

## INVITATION OF BIDS FOR THE SUPPLY OF COPPER CABLES

1. Proposals are invited from the interested bidders for the enclosed scope of work in ***TWO part.***
2. The scope of the work includes the Supply of Armoured PIJF copper cables of different capacities(10P,20P,50P,100P,200P) and 5 pair armoured FRLS copper cable at SDSC SHAR for Telecommunications purpose (SPAG project) as mentioned in the specifications.
3. This RFP is divided into three Parts as follows:
  - A. **Part I** – Contains General Information and Instructions for the Bidders about the RFP and also Standard Conditions of RFP, which will form part of the Contract with the successful Bidder
  - B. **Part II** – Essential details of items required, such as technical specifications,
  - C. **Part III** – Contains Evaluation Criteria and Annexures.
4. This RFP is being issued with no financial commitment and SDSC SHAR reserves the right to change or vary any part thereof at any stage. Buyer also reserves the right to withdraw the RFP, should it become necessary at any stage.

### 5. **BID SUBMISSION**

The Tenders authorized in online (GeM) on or before the open authorization date and time only be considered as valid tenders. Physical copy of the tender will not be considered, even if before the bid submission date. Bids shall be submitted in GeM only.

The techno-commercial bid should contain the following:

- (a) Submission of bid letter along with one set of proposal document (RFQ) duly signed and stamped as token of acceptance.
- (b) Bill of material with Make and Model no. of each item with commercial terms, GST, duties, exemption certificates.
- (c) A Technical compliance statement for each item in Bill of Material as per the proforma attached along with technical data sheet/literature highlighting the compliance to specifications. Deviations, if any, shall be brought out clearly.
- (d) Documentation (Product Brochures, leaflets, manuals & related technically supporting documents with respect to the products offered)
- (e) ***Certificate from the Original Equipment Manufacturers (OEM) that the bidder is an authorized dealer / agent for the OEM shall be submitted.***
- (f) Any other relevant document which strengthens supplier's claim with respect to this bid.
- (g) ***Any bids/offers with price details in Techno-Commercial Offer (Part –I & II) shall be rejected.***
- (h) ***In order to qualify the bid, the Vendor must submit all the relevant standard test certificates/data sheets which complies with the technical specifications of each type of cable in this RFP.***

**5.1. PRICE PART OF THE BID FOR THE WORK**

- a) Unit rate for each of the item shall be indicated separately. The rate quoted shall be on **FOR DESTINATION BASIS**. Even unloading of the material at our site shall be your responsibility at your cost. Thus, transportation of material from your works to SDSC SHAR and unloading at our site shall be the responsibility of tenderers.
- b) The taxes applicable for supply shall be ***indicated separately in terms of percentage in the price bid***. If the offers submitted by the tenderers are silent on taxes, it will be presumed that quoted rates are inclusive of taxes & duties and no claim in this regard will be entertained later.
- c) **Supplier shall quote for the entire bill of material. If not quoted in full, the offer may be subjected for disqualification.**
- d) **Order will not be split. Overall lowest will be recommended.**

