contractor shall hand over the project in working condition i.e. 100% lights on after completion of contract period with all accessories / material in complete.		
30.	2. SCOPE OF WORK AND TERMS OF REFERENCE 2.8 Scope of work 2.12 Obligations of the contractor	54	m) Ensure that the Project Facility remains free from all encroachments and take all steps necessary to remove encroachments, if any;	How can the bidder be responsible for such activities, department has to take care of any unwanted elements?	No change in Clause.
31.	3. GENERAL CONDITIONS OF CONTRACT 4.27 Security of the Site	90	The Contractor shall be wholly responsible for security of site and Works. Unless otherwise stated in Special Conditions of Contract (a) the Contractor shall be responsible for keeping unauthorized persons off the Site; and (b) Authorized persons shall be limited to the Employees of the Contractor, Subcontractor or persons authorized by the Engineer.	The security of the site is currently under the Contractor , since the security of the site is dependent on various factors like issues or riots in the City , this risk has to be taken by the Government or there should be clauses for particular type of situations.	No change in Clause.
32.	3. GENERAL CONDITIONS OF CONTRACT 8 TIME MANAGEMENT	109	Supply, Installation of Smart LEDs system and Cast iron decorative poles including all connected accessories - T + 16 months	There is no specification or drawing provided for Cast Iron decorative poles. However, in the BOQ Sr. no.5, it is mentioned as Octagonal pole with Ornamental bracket. Please Clarify	Modified: Specification and drawing of Light pole in smart road is included.

Cochin Smart Mission Limited (CSML)

	8.2 Time for Completion			whether we have to consider Octagonal poles with Decorative bracket arm made of GI pipe. OR will it be a pole/bracket with Cast iron part. In both cases GI pipe decorative bracket OR Decorative Bracket with Cast Iron part, please provide drawing. There is no drawing given in the tender for decorative/ornamental pole bracket.	Light pole drawings is attached as Addendum.
33.	3. GENERAL CONDITIONS OF CONTRACT 10 DEFECTS LIABILITY 10.2 Cost of Remediating Defects	117	All work referred to in Sub-Clause 10.1 shall be executed by the Contractor at his own cost, if the necessity for such work is due to: a) the design of the Works;	If there is difference in the data given in the tender, like cross section of Road given in the tender and Cross section of Road at actual, then required change in the work/design need to be considered as Extra work to be charged Extra.	Road dimensions are given in the drawings. The contractor has to ascertain the condition of the road. This is a basic design based upon actual topographic survey done for various roads. Minor modification could be possible except height of the poles. Road dimensions and lighting design of each road considering illumination level required, spacing, height of the poles and minimum lumen requirement of Light fixture is indicated. If deviation coming due to selection of wattage, optics, CCT, efficiency of light fixture from the design may lead to increase in cost, the contractor shall have to ascertain the condition of the road and minimize such variation in quantity. The extra cost incurred due to variation in quantity because of change from the

Cochin Smart Mission Limited (CSML)

					proposal for the above-mentioned reasons is to be borne by the contractor. For drawings refer Addendum
34.	3. GENERAL CONDITIONS OF CONTRACT 12 VARIATIONS 12.5 Variation in Bill of Quantities	132	i) The quantities of items shown in the Bill of Quantities are approximate, and liable to vary during the actual execution of the work. Some items/group of items may have to be altered, added or omitted. The Contractor shall be bound to carry out and complete the stipulated work as instructed by the Engineer, irrespective of the magnitude of variations including additions, alterations or omissions in the Bill of Quantities, individual items or group of items, specified in the Bill of Quantities.	This seems very strict request you to ease the terms.	No change in clause
35.	17 CLAIMS, DISPUTES, CONCILIATION AND ARBITRATION 17.9 Arbitration	152	(a) Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is up to Rs.5 million and to a panel of three Arbitrators if total value of claims is more than Rs.5 million. The Employer shall provide a panel of three arbitrators which may also include CSML officers for the claims up to Rs.5 million and a panel of five Arbitrators which may also include CSML officers for claims of more	We recommend The arbitrators should be independent and with no association with any of the parties.	No change in clause

Cochin Smart Mission Limited (CSML)

			<p>than Rs.5 million. The Contractor shall have to choose the sole Arbitrator from the panel of three and/or one Arbitrator from the panel of five in case three Arbitrators are to be appointed. The Employer shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only. . The Arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/ demand of appointment of Arbitrator from either party. Neither party shall be limited in the proceedings before such arbitrator(s) to the evidence or arguments put before the Engineer for the purpose of obtaining his decision. No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator(s) on any matter, whatsoever, relevant to dispute or difference referred to arbitrator/s. The arbitration proceedings shall be held in only. The language of</p>		
--	--	--	---	--	--

Cochin Smart Mission Limited (CSML)

			proceedings, that of documents and communication shall be English.		
36.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.1 GENERAL REQUIREMENTS OF SLMS:	190	The system shall be accessible through a secure connection from any location. It shall provide a fast assessment of the systems status, alarms and other events.	fast assessment means how much time duration?	The street light management system features modified. Refer Corrigendum
37.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.1 GENERAL REQUIREMENTS OF SLMS:	190	All the communication between central controller installed in the street lighting cabinet and LED Luminaires shall be through power cables. No additional cabling shall be required for communication.	We recommend changes as All communication between central controller and LED luminaries shall be through power cables/ wireless. Request to add 4G and NB-IoT as possible options for communication	The street light management system features modified. Refer Corrigendum
38.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.1 GENERAL REQUIREMENTS OF SLMS:	190	System shall allow tailoring and be easily upgradable by adding new modules with additional functionalities for future scalability	Please elaborate	The street light management system features modified. Refer Corrigendum

