

**RDSO HQ-S AND T/RDSO
TENDER DOCUMENT**

Tender No: STTTMSRDSOGPON-20221

Closing Date/Time: 02/03/2023 15:00

DG/RDSO acting for and on behalf of The President of India invites E-Tenders against Tender No **STTTMSRDSOGPON-20221** Closing Date/Time 02/03/2023 15:00 Hrs. Bidders will be able to submit their original/revised bids upto closing date and time only. Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

1. NIT HEADER

Name of Work	Provision of Gigabit Passive Optical Network (GPON) for RDSO Residential Area at RDSO Phase-I		
Bidding type	Normal Tender		
Tender Type	Open	Bidding System	Single Packet System
Tender Closing Date Time	02/03/2023 15:00	Date Time Of Uploading Tender	08/02/2023 17:59
Pre-Bid Conference Required	No	Pre-Bid Conference Date Time	Not Applicable
Advertised Value	20855351.50	Tendering Section	TMS
Bidding Style	Single Rate for Tender	Bidding Unit	Above/Below/Par
Earnest Money (Rs.)	254300.00	Validity of Offer (Days)	60
Tender Doc. Cost (Rs.)	0.00	Period of Completion	365 Days
Contract Type	Works	Contract Category	Expenditure
Bidding Start Date	16/02/2023	Are Joint Venture (JV) firms allowed to bid	No
Ranking Order For Bids	Lowest to Highest	Expenditure Type	Capital (Works)

2. SCHEDULE

S.No.	Item Code	Item Qty	Qty Unit	Unit Rate	Basic Value	Escl.(%)	Amount	Bidding Unit
Schedule 1-Provision of Gigabit Passive Optical Network (GPON) for RDSO Residential Area at RDSO Phase-I							20855351.50	
1	1	1.00	Set	786764.00	786764.00	AT Par	786764.00	
	Description:- Supply and Installation of 24 Port 1000Mbps SFP Layer 3 Switch including 16 Gigabit Combo ports, 8 Gigabit SFP additional 4 x 1G/10G SFP+ ports, 2 x 20G stacking ports. Supports Dual Hotswappable Power Supplies. (Default Shipped with Dual Power Supply). Supports OSPF v2/v3, BGP4+, VRRP. As per technical specifications Annexure 'A'							
2	2	1.00	Numbers	394343.00	394343.00	AT Par	394343.00	
	Description:- NMS/EMS Software Window based as per technical Specifications Annexure 'A'							
3	3	3.00	Numbers	1352380.00	4057140.00	AT Par	4057140.00	
	Description:- GPON, 4-port 1RU OLT, "Single" AC, 100 to 240V AC, Installation kit OLT Fabric and Control card SC1, Power connector with convertor as per technical specifications Annexure 'A'							
4	4	234.00	Numbers	195.00	45630.00	AT Par	45630.00	
	Description:- Supply and installation of UTP Patch cord (2Meter). As per technical specifications Annexure 'A'							
5	5	40.00	Numbers	2480.00	99200.00	AT Par	99200.00	
	Description:- Supply & Installation of PATCHCORD, SM(OS2), DUPLEX SC-SC, PC TYPE, 1M as per technical specifications Annexure 'A'							
6	6	15.00	Numbers	6853.00	102795.00	AT Par	102795.00	
	Description:- Supply & Installation of FIBER DRAWER LIU, LOADED, 24SM, SC SX ADAPTER As per technical specifications Annexure 'A'							
7	7	5000.00	Metre	76.77	383850.00	AT Par	383850.00	
	Description:- Supply of 06 core Single Mode armoured Optical Fiber Cable as per technical specification as per technical specifications Annexure 'A'							
8	8	10.00	Numbers	26800.00	268000.00	AT Par	268000.00	
	Description:- Supply & Installation of FIBER DRAWER LIU, LOADED, 48SM, SC SX ADAPTER, 48 Pigtails As per technical specifications Annexure 'A'							
9	9	20.00	Numbers	4078.00	81560.00	AT Par	81560.00	
	Description:- Supply and installation of OFC splitter- Loaded with 1:16 PLC Splitter pre-terminated with SC/APC connectors and adaptors							
10	10	15.00	Numbers	3684.00	55260.00	AT Par	55260.00	
	Description:- Supply and installation of OFC splitter- Loaded with 1:8 PLC Splitter pre-terminated with SC/APC connectors and adaptors							
	11	268.00	Numbers	450.00	120600.00	AT Par	120600.00	