**PART I – GENERAL INFORMATION & STANDARD CONDITIONS OF RFP**

S.No	Description	Vendor Compliance
1.	<b>Prices quoted should be on the basis of F.O.R. SDSC SHAR, Sriharikota,</b> The purchaser will not pay separately for transit insurance. All risks in transit shall be exclusively of the contractor and the purchaser shall pay only for such stores as are actually received in good condition in accordance with the contract.	
2.	<b>LIQUIDATED DAMAGES:</b> In the event of the Supplier failing to supply the item within the delivery period specified in the contract agreement or in extension agreed thereto, the Department shall reserve the right to recover from the Supplier as liquidated damages, a sum of <b>0.5</b> percentage per week or part thereof of the undelivered portion of the total contract price of equipment. The Total liquidated damages shall not exceed the <b>10.0</b> % of the total Contract.	
3.	<b>OFFER VALIDITY:</b> Bid shall remain valid for acceptance for a period of <b>3 months</b> from the due date of submission of the Bid. The Bidder shall not be entitled during the said period to revoke or revise his Bid or to vary the Bid except and to the extent required by SDSC SHAR in writing. Bid shall be revalidated for extended period as required by SDSC SHAR in writing. In such cases, unless otherwise specified, it is understood that validity is sought and provided without varying either the quoted price or any other terms and conditions of Bid finalized till that time.	
4.	<b>GST:</b> Please mention the applicable GST percentage with HSN/SAC code	
5.	<b>INCOME TAX:</b> Income tax at the prevailing rate and as applicable from time to time shall be deducted from the supplier's bills as per Income Tax Act. And a certificate will be issued (TDS Certificate).	
6.	<b>DELIVERY SCHEDULE:</b> The supply of the items shall be completed within <b>12 weeks</b> from the date of placement of the order.  The time for the date of delivery of the stores stipulated in the purchase order shall be deemed to be the essence of the contract and delivery must be completed not later than the date(s) specified therein. Failure to do so, without adequate justification may involve cancellation of the contract at the discretion of purchaser.	
7.	<b>RISK COVERAGE:</b> The Supplier shall arrange comprehensive risk coverage at his own cost covering the value of items including transportation to the site from manufacturer's works. The period of such coverage shall be up to contractual completion period or any extension granted by Department thereof.	
8.	<b>WARRANTY:</b>  The bidder should provide <b>warranty</b> for the cables for a period of minimum one year from the date of acceptance of cables at our end.	

S.No	Description	Vendor Compliance
9.	<b>MODE OF PAYMENT:</b> Our Bankers are State Bank of India, SDSC SHAR, Sriharikota – 524 124. You may furnish your banker details for transferring the payments through ECS mode	
10.	<b>TERMS OF PAYMENTS:</b> General guideline TERMS OF PAYMENTS are as indicted below. Any deviation to these payment terms to be brought out. <b>FOR SUPPLY OF EQUIPMENT / MATERIAL:</b> 100% payment shall be made after receipt and acceptance of materials at our site by CLIP at SDSC SHAR for the actual quantity of cable supply.	
11.	<b>BANK GUARANTEE: (ePBG):</b> ePBG @ 3% of the order value shall be submitted immediately after release of Contract on Rs.100/- Non-judicial stamp paper from a Nationalised/Scheduled bank valid till the completion of total contractual obligation (i.e., supply period + warranty period + 60 days).	
12.	Bidder shall note that the conditional discounts would not have edge in the evaluation process of tenders.	
13.	Non-acceptance of any conditions where ever called for related to guarantee or warrantee, performance bank guarantee, liquidate damages are liable for disqualification of bids.	
14.	<b>General Terms &amp; conditions for Bidders:</b> For this procurement, bids from Class-I & class-II Local Suppliers are admissible. Hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments: (a) Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance Under Public procurement division for the General Financial rule (GFRs). (b) Class-I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50%, as defined under order. I Class-II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but	

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	<p>less than 50%, as defined under this Order</p> <p>(d) Verification of local content:</p> <p>(i) The Class I local supplier/ Class- II local supplier at the time to tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for Class- I local supplier / Class II local supplier as the case may be. They shall also give details of the location(s) at which the local value addition is made.</p> <p>(ii) In case bid value is in excess of Rs. 10 Cr., Class-I local supplier / Class-II local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.</p> <p>(iii) False declarations will be in breach of the code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (GFR) for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the general Financial Rules along with such other actions as may be permissible under Law.</p> <p>(iv) A supplier who has been debarred by any procuring entry for violation of this order shall not be eligible for preference under this order for procurement by any other procuring entity for the duration of the debarment.</p> <p>I The percentage of local content should be specifically mentioned in the offer, without which it will be summarily rejected.</p> <p>(f) Preference will be given to Class-I Local supplier and in their absence, Class-II Local supplier will be considered.</p>	
15.	<b>Quality:</b> Materials used in the installation will be new and exclusively developed, produced and supplied to meet site requirements.	
16.	<b>Safety:</b> All equipment shall be complete with approved safety devices.	
17.	Test Certificates, wherever necessary, should be forwarded along with supplies.	
18.	The tenderer shall at all times indemnify the Purchaser against all claims which may be made in respect of the stores for infringement of any right protected by the patent Registration of design or Trade Mark and shall take all risks of accidents or damage, which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all means used by him for the contract.	
19.	<p><b>ARBITRATION:</b></p> <p>In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution</p>	

