



# JAIPUR DEVELOPMENT AUTHORITY, JAIPUR

www.jda.urban.rajasthan.gov.in

No. JDA/EE (Elect-I) /2023/D- 893

Dated: 19/7/23

## CORRIGENDUM

In partial modification in the NIB No.-10/2023-24. The last date of online submission of the bid is extended up to 27.07.2023, 6.00 PM and date of opening of the bid shall be 02.08.2023, 06.00 PM.

*Handwritten signature*  
19/07/23.

**Executive Engineer (Elect.-I)**  
**JDA, Jaipur**



No. JDA/EE (Elect-I)/2023/D-

Date:

Minutes of Pre-Bid Meeting held on 05.07.2023

1. Name of Work: - Conversion of existing HPSV & Normal LED lighting System into NB IoT based LED Smart lighting System, which are installed by JDA at various locations beyond the Jaipur Nagar Nigam Jurisdiction /energy bills paid by JDA.
2. NIT No. :- 10/2023-24 published on 28.06.2023
3. Pre-bid Meeting held on 05.07.2023 in Manthan Hall, JDA, Jaipur.
4. The following prospective bidders representatives attend the meeting were briefed about the project, Technical Terms & Conditions of qualification criteria and about payment terms :-
  - i. M/s Surya Roshni Ltd.; Mr. Gaurav Kothari
  - ii. M/s Panasonic ; Mr. Ramesh Sihag ;
  - iii. M/s Jio Platforms; Mr. Subhdeep Dutta (Query Sent by E-Mail)
  - iv. M/s Raj Info ; Mr. Kishan Kalvadia ;
  - v. M/s HPL Electric & Power Ltd.; Mr. Pankaj Rawat
  - vi. M/s Bajaj Electricals Ltd.; Mr. Arvind Sharma
  - vii. M/s Aksh Optifiber Ltd.; Mr. Harish Singh (Query Sent by E-Mail & Letter)
  - viii. M/s Wipro; Mr. Pramod Kumawat (Query Sent by E-Mail)
  - ix. M/s Intelli Konnect; Mr. Chintan Shah (Query Sent by E-Mail)
  - x. M/s Acon Innovations Pvt. Ltd.:(Query Sent by E-Mail)
5. Following officers of JDA were also present in pre-bid meeting :-
  - i. Director (Engg-IV), JDA, Jaipur.
  - ii. ACE (Elect.), JDA, Jaipur.
  - iii. Executive Engineer (Elect.-I), JDA, Jaipur.
  - iv. Assistant Engineer (Elect.-I), JDA, Jaipur.

6. After briefing about the project, the pre-bid queries were started by bidders. The decision taken are as follows  
 which will become the part of tender documents :-

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| S. No. | Relevant clause no. page no.   | As per Bid Document  | Pre-Bid Queries  | Clarification from IDA  |                      |
|--------|--|--|--|---|----------------------|
| 1.     | M/s Jio Platforms; Mr. Subhdeep Dutta (Query Sent by E-Mail)                       |  |  |   |                      |
| 1      | Annexure A /110 Watt Luminaire:/ point no. 9 Page No. 53 of 101                    | LED Driver shall be capable of DALI dimming. Dimming shall be compliant to relevant IEC 62386 standard and must offer Flicker free lighting.   | LED Driver shall be capable of DALI/0-10V/Digital dimming. Dimming shall be compliant to relevant IEC 62386 standard and must offer Flicker free lighting.   | DALI is typically used in the indoor application kindly allow 0-10V analog and digital dimming options also for ease of procurement and ease of service.  | As per Bid Documents |
| 2      | Annexure A /Smart lighting Software / application / point no. 9 Page No. 58 of 101 | LMS must provide interface for selecting different types of ILCs/ Drivers, namely, 0-10V, 1-10V and DALI   | LMS must provide interface for selecting different types of ILCs/ Drivers, namely, 0-10V, 1-10V and DALI   | LMS is agnostic to type of driver so kindly delete this clause.   | As per Bid Documents |
| 3      | Annexure A /IOT Based Individual light Controller / point no. 1 Page No. 50 of 101 | Outdoor individual intelligent lighting controller (ILC) must be an integrated product with in-built wireless communication, GPS, lighting control, power-metering, tilt sensor, photocell (optional), antennas and input for external motion sensor   | Outdoor individual intelligent lighting controller (ILC) must be an integrated product with in-built wireless communication, GPS, lighting control, power-metering, tilt sensor, photocell (optional), antennas and input for external motion sensor   | External motion sensor is not feasible as all ILC controllers will be independent of on site gateway or base station in case of NB-IoT/LTE based technology and will communicate directly with cloud based LMS. Kindly remove motion sensor from the requirement  | As per Bid Documents |
| 4      | Annexure A /IOT Based Individual light Controller / point no. 2 Page No. 50 of 101 | ILC must be equipped with a standardized 7-pin Nema interface (compliant with ANSI c136.41 standard) for ease of mounting with any NEMA compliant street light luminaire.  | ILC must be equipped with a standardized 7-pin Nema or integrated type interface (compliant with ANSI c136.41 standard) for ease of mounting with any NEMA compliant street light luminaire.   | Integrated type ILC are very popular now a days due to robustness and low cost. Kindly allow using integrated type ILC also as a choice   | As per Bid Documents |
| 5      | Annexure A /IOT Based Individual light Controller / point no. 4 Page No. 50 of 101 | (a) ILC shall support latest IoT cellular standard such as NB-IoT, LTE CAT M1 and / or LTE CAT 1. It should have a mandatory EGPRS/ EDGE/ GSM fallback in case of network unavailability   | (a) ILC shall support latest IoT cellular standard such as NB-IoT, LTE CAT M1 and / or LTE CAT 1. It should have a mandatory EGPRS/ EDGE/ GSM fallback in case of network unavailability   | EGPRS/ EDGE/ GSM are dieing technologies and soon will become obsolete in the country due to all major telecom players have moved to latest technologies like 4G/5G/LTE. kindly remove fall back arrangement as we cannot gurantee service availability for 3 years (project duration)  | As per Bid Documents |
| 6      | Annexure A /IOT Based Individual light Controller / point no. 5 Page No. 50 of 101 | ILC must have in-built GNSS module (GPS) to offer automatic geo-positioning, auto-commissioning and accurate astronomical timings for sunrise/ sunset lampswitching. Geo-positioning must also support notification/ alarm incase the streetlight location moves by more than 500m from it's original location (e.g. pole theft situation) | ILC must have in-built GNSS module (GPS) to offer automatic geo-positioning, auto-commissioning and accurate astronomical timings for sunrise/ sunset lampswitching. Geo-positioning must also support notification/ alarm incase the streetlight location moves by more than 500m from it's original location (e.g. pole theft situation) | Kindly remove this requirement as the controller does not contain an additional battery power source sufficient to establish connection with the network, there is no possibility for it to send a message about changing location after being cut off from the mains and the time needed to ascend to 500 m. If it's a very critical feature, it's possible to do, but it will significantly increase the cost of the controller and subsequent maintenance. | As per Bid Documents |