**RDSO HQ-S AND T/RDSO
TENDER DOCUMENT**

Tender No: STTTMSRDSOGPON-20221

Closing Date/Time: 02/03/2023 15:00

11	Description:- Supply & Installation of Pigtail, Single Mode (OS2), LSZH Type as per technical specification Annexure 'A'						
12	12	5000.00	Metre	59.80	299000.00	AT Par	299000.00
12	Description:- Supply of FTTH DROP CABLE, SM,2 CORE, LSZH as per technical specifications Annexure 'A'						
13	13	234.00	Numbers	400.00	93600.00	AT Par	93600.00
13	Description:- Supply and installation of OFC I/O as per technical specification Annexure 'A'						
14	14	234.00	Numbers	450.00	105300.00	AT Par	105300.00
14	Description:- Supply & Installation of PIGTAIL, SM(OS2), SIMPLEX SC, PC TYPE, 1M, LSZH						
15	15	234.00	Numbers	450.00	105300.00	AT Par	105300.00
15	Description:- Supply & Installation of ADAPTER, SM, SIMPLEX SC, PC TYPE. As per technical specifications Annexure 'A'						
16	16	234.00	Numbers	1695.00	396630.00	AT Par	396630.00
16	Description:- Supply & Installation of Patch cords SC/PC in HTB						
17	17	234.00	Numbers	20879.00	4885686.00	AT Par	4885686.00
17	Description:- Supply & Installation of GEAPON/GPON ONU AC1200 WiFi Router with 1PON, 1GE & 1FE, 1FXS Port As per technical specifications Annexure 'A'						
18	18	8.00	Numbers	19500.00	156000.00	AT Par	156000.00
18	Description:- Supply and installation of IP65 Rated outdoor location box with power dB, Tray as per technical specification Annexure 'A'						
19	19	500.00	Metre	418.00	209000.00	AT Par	209000.00
19	Description:- Laying of 24 core Single Mode armoured Optical Fiber Cable in HDPE Duct with digging and blowing						
20	20	5000.00	Metre	418.00	2090000.00	AT Par	2090000.00
20	Description:- Laying of 06 core Single Mode armoured Optical Fiber Cable in HDPE duct with digging and blowing						
21	21	5000.00	Metre	80.00	400000.00	AT Par	400000.00
21	Description:- Laying of 02 core Single Mode armoured Optical Fiber Cable in Conduit pipe						
22	22	1554.00	CORE	195.00	303030.00	AT Par	303030.00
22	Description:- Termination of Fiber Cable in LIU Splicing of fiber with pigtail on site as per network						
23	23	5.00	Kilometre	94860.00	474300.00	AT Par	474300.00
23	Description:- Supply of HDPE duct for 02 core, 06 core and 24 core OFC cables						
24	24	1200.00	Per Unit	290.00	348000.00	AT Par	348000.00
24	Description:- Splicing of 02 core, 06 core and 24 core OFC						
25	25	500.00	Metre	1450.00	725000.00	AT Par	725000.00
25	Description:- Horizontal direction drilling/boring without damage of surface road /track using Auger Machine (HDD machine). The bore shall be upto 200 mm dia & shall be done at the depth of minimum 1200 mm from the ground level. The ground level shall be considered ignoring the bank height of the bank of the road. The length of the bore shall be minimum 4 Mtrs long. This include insertion of different dia DWC-HDPE pipe/ GI pipes coupling etc. as per direction of Engineer In charge						
26	26	5.00	Numbers	48000.00	240000.00	AT Par	240000.00
26	Description:- Supply of Digital Multimeter of Fluke or similar True RMS with temperature, Analog bar graph, Digital display, Backlight, 1000V AC/DC, measure up to 10A, 20A for up to 30 second						
27	Please see Item Breakup for details.				642130.00	AT Par	642130.00
27	Description:- Supply of PVC 0.5 mm dia telephone cable as per Technical Specification						
28	Please see Item Breakup for details.				204524.50	AT Par	204524.50
28	Description:- Supply, Fixing & wiring of Krone type DP boxes fitted with all required accessories of following sizes on in side wall at different locations. This also include termination of incoming cable conductor on one side of KRONE make module and outgoing cables conductor on other side of KRONE make modules. All required material for fixing of DP boxes are to be arranged by contractor including related masonry work						
29	29	1.00	Job	234000.00	234000.00	AT Par	234000.00
29	Description:- Testing and commissioning of complete GPON system as per scope and instructions of Engineer In Charge						
30	30	5.00	Numbers	65000.00	325000.00	AT Par	325000.00
30	Description:- Supply of Console for management including Software as per Technical Specification Annexure 'A'.						
31	31	250.00	Numbers	1478.00	369500.00	AT Par	369500.00