S.No	Description	Vendor Compliance
	satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be English only. Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the DEPARTMENT or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.	
20.	<b>FORCE MAJEURE:</b> Should a part or whole work covered under this P.O be delayed due to reasons of Force Majeure which shall include legal lockouts, strikes, riots, civil commotion, fire accident, quarantines, epidemic, natural calamities and embargoes the completion period for work, equipment referred to in this agreement shall be extended by a period not in excess of the duration of such Force Majeure. The occurrence shall be notified within reasonable time.	
21.	<b>PACKING, FORWARDING &amp; TRANSPORT:</b> The tenderer will be held responsible for the stores being sufficiently and properly packed for transport, to withstand transit hazards and ensure safe arrival at the destination. The packing, marking of packages and transport to the destination (SDSC SHAR) shall be done by and at the expenses of the tenderer. All the costs relevant shall be included in the quotation.	
22.	<b>OEM Certificate:</b> In case the Bidder is not the OEM, the agreement certificate with the OEM for sourcing the items shall be mandatory.	
23.	<b>Earliest Acceptable Year of Manufacture.</b> Items which are to be supplied shall be manufactured not before 31.03 2023.	
24.	The following information/documents are to be furnished online wherever applicable. (a) Product literature	
	(b) Core banking account number	

S.No	Description	Vendor Compliance
	(c) PAN details in quotation and invoices	
	(d) GST Registration details.	
25	<b>Pre- Delivery inspection:</b> Bidder shall arrange for the Inspection of items at factory site/online video mode before the dispatch of the items as per the standard Quality Assurance Plan and the dispatch of the items shall be made only after obtaining the clearance from Pre- Delivery inspection team of SDSC SHAR.	

## PART II

### ESSENTIAL DETAILS OF ITEMS REQUIRED

#### 1. Requirement of the cables:

S.No	Description of the cable	Quantity in kms
1	200 pair, 0.5mm diameter, PIJF armoured copper cable (single strand)	1.5 km
2	100 pair, 0.5mm diameter, PIJF armoured copper cable (single strand)	1 km
3	50 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand)	4.5 kms
4	20 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand)	3 kms
5	10 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand)	2 kms
6	5 pair, 0.5mm diameter, Armoured FRLS copper cable (Single strand)	3 kms

**Note:**

Cable Drums are non-returnable.

#### 2. Specifications of PIJF (polythene insulated jelly filled) armoured copper cables for telecom

S.No	Description	Specifications	Vendor Compliance (yes/No) /Remarks
1.	Copper cable	Polythene Insulated Jelly filled armoured Telecom cable	
2.	Applicable Standards	Generally configurable to DOT TEC GR/CUG-01/03 Aug 2003.	
3.	No. of pairs with length a) 200 pair b) 100 pair c) 50 pair d) 20 pair e) 10 pair	1.5 kms 1km 4.5 kms 3 kms 2 kms	
4	Conductor a) Diameter b) Shape c) Material	0.5mm, Solid- Circular Solid Annealed high conductive Copper	
5	Insulation a) Grade b) Oxidation	Polythene insulating grade Anti-oxidant/copper inhibitor	



	c) Sheath d) Colour coding e) Thickness f) Spark test	Polythene material As per table 2 of TEC GR/CUG-01/03 Aug 2003. Uniform for entire cable length As per Electrical data table 2(b)	
6	Twining / Pairing  a) Twisting  b) Capacitance unbalance c) Cross talk	 Uniform for entire cable length complying to TEC GR/CUG-01/03 Aug-2003(Clause 5.1 of TEC GR mentioned that the lay length of any twisted pair shall not exceed 150mm)  As per Electrical data table 2(b) As per Electrical data table 2(b)	
7	Units: a) No of pairs b) Unit identification c) Colour of binder d) Group Twinning	10,20,50,100 and 200 Pairs Coloured binder As per Table-3 of TEC GR/CUG-01/03 Aug-2003. 1) 10P contains 1 unit of 10P 2) 20P contains 1unit of 20P 1) 50P contains 5 units of 10P 2) 100P contains 5units of 20P 3) 200P contains 4units of 50P	
8	Filling Compound- Petroleum Jelly  a) Compatibility  b) Material  c) Homogenous	 Compatible with polythene insulation, binders and tapes  It shall be of homogenous and uniformly mixed material containing an anti-oxidant and water-resistant compound.  shall not contain dirt, metallic particles or other foreign matter.	
9	Core Wrapping a) Tape   b) Jelly	A closed helical or longitudinal lapping of a non – hygroscopic and non-wicking polyester tape shall be laid over the cable core.  Impregnated or flooded with jelly to meet the water penetration test requirements.	