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|--|--|---|---|-----------------------------|
| <p>7<br/>Annexure A /IOT Based Individual Light Controller / point no. 10<br/>Page No. 51 of 101</p> | <p>(a) Operating voltage: 95 - 270V AC, should be able to cooperate together with the over-voltage protection device(b) Electrical protection: Class II(c) Surge protection: 6kV, 3kA (L-N)(d) In-built RTC with on-board power backup for at least 3days(e) Operating condition: -10° C to +70° C ambient temperature, &lt; 95% Rh non-condensing (f) Must be certified to work at high temperature temporarily with direct sunlight Tc +85°C(g) Output power: &gt;400W</p> | <p>(a) Operating voltage: 95 - 270V AC, or 12 V DC should be able to operate together with the over-voltage protection device (b) Electrical protection: Class II(c) Surge protection: 6kV, 3kA (L-N)(d) In-built RTC with on-board power backup for at least 3days(e) Operating condition: -10° C to +70° C ambient temperature, &lt; 95% Rh non-condensing (f) Must be certified to work at high temperature temporarily with direct sunlight Tc +85°C(g) Output power: &gt;400W</p>                            | <p>kindly allow ILC operation on 12 V DC as well as this is comparatively robust solution due to AC-DC isolation. Such solution shall consume substantially lower power at ILC. In such case ILC device cost will further decrease as it will not need any protections related to AC current, point no. ( b ) ( c ) &amp; ( g ) can be safely eliminated without compromising product performance /deliverables</p> | <p>As per Bid Documents</p> |
| <p>8<br/>Annexure A /IOT Based Individual Light Controller / point no. 11<br/>Page No. 51 of 101</p> | <p>(a) IP66 or higher ingress protection rating, when combined with an equivalent IP66 NEMA streetlight luminaire (b) Fire resistant (UL94-V0) housing(c) ILC outer diameter must not exceed the standard 85 mm to meet the elegance requirements of Jaipur (d) UV exposure and water immersion protection: F1</p>   | <p>(a) IP66 or higher ingress protection rating, when combined with an equivalent IP66 NEMA streetlight luminaire (b) Fire resistant (UL94-V0) housing(c) ILC outer diameter must not exceed the standard 85 mm to meet the elegance requirements of Jaipur (d) UV exposure and water immersion protection: F1</p>  | <p>Kindly also allow integrated ILC so that there is no exposed NEMA controller. Dimension of NEMA can vary from OEM to OEM so kindly relax this term</p>   | <p>As per Bid Documents</p> |
| <p>9<br/>Annexure A /IOT Based Individual Light Controller / point no. 12<br/>Page No. 51 of 101</p> | <p>ILC must offer following individual lamp switching and dimming options:(a) Photocell / photo sensor / ambient light sensor(optional)(b) Astro Clock (astronomical clock)(c) Time-based scheduled dimming,(d) Calendar-based schedules,(e) Adaptive Light-on-Demand (when an external motion sensor is connected),(f) Emergency Mode through external trigger via LMS,(g) MaintenanceApp (at no additional costs)(h) RGBW based color streetlights via DALI (optional)</p> | <p>ILC must offer following individual lamp switching and dimming options:(a) Photocell / photo sensor / ambient light sensor(optional)(b) Astro Clock (astronomical clock)(c) Time-based scheduled dimming,(d) Calendar-based schedules,(e) Adaptive Light on Demand (when an external motion sensor is connected),(f) Emergency Mode through external trigger via LMS,(g) Maintenance on/ off through External MaintenanceApp (at no additional costs)(h) RGBW based color streetlights via DALI (optional)</p> | <p>Motion sensor is not feasible in case of NB-IoT/LTE based ILC as all controllers are directly communicating with cloud based LMS. No edge level communication is possible.</p>   | <p>As per Bid Documents</p> |
| <p>10<br/>Annexure C /Smart lighting Software application / point no. 6<br/>Page No. 57 of 101</p>   | <p>LMS must allow for an unlimited number of Light Profiles(also called, Dimming Profiles or Light Scenes) to meet the lighting needs of different streets and areas:(a) Fixed light level,(b) Time based scheduling,(c) Dynamic lighting levels (to support motion sensor based adaptive lighting)(d) Colour control (using multi-addressable DALI, DT6, DT7 and DT8) based on time schedule or dynamic detection</p>   | <p>LMS must allow for an unlimited number of Light Profiles(also called, Dimming Profiles or Light Scenes) to meet the lighting needs of different streets and areas:(a) Fixed light level,(b) Time based scheduling,(c) Dynamic lighting levels (to support motion sensor based adaptive lighting)(d) Colour control (using multi-addressable DALI, DT6, DT7 and DT8) based on time schedule or dynamic detection</p>  | <p>Motion based dynamic control is not successful in India in many past projects.</p>   | <p>As per Bid Documents</p> |

