



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

संदर्भ सं. : एएआई/डीएटीएस/ई.-ई./डायनामिक लाइटिंग/2023-24/ कार्य आदेश/ 05/
No: AAI/DATS/E-E/Dynamic Lighting/2023-24/W.O./05

दिनांक : 04.10.2023
Date: 04.10.2023

सेवा में / To,

मैसर्स सूर्या रोशनी लिमिटेड/Surya Roshni Limited
प्रकाश नगर, बहादुरगढ़/ Prakash Nagar, Bahadurgarh,
हरियाणा-124507/ Haryana-124507

कार्य का नाम : डीएटीएस कॉम्प्लेक्स, आईजीआई एयरपोर्ट, नई दिल्ली में एटीसी टावर की रोशनी
के लिए गतिशील प्रकाश व्यवस्था का प्रावधान

Name of work : Provision of dynamic lighting system for illumination of ATC tower
at DATS Complex, IGI Airport, New Delhi.

संदर्भ / Ref:- आपकी निविदा(Tender ID: 2023_AAI_163329_1) जोकि दिनांक 15.09.2023 को
खोली गई।
Your e-tender (Tender ID: 2023_AAI_163329_1) for the above said work
opened on Dated 15.09.2023.

महोदय / Dear Sir,

1. उपर उल्लेखित कार्य हेतु आपकी निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत की जाती है आपके द्वारा बताए गये मद पर आपकी राशि कुल ₹ 65,30,575.00 (रुपए पैसठ लाख तीस हजार पांच सौ पचहेतर मात्र) जी० एस० टी० रहित है जोकि निविदा की न्यायोचित राशि ₹ 1,66,46,405.00 से 61% कम है।

Your tender for the work mentioned above is here by accepted on behalf of the Chairman, Airports Authority of India at the item rates quoted for a sum totaling to Rs. 65,30,575.00 (Rupees Sixty Five Lakhs Thirty Thousand Five Hundred Seventy Five Only) excluding of G.S.T. which is 61% below the Justified Cost of Rs. 1,66,46,405.00

2. उप महाप्रबंधक/सहायक महाप्रबंधक (अभि०-वि०), डी.ए.टी.एस. कॉम्प्लेक्स, आईजीआई एयरपोर्ट, नई दिल्ली कार्य के प्रभारी अभियंता होंगे। आपसे निवेदन है कि आप आपकी ओर से एक विश्वसनीय प्रतिनिधि प्रतिनियुक्त करें जो करारनामे पर हस्ताक्षर करने के लिए अधिकृत हो तथा वह दिनांक 19.10.2023 तक सहायक महाप्रबंधक (अभि०-वि०), डी.ए.टी.एस. कॉम्प्लेक्स, नई दिल्ली के कार्यालय में उपस्थित हो तथा करारनामे को पूरा करें। ठेके का करारनामा ₹100 के नोनज्युडिशियल स्टैम्प पेपर पर निष्पादित किया जाएगा तथा पेपर का खर्च आपके द्वारा उठाया जायगा।

Contd.....

DGM/AGM (Engg-E), AAI, DATS Complex, IGI Airport, New Delhi shall be Engineer-in-Charge of the work. You are requested to depute your accredited representative, empowered to sign the contract agreement on your behalf and attend the office of the **Asstt. Gen. Manager (Engg-E), AAI, DATS Complex, IGI Airport,, New Delhi** by dt. **19.10.2023** to sign and complete the agreement. The contract agreement shall be executed on a non judicial stamp paper of value **Rs.100/-** and the cost of stamp paper shall be borne by you.

3. इस पत्र के जारी होने की तिथि से 10 दिनों के अंदर जमानत कि राशि **₹6,53,057/- (रुपये छः लाख तिरपन हजार सतावन मात्र)** जमा करे वरना ठेके के दस्तावेज के अनुसार आपके रनिंग बिल से काट ली जायेगी।

Please deposit balance **Rs. 6,53,057/- (Rupees Six Lakhs Fifty Three Thousand Fifty Seven Only)** towards security deposit within 10 days from the date of issue of this letter, failing which the same will be deducted from your running bill.