Cochin Smart Mission Limited (CSML)

39.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	The controller shall have Ethernet TCP/IP port	We strongly recommend CCMS have modem (GSM/GPRS) for cloud connectivity	The street light management system features modified. Refer Corrigendum
40.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	The Controller shall have the ability to automatically switch between different available communications carriers to provide stable and reliable communication.	As per our understanding carrier switching is band switching of a GSM. Kindly clarify.	The street light management system features modified. Refer Corrigendum
41.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	The Controller shall have a USB / micro card interface for software upgrade	The Controller shall have a USB / micro card interface for software upgrade/SW OTA.	The street light management system features modified. Refer Corrigendum

Cochin Smart Mission Limited (CSML)

42.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	<p>The Controller shall be able to switch on/off luminaires in at least two groups.</p> <p>The Controller shall be able to monitor the current in at least two 3-phase circuits.</p>	<p>Does it mean switching individual phases ON/OFF? What is meant by 2 3-phase circuits If yes this would mean a distribution box Need Clarity</p> <p>Note: This is not used in any streetlight wiring configuration. Generally, streetlights are either 3 phase or at max 3 Phase. Need Clarity. Two 3 phase circuit current monitoring will increase the panel size,</p>	<p>The street light management system features modified.</p> <p>Refer Corrigendum</p>
43.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	<p>The Controller shall support at least 1 leakage current sensor.</p>	<p>This is a nonstandard requirement for current market. This requirement is pointing to a specific one OEM only.</p>	<p>The street light management system features modified.</p> <p>Refer Corrigendum</p>
44.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING	192	<p>The controller shall have an integrated GPS sensor to remotely determine its location, to ease the commissioning process.</p>	<p>GPS locations will be update on server during commissioning of the panel as panels are stationary equipment's and continuous GPS link</p>	<p>The street light management system features modified.</p>

Cochin Smart Mission Limited (CSML)

	MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:			is not required.	Refer Corrigendum
45.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.3 CENTRAL CONTROL MONITORING SYSTEM:	192	The Controller shall have integrated GPRS/2 G/3G for wireless communication with the server over internet	Please change the clause to "The Controller shall have integrated GPRS/2 G/3G or use LoRa technology for wireless communication with the server over internet." LoRa is the latest technology that offers an efficient, flexible and economical solution. LoRa operates in the unlicensed band and supports indoor applications; LoRa Technology is highly secure & robust from end devices to the application server and is suitable for outdoor applications.	The street light management system features modified. Refer Corrigendum
46.	4. TECHNICAL SPECIFICATIONS 4.7 STREET LIGHTING MANAGEMENT SYSTEM (SLMS) 4.7.9 CONTROL ROOM APPLICATION	193	It shall be possible to see the communication status of a selected box.	please clarify communication status required (connected / disconnected)	The street light management system features modified. Refer Corrigendum

Cochin Smart Mission Limited (CSML)

47.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.1 FEATURES FOR SMART INDIVIDUAL CONTROL	195	The communication node having self protection from short circuit, over voltage, and anti theft alert	No anti-theft alert feature required for Lights This requirement is pointing to a specific one OEM only.	No change in clause
48.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.1 FEATURES FOR SMART INDIVIDUAL CONTROL	195	The system has real time and 07 days data backup facility	StreetCom has this feature not required for the node This requirement is pointing to a specific one OEM only.	The street light management system features modified. Refer Corrigendum
49.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.1 FEATURES FOR SMART INDIVIDUAL	195	The communication node controller shall have embedded photo sensor, auto GPS, astronomical clock and real time measurement features of power factor, active power, frequency, current, voltage, cumulative KWh and number of lamp burring hours	Astronomical clock based on sunrise and sunset and real time data are available. GPS is not required as the street lights are stationary and GIS survey is done prior to installation.	The street light management system features modified. Refer Corrigendum

Cochin Smart Mission Limited (CSML)

	CONTROL				
50.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.2 TYPE 1: (SHANMUGHAM ROAD)	196	2) Suitable wattage with system lumens >3500 lumens decorative post top light with individual light point control	Understand Post top from Consultant & Product Owner; Individual control in control ina 35W luminaire does not have a value proposition. This requirement is pointing to a specific one OEM only.	In smart road, all the lamps are with individual controls and is not pointing to any particular OEM.
51.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.2 TYPE 1: (SHANMUGHAM ROAD)	198	TECHNICAL SPECIFICATION FOR SMART STREETLIGHT TO BE USED IN SHANMUGHAM ROAD: 34) Auto Location of streetlight in GUI	Is this a capability of luminaire or controller?	It is the capability of Controller.
52.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.2 TYPE 1: (SHANMUGHAM ROAD)	199	TECHNICAL SPECIFICATION FOR SMART LED DECORATIVE LIGHT TO BE USED IN SHANMUGHAM ROAD: 2) Life span of LEDs used in the Luminaire shall be more than 100000 hours at Useful life L80B10	Standard industry offering is 50000 burning hours. Any specific requirement.	50000 burning hours is acceptable in case of post top lights. Refer Corrigendum
53.	4. TECHNICAL SPECIFICATIONS 4.8 SMART	199	TECHNICAL SPECIFICATION FOR SMART LED DECORATIVE LIGHT TO BE USED IN SHANMUGHAM ROAD:	5700 K is as per ANSI Standard. This requirement is pointing to a specific one OEM only.	The preferred CCT is 4000 K with LED