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|----|--|--|--|---|----------------------|
| 11 | Annexure C /Smart lighting Software application / point no. 14 Page No. 59 of 101                                | (a.) LMS must be able to visualize all the analytical data ingraphical format. Such graphs must at least include anaggregated overview of the energy used, energy saved, %energy saved, for a specific number of days, weeks ormonths.(b.) Visualize data such as grid voltage and active power -preferably every 15 minutes(c.) When motion sensors are used within the lightingnetwork, then it must also be possible to visualize thenumber of triggers per sensor or a group of sensors. | (a.) LMS must be able to visualize all the analytical data ingraphical format. Such graphs must at least include anaggregated overview of the energy used, energy saved, %energy saved, for a specific number of days, weeks ormonths.(b.) Visualize data such as grid voltage and active power -preferably every 15 minutes(c.) When motion sensors are used within the lightingnetwork, then it must also be possible to visualize thenumber of triggers per sensor or a group of sensors. | Kindly delete motion sensor requirement as it is not feasible solution  | As per Bid Documents |
| 12 | Annexure C /Smart lighting Software application / point no. 19 Page No. 60 of 101                                | (a.) LMS must be available in English language. It shouldbe possible to add other local languages such as Hindi/Rajasthani.(b.) LMS must offer In-App guide/ help feature. This isfor the User to easily navigate through the LMS.   | (a.) LMS must be available in English language. It shouldbe possible to add other local languages such as Hindi/Rajasthani.(b.) LMS must offer In-App guide/ help feature. This isfor the User to easily navigate through the LMS.   | Kindly relax indian language as English is understood by everyone.  | As per Bid Documents |
| 13 | Annexure C /Mobile Applications (APPs): /point no. 4 Page No. 61 of 101  | Mobile web application for Android / iOS mobile phones to be developed during the project for complaint registration by citizens. This App should work like CRM process flow. That is, from complaint registration to attend till complaint resolution to be done online   | Mobile web application for Android / iOS mobile phones to be developed during the project for complaint registration by citizens. This App should work like CRM process flow. That is, from complaint registration to attend till complaint resolution to be done online   | Kindly drop APP with CRM process flow. As elaborated requirement and functional deliverables are not shared in the tender document. | As per Bid Documents |
| 14 | Annexure F /OEM Eligibility Criteria for Node/ Intelligent Lamp Controller (ILC) /supply make Page No. 67 of 101 | ILC must be Zumtobel Thorn, Trilux, Twilight make with provenexperience, expertise and reliability and local representation. ILC must be vendor independent and must work with street lightfixtures from different suppliers.  | ILC must be Zumtobel Thorn, Trilux, Twilight, Jio make with provenexperience, expertise and reliability and local representation. ILC must be vendor independent and must work with street lightfixtures from different suppliers.   | Kindly include Jio make controllers as Jio has pan india presence and is manufacturing ILC controllers "Make in India"              | As per Bid Documents |

