TENDER DOCUMENT

FOR

Supply, installation, testing and commissioning of "TRAFFIC SIGNAL LIGHT"

Tender Notice No. .....

Ranchi Municipal Corporation
Kutuchery, Ranchi 834001
Contact No. : 0651-2211215, Fax: 06512211777
e-mail: support@ranchimunicipal.com, website: www.ranchimunicipal.com

1. INTRODUCTION:

Sealed Tenders are invited from manufacturers/ authorized dealers by Municipal Commissioner, Ranchi Municipal Corporation for supply, installation, commissioning and maintenance of 14 (fourteen) traffic signals at various intersections points at the junction of Ranchi city as a road safety measure for cautioning commuters/ road users as per the specifications. The bidder(s) must have necessary portal enrolment with their own digital signature certificate.

2. GENERAL INSTRUCTIONS:

1. Participants in the tender shall be a manufacturer of the product or an authorized dealer. The authorized dealers shall produce the certificate of authorization in force along with the tender.
2. The bidder is to supply, deliver, install, commission and maintain the traffic signals for one year from the date of commissioning of the traffic signals. The products should be as per the specifications mentioned in Annexure-I of this document. The traffic signals will be installed at intersection points in the Ranchi. The location of the installation points is mentioned in the Annexure II, The traffic signals will have to installed at these locations.
3. Each tenderer is required to deposit an **earnest money (EMD) of Rs. 2,00,000/- (two lacs only)** in form of a Demand Draft/BG/FDR, DD must be drawn from a nationalized bank, in favor of "Municipal Commissioner, Ranchi Municipal Corporation. DD must be payable at Ranchi. The Bank guarantee must be valid for atleast one year from the date of opening of the tender. FDR must be pledged in form of Municipal commissioner, Ranchi Municipal Corporation and must be valid for atleast one year from the date of opening of the tender. The earnest money of unsuccessful bidder(s) shall be returned on the finalization of the tender without any interest. The earnest money for successful bidder will be converted to performance guarantee.
4. The tenderers should submit the tender in two envelops covering **technical bid** and **commercial bid** giving full details with supporting documents as required. Tenders giving insufficient particulars are liable to be rejected.
5. The **Technical bid** envelope should contain the following:
   a) Affidavit regarding non blacklisting by any govt/PSU.

b) Document related to experience in last three years. Provide a list of cities where work was done along with successful completion certificate by client.
c) Documents showing GSTN, PAN and ESIC registration.
d) Details of tender fee and EMD.
e) Audited annual balance sheet of last 03 (three) years in support of turnover.
f) List of technical expert to be employed if work is allotted.
g) Proof of being manufacturer or authorized dealer.
h) Mention the above details in Annexure III also.

6. Pre bid meeting would be held on 20.08.2018 at 3:00 PM in office of Ranchi Municipal Corporation.
7. The technical bids of all the tenderers will be opened on 05.04.2018 at 4.00 P.M. in the office of the Municipal Commissioner, Ranchi Municipal Corporation in the presence on the bidders or their authorized representatives present on the specified date & time.
8. **Commercial bid** of only those tenderer will be opened who would qualify in the technical bid. The lowest rate (L1) will be decided on the basis of the total price value of all the 6 (six) items mentioned in the price bid.
9. The Municipal Commissioner reserves the right to reject any or all of the tenders without assigning any reason.
10. The rates, finalized through this tender, will be operative for a period of at least one year.
11. The submission of more than one tender by the same agency under different name is prohibited. Such tenders shall be rejected and no representation or correspondence shall be entertained in this regard.

ELIGIBILITY CRITERIA:-

1. Manufacturer or authorized dealer must have been in the field of ITS (intelligent transportation system) with atleast 3 (three) years experience of manufacturing/ installing/maintaining atleast 10 (ten) traffic signals anywhere in India.
2. Turnover of atleast Rs. 2 (two) Crore annually in last 3 (three) years.
3. Affidavit that the company was never black listed by any govt./PSU .
4. Valid PAN/GSTN/ESIC registration.

GENERAL TERMS & CONDITIONS.