Cochin Smart Mission Limited (CSML)

	ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.2 TYPE 1: (SHANMUGHAM ROAD)		10) Colour temperature of the luminaire shall be in the range of nominal 4000K to 5500K		Refer Corrigendum
54.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.2 TYPE 1: (SHANMUGHAM ROAD)	201	TECHNICAL SPECIFICATION FOR SMART LED DECORATIVE LIGHT TO BE USED IN SHANMUGHAM ROAD: 33) Maintenance 34) Auto Location of streetlight in GUI	(33) E7(34) GPS locations will be update done server during commissioning of the panel as panels are stationary equipments and continuous GPS link is not required.	The specification of Lighting Management System is modified. Refer Corrigendum
55.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.3 TYPE 2: (BANERJI ROAD)	206	TECHNICAL SPECIFICATION FOR SMART LED DECORATIVE POST TOP LIGHT TO BE USED IN BANERJI ROAD: 4) Wattage: suitable wattage with system lumens: > 28350000 lumens	Please reconfirm the system lumen.	Refer Corrigendum
56.	4. TECHNICAL SPECIFICATIONS 4.8 SMART ROADS – INDIVIDUAL LIGHT POINT CONTROL 4.8.10 B 1 TYPE	249	TECHNICAL SPECIFICATION FOR STREETLIGHT TO BE USED IN B1 CATEGORY ROAD Nominal sys Wattage: suitable Wattage with nominal system lumens: > 3500 lumens	There is a contradiction between lumen package mentioned in technical documents and BOQ. Please clarify.	Refer Corrigendum

Cochin Smart Mission Limited (CSML)

	ROADS				
57.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	267	a) 1) Ability to connect with a communication device	Please clarify need for additional communication device? Which kind of communication type expected	The street light management system features modified. Refer Corrigendum
58.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	268	2) Enclosure should be made of fire-retardant FRS/ SMC material and with impact resistance of IK10.	Material & Dimensions of SSMS shouldn't be defined & it depends on Smart Meter This requirement is pointing to a specific one OEM only. MS powder coated enclosure which meets the specifications of fire retardant and with impact resistance of IK10 should be accepted.	Modified as the materials shall be fire retardant and impact resistance of IK-06 Refer Corrigendum
59.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	268	3) Communication technology between CCMS unit and central server should be 3G or above. However, a provision should be there for upgrading it to 4G as per local area requirements due to network evolution.	not upgradable	The street light management system features modified. Refer Corrigendum
60.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	269	5) Could be both utility owned server as well as cloud - dedicated server for the project based within India.	Is it utility owned server and/ or cloud?	The street light management system features modified. Refer Corrigendum
61.	5. Specification OF MATERIALS 5.2 CCMS AND	270	20) Following tampers are logged with occurrence and restoration in FIFO	Please clarify magnet. Delete for Magnet This requirement is pointing to a specific	The item magnet is deleted.

Cochin Smart Mission Limited (CSML)

	ILM PANEL 5.2.1 TECHNICAL SPECIFICATION		<ul style="list-style-type: none"> •Low Load •Over load •Low Power Factor •Under voltage •Overvoltage • Magnet 	one OEM only. Please clarify magnet.	The item, magnet is deleted Refer corrigendum
62.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	272	42) Software to have asset management features for tracking of each streetlight, unique asset tag no., make, wattage, date of installation date of replacement, reason for replacement	No Asset Management Features Such kind of features are not availed in the node. The are available in the StreetComm report section; however, this is a onetime activity and will be implemented during the installation process with customer concurrence This requirement is pointing to a specific one OEM only.	The street light management system features modified. Refer Corrigendum
63.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	274	43) Each central CCMS unit must be capable of handling minimum 5000 number switching point units.	Need to have clarity about KVA rating per CCMS in order to accommodate min 5000 switching points.	The street light management system features modified. Refer Corrigendum
64.	5. Specification OF MATERIALS 5.2 CCMS AND ILM PANEL 5.2.1 TECHNICAL SPECIFICATION	274	43) One dedicated or multiple display screen of UHD Resolution each of 55" size at KMC project office for monitoring of CCMS Operation	is it scope of KMC or contractor?	Modified: The centralized monitoring of street Light Management system is from Integrated Command and Control Centre of KMC and hence all items in no. 16 of BOQ is deleted except Lighting Management Software from the scope.

Cochin Smart Mission Limited (CSML)

					Item deleted from the scope. Refer Corrigendum
65.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER	275	A street light controller should be a GPRS/GSM based remote streetlight monitoring system with capacity for self- protection from short-circuit, over voltage and anti-theft alert.	<p>No theft alert feature for fixtures This requirement is pointing to a specific one OEM only.</p> <p>Please change the clause to "A street light controller should be a GPRS/GSM/LoRA based remote streetlight monitoring system with capacity for self- protection from short-circuit, over voltage and anti-theft alert."</p> <p>LoRa is the latest technology that offers an efficient, flexible and economical solution. LoRa operates in the unlicensed band and supports indoor applications; LoRa Technology is highly secure and robust from end devices to the application server and is suitable for outdoor applications.</p>	The street light management system features modified. Refer Corrigendum
66.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.1 SYSTEM PARMETERS	275	In cases where the Streetlight Controller is used in conjunction with Individual Lamp Monitoring (ILM) devices, the Streetlight Controller should be capable of acting as a RF Data Concentrator so as to be able to communicate with all the ILM devices of that switching	Please clarify	The street light management system features modified. Refer Corrigendum