	c) flooding compound	Application of a flooding compound below and above the core wrapping tape is recommended.	
10	Moisture barrier / Screen		
	a) Tape	Polythene coated aluminum tape shall be applied longitudinally on the core with a minimum overlap of 3 mm.	
	b) Size	The thickness of the aluminum tape shall be 0.3 mm $\pm$ 15% extruded over it any suitable method.	
11	Sheath		
	a) Type	polythene grade and containing a suitable anti-oxidant system confirming to BS 6234.	
	b) Nature	Reasonable circular, and free from pin holes, joints and other defects	
	c) Diameter over sheath for 10 pair cable	Shall not exceed 11mm (Table-7 of TEC GR/CUG-01/03 Aug-2003)	
	d) Diameter over sheath for 20 pair cable	Shall not exceed 17mm (Table-7 of TEC GR/CUG-01/03 Aug-2003)	
	e) Diameter over sheath for 50 pair cable	Shall not exceed 22mm (Table-7 of TEC GR/CUG-01/03 Aug-2003)	
	f) Diameter over sheath for 100 pair cable	Shall not exceed 28mm (Table-7 of TEC GR/CUG-01/03 Aug-2003)	
	g) Diameter over sheath For 200 pair cable	Shall not exceed 37.5mm (Table-7 of TEC GR/CUG-01/03 Aug-2003)	
	h) Minimum thickness	Shall not be less than 75% of nominal specified (As per Table-6 of TEC GR/CUG-01/03 Aug-2003.)	
12	Bedding tape	Polythene tape or polypropylene tape shall be applied helically over the sheath.	
13	Armouring: 1) Material 2) Type 3) Size (Thickness)	Galvanized steel tape Helical (double) (Cl 11.3 of TEC GR) 0.5mm $\pm$ 10%	
14	Jacket: 1) Material 2) Thickness	Solid polythene confirming to BS-6234 Shall not be less than 1.4mm	

	3) Diameter over Jacket	a) For 10P, shall not exceed 20.2mm b) For 20P, shall not exceed 24mm c) For 50P, shall not exceed 29mm d) For 100P, shall not exceed 36mm e) For 200P, shall not exceed 45.5mm (note: a,b,c values are as per Table-7 of TEC GR/CUG-01/03 Aug-2003.	
15	Packing a) Cable Length   b) Wounding  c) Sealing  d) Stampings	1) drums shall have cables of length 1000 meters +/- 10% or as per nominal length mentioned in Table-1 of TEC GR/CUG-01/03 Aug-2003.  2) Cable shall be wound on strong wooden drums.  3) ends of the cable shall be sealed by enclosing them in rubber or PVC caps.  4) hot stamping with authorities of SDSC SHAR stamp at the ends shall be done.	
16	Marking a) The following information shall be stenciled on the drums,   b) The following information should be engraved on the sheath throughout the length.  c) Marking intervals	1. Manufactures name 2. No. of pairs and dia of conductor 3. Length of cable on the drum 4. Direction of rotation of the drum 5. Drum number 6. Year of manufacture 7. Approximate gross weight  1. Manufactures name 2. No. of pairs and dia of conductor 3. Length (sequential marking) 4. Year of manufacture "TELECOM SDSC" should be engraved on the sheath throughout the length  The marking shall be at intervals of one meter and shall be throughout the length. The running length marking is critical.	