4. आपसे निवेदन है कि केन्द्रीय और राज्य सरकारों के 1970 के अधिनियम अनुबंध श्रम नियम तथा 1971 के केन्द्रीय नियम अनुबंध श्रम नियम (नियमन तथा उनमुल्य) एवं केद्र तथा राज्य सरकार के न्युनतम वेतन अधिनियम और नियमों के प्रावधानों का अनुपालन करें।

You are requested to comply with the provision of Contract Labour (Regulation & Abolition) Act of 1970 and Contract Labour (Regulation & Abolition) Central rules 1971 and Minimum wages Act & Rules of Central and State Government with upto date amendments.

5. आपको यह भी निर्देश दिया जाता है आप तुरंत **सहायक प्रबंधक (अभि०-वि०), डी.ए.टी.एस. कॉम्प्लेक्स** से मिले वह आपको कार्य स्थल सौंपने की व्यवस्था करेंगे। कृपया ध्यान दें कि इस कार्य के लिए समय अवधि **चार (04) महीने** की होगी जो कि **14.10.2023** से गिना जाएगा।

You are also directed to contact the **Asstt. Manager (Engg-E), AAI, DATS Complex,** immediately to take over the site. Please note that time period for this work shall be **Four (04) Month** and shall be reckoned from **14.10.2023.**

6. इस ठेके के सम्बन्ध में आगे का कोई भी पत्राचार **सहायक महाप्रबंधक (अभि०-वि०), डी.ए.टी.एस. कॉम्प्लेक्स, आईजीआई एयरपोर्ट, नई दिल्ली** के पते पर किया जाए।

Any further correspondence with contract should normally be addressed to the **Asstt. Gen. Manager (Engg-E), AAI, DATS Complex, IGI Airport, New Delhi.**

7. उपरोक्त कार्य के लिए दोष त्रुटि दायित्व अवधि **पांच (05) वर्ष (निविदा दस्तावेज़ के एससीसी खंड संख्या 14 अनुसार)** होगी जिसकी गणना कार्य के सफल समापन की तिथि से की जाएगी।

Defect liability period for this work shall be for 05 (Five) Years (**As per the SCC clause No. 14 of Tender document**), which shall be reckoned from the date of successful completion of works.

8. कृपया पावती भेजे।

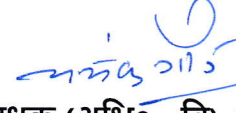
Please acknowledge the receipt.

धन्यवाद / Thanking you

संलग्न - (अ) मात्रा की अनुसूची /

Encl:- (a) Schedule of Quantities

भवदीय / Yours sincerely

 21/5/2018

सहा. महाप्रबंधक (अभि० - वि) / AGM (Engg-E),
भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India
डी.ए.टी.स., ई. गां. अ.हवाई अड्डा / DATS Complex, IGI Airport
नई दिल्ली- 110037 / New Delhi-110037
कृते एवं अध्यक्ष भा. वि. प्रा की और से / On behalf of Chairman, A.A.I.

Schedule of Quantity

Name of work: Provision of dynamic lighting system for illumination of ATC tower at DATS Complex, IGI Airport.