Cochin Smart Mission Limited (CSML)

			point.		
67.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.1 SYSTEM PARMETERS	276	Design life should be more than 15 years or more.	Please reconfirm	The panel shall able to withstand the corrosive environment as the project location is seashore area.
68.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.2 GENERAL SPECIFICATIONS	276	9) Provisions for camera at later stage at strategic locations	Please detail out the provision required for this facility.	This is deleted. The street light management system features modified. Refer Corrigendum
69.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.2 GENERAL SPECIFICATIONS	276	11) The interface device used for the intelligent feeder pillar should be capable of two way communication with SCADA control of KMC/KSEB and the street light control room through GPRS/optical fibre. The scope of work covers every such item which is responsible for smart lighting system and communication with SCADA of CSML/ KMC Street light control room.	Need clarity on scope of work for integration with scada	Modified. The vendor is free to choose the Lighting Management software. But the integration of Street Light Management system with Integrated Command and Control Centre of KMC and integration of smart energy meter with Smart Energy Management system of KSEB is in the scope of the vendor. Refer Corrigendum
70.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.2 GENERAL	278	32) The St. light feeder pillar shall have battery for 48 hours power back up, relay for switching the contactor, modem, MCB, for isolation and protection of feeder	The data stored on the server and it can be retrieved at any time. So why we require 48hrs back up at feeder pillar	Modified. The vendor is free to choose the Lighting Management software. But the integration of Street Light Management system with Integrated Command and

Cochin Smart Mission Limited (CSML)

	SPECIFICATIONS		interface unit, wiring, Auto/manual bypass switch installed inside the pillar panel.		Control Centre of KMC and integration of smart energy meter with Smart Energy Management system of KSEB is in the scope of the vendor. Refer Corrigendum
71.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3 COMPONENTS OF FEEDER PANEL 5.3.3.23 VOLTAGE CONTROLLERS	286 - 287	VOLTAGE CONTROLLERS	Requesting CSML to remove the clause. Because this method is applicable only for old convention light fixtures. The voltage dimming is not applicable for LED system, if we reduce the supply voltage to LED luminaries then also the fixture produces same lumen output only.	This is deleted. The street light management system features modified. Refer Corrigendum
72.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3 COMPONENTS OF FEEDER PANEL 5.3.3.23 VOLTAGE CONTROLLERS	286	a) Should reduce Energy consumption of street lights by voltage control during off-peak hours	LED do not respond uniformly to voltage control. Dimming can be carried out by individual controller.	Voltage controller is deleted. Refer Corrigendum
73.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER	286	e) Should have 3 steps of dimming to ensure maximum energy saving during off-peak hours	Request you to rephrase the clause as should have minimum 3 steps of dimming to ensure maximum energy saving during off-peak hours with	The street light management system features modified.

Cochin Smart Mission Limited (CSML)

	5.3.3 COMPONENTS OF FEEDER PANEL 5.3.3.23 VOLTAGE CONTROLLERS			dimming between 0-100%	Refer Corrigendum
74.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3 COMPONENTS OF FEEDER PANEL 5.3.3.23 VOLTAGE CONTROLLERS	286	f) Intelligent dimming should be there; during off-peak hours if input voltage itself is low, further voltage reduction should not happen	LED and controller shall work within specific voltage band. Kindly relax voltage dimming from feeder as it adds unnecessary losses	The street light management system features modified. Refer Corrigendum
75.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3 COMPONENTS OF FEEDER PANEL 5.3.3.23 VOLTAGE CONTROLLERS	287	o) In cases where the Voltage Controller is used in conjunction with Individual Lamp Monitoring (ILM) devices, the Streetlight Controller should be capable of acting as a RF Data Concentrator so as to be able to communicate with all the ILM devices of that switching point.	Other points ask for M2M /GPRS based controllers, which one is expected by CSML	Voltage controller is deleted. The street light management system features modified. Refer Corrigendum
76.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3	287	The CPU module shall be equipped with a 32 Bit processor capable of running DSP, Microcontroller and Java applications, running on open source operating system. It shall	Please elaborate. What is LCS? Analog inputs are not relevant for street light application hence may be deleted.	The item is deleted The street light management system features modified.

Cochin Smart Mission Limited (CSML)

	<p>COMPONENTS OF FEEDER PANEL 5.3.3.24 OUTDOOR LIGHTING CONTROL CPU</p>		<p>have inbuilt 3 Phase power supply input terminals, USB port, internal health monitoring & logging, 2 analog inputs, ,1 digital input for Photocell, Ethernet and GPRS ports, and communication capability on RS 232 along with built in Flash memory for data storage. The CPU shall monitor and control all other modules in the LCS. Direct communication between the modules shall takes place by means of an industrially proven RS 485 technology. The same interface shall also be used for power supply between the modules. The CPU module shall serve as a WAN communications and data concentrator module. It shall be capable of two way communication with the central server takes place via</p> <ul style="list-style-type: none"> a)GPRS b)SMS c) Ethernet 		<p>Refer Corrigendum</p>
<p>77.</p>	<p>5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.3 COMPONENTS</p>	<p>Page 288</p>	<p>The module shall have the ability to automatically switch between different available communications carriers in order to provide stable and reliable communication. It shall be upgradable for used with WIFI</p>	<p>CPU module weight restriction / mounting arrangement are vendor specific and do not hinder the streetlight application and its O&M. Hence may be deleted.</p>	<p>The street light management system features modified.</p> <p>Refer Corrigendum</p>