**RDSO HQ-S AND T/RDSO
TENDER DOCUMENT**

Tender No: STTTMSRDSOGPON-20221

Closing Date/Time: 02/03/2023 15:00

	Description:- Supply & Installation of Home Termination Box						
32	32	8.00	Numbers	78592.00	628736.00	AT Par	628736.00
	Description:- C++ PON SFP as per technical specifications Annexure 'A'.						
33	33	2.00	Numbers	94890.00	189780.00	AT Par	189780.00
	Description:- 1G Copper SFP as per technical specifications Annexure 'A'.						
34	34	1.00	Numbers	590213.00	590213.00	AT Par	590213.00
	Description:- Server, intel xeon 8 core processor, 32 GB RAM, 2X600GB HDD in RAID, Windows based server Standard 3year MySQL Standard License 1-4 socket for NMS/EMS As per technical specifications Annexure 'A'						
35	35	7000.00	Metre	63.64	445480.00	AT Par	445480.00
	Description:- Laying of PVC cable inside PVC conduit pipe PVC channel, industrial casing and through wire manager of work stations.						

3. ITEM BREAKUP

Schedule	Schedule 1-Provision of Gigabit Passive Optical Network (GPON) for RDSO Residential Area at RDSO Phase-I					
Item- 27	Supply of PVC 0.5 mm dia telephone cable as per Technical Specification					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
1	1	05 Pair	Metre	2000.00	76.36	152720.00
2	2	10 Pair	Metre	2000.00	93.01	186020.00
3	3	20 Pair	Metre	1000.00	185.91	185910.00
4	4	04 Pair	Metre	2000.00	58.74	117480.00
					Total	642130.00
Item- 28	Supply, Fixing & wiring of Krone type DP boxes fitted with all required accessories of following sizes on in side wall at different locations. This also include termination of incoming cable conductor on one side of KRONE make module and outgoing cables conductor on other side of KRONE make modules. All required material for fixing of DP boxes are to be arranged by contractor including related masonry work					
S No.	Item No	Description of Item	Unit	Qty	Rate	Amount
1	1	10 Pair	Numbers	25.00	808.98	20224.50
2	2	20 Pair	Numbers	25.00	1164.00	29100.00
3	3	50 Pair	Numbers	25.00	2425.00	60625.00
4	4	100 Pair	Numbers	25.00	3783.00	94575.00
					Total	204524.50

4. ELIGIBILITY CONDITIONS

Special Financial Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	The tenderer must have minimum average annual contractual turnover of V/N or V whichever is less; where V= Advertised value of the tender in crores of Rupees N= Number of years prescribed for completion of work for which bids have been invited. The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. The tenderers shall submit requisite information as per Annexure-VIB, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.	No	No	Allowed (Mandatory)

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading

**RDSO HQ-S AND T/RDSO
TENDER DOCUMENT**

Tender No: STTTMSRDSOGPON-20221

Closing Date/Time: 02/03/2023 15:00

1	The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.	No	No	Allowed (Mandatory)
---	---	----	----	---------------------