Sl. No.	Description	Unit	Qty	Rate ex. GST (In Rs.)	Amount ex. GST (in Rs.)
A	SUB HEAD-I				
1	Supply of DYNAMIC LIGHT FIXTURE- Large Projector Light, Not less than 400 W, LED, RGBW, IP 66 The housing in light weight, made of high strength die cast aluminium and coated by static powder making it weather resistant. The luminaire shape and dimension shall be as per the site requirement after approval by the EIC. Screen protection in tempered glass with high impact resistance ($\geq$IK08). High precision dial ensures precision angle adjustment. Fixture shall be suitable to operate at ambient temperature range of -10°C to +50°C. Pure Polyester powder coating in Standard Colour. Precise structure and multi-protection silicon rubber seal guarantees the fixture $\geq$IP65 rated. Power LED Module with high efficacy LED's on Printed Circuit Board with metal core plate. The LEDs shall have minimum CRI $\geq$80 & SDCM $\leq$4. Electronic Power Supply for LED module, which offers protection against Short Circuit, over-voltage & over-current, with in-built surge protection. Light fixture should be standard DMX512 protocol compatible, the DMX decoder function should be inbuilt in the light fixture, Each light fixture should be individually addressable & should be able to operate with standard DMX512 equipment. The luminaire shall be capable of producing dynamic colour changing light with 16 million colours as light fixture shall be programmable using required bit control DMX protocol/Ethernet based control. The luminaries shall be with Anti-aging and anti-UV high optical efficiency and lens shall be UL/VDE/ PMMA lens of approved PC for each LED and clear tempered glass for better illumination and beam angle should not more than 9°, as per site requirement. Luminaire should have IP67 rated male/female connectors for DMX512 through wiring. Anti-glare accessory to be provided to restrict glare. Estimated Lifetime should be at least 50,000 burning hours at L70 at 50 degree centigrade. LM80 report from LED Manufacturer should be submitted. BIS safety test report as per IS10322 from Intertek/UL lab or any other BIS certified Lab & BIS Certificate with manufacturer name same as brand proposed should be submitted. Minimum Light Fixture Lumen output is 14000 Lumens @ full power. Necessary cage arrangements are to be made for the safety of the LIGHT FIXTURE as per the site requirement	Nos.	40	55680.00	2227200.00
2	Supply of DYNAMIC LIGHT FIXTURE- Linear Wall Washer, Not less than 60W, LED, RGBW, (DMX 512 Compatible), IP 66 The housing in light weight, made of high strength aluminium and coated by static powder making it weather resistant. The luminaire shape and dimension shall be as per the site requirement after approval by the EIC. Protection screen in ultra white tempered glass with high impact resistance ($\geq$IK 06). High precision dial ensures precision angle adjustable as per site requirement. Pure Polyester powder coating in Standard Colour, Precise structure and multi-protection silicon rubber seal guarantees the fixture $\geq$IP65 rated. Power LED module with high efficacy LED's, on Printed Circuit Board with metal core plate. Electronic Power Supply for LED Module, which offers Protection against Short Circuit, Over-Voltage & Over-Current, with in-built surge protection. Light fixture should be standard DMX512 protocol compatible, The DMX decoder function should be inbuilt in the light fixture, Each light fixture should be individually addressable & should be able to operate with any standard DMX512 equipment. The luminaire shall be capable of producing dynamic colour changing light with 16 million colours as light fixture shall be programmable using required bit control DMX protocol/Ethernet based control Lens made of PC. Estimated Lifetime should be at least 50,000 burning hours at L70 at 50 degree centigrade. LM80 report from LED Manufacturer should be submitted. BIS safety test report as per IS10322 from Intertek/UL lab or any other BIS certified Lab & BIS Certificate with manufacturer name same as brand proposed should be submitted. Minimum Light Fixture Lumen output is 15000 lumens at full power.	Nos.	165	15140.00	2498100.00
3	Installation testing and commissioning of Light fixtures (including all the accessories) mentioned in BOQ item no. 1 & 2	Nos.	205	2475.00	507375.00
4	Supply of Universe (512 Channels) DMX controller & Xlor Connectors, with following features & specifications: Designed for DIN rail mounting, Delivered with 512 DMX channels. It's Key Features includes. DMX Stand Alone controller. Up to 1x DMX512 universes (512 channels). RDM compatible. USB & Ethernet connectivity for programming/ control. Stand alone made with 99 scenes. Play scenes in 5 areas/ zones/ microSD slot. 8+3 dry contact trigger ports. Test scenes rotary switch. Window/ Mac software to set dynamic colours/ effects. LS cloud compatibility (optional). Technical Data Input Power 12v DC (8-15V range), Output Protocol DMX512 (x1), Programmability PC, Mac, Android, iOS, Connecting-USB-C Ethernet Screw terminals for 1 DMX/ RDM Universes, 8+3 Contact ports, 12v power-in Battery holder (CR2032), microSD slot Memory SD card, Environment IP 20 0°C to +50°C, Buttons Rotary switch, OS Requirements Mac OS x 10.8-10.14 Window 7/8/10 Standards CE, ETL, Low voltage, EMC, and RoHS. DMX Controller Make-Nicolaudie/Pharos/Madrix/Enttec/chromateq	Nos.	1	60000.00	60000.00