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| 2  |                  |   |  |    |  |  |
| 1  | General          | NA  | Please clarify and confirm that bidder is not responsible for Panel, Pole, Electric Cable repair work and all these items will be available on working condition to the bidder and if any repair work is to be carried out for keeping the lot based light in working condition then either JDA will arrange to get this repair or will give the additional cost for rectification of these items.   | NA | Bidder shall carry out these additional work on JDA approved BSR rates with adjustment of T.P. |  |
| 2  | General          | NA  | Please confirm whether to submit the MAF in technical documents from the respective OEM's of Luminaire and ILC/Node.   | NA | Yes  |  |
| 3  | General          | NA  | In case due to any reason the material supplied and delivered by bidder to JDA and these materials (lot based Lights) is not installed due to any reason (Like site repair work is not completed or Site cancelled or any other reason), Then supplied material warranty shall be start after three months of material delivery to JDA and JDA will release the balance payment of Installation and commissioning against this delay after 3 months of delivery of material. | NA | As per Bid Documents   |  |
| <b>M/s Acon innovations.; (Query Sent by E-Mail)</b> |                  |   |  |    |  |  |
| 1  | Annexure-A<br>46 | LED Driver shall be capable of DALI dimming.  | Request you to also consider Analog (0-10 V) Dimming.  |    | As per Bid Documents   |  |
| 2  | Annexure-A<br>47 | Manufacturer (fixture OEM) must have their own in-house NABL lab setup for all testing facilities for LED fixtures. | Kindly allow to submit Test Reports from Third Party NABL accredited laboratories like ERDA / UL which are more authentic and genuine rather than relying on inhouse testing. This will also encourage healthy competition.  |    | As per Bid Documents   |  |
| 3  | Annexure-B<br>54 | LED Driver shall be capable of DALI dimming.  | Request you to also consider Analog (0-10 V) Dimming.  |    | As per Bid Documents   |  |
| 4  | Annexure-B<br>56 | Manufacturer (fixture OEM) must have their own in-house NABL lab setup for all testing facilities for LED fixtures. | Kindly allow to submit Test Reports from Third Party NABL accredited laboratories like ERDA / UL which are more authentic and genuine rather than relying on inhouse testing. This will also encourage healthy competition.  |    | As per Bid Documents   |  |

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| 5  | Annexure-F<br>67  | List of Approved Makes for Street Light Fixtures   | Kindly include our make ACCON and or Equivalent Makes which are meeting all the technical specifications so as to encourage healthy competition and in line with the CVC guidelines.  |   | As per Bid Documents |
| 6  | Annexure-F other paras<br>67  | OEM must have in-house NABL accredited photometric lab in manufacturing Unit. Certificate of the same must be enclosed.  | Kindly allow to submit Test Reports from Third Party NABL accredited laboratories like ERDA /UL which are more authentic and genuine rather than relying on inhouse testing. This will also encourage healthy competition.                |   | As per Bid Documents |
| 7  |   | Illumination Requirements & Uniformity ratio   | No mention about lux levels, Uniformity Ratio & Longitudinal Uniformity is there in the technical specifications. Requesting you to kindly specify as per the National Lighting Code 2010.  |   | As per Bid Documents |
| 4. <b>M/s Wipro; Mr. Pramod Kumawat (Query Sent by E-Mail)</b> |   |  |   |   |                      |
| 1  | Annexure A /110<br>Watt Luminaire:/<br>point no. 9<br>Page No. 46 of<br>101                     | LED Driver shall be capable of DALI dimming. Dimming shall be compliant to relevant IEC 62386 standard and must offer Flicker free lighting.   | LED Driver shall be capable of DALI/0-10V/Digital dimming. Dimming shall be compliant to relevant IEC 62386 standard and must offer Flicker free lighting.  | DALI is typically used in the indoor application kindly allow 0-10V analog and digital dimming options also for ease of procurement and ease of service.  | As per Bid Documents |
| 2  | Annexure A<br>/Smart lighting<br>Software<br>application /<br>point no. 9<br>Page No. 58 of 101 | LMS must provide interface for selecting different types of ILCs/ Drivers, namely, 0-10V, 1-10V and DALI   | LMS must provide interface for selecting different types of ILCs/ Drivers, namely, 0-10V, 1-10V and DALI  | LMS is agnostic to type of driver so kindly delete this clause.   | As per Bid Documents |
| 3  | Annexure A /IOT<br>Based Individual<br>Light Controller /<br>point no. 1<br>Page No. 50 of 101  | Outdoor individual intelligent lighting controller (ILC) must be an integrated product with in-built wireless communication, GPS, lighting control, power-metering, tilt sensor, photocell (optional), antennas and input for external motion sensor | Outdoor individual intelligent lighting controller (ILC) must be an integrated product with in-built wireless communication, GPS, lighting control, power-metering, tilt sensor, antennas and <del>input for external motion sensor</del> | External motion sensor is not feasible as all ILC controllers will be independent of on site gateway or base station in case of NB-IoT/LTE based technology and will communicate directly with cloud based LMS. kindly remove motion sensor from the requirement. | As per Bid Documents |
| 4  | Annexure A /IOT<br>Based Individual<br>Light Controller /<br>point no. 2<br>Page No. 50 of 101  | ILC must be equipped with a standardized 7-pin Nema interface (compliant with ANSI c136.41 standard) for ease of mounting with any NEMA compliant street light luminaire.  | ILC must be equipped with a standardized 7-pin Nema or integrated type interface (compliant with ANSI c136.41 standard) for ease of mounting with any NEMA compliant street light luminaire.  | Integrated type ILC are very popular now a days due to robustness and low cost. Kindly allow using integrated type ILC also as a choice   | As per Bid Documents |