1. Tenders found incomplete and not as per instructions will be rejected.
2. E.M.D shall be forfeited if a bidder withdraws its bid during the period of bid validity.
3. The price and conditions of the offer should be valid for at least a period of one year from the date of opening of the tender.
4. The purchaser may alter the quantities of material at the time of placing of orders and may split order among more than one bidder.
5. Value of each item with total and grand total should be written clearly. Clerical and arithmetical mistakes may result in rejection of the tender.
6. The vender shall make his own arrangements for supply and installation of materials at the purchaser's site.
7. All the equipments supplied must operate satisfactorily for a period of 1 (one) year from the date of commissioning. The vendor will provide module, charge controller with cabinet for keeping battery & charge controller and M.S. pole for mounting. The vendor will have to rectify any defects during the warranty free of cost within 48 hours of the receipt of complaint.
8. If the equipment is out of order beyond 48 hours of complain then penalty at the rate of 0.5% of the cost of equipment will be charged per week or its fraction from the supplier.
9. The prices quoted should be inclusive of all taxes.
10. Payment will be made in three phases i.e. (i) 60% of the contract price on successful delivery with installation of the equipments at site and verification thereof and on submission of bill and (ii) balance 25% will be released after successful functioning of the equipment for two months from the date of commissioning. (iii) Rest 15% of the contract price payment will be made after successful operation for one year from the date of commissioning.
11. The successful bidder should complete installation within 45 (forty five) days after the date of issue of the work order. Delay in supply / installation / commissioning shall be invite a penalty @ 0.5% of the material cost which will be charged per week or part thereof for any delay. In such case the purchaser reserves the right to cancel the order in full or in part.
12. The purchaser, if so wants, can ask for demonstration of any or all the equipments at a convenient date and time from technically selected bidders.

13. The equipment shall confirm to national/international standard as applicable.

14. All signal aspects (Poly carbonate/Mild Steel) and other items shall conform to the relevant Indian/International standards. If the bidder has acquired any ISO series of standard for maintenance/service to be provided in the field of traffic and transport, the bidder shall include the same.

15. Before tendering, the bidder may visit signal sites and acquaint himself with the prevalent conditions. In case of doubt, the bidders may obtain the required information from Municipal Commissioner, Ranchi Municipal Corporation.

16. The bidders should be capable enough to maintain these traffic signal lights in the city. The technical specifications of the signals is provided in **Appendix -I.**

17. Testing, commissioning, earthing of controllers and poles shall be the responsibility of the agency for new installations as well as maintenance of signals and its repairs.

18. The bidder shall follow all the relevant standard/specifications prescribed in the CPWD manual for executing the works of signals.

TECHNICAL SPECIFICATION | Annexure I

SL. NO.	*Items*	*Specification*
01	Microprocessor based Traffic Controller	Supply, installation, testing and commissioning of Microprocessor based Road Traffic Controller: Modular in design to work as Synchronized Multi-Plan programming. The Multi Plan Traffic Controller with Fixed Cycle Time can be used as an independent system at isolated intersections or as a synchronized chain of controllers for coordinated control. 8 phase fully automatic, programmable, Windows based software for programming, LCD display Key Pad for onsite programming, day-week day & holiday programming, USB port for PC interface and serial port for remote programming with GSM network. Vehicle actuated Input Port 16 adaptable to inductive loop or radar or video analytics for vehicle/pedestrian actuation, 48 output ports outdoor M.S cabinet, working voltage 24V DC with basic facility. (Future Upgradable) with Battery Box/cabinet to accommodate batteries and the Controller -pedestal Mounting. As per the technical Specifications given in the Tender document **EN 12675:2000** Traffic signal controller, functional safety requirements. **EN 50293:2012** Road traffic signal systems, electromagnetic compatibility **EN 50556:2011** Road traffic signal systems. **EN 60950-1:2006** Information technology systems, safety
02	Traffic Light	Supply, installation, testing and commissioning of 300mm dia Vehicular Signal Head with soft visor hood in black finish, set of 4 Traffic Lights: 1-red, 1 amber & 1 Green, & 1 pedestrian signal. LED retrofit should be EN12368 certified and LED shall be single source narrow beam type & luminance uniformity 1:15 with uniform appearance light diffusion with convex tinted lens, phantom 5 class and following lumen and chromaticity, Luminious intensity- RED> 400 CD, : Colour acc. 613.5- 631 nm AMBER>400 CD, : Colour acc.585- 597 nm GREEN>400 CD, :Colour ACC. 498.5- 508 nm Working voltage 23 VAC/24VDC including polycarbonate based housing mounting clamps etc complete
03	Timer	Supply, installation, testing and commissioning of 300mm dia. Vehicular Reverse Count Down Timer: 2½ Digits (0-199) Dual Colour (Red & Green), visible in Day Light from more than 300 mtrs. & readable from 100 mtrs. with inbuilt smart sensor for time sensor, enclosed in polycarbonate housing, complete in all respect as per the technical Specifications given in the Tender document
04	Pole	a) Supply, installation, testing and commissioning of Vehicular cylindrical M. S. Poles, 100mm dia. 3 mtr height- with base flange and base plate of 200mm dia. with 4 grouting bolts. Thickness of pole 3 mm