Sl. No.	Description	Unit	Qty	Rate ex. GST (In Rs.)	Amount ex. GST (in Rs.)
5	Supply of 6-port DMX Splitter (Din Rail Mountable) with following features & specifications: DMX signal splitter enables branching in complex DMX installations. The individual outputs are galvanically isolated from input and between each other. The output signals are appropriately reinforced, which guarantees correct operation of the entire installation. DMX Splitter is manufactured in a housing adapted for mounting on standard DIN 35mm rails. Specification- Power Supply- DC12-24V, DMX Channels-512, Nos. of DMX input-1 & output-6, Optical Isolation of DMX Lines, Built-in Terminator, breakdown voltage of the isolation > 1000V, current consumption-<500mA, Weight-0.2 Kgs., W-105mm, H-86mm & D-60mm or dimension as per standard similar model of Manufacturer of Light Fixture. DMX Splitter Make- PXM/ Swisson/ Sundrax/ Pharos/ Enttec	Nos.	2	7150.00	14300.00
6	Installation, Programming & Commissioning of DMX controller and splitter mentioned in BOQ item no. 4 & 5.	Job	1	450000.00	450000.00
7	Supply, Installation, Testing and Commissioning of DMX cable with the following specs .cable should be true DMX512 construction flexible and easy to use , rugged black matte PVC jacket ,corroision resistant tinned copper braid , meets or exceeds DMX standards ,24 AWG 4conductors stranded bare copper ,duofoil tape etc.as suitable for the site condition . DMX Cable Make- Belden/ Van Damme/ Sommer	Mtr.	1000	115.00	115000.00
B	SUB HEAD-II				
8	Supply of 3Cx 2.5 sqmm armoured Copper conductor cable , XLPE Insulated, cores laid up, PVC tape/PVC Extruded Innersheathed for Multicore Cables, 1.1 kV grade as per IS 7098 (Part 1) 1988	Mtr.	830	120.00	99600.00
9	Supply and laying of 3Cx 2.5 sqmm flexible Copper conductor cable , PVC insulated & FR PVC Round sheathed, 1.1 kV grade conforming to IS 694 in the existing PVC/steel /HDPE pipe as required.	Mtr.	400	250.00	100000.00
10	Supply of 4C x 16 sqmm solid/stranded Aluminium armoured conductor cable , XLPE Insulated, cores laid up, PVC tape/PVC Extruded Innersheathed for Multicore Cables, 1.1 kV grade as per IS 7098 (Part 1) 1988.	Mtr.	150	130.00	19500.00
C	SUB HEAD-III				
11	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. 63 mm dia (OD-63 mm & ID-51 mm nominal)	Mtr.	50	265.00	13250.00
12	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sqmm	Mtr.	880	120.00	105600.00
13	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. (Clamped with 1 mm thick saddle) Upto 35 sqmm	Mtr.	50	120.00	6000.00
14	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on existing cable tray as required. (Clamped with 1 mm thick saddle) Upto 35 sqmm	Mtr.	50	120.00	6000.00
15	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	2	7920.00	15840.00
16	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. Pipe (including pipe) from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	Mtr.	15	200.00	3000.00

Sl. No.	Description	Unit	Qty	Rate ex. GST (In Rs.)	Amount ex. GST (in Rs.)
17	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	Mtr.	300	58.00	17400.00
18	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
18.1	25 mm	Mtr.	400	158.00	63200.00
19	Supplying and fixing 25 mm dia MS flexible pipe with PVC coating along with all ancillaries and accessories like couplers etc. as required.	Mtr.	300	94.00	28200.00
20	Supplying and fixing following way , horizontal type three pole and neutral ,sheet steel ,MCB distribution board ,415V , on surface /recess, complete with tinned copper bus bar ,neutral bus bar ,earth bar ,din bar , interconnections ,power painted including earth etc. as required ,(but without MCB/RCCB/Isolator) 4 Way (4 +12), Double door	Nos.	2	33870.00	67740.00
21	Supply and fixing of 5 Ato 32 Amp rating ,240/415V ,10KA ,c cureve miniature circuit breaker suitable for inductive load of following poles in the exixting MCB DB complete with connections, teting and commisioning etc. as required .				
21.1	Single pole	Nos.	24	4495.00	107880.00
21.2	TPN (32 A)	Nos.	2	2695.00	5390.00
				Total	6530575.00

(Rupees Sixty Five Lakhs Thirty Thousand Five Hundred Seventy Five Only)

AGM (Engg.-E)
AAI, DATS Complex