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| <p>5</p> <p>Annexure A / IOT Based Individual Light Controller / point no. 4 Page No. 50 of 101</p>  | <p>(a) ILC shall support latest IoT cellular standard such as NB-IoT, LTE CAT M1 and / or LTE CAT 1. It should have a mandatory EGPRS/ EDGE/ GSM fallback in case of network unavailability</p>   | <p>(a) ILC shall support latest IoT cellular standard such as NB-IoT, LTE CAT M1 and / or LTE CAT 1. It should have a mandatory EGPRS/ EDGE/ GSM fallback in case of network unavailability</p>  | <p>EGPRS/ EDGE/ GSM are dying technologies and soon will become obsolete in the country due to all major telecom players have moved to latest technologies like 4G/5G/LTE. kindly remove fall back arrangement as we can not guarantee service availability for 3 years (project duration)</p>  | <p>As per Bid Documents</p>  |
| <p>6</p> <p>Annexure A / IOT Based Individual Light Controller / point no. 5 Page No. 50 of 101</p>  | <p>ILC must have in-built GNSS module (GPS) to offer automatic geo-positioning, auto-commissioning and accurate astronomical timings for sunrise/ sunset lamp switching. Geo-positioning must also support notification/ alarm in case the streetlight location moves by more than 500m from it's original location (e.g. pole theft situation)</p>   | <p>ILC must have in-built GNSS module (GPS) to offer automatic geo-positioning, auto-commissioning and accurate astronomical timings for sunrise/ sunset lamp switching. Geo-positioning must also support notification/ alarm in case the streetlight location moves by more than 500m from it's original location (e.g. pole theft situation)</p>  | <p>kindly remove this requirement as the controller does not contain an additional battery power source sufficient to establish connection with the network, there is no possibility for it to send a message about changing location after being cut off from the mains and the time needed to ascend to 500 m. If it's a very critical feature, it's possible to do, but it will significantly increase the cost of the controller and subsequent maintenance.</p>                          | <p>As per Bid Documents</p>  |
| <p>7</p> <p>Annexure A / IOT Based Individual Light Controller / point no. 10 Page No. 51 of 101</p> | <p>(a) Operating voltage: 95 - 270V AC, should be able to operate together with the over-voltage protection device<br/>(b) Electrical protection: Class II<br/>(c) Surge protection: 6kV, 3kA (L-N)<br/>(d) In-built RTC with on-board power backup for at least 3 days<br/>(e) Operating condition: -10° C to +70° C ambient<br/>(f) Must be certified to work at high temperature, &lt; 95% Rh non-condensing temperature temporarily with direct sunlight Tc +85° C<br/>(g) Output power: &gt;400W</p> | <p>(a) Operating voltage: 95 - 270V AC, or 12 V DC should be able to operate together with the over-voltage protection device<br/>(b) Electrical protection: Class II<br/>(c) Surge protection: 6kV, 3kA (L-N)<br/>(d) In-built RTC with on-board power backup for at least 3 days<br/>(e) Operating condition: 0° C to +50° C ambient<br/>(f) Must be certified to work at high temperature, &lt; 95% Rh non-condensing temperature temporarily with direct sunlight Tc +85° C<br/>(g) Output power: &gt;400W</p> | <p>kindly allow ILC operation on 12 V DC as well as this is comparatively robust solution due to AC-DC isolation. Such solution shall consume substantially lower power at ILC. In such case ILC device cost will further decrease as it will not need any protections related to AC current point no. (b), (c) &amp; (g) can be safely eliminated without compromising product performance / deliverables. Operating temperature of 0 to 50 is industry standard. kindly allown for this</p> | <p>As per Bid Documents</p>  |
| <p>8</p> <p>Annexure A / IOT Based Individual Light Controller / point no. 11 Page No. 51 of 101</p> | <p>(a) IP66 or higher ingress protection rating, when combined with an equivalent IP66 NEMA streetlight luminaire<br/>(b) Fire resistant (UL94-V0) housing<br/>(c) ILC outer diameter must not exceed the standard 85 mm to meet the elegance requirements of Jaipur<br/>(d) UV exposure and water immersion protection: F1</p>   | <p>(a) IP66 or higher ingress protection rating, when combined with an equivalent IP66 NEMA streetlight luminaire<br/>(b) Fire resistant (UL94-V0) housing<br/>(c) ILC outer diameter must not exceed the standard 85 mm to meet the elegance requirements of Jaipur<br/>(d) UV exposure and water immersion protection: F1</p>  | <p>Kindly also allow integrated ILC so that there is no exposed NEMA controller. Dimension of NEMA can vary from OEM to OEM so kindly relax this term</p>   | <p>ILC outer diameter must not exceed the 100 mm to meet the elegance requirements of Jaipur</p> |