Special Technical Criteria

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Definition of Similar Nature of Work - "The tenderer should have completed the work of supply and installation of Local Area Network (LAN) or Gigabit Passive Optical Network (GPON)".	No	No	Allowed (Mandatory)

Submission of Document Verification Certificate

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Please submit a certificate in the prescribed format (please download the format from the link given below) for verification / confirmation of the documents submitted for compliance of eligibility / qualifying criteria. Non submission of the certificate, or submission of certificate either not properly filled in, or in a format other than the prescribed format shall lead to summary rejection of your offer. (Click here to download the Format of Self Certificatio)	No	No	Allowed (Mandatory)

5. COMPLIANCE

Commercial-Compliance

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	For Schedule of Work item no. 1, the make in india content should be greater than 20%	Yes	Yes	Allowed (Mandatory)
2	For Schedule of Work item no. 3,4,5,6,7,8,11,12,13,15,17,27,32 & 33 the make in india content should be greater than or equal to 50%	Yes	Yes	Allowed (Mandatory)
3	Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.	No	Yes	Allowed (Optional)

General Instructions

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	For those conditions for which standard formats have been given in the uploaded documents titled Formats for uploading of various format.The information should only be submitted in these standard formats.	No	No	Not Allowed
2	Rates are inclusive of all taxes/octroi,license fee, royalty charges etc legally leviable by state , Central Govt and/or any other local authority.	No	No	Not Allowed
3	Certificates from private individuals for whom such works are executed being executed is not acceptable.	No	No	Not Allowed
4	Tenderers are required to submit authenticated certificate along with the tenders from officers of govt or semi-govt/public sector undertaking under whom the work has been executed indicating there in the name of work executed, value of works/payment details and period during which completed. Such certificate should have signature and seal of the concerned officer. in the absence of such certificate the tender may not be considered.	No	No	Not Allowed
5	Tenderer shall submit all the documents in support of minimum eligibility criteria/ credentials along with the tender offer. no document in support of minimum eligibility criteria/credential will be considered /accepted /entertained after closing of tender and the decision will be taken based on the document submitted by the tenderer along with the offer only.	No	No	Not Allowed

**RDSO HQ-S AND T/RDSO
TENDER DOCUMENT**

Tender No: STTTMSRDSOGPON-20221

Closing Date/Time: 02/03/2023 15:00

6	For those conditions for which standard formats have been given in the uploaded documents titled Formats for uploading of various format.The information should only be submitted in these standard formats.	No	No	Not Allowed
---	--	----	----	-------------

Special Conditions

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Submission of AMOU with OEM of equipment with in 30 days, after issue of LOA in any case the MOU shall be submitted alongwith submission of performance guarantee.	No	No	Not Allowed
2	In Case Tenderer face to supply the MOU with in 60 days of issue LOA his contract will be terminated.	No	No	Not Allowed

Technical-Compliances

S.No.	Description	Confirmation Required	Remarks Allowed	Documents Uploading
1	Submission of details of the qualification and experience of the personal identified for execution of work.	Yes	No	Allowed (Mandatory)
2	Submission of list of construction machinery, tools & plants, test & measuring instruments etc. required for execution of work.	Yes	No	Allowed (Mandatory)
3	MTCTE certificate should be attached for schedule of work item no. 3 & 17.	Yes	Yes	Allowed (Mandatory)
4	All the Technical specifications mentioned in Annexure 'A' of Tender document shall be jointly certified by Bidder and OEM.	Yes	Yes	Allowed (Mandatory)
5	Tenderer shall also submit all mandatory documents as mentioned in SN-17 of Chapter III Special Condition of Contract of Tender Document at the time of submission of bid, else the offer of tenderer shall be treated as rejected.	Yes	Yes	Allowed (Mandatory)

6. Documents attached with tender

S.No.	Document Name	Document Description
1	GPONTender_1.pdf	GPON Tender

This tender complies with Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017 and amendments/ revisions thereof.

As a Tender Inviting Authority, the undersigned has ensured that the issue of this tender does not violate provisions of GFR regarding procurement through GeM.

Signed By: VIJAY GARG

Designation : Dir Tele-I