17	<p><b>Inspection and Testing</b></p> <p><b>Inspection</b></p> <p>a) Sampling</p> <p>b) Quantity</p> <p><b>Testing</b></p> <p><b>Mechanical Test</b></p> <p><b>Electrical Test</b></p> <p>1) Low frequency (audio frequency) range tests</p> <p>2) High frequency (150KHz) range tests:</p>	<p>cable drums shall be chosen at random from the lot for taking samples to do the mechanical and electrical test.</p> <p>Minimum 50% of the ordered quantity shall be tested with the presence of SDSC SHAR authorities.</p> <ol style="list-style-type: none"> <li>1. Polythene for conductor insulation</li> <li>2. Dielectric constant or permittivity</li> <li>3. Volume resistivity of petroleum jelly</li> <li>4. Permittivity of petroleum jelly</li> <li>5. Thickness of Poly-Al tape</li> <li>6. Thickness of Sheath</li> <li>7. Diameter over Sheath</li> <li>8. Variation between the maximum and minimum diameter over sheath at any cross section.</li> <li>9. Elongation and tensile strength of conductor insulation</li> <li>10. Thickness of conductor</li> <li>11. Annealing of conductor</li> <li>12. Cable bend test</li> <li>13. Water penetration test</li> </ol> <ol style="list-style-type: none"> <li>1. Continuity of conductors</li> <li>2. Conductor resistance</li> <li>3. Resistance unbalance</li> <li>4. Resistance of poly-al tape</li> <li>5. Mutual capacitance</li> <li>6. Capacitance unbalance (Pair to Pair)</li> <li>7. Capacitance unbalance (Pair to Gnd)</li> <li>8. Dielectric strength (High voltage) between conductors</li> <li>9. Dielectric strength (High voltage) between all conductors and shield.</li> <li>10. Insulation resistance</li> </ol> <ol style="list-style-type: none"> <li>1. Equal level far end cross talk</li> </ol>	
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		2. Near end cross talk 3. Attenuation	
18	Other Technical terms if any	Shall comply to TEC GR/CUG-01/03 Aug-2003.	

**2(a) Mechanical data:**

S.No	Description	Specifications	Vendor Compliance
<b>1.</b>	<b>Pairs</b>		
	No of pairs	10/20 / 50/100/200	
<b>2.</b>	<b>Conductor</b>		
	a) Material	Annealed copper conductor (single strand).	
	b) Thickness	0.5 mm diameter	
	c) Annealing	Min 15% of a sample wire of 250mm long	
<b>3.</b>	<b>Insulation</b>		
	a) Material & its standard	Solid polythene confirming to ASTM D-1248 Type-II or III, Class-A cat.4 or 5 (Cl.4.0 of TEC GR/CUG-01/03 Aug.2003)	
	b) Dielectric Constant	Maximum 2.35	
	c) Tensile strength of Insulation	Min 100 kg/cm <sup>2</sup>	
	d) Elongation of Insulation	: Min 300%	
<b>4.</b>	<b>Colour scheme for core insulation</b>	As per Table-2 of TEC GR/CUG-01/03 Aug.2003	
<b>5.</b>	<b>Sheath</b>		
	a) Diameter over sheath	1) For 10Pair ≤ 11mm 2) For 20Pair ≤ 17mm 3) For 50 pair ≤ 22mm 4) For 100 pair ≤ 28mm 5) For 200 pair ≤ 37.5mm	
	b) Sheath thickness	a) 1.50 mm (min) and 2.0 mm (nom) for 10P, 20P, 50P & 100P excluding poly-Al laminate). b) 1.62 mm (min) and 2.2 mm (nom) for 200P cable (excluding poly-Al laminate).	
	c) Tensile strength of sheath	Min 70kg/cm <sup>2</sup>	
	d) Elongation of sheath	Min 300%	

6.	<b>Color of binder tap</b>	Blue, Orange, Green, Brown, Grey	
7.	<b>Filling compound</b>	Petroleum Jelly	
8.	<b>Poly – Al overlap</b>	Min 3 mm	
9.	<b>Thickness of Aluminum tape</b>	Min 0.3 mm $\pm$ 15%	