Cochin Smart Mission Limited (CSML)

	OF FEEDER PANEL 5.3.3.24 OUTDOOR LIGHTING CONTROL CPU		and WIMAX in future using the USB or the Ethernet port on the module. It shall support remote Software and configurations updates from the server enabling it to autonomously execute tasks. It shall monitor Voltage values on all three phases of main supply. Battery shall be supplied with backup power via the A Bus in the event of power failure enabling the CPU module to store data and send a main power failure alarm to the central server before it shuts down safely. It shall be light weight (not more than 300 grams), compact and DIN rail mountable, supporting Tri band GSM900 / EGSM900, GSM1800, 1900 MHz Compliant to GSM Phase 2/2+. It shall have a local Real time clock synchronized with remote time server, to enable functionality even in case of communication network failure		
78.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.6 WEB BASED MANAGEMENT OF THE LIGHTING SYSTEM	289	d) The GUI shall have a search box to search for nodes, boxes, modules, meters and programs.	Please clarify nodes, boxes, modules, meters & programs.	Modified. The vendor is free to choose the Lighting Management software. But the integration of Street Light Management system with Integrated Command and Control Centre of KMC and integration of smart energy meter with Smart Energy Management system of KSEB is in

Cochin Smart Mission Limited (CSML)

					the scope of the vendor. Refer Corrigendum
79.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.6 WEB BASED MANAGEMENT OF THE LIGHTING SYSTEM	289	f) The GUI shall indicate the photocell history.	Please provide clarification on photocell history	Modified. The vendor is free to choose the Lighting Management software. But the integration of Street Light Management system with Integrated Command and Control Centre of KMC and integration of smart energy meter with Smart Energy Management system of KSEB is in the scope of the vendor. Refer Corrigendum
80.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.6 WEB BASED MANAGEMENT OF THE LIGHTING SYSTEM	289	LMS: Delete points d) The GUI shall have a search box to search for nodes, boxes, modules, meters and programs. f) The GUI shall indicate the photocell history. & i) It shall be possible to set an operational mode for the boxes. The operational modes shall be “operational”, “Installation”, “maintenance with alarm”, or “maintenance w/o alarm”	Delete points (d), (f) & (i)	The street light management system features modified. Refer Corrigendum
81.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER	290	b) There shall be no requirement to carry out survey to establish the communication network or to find out best location for segment	Instead of GPRS/GSM on each Controllers, it should be RF based communication on each Nodes of the Luminaire. This will save SIM	The street light management system features modified.

Cochin Smart Mission Limited (CSML)

	<p>5.3.10 INDIVIDUAL LIGHT POINT CONTROL SYSTEM</p>		<p>controller/ gateway as the proposed system shall have independent M2M communication from each luminaire to server over GPRS/GSM & hence not relying on one others to build up mesh of communication, thereby avoiding any further interference, loss of signal & thereby leading to fast deployment of installation program.</p>	<p>card cost, as RF 2.4 Ghz is free band in India. Please refer page 92 Page – 92, clause 5.3 STREET LIGHT CONTROLLER Which clearly states that a street light controller should be a GPRS/GSM based remote streetlight monitoring system, further in case where the Streetlight Controller is used in conjunction with Individual Lamp Monitoring (ILM) devices, the Streetlight Controller should be capable of acting as a RF Data Concentrator so as to be able to communicate with all the ILM devices of that switching point. Preference given to only SIM based communication whereas it should be open for the best communication topology applicable in the market This requirement is pointing to Philips only, hence not open standard * As per this statement Individual light point control system will have provision for GPRS/ GSM at every fixture level, which means SIM will be required for respective street lighting, decorative post top. * There is a quantity mismatch of SIM card requirements. * Only 130 SIM' s are considered in the BOQ are matching only for feeder pillars</p>	<p>Refer</p>	<p>Corrigendum</p>
--	---	--	---	--	---------------------	---------------------------

Cochin Smart Mission Limited (CSML)

				<p>which will be sufficient for Group monitoring.</p> <p>* Additional 1110 nos. of GSM SIM's will be required if in case this LED street light and decorative post top's to be individually monitor over GPRS/ GSM.</p>	
82.	<p>5. Specification OF MATERIALS</p> <p>5.3 STREET LIGHT CONTROLLER</p> <p>5.3.10 INDIVIDUAL LIGHT POINT CONTROL SYSTEM</p>	290	<p>d) The individual light point control shall use a license network from server all the way up to luminaire & node controller & shall not require setting up any proprietary network , gateways/data boosters & infrastructure thereby making system fully interference free from other communication system & or smart devices.</p>	<p>Instead of GPRS/GSM on each Controllers, it should be RF based communication on each Nodes of the Luminaire. This will save SIM card cost, as RF 2.4 Ghz is free band in India.</p> <p>However, Section 5.5.4 talks about Smart Mesh. If this is not proprietary mesh, please explain which mesh is being referred to</p> <p>ISM Free RF band network should be applicable</p>	<p>The street light management system features modified. The vendor is free to offer any system.</p> <p>Refer Corrigendum</p>
83.	<p>5. Specification OF MATERIALS</p> <p>5.3 STREET LIGHT CONTROLLER</p> <p>5.3.10 INDIVIDUAL LIGHT POINT CONTROL SYSTEM</p>	291	<p>j) The system provides light point control and cabinet control from one user interface.</p>	<p>What is meant by cabinet control</p>	<p>The software program of Lighting Management System shall be capable control the operation light point/ control panel from Mobile phones / PC etc. from local /remote locations.</p> <p>Modified. The vendor is free to choose the Lighting Management software. But the integration of Street Light Management system with Integrated Command and Control Centre of KMC and</p>