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| 9  | Annexure A / IOT Based Individual Light Controller / point no. 12<br>Page No. 51 of 101 | ILC must offer following individual lamp switching and dimming options:<br>(a.) Photocell / photo sensor / ambient light sensor (optional),<br>(b.) Astro Clock (astronomical clock),<br>(c.) Time-based scheduled dimming,<br>(d.) Calendar-based schedules,<br>(e.) Adaptive Light-on-Demand (when an external motion sensor is connected),<br>(f.) Emergency Mode through external trigger via LMS,<br>(g.) Maintenance on/ off through External Maintenance App (at no additional costs)<br>(h.) RGBW based color streetlights via DALI (optional) | ILC must offer following individual lamp switching and dimming options:<br>(a.) Photocell / photo sensor / ambient light sensor (optional),<br>(b.) Astro Clock (astronomical clock),<br>(c.) Time-based scheduled dimming,<br>(d.) Calendar-based schedules,<br>(e.) Adaptive Light-on-Demand (when an external motion sensor is connected),<br>(f.) Emergency Mode through external trigger via LMS,<br>(g.) Maintenance on/ off through External Maintenance App (at no additional costs)<br>(h.) RGBW based color streetlights via DALI (optional) | Motion sensor is not feasible in case of NB-IoT/LTE based ILC as all controllers are directly communicating with cloud based LMS. No edge level communication is possible. | As per Bid Documents |
| 10 | Annexure C / Smart lighting Software application / point no. 6<br>Page No. 57 of 101    | LMS must allow for an unlimited number of Light Profiles (also called, Dimming Profiles or Light Scenes) to meet the lighting needs of different streets and areas:<br>(a.) Fixed light level,<br>(b.) Time based scheduling,<br>(c.) Dynamic lighting levels (to support motion sensor based adaptive lighting)<br>(d.) Colour control (using multi-addressable DALI, DT6, DT7 and DT8) based on time schedule or dynamic detection   | LMS must allow for an unlimited number of Light Profiles (also called, Dimming Profiles or Light Scenes) to meet the lighting needs of different streets and areas:<br>(a.) Fixed light level,<br>(b.) Time based scheduling,<br>(c.) Dynamic lighting levels (to support motion sensor based adaptive lighting)<br>(d.) Colour control (using multi-addressable DALI, DT6, DT7 and DT8) based on time schedule or dynamic detection   | Motion based dynamic control is not successful in India in many past projects.   | As per Bid Documents |
| 11 | Annexure C / Smart lighting Software application / point no. 14<br>Page No. 59 of 101   | (a.) LMS must be able to visualize all the analytical data in graphical format. Such graphs must at least include an aggregated overview of the energy used, energy saved, % energy saved, for a specific number of days, weeks or months.<br>(b.) Visualize data such as grid voltage and active power – preferably every 15 minutes<br>(c.) When motion sensors are used within the lighting network, then it must also be possible to visualize the number of triggers per sensor or a group of sensors.  | (a.) LMS must be able to visualize all the analytical data in graphical format. Such graphs must at least include an aggregated overview of the energy used, energy saved, % energy saved, for a specific number of days, weeks or months.<br>(b.) Visualize data such as grid voltage and active power – preferably every 15 minutes<br>(c.) When motion sensors are used within the lighting network, then it must also be possible to visualize the number of triggers per sensor or a group of sensors.  | Motion based dynamic control is not successful in India in many past projects.   | As per Bid Documents |