**2(b) Electrical data:**

S.No	Description	Specifications	Vendor Compliance
1.	<b>Conductor resistance</b>	86 Ohms/ km $\pm$ 6 Ohms/ km	
2.	<b>Maximum Percentage of Conductor Resistance unbalance</b>	1 ( avg ) / 2.5(Individual)	
3.	<b>Average Mutual capacitance of individual pairs at 800 to 1000 Hz</b>	52 $\pm$ 3 nF/km	
4.	<b>Capacitance unbalance (Pair to Pair)(@800- 1000Hz)</b>	$\leq$ 50 pF/Km (average)	
5.	<b>Capacitance unbalance (Pair to Gnd) (@800- 1000Hz)</b>	$\leq$ 750 pF/Km (average)	
6.	<b>Spark test:</b>		
	<b>a) Dielectric strength:</b>		
	1) Conductor to conductor	At 2.4 KV DC for 3 Sec.	
	2) Conductor to shield	At 5.0 KV DC for 3 Sec.	
	<b>b) Insulation Resistance:</b>		
	1) Conductor to conductor	Min 5000 M $\Omega$ -KM at 500 V DC-1 Min	
	2) Conductor to shield	Min 5000 M $\Omega$ -KM at 500 V DC-1 Min.	
	<b>c) Dielectric strength of the sheath</b>		
	Sheath thickness	2.0 to 2.4mm: At 17KV dc or at 11KV RMS ac	
7.	<b>Equal level far end cross talk at 150Khz (individual value)</b>	Better than 55dB/Km	
8.	<b>Near end cross talk at 150Khz (individual value)</b>	Better than 55dB/Km	
9.	<b>Maximum average Attenuation of the pairs at 150Khz at 20 deg C</b>	8.25 dB/Km	

**3. Specifications for 5 pair armoured FRLS copper cable:**

S.No	Description	Specifications	Vendor Compliance
1	Cable Type	0.5mm diameter, Armoured FRLS Telephone cable	
2	Applicable standard	GR/WIR 06/03. Mar 2002	
3	No of pairs 5 pair	3 kms	
4	<b>Conductor:</b>		
	1) Material	Solid annealed Bare copper conductor as per IS:8130 (Single strand).	
	2) Grade	Electrolytic	
	3) Diameter	0.5mm	
	4) Shape of conductor	Solid- circular	
5	<b>Insulation:</b>		
	1) Material	Extruded Polyethylene	
	2) Lay length of Twisted pair	≤ 80mm	
	3) Colour coding	As per Table-2 of GR/WIR 06/03. Mar 2002.	
6	<b>Inner sheath:</b>		
	1) Material	PVC type 'TM-2 as per IS:13176 or ST1 as per IS:5831"	
	2) Thickness	Minimum 0.65mm	
7	<b>Armouring:</b>		
	1) Material	G S Round wire (IS: 3975)	
	2) Type	Single layer	
	3) Size	≥ 0.9 mm	
8	<b>Outer Sheath:</b>		
	1) Material	Extruded FRLS PVC type-TM-2 as per IS:13176 or ST1 as per IS:5831"	
	2) Thickness	Minimum 1.24mm	
	3) Nominal diameter of overall cable	11.5 ± 2mm	

9	<b>Electrical tests:</b>		
	1) conductor Resistance	86 ± 6 ohms/km	
	2) Min Insulation resistance	50M.ohms/km	
	3) High Voltage test	2KV RMS for 1 minute.	
	4) Capacitance Unbalance(pair to pair)	Shall not exceed 230PF	
10	<b>FRLS properties</b>		
	1) Flammability test	Shall pass the test when tested as per IEC-332 Part-1	
	2) Smoke density rating	Max(60%) when tested as per ASTM D2843	
11	Packing & Delivery	Cable length of 500m +/- 10% in a single drum/reel or nominal length specified in TEC GR WIR 06/03. March 2002. Marking of the drums is as per TEC GR document.	