Cochin Smart Mission Limited (CSML)

					integration of smart energy meter with Smart Energy Management system of KSEB is in the scope of the vendor. Refer Corrigendum
84.	5. Specification OF MATERIALS 5.3 STREET LIGHT CONTROLLER 5.3.10 INDIVIDUAL LIGHT POINT CONTROL SYSTEM	291	n) The CMS node will be mounted to the top of the luminaire housing via a 20mm hole or appropriate external socket/bracket and meet the same ingress protection (IP66), and impact resistance (IK09) rating as required of the luminaire.	Can we mount node on pole as drilling hole on luminaire shall not achieve sustainable IP rating and O&M period is quite vast? It is requested to consider external adaptation of control node meeting independent IP & Ik rating as per RFP	The controller shall be plug and play system, easily mountable of light fixture. Drilling on LED fixture is not permitted as this will lead moisture entering to light fixture and damage the IP rating. The IK rating is IK 08 and IP rating is IP 66. Refer Corrigendum
85.	5. Specification OF MATERIALS 5.5 SMART ENERGY METER 5.5.1 BASIC REQUIREMENT	297	The Smart Energy meter installed at the CCMS panel shall conform to IS 16444 standards. The energy meter shall have the provision for external communication by using RS 232 port of IRDA for communication to a hand held unit or AMR. Energy meter capable of detecting and recording anti tamper features including neutral missing and abnormal voltage/ frequency protection.	As mentioned in page 269 of CCMS and ILM panel specifications: Meter conforming to IS:13779 standard with RS 232 / RS 485 port should be accepted. Same to be amended accordingly.	Standards: IS 16444, IS 15959(1), IS 15959(2), Metrology Accuracy Modified as: Class 1 Refer Corrigendum
86.	5. Specification OF MATERIALS 5.5 SMART	298	Meter class : 0.5	As mentioned in page 269 of CCMS and ILM panel specifications: Meter conforming to Class 1 should be	Standards: IS 16444, IS 15959(1), IS 15959(2), Metrology Accuracy Modified as: Class 1

Cochin Smart Mission Limited (CSML)

	ENERGY METER 5.5.3 RATING			accepted. Same to be amended accordingly.	Refer Corrigendum
87.	5. Specification OF MATERIALS 5.6 LIGHTING 5.6.2 LED LAMPS AND LUMINAIRE:	300	8) Colour temperature of the luminaire shall be in the range between 4000K to 5500K	Is standard CCT of 5700+/- 300 K acceptable?	The item deleted. Refer Corrigendum
88.	5. Specification OF MATERIALS 5.7 SELECTION OF STREET LIGHT POLES 5.7.11 SOLAR INTEGRATE POST TOP LANTERN 5.7.11.2 LUMINAIRE	306	The luminaire shall deliver a system lumen > 6000 lm by consuming wattage <44W. The luminaire shall be with 5000K and CRI > 70. The luminaire shall have a rated life of 50,000 burning hours @ L70. The luminaire shall be street light made of pressure diecast aluminum body. The bottom cover shall be polycarbonate with IP 65 and IK 08 rating. The LED shall be SMD type.	This is system lumen package is contradictory to system lumen demand of 105lumen /W written elsewhere, kindly clarify. This is contradictory to IP requirement of IP66. Kindly clarify	This is 6000 lumens only. The data sheet is attached. IP requirement is IP 66 and IK rating is IK 08. Refer Corrigendum
89.	5. Specification OF MATERIALS 5.8 CONTRACTOR'S REQUIREMENT 5.8.9 LIST OF PREFERRED MANUFACTURERS	309	List of Preferred Manufacturers	Is mandatory to bid only the manufacturers mentioned in this list? Also confirm if the bidder can bid any other renowned manufacturer which is not mentioned in the list given in the RFP?	Manufacturers/ suppliers/ implementation agency also can quote. The Luminaire and poles shall be supplied from the list of preferred makes mentioned in 5.8.9.
90.	BOQ point 2.02	BOQ	GLS Street light with suitable wattage having system lumens > 3000 lumens		Street light with suitable wattage having system lumens > 3500 lumens Refer Corrigendum

Cochin Smart Mission Limited (CSML)

91.	BOQ point 15	BOQ	Location of energy meter	Let us know Location where Energy meter is to be mounted.	Energy meter is installed inside the feeder pillar.
92.	BOQ point 16	BOQ	Setting up of a Centralised Control and Monitoring Centre and Project Office for all the two regions (Fort Kochi and Ernakulum) of the ABD of Kochi Smart City with all required Hardware and soft wares and required quantity of furniture to man the Centre, with features like remote monitoring, management and control of lamps on an individual or group level through intuitive software, with real time accurate data and shall be robust and secure, regular data backups, automatic failure reports to improve corrective and preventive maintenance, accurate energy metering. Compatible with third party hardware and software - to enable addition of various smart city application in future etc. Periodic software upgrades to provide enhanced functionalities. capable of supporting seventy five lights. Map based visualisation etc.	<ul style="list-style-type: none"> Please confirm that Land required from CCMS centre and project office/ store shall be provided by you. 	<ul style="list-style-type: none"> Modified: The centralized control of street lighting system is from the Integrated Command and Control Centre of Kochi Municipal Corporation. For operation and maintenance of street lighting system, the contractor has to open an office with 24X7 maintenance facility at his own cost. <p>Refer Corrigendum</p>
93.	Pre-qualification Criteria			As per the eligibility criteria bidder should have 12 cr. in a single deal. we	Clause modified