		b) Supply, installation, testing and commissioning of Vehicular cylindrical Cantilever (L-type) M. S. Poles, 100mm dia. 3 mtr height 2 mtr length- with base flange and base plate of 200mm dia. with underground. Thickness of pole 3 mm
05	Solar System	Supply, installation, testing and commissioning of Solar PV Power System for complete traffic signal junction with above mentioned load for 24 hours {10 hrs: full brightness,6 hrs: dim and rest flashing}with 1+1 day Battery back-up and facility to hook up with AC main grids supply for charging battery (hybrid type) LOAD traffic signal LED, traffic controller consisting of following items: [Explain the system Design calculations (on the basis of "Average Daily Solar Radiation" condition of 5.5 KWh / sq.m. on a horizontal surface), showing the Load calculations and exact capacities of components.] ,
		a) Working voltage: 24 V DC
		b) Solar SPV modules: Appropriate capacity (Indigenous PV Modules, as per MNRE guidelines and Standards, (specify the exact capacity being offered))
		c) Charge controller: (as per MNRE guidelines and Standards, specify the exact capacity being offered)
		d) Battery: Appropriate capacity with 1+1 day Battery back-up (Solar Tubular GEL,VRLA Battery as per MNRE guidelines and Standards(specify the exact capacity being offered))
		e) AC mains Power Supply (battery Charger) for Hybrid charging of Batteries Suitable for 80 – 135VAC, 60 Hz (specify the exact capacity being offered)
		f) Supply of cables suitable for interconnecting Solar Panel, Controller and battery etc. along with accessories required for proper installation of the complete system: 1 set (as per MNRE guidelines and Standards)
		g) 4 meter - mounting frames to support Solar PV Modules along with Pole (with base plate for grouting)
06	Cable & HDPE Pipe	a) 0.5 mm 6 core Supply of conductor cable suitable for ATC signals. b) Supply of 0.5 mm 12 core conductor cable suitable for ATC signals. c) HDPE Pipe 75MM

Annexure II

List of names of junctions for installation of new traffic signal

Names of Junctions:	Junction Type
1. Piska More	3 way
2. KadruSahjanandchowk (near bharat kitchen house)	3 way
3. Puruliya Plaza Intersection	4 way
4. Premsons Motors	3 way
5. DurgaMandirRatu Road	4 way
6. Morabadi Tagore Hill (near state museum)	3 way
7. KokarChowk	4 way
8. Kashmir Vastaralay	3 way
9. Pahari Mandir (saniMandir)	4 way
10. Bahu Bazar	6 way
11. RIIMS Intersection	3 way
12. Kali Mandir Church road	4 way
13. Singh More	3 way
14. Nepal House next to RajendraChowk	3 way

Note: Tenderer must visit the sites before quoting rates.

Annexure III

DETAILS TO BE FURNISHED BY THE BIDDERS

1. Name of the Firm/Company: _____
2. Class of Registration with validity date:_____
3. Value of Registration: _____
4. Address for Communication: _____
5. Telephone/Mobile Number:_____
6. E-mail: _____
7. Details of Proprietor/Partner/Director

Name	Address	Qualification and Experience

8. Annual Turnover of the Firm/Company during previous three Financial Years for supply of cartridges (Certified copies of audited Balance Sheet to be submitted):

Financial Year	Annual Turnover(Rs)	Copies of audited Balance Sheet enclosed(Yes/No)
Previous Financial Year(2014-15)		
2nd Previous Financial Year(2015-16)		
3rd Previous Financial Year(2016-17)		

9. PAN, GST Number of the Firm/Company: _____
10. GST Registration No.: _____
11. EMD Draft Number/Date & Name of the Bank: _____

This is to certify that the above facts are true complete and correct to the best of my knowledge and belief. Further, it is certified that I/We have read and understood the terms and conditions of the Tender Notice.

I/We give an undertaking and give our unconditional and unequivocal acceptance of all terms and conditions of the Tender and agree to abide by these terms and conditions.