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|----|---|--|--|---|----------------------|
| 12 | Annexure C /Smart lighting Software application / point no. 19 Page No. 60 of 101                       | (a) LMS must be available in English language. It should be possible to add other local languages such as Hindi/Rajasthani.<br>(b) LMS must offer In-App guide/ help feature. This is for the User to easily navigate through the LMS.                                   | (a) LMS must be available in English language. It should be possible to add other local languages such as Hindi/Rajasthani.<br>(b) LMS must offer In-App guide/ help feature. This is for the User to easily navigate through the LMS.                                   | Kindly relax indian language as English is understood by everyone.  | As per Bid Documents |
| 13 | Annexure C /Mobile Applications (APPs): / point no. 4 Page No. 61 of 101                                | Mobile web application for Android / iOS mobile phones to be developed during the project for complaint registration by citizens. This App should work like CRM process flow. That is, from complaint registration to attend till complaint resolution to be done online | Mobile web application for Android / iOS mobile phones to be developed during the project for complaint registration by citizens. This App should work like CRM process flow. That is, from complaint registration to attend till complaint resolution to be done online | Kindly drop APP with CRM process flow. As elaborated requirement and functional deliverables are not shared in the tender document.               | As per Bid Documents |
| 14 | Annexure F /OEM Eligibility Criteria for Node/ Intelligent Lamp Controller (ILC) /supply make 67 of 101 | ILC must be Zumtobel Thornn, Trilux, Twilight make with proven experience, expertise and reliability and local representation. ILC must be vendor independent and must work with street light fixtures from different suppliers.   | ILC must be Zumtobel Thornn, Trilux, Twilight, Jio make with proven experience, expertise and reliability and local representation. ILC must be vendor independent and must work with street light fixtures from different suppliers.                                    | Kindly include Jio make controllers as Jio has pan india presence and is manufacturing ILC controllers. "Make in India"                           | As per Bid Documents |
| 15 | Annexure A - SI No.8 Page No. 46 & 54   | Luminaire Efficacy > 140Lm/Wt  | Luminaire Efficacy > / = 130Lm/Wt  | Luminaire efficacy of 130Lm/Wt is more sustainable and efficient way forward in this case looking at the LED efficacy availability in the market. | As per Bid Documents |
| 16 | Annexure A - SI No. 10 Page No. 47 & 55   | Cut off at > 270V/AC and Driver should have Phase to Phase protection of 440V for 4 hours  | To be removed  | DALI drivers do not come with these features and protections  | As per Bid Documents |
| 17 | Annexure A - SI No. 10 Page No. 47 & 55   | Working temperature (-5) to 60 Deg C   | To change to -5 to 45 Deg C  | Normally Streetlight works in the night at 30-35 Deg C. We have taken additional 10 Deg C as buffer.  | As per Bid Documents |
| 18 | Annexure A - SI No. 11 Page No. 47 & 55   | Product Life Expectancy  | Fixture Expectancy of 50,000 Burning hours   | Not possible for Fixture. Possible for LEDs as per LM80 standard.   | As per Bid Documents |
| 19 | Annexure A - SI No. 14 Page No. 47 & 55   | LM79 report  | LM79 report to be submitted before supply of material  | This is a customized product, it is not possible to provide LM79 at the time of proposal.   | As per Bid Documents |
| 20 | IOT based Individual Light Controller Page No. 19 Point 13  | ILC will support DALI 2.0 / DALI DT6 and 0-10V DC  | ILC will support DALI 2.0 drivers only   | DALI is the required protocol for this product as there is no colour tunable streetlight requirement for this project.                            | As per Bid Documents |
| 21 | IOT based Individual Light Controller Page 20 Point 18  | IK 09 and Class 2  | Not applicable in case of controllers being offered inside the luminaire.  | Controller being considered inside Luminaire should be exempted from this required specification. In case of NEMA it should be IK05.              | As per Bid Documents |

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|--|--|--|---|---|----------------------|
| 22   | IOT based Individual Light Controller<br>Page No. 20 Point 19      | Automated Ticketing System   | Toll Free number to be provided for complaints  | Automated Ticketing system is NOT possible with the current system and set up                                     | As per Bid Documents |
| 23   | IOT based Individual Light Controller,<br>Page No. 52 point no12   | RGBW based Color Streetlight via Dali (Optional)   | RGBW base color streetlight option shall be removed   | RGBW base color streetlight shall be removed as in Street lighting white Light is used(CCT may Vary) but not RGBW | As per Bid Documents |
| 24   | criteria for post qualification<br>Page No. 35, point no 2         | Consortium/Joint Venture not Allowed   | Pls allow to Consortium/Joint venture   | by JV work can be done more efficiently   | As per Bid Documents |
| <b>M/s Bajaj Electricals Ltd.; Mr. Arvind Sharma</b> |  |  |   |   |                      |
| 1  | POST<br>QUALIFICATION<br>1. Criteria<br><br>Page No. 34 (10TBHPSV) | Bidder should be an established ICT System Integrator and should have been engaged in at least One Smart City project in India invited by any Government agency only which include Supply, Installation, testing, Commissioning with Operations & Maintenance of smart solutions in the last 7 financial years ending 31.03.2022. The value of contract must be above or equivalent to 11.66 crore.  | Bidder should be an established ICT System Integrator and should have been engaged in at least One Smart City project/ Illumination project in India and end user should be State & Center Government department/agency, any PSU and smart city only which include Supply, Installation, testing and Commissioning of smart solutions/ LED lights in the last 10 financial years ending 31.03.2022. The value of contract must be above or equivalent to 11.66 crore.<br>And Bidder should have experience of Operations & Maintenance of smart solutions/ LED Lights for minimum 2 years in the last 10 financial years ending 31.03.2022. |   | As per Bid Documents |
| 2  | POST<br>QUALIFICATION<br>1. Criteria<br><br>Page No. 35 (10TBHPSV) | Area of operations must include any 2 out of 6 smart elements in any one smart city:<br>1. Smart Lighting system (Mandatory)<br>2. Wi-Fi.<br>3. CCTV.<br>4. Environmental sensors.<br>5. Smart Parking System+D35.<br>6. ICOC/NOC/data Centre<br>OR<br>Bidder should have completed single project of smart lighting solution (individual light control) implementation of 50% of estimated tender value in last seven financial years for any government agency in India. | Area of operations must include any 2 out of 6 smart elements in any one smart city/ <b>Illumination Project other then smart city:</b><br>1. Smart Lighting system/ <b>LED Lighting System (Mandatory)</b><br>2. Wi-Fi./CCMS.<br>3. CCTV.<br>4. Environmental sensors.<br>5. Smart Parking System.<br>6. ICOC/NOC/data Centre<br>OR<br>Bidder should have completed single project of smart lighting solution (individual /Group light control) implementation of 50% of estimated tender value in last Ten financial years for any government agency in India.  |   | As per Bid Documents |