Cochin Smart Mission Limited (CSML)

				request you to consider our case where we have 13.76 cr. smart lighting contract from the same client for the same project during same financial year but as two different PO (6.5 Cr 14/02/2017 and 7.1 cr. 22/07/2016	Refer Corrigendum
94.	Pre-qualification Criteria			AS you are aware, we are a preferred TSP in Kerala, hence request you to amend qualification criteria to class 1 electrical contractors or TSP.	Eligibility Criterion modified Refer Corrigendum
95.	Pre-qualification Criteria			<ul style="list-style-type: none"> Can we have three partners in the consortium (partner for Light Fixtures, Partner for CMS (AI & Big Data) and Partner for Implementation and maintenance and funding) 	PI refer eligibility criterion Refer Corrigendum
96.	Pre-qualification criteria		As per the eligibility criteria bidder should have 12 Cr in a single deal	we request you to consider our case where we have 13.76 Cr Smart Lighting Contract from the same client for the same project during same Financial Year but as two different PO (6.56 Cr 14/02/2017 and 7.1 Cr 22/07/2016)	PI refer eligibility criterion Refer Corrigendum
97.	Pre-qualification criteria		The consortium can be among (i) LED street light manufacturer, (ii) a company with experience of O&M of street lighting & (iii) a All MV / Class A Electrical contractor registered in Kerala or any other state/UT in India.	2. As you are aware, we are a preferred TSP in Kerala, hence request you to amend qualification criteria to Class 1 Electrical Contractors or TSP.	Eligibility Criterion modified Refer Corrigendum

Cochin Smart Mission Limited (CSML)

98.	queries on TOR			Based on the Pre-bid meeting we are assuming customers want best in class LMS	<p>We are planning for Smart city. So, we want all materials best in class because it will provide the best lighting facility, citizen friendly, integrated with command controls and will provide best maintenance solutions and maximum energy saving</p> <p>Yes. Best in class LMS is critical to smart LED solution focused on high efficiency, serviceability, good lighting and high energy saving.</p>
99.				Please specify how many feeder pillars are to be equipped with dimmer controls. Kindly clarify on the same	15 feeder pillars.
100.				the said company is an authorized supplier for LED lighting, poles and bracket also having installation, commissioning, operation and maintenance agency with more than 10 years of experience under proprietorship as well registered in companies Act	Bidder can participate in the tender if they meet all qualifications.
101.				The said company having similar nature of work experience in supply, execution and commissioning of energy efficiency street lighting projects worth 12 Cr and more with local bodies in a single project in India in the last 5 years	Bidder can participate in the tender if they meet all qualifications.

Cochin Smart Mission Limited (CSML)

102.				<p>The Communication Protocol is agnostic (light to driver/Drive to controller/controller to Gateway and Gateway to LMS/Energy meter to Gateway)</p>	<p>We agree that all items and systems in the RFP are vendor agnostic</p> <p>Yes. The communication protocol will be vendor agnostic and the service provider are free to adopt the most efficient and cost-effective solution which can guarantee a minimum uptime of 99.5%</p>
103.				<p>We can host the LMS in any India govt approved Cloud Service data should be stored in a Tier 3 Datacenter.</p>	<p>SaaS model hosted in tier 3 Data center is the preferred option. The solution should have Big data analysis, AI, Machine learning as part of the LMS. The solution will be benchmarked with other smart cities for efficiency, uptime, energy saving, and other key parameters.</p>
104.				<p>The Customer wants a SAAS Model LMS to continuously improve the system</p>	<p>Agreed. This matter was discussed in Prebid meeting and necessary clarifications given in the minutes of pre-bid meeting</p> <p>SaaS model hosted in tier 3 Data center is the preferred option. The solution should have Big data</p>

Cochin Smart Mission Limited (CSML)

					analysis, AI, Machine learning as part of the LMS. The solution will be benchmarked with other smart cities for efficiency, uptime, energy saving, and other key parameters.
105.				We request you to only consider LMS which has got Security for IoT, Open Data portal and a rule engine to achieve your vision of cutting edge LMS and high interoperability.	The following standards will be followed to ensure security of the system. ISO 27001:2013; OPC-UA protocol, tier 3 datacenter. The system should comply with Indian IT act and metadata standards (http://egovstandards.gov.in/metadata-and-data-standard)
106.				We request to allow only LMS which has got rule engine which will control the lights automatically.	Refer Corrigendum
107.				Do all the fixtures need dimming? if yes what is the rule of dimming?	Refer Corrigendum
108.				What is the wattage of lights?	Lumen requirement of lighting fixture of each road is mentioned. The bidder is free to choose the wattage but weightage will be given lamps with better efficacy.
109.				What lumen are you looking for?	This is already provided in RFP

Cochin Smart Mission Limited (CSML)