Name, Signature & Seal of the Firm/Company

PRICEBID

SL. NO.	Items	Specification	Unit Rate (Rs)	Qty	Total (Rs)
01	Microprocessor based Traffic Controller	Supply, installation, testing and commissioning of Microprocessor based Road Traffic Controller: Modular in design to work as Synchronized Multi-Plan programming. The Multi Plan Traffic Controller with Fixed Cycle Time can be used as an independent system at isolated intersections or as a synchronized chain of controllers for coordinated control. 8 phase fully automatic, programmable, Windows based software for programming, LCD display Key Pad for onsite programming, day-week day & holiday programming, USB port for PC interface and serial port for remote programming with GSM network. Vehicle actuated Input Port 16 adaptable to inductive loop or radar or video analytics for vehicle/pedestrian actuation, 48 output ports outdoor M.S cabinet, working voltage 24V DC with basic facility. (Future Upgradable) with Battery Box/cabinet to accommodate batteries and the Controller -pedestal Mounting. As per the technical Specifications given in the Tender document **EN 12675:2000** Traffic signal controller, functional safety requirements. **EN 50293:2012** Road traffic signal systems, electromagnetic compatibility **EN 50556:2011** Road traffic signal systems. **EN 60950-1:2006** Information technology systems, safety		14	
03	Timer	Supply, installation, testing and commissioning of 300mm dia. Vehicular Reverse Count Down Timer: 2½ Digits (0-199) Dual Colour (Red & Green), visible in Day Light from more than 300 mtrs. & readable from 100 mtrs. with inbuilt smart sensor for time sensor, enclosed in polycarbonate housing, complete in all respect as per the technical Specifications given in the Tender document		50	

02	Traffic Light	Supply, installation, testing and commissioning of 300mm dia Vehicular Signal Head with soft visor hood in black finish, set of 4 Traffic Lights: 1-red, 1 amber & 1 Green, & 1 pedestrian signal. LED retrofit should be EN12368 certified and LED shall be single source narrow beam type & luminance uniformity 1:15 with uniform appearance light diffusion with convex tinted lens, phantom 5 class and following lumen and chromaticity, Luminious intensity- RED> 400 CD, : Colour acc. 613.5- 631 nm AMBER>400 CD, : Colour acc.585- 597 nm GREEN>400 CD, :Colour ACC. 498.5- 508 nm Working voltage 23 VAC/24VDC including polycarbonate based housing mounting clamps etc complete		400	
04	Pole	c) Supply, installation, testing and commissioning of Vehicular cylindrical M. S. Poles, 100mm dia. 3 mtr height- with base flange and base plate of 200mm dia. with 4 grouting bolts. Thickness of pole 3 mm		58	
		d) Supply, installation, testing and commissioning of Vehicular cylindrical Cantilever (L-type) M. S. Poles, 100mm dia. 3 mtr height 2 mtr length- with base flange and base plate of 200mm dia. with underground. Thickness of pole 3 mm		42	
05	Solar System	Supply, installation, testing and commissioning of Solar PV Power System for complete traffic signal junction with above mentioned load for 24 hours {10 hrs: full brightness,6 hrs: dim and rest flashing}with 1+1 day Battery back-up and facility to hook up with AC main grids supply for charging battery (hybrid type) LOAD traffic signal LED, traffic controller consisting of following items: [Explain the system Design calculations (on the basis of "Average Daily Solar Radiation" condition of 5.5 KWh / sq.m. on a horizontal surface), showing the Load calculations and exact capacities of components.]		14	

		a) Working voltage: 24 V DC			
		b) Solar SPV modules: Appropriate capacity (Indigenous PV Modules, as per MNRE guidelines and Standards, (specify the exact capacity being offered))			
		c) Charge controller: (as per MNRE guidelines and Standards, specify the exact capacity being offered)			
		d) Battery: Appropriate capacity with 1+1 day Battery back-up (Solar Tubular GEL,VRLA Battery as per MNRE guidelines and Standards(specify the exact capacity being offered))			
		e) AC mains Power Supply (battery Charger) for Hybrid charging of Batteries Suitable for 80 – 135VAC, 60 Hz (specify the exact capacity being offered)			
		f) Supply of cables suitable for interconnecting Solar Panel, Controller and battery etc. along with accessories required for proper installation of the complete system: 1 set (as per MNRE guidelines and Standards)			
		g) 4 meter - mounting frames to support Solar PV Modules along with Pole (with base plate for grouting)			
06	Cable & HDPE Pipe	d) 0.5 mm 6 core Supply of conductor cable suitable for ATC signals. e) Supply of 0.5 mm 12 core conductor cable suitable for ATC signals. f) HDPE Pipe 75MM g) Laying of cable and pipe as required.		L.S	
		TOTAL COST			

NOTE :

1. The bidder must do a physical verification of site before quoting.
2. The rates will be inclusive of transportation, installation, commissioning and one year warranty on parts along with maintenance.
3. Rates must be inclusive of all prevailing taxes.