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| 3  | Annexure A<br>Page No. 50 | 4. Wireless communication - (a) ILC shall support latest IoT cellular standard such as NB-IoT, LTE CAT M1 and / or LTE CAT 1. It should have a mandatory EGPRS/ EDGE/ GSM fallback in case of network unavailability across Jaipur remote locations, including the neighbouring villages, at an affordable price. Other communication methods (such as Zigbee, LoRa) are not permitted for this application | We propose the inclusion of any communication medium like GSM, GPRS, LoRa, Zigbee & SubGHz RF. The band must be de-licensed to de-risk the obsolescence and commercialisation of a band. Bidders should be allowed to select the medium basis use case. NB-IoT as mentioned in the tender document is a communication medium with latency and limited packet size. Moreover, NB-IoT attracts recurring data charges that needs to be borne by the user, JDA in this case. This is a loss to the user and does become as beneficial as a subGHz Radio frequency network, Zigbee Network or LoRa network. | As per Bid Documents |
| 4  | Annexure A<br>Page No. 51 | 9. Reporting - Each ILC should be able to report all relevant data of the street lighting fixture at least every 15 minutes interval - if requested.  | We propose that the time intervals is 1 minute as the system needs to work, respond in realtime. With a refresh rate of 15 minutes, critical scheduling settings and during field maintenance the system will behave slowly and will cause trouble on field.  | As per Bid Documents |
| 5  | Annexure A<br>Page No. 51 | 10. Electrical parameters - (e) Operating condition: -10° C to +70° C ambient   | Ambient temperatures in Jaipur shall not be in this range. We propose to make this - 5DegC to +55DegC ambient   | As per Bid Documents |
| 6  | Annexure A                | (c) ILC outer diameter must not exceed the standard 85 mm to meet the elegance requirements of Jaipur   | Receptacle is standardised to NEMA. We propose that the Controller is in line with the NEMA socket dimensions, and not be bound by circumference. Moreover, with various luminaires being bid by different bidders, the elegance might vary.  | As per Bid Documents |
| 7  | Page No. 51<br>Annexure A | 13. Lighting Control Compatibility - ILC must support the following switching and dimming protocols (LED Driver): (a) DALI, DALI 2.0 and DALI D4(b) DALI DT6 and DALI DT8(c) 0-10V DC / 1-10V DC  | NEMA allows only 2 pins for dimming. We recommend to clarify only driver specification basis requirement.   | As per Bid Documents |
| 8  | Annexure A<br>Page No. 52 | 16. Remote Monitoring - ILC must work with the existing LMS and Smart City Operational Centre at Jaipur Development Authority (JDA). It will be the responsibility of OEM supplier to integrate their ILC to JDA Smart City platform at no additional costs.  | We can provide Open APIs to integrate the ILCs into the existing system. Requesting information about the make and type of Command and Control Centre.  | As per Bid Documents |
| 9  | Annexure A<br>Page No. 53 | 18. Certifications & Compliance (product) - ILC shall be independently certified by 3rd party. Self-issued certificates are not acceptable.   | We request that the certificates are to be submitted at the time of supply by successful bidder   | As per Bid Documents |
| 10 | Annexure A<br>Page No. 57 | 1. LMS provision & Interoperability - OEM must provide its own LMS for remote monitoring, management, metering, controlling, and configuring of all the ILCs.   | Contradictory point to a point mentioning that the ILC must communicate with current system as well.  | As per Bid Documents |

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|----|------------------------------------|--|--|----------------------|
| 11 | General                            | Security of Application -NB/IOT and LTE technology | Each device has an IP and is exposed to the internet. Hence the vulnerability of the product to unwanted attacks and hack attempts is always higher. | As per Bid Documents |
| 6. | M/s Panasonic ; Mr. Ramesh Sigagar |  |  |                      |
| 1  | General                            | NA   | Requesting your approval to Pls include "PANASONIC" in this tender and upcoming tender   | As per Bid Documents |

  
Assistant Engineer (Elect-I)  
JDA, Jaipur

  
Executive Engineer (Elect-I)  
JDA, Jaipur

  
ACE (Elect.)  
JDA, Jaipur