110.				Individual Light Controllers, do you want inside the fixture or outside the fixture?	It will depend upon the technology which vendor is going to provide
111.				What sort of redundancy are you looking?	98%
112.				We also request you to provide "provision" to install Weather station/Cameras/Sound Monitors. (This will help reduce the number of poles and increase the look of the city eg: you are planning for 500 surveillance cameras)	Not in the scope of this RFP
113.				The client wants a SAAS application for lighting management systems (LMS)	<p>SaaS model hosted in tier 3 Data center is the preferred option. The solution should have Big data analysis, AI, Machine learning as part of the LMS. The solution will be benchmarked with other smart cities for efficiency, uptime, energy saving, and other key parameters.</p> <p>Refer Corrigendum</p>
114.				This will make the data ownership with SAAS Company. Since this is govt project, and this is a critical data. Our suggestion is that, we should say either it should be 100% Indian companies SAAS or it should be not SAAS.	<p>Data Security is assured as per Indian IT Act and will be with stakeholder.</p> <p>The data related to performance will be made availed in the citizen</p>

Cochin Smart Mission Limited (CSML)

					portal for social audit. Citizen participation is essential for ensuring high degree of service and efficiency. For this purpose, the service provider may create a mobile app. The data will be owned by CSML/KMC. Policy on data sharing will be decided by the authority based on requirement. The SaaS model LMS solution will comply to Indian IT act.
115.				As there scattered individual light points in the infrastructure so license network / cellular SIM card in each Individual light point is not an economical solution and has very high recurring operating costs.	Refer Corrigendum
116.			The CPU shall monitor and control all other modules in the LCS. Direct communication between the modules shall takes place by means of an industrially proven RS 485 technology. The same interface shall also be used for power supply between the modules.	Communication with power supply over RS485 technology is irrelevant and vendor specific. It's not mandatory for street light application and unnecessarily increases the project costs Hence may be deleted.	Refer Corrigendum
117.			It shall monitor Voltage values on all three phases of main supply. Battery shall be supplied with backup power via the A Bus	Battery backup via A Bus is vendor specific. In order to have fair, open and healthy competition "A bus" should be deleted.	A Bus is deleted Refer Corrigendum

Cochin Smart Mission Limited (CSML)

			in the event of power failure		
118.				no. of components and project costs. Hence monitoring of main incomer 3 phase 4 wire system should be accepted.	No change in clause
119.			The controller shall have an integrated GPS sensor to remotely determine its location, to ease commissioning process.	System can have provision to update the GPS location coordinates to determine its location and ease commissioning process. Having a GPS sensor will unnecessarily increase the project costs.	Refer Corrigendum
120.			The controllers shall have an input power supply voltage in the range from 140 V to 277 V.	Normal operating voltage are up to 265 V AC. Alarm shall be generated by the controller in case the voltage increases above 265 V AC.	Refer Corrigendum
121.			4.7.8 CUSTOMERS / CLIENT PERMISSION GROUPS AND USERS It shall be possible for a user to control ON, OFF via SMS.	This feature can lead to lamp off occurrence without proper audit trail leading to citizen safety and hence should be deleted.	LMS specification revised. Refer Corrigendum
122.			n. The CMS node will be mounted to the top of the luminaire housing via a 20mm hole or appropriate external socket/bracket and meet the same ingress protection (IP66), and impact resistance (IK09) rating as required of the luminaire.	CMS node should be as per ANSI standards for photo controls and should be UL and CE certified. Same to be incorporated.	Refer Corrigendum
123.				The overall RFP seems to be driven by a Netherlands based OEM and Netherlands based group of companies in terms of the technical specifications and functional capabilities of the	The Prebid was attended by representatives of more than 10 reputed firms, none of them pointed out any bias to any

Cochin Smart Mission Limited (CSML)

				<p>solution which will prevent multiple smart Lighting and Controller OEMs to take part in the tender process.</p>	<p>particular firm. The specifications are generic. The accusation is generic without any details.</p> <p>For LED light Fixtures, we have almost 10 preferred manufactures. they are Philips/Wipro/Bajaj/Crompton/Osram/NERI/Schreder/Havells/Lighting Technologies/HPL.</p> <p>For Light Poles-Bajaj/Valmont/Sumip/Crompton/Surya/Philips/BPP. For Software-Primary requirement of the system is that it should be simple, Open and Secure. System Infrastructure should be simple providing seamless end to end solution without any complexity. System should be open and should be easily integrated with other major system. It should use open standard network technologies; Lighting data should be secure from any leak. Solution should be scalable and adaptable to future requirements.</p>
--	--	--	--	--	---

Cochin Smart Mission Limited (CSML)

124.				<p>Since the specification is favorable to a respective OEM there will be a challenge in terms of fair open competition with regard to the best solution with an optimum pricing to address the requirements of smart lighting to the customer.</p>	<p>The Prebid was attended by over 10 reputed firms; none of them pointed out any bias to any particular firm. The specifications are generic. The accusation is generic without any details.</p> <p>We have special specifications. Bidders can participate in the tender, and we don't allow any low-quality products.</p>
125.				<p>The pricing of the RFP is on a higher side with provisions for the specific OEM to get a higher margin (Around 30%) which has to be addressed.</p>	<p>We have prepared estimate as per the departmental guidelines & the same is based on schedule rates / market rate collected from various companies.</p>
126.				<p>Request you to include Surya name also in the LED Light Fixtures and Post Top Layers.</p>	<p>If their light fixtures meet the technical specification they can participate in the tender.</p>

Firm / agency are hereby once again reminded that, offer / proposals shall be submitted by the Bidder keeping in mind the clarifications & addendum issued.