**PART III****EVALUATION CRITERIA & ANNEXURES****A. Minimum Qualification Criteria:**

<b>S.No</b>	<b>Qualification Criteria</b>	<b>Vendor Remarks (with supporting documents)</b>
1.1.	The bidder should have prior experience in supplying similar items. They should have supplied at private/public organizations in the last seven years.  The documentary evidence(s) like Purchase Order copies, acceptance/completion report/ user satisfaction certificate(s) with user contact details should be submitted along with the technical proposal.	
1.2.	Purchase order's in the last seven years such that any 1) One P.O with order value greater than 35 lakhs or 2) Two P.O's with order value greater than 20 lakhs each or 3) Three P.O's with order value greater than 15 lakhs each.	
1.3.	Vendor's association with OEM should be clearly brought out with documentary evidences.	
1.4.	The bidder must be in existence for a minimum of four years as on 31.03.2023.	
1.5.	Technical proposal of the bidder, which is not able to substantiate/satisfy the claims made by it with respect to the technical requirements laid down in this RFP, is liable to be rejected	
1.6.	The firm must provide a self-declaration that there is no complaint/vigilance inquiry against them in any Govt./Department /PSU and they have not been black listed by any Govt. Department/PSU.	
1.7.	Offers of those bidders taking for full scope of the work as per the requirements indicated in the RFP only will be considered.	
1.8.	IT returns shall be submitted for the last 3 financial years	

**(Authorized Signatory of Company)**

**B. Evaluation Criteria.** The broad guidelines for evaluation of Bids will be as follows:

<b>S.No</b>	<b>Description</b>	<b>Vendor Compliance</b>
<b>1.0</b>	In respect of Two-part system, the technical Bids forwarded by the Bidders will be evaluated by the Department with reference to the technical characteristics of the equipment as mentioned in the RFP. The compliance of Technical Bids would be determined on the basis of the parameters specified in the RFP. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.	
<b>2.0</b>	The Vendor must submit all the relevant standard test certificates/data sheets which complies with the technical specifications of each type of cable in this RFP.	
<b>3.0</b>	During evaluation, SDSC SHAR may request Bidder for any clarification on the bid, additional documents.	
<b>4.0</b>	The OEM shall be in manufacturing since 05 years (as on the closing date for submission of Bids). The OEM to submit self-certification on the Letter head.	
<b>5.0</b>	SDSC SHAR reserves the right to reject any bid if technically/commercially not meeting the requirement/terms & conditions. Such decisions by the SDSC SHAR shall bear no liability whatsoever consequent upon such decision.	
<b>6.0</b>	All OEM to give an affidavit declaring that they are not supplying any equipment that has been manufactured by 3rd party that is Blacklisted by any Government Department in India or any Government Globally as per GFR2017 Clause 144 (xi) and neither do they get the products manufactured from any of the above companies, else they are liable to be disqualified irrespective of the models offered.	
<b>7.0</b>	<b><i>Total price inclusive of all taxes and duties, if any, will be considered for arriving L1 and awarding the purchase order as per the procedures. Split order will not be awarded.</i></b>	

(Authorized Signatory of Company)

**Annexure -I****NAME OF THE ITEM :** \_\_\_\_\_

\_\_\_\_\_

**NAME OF BIDDER :** \_\_\_\_\_**EXCEPTIONS AND DEVIATIONS**

In line with Proposal Document, Bidder may stipulate Exceptions and deviations to the Proposal conditions if considered unavoidable.

SL. NO	Reference Specification in		Dept. Specification	Offered Specification	DEVIATION
	PAGE NO	CLAUSE NO			

**NOTE :**

Any deviations taken by the Bidder to the stipulations of the Proposal document shall be brought out strictly as per this format and enclosed along with the bid.

Any deviations not brought out as per this Proforma and written elsewhere in the Proposal document shall not be recognized and the same is treated as null and void.

Any willful attempt by the Bidders to camouflage the deviations by giving them in the covering letter or in any other documents that are enclosed may render the Bid itself non-responsive.

**(Authorized Signatory of Company)**

**TO BE SUBMITTED ALONGWITH TECHNICAL BID****Annexure -II****ACCEPTANCE OF TERMS AND CONDITIONS BY THE VENDOR**

We hereby agree to all the terms and conditions as given in Tender Notice No. \_\_\_\_\_ dated: \_\_\_\_\_ for Supply of copper cables at SDSC SHAR as per tender specifications.

**Company Seal****(Authorized Signatory of Company)**

Place : \_\_\_\_\_

Date : \_\_\_\_\_

**TO BE SUBMITTED ALONG WITH TECHNICAL BID****Annexure -III****CERTIFICATE TO BE FURNISHED BY THE VENDOR**

1. The items once ordered will be subjected to an inspection by the Department CLIP team at factory site/online video mode before the dispatch of the items as per the Pre-Delivery Inspection clause of this tender document. The specifications of the items will be in conformity with the details provided by the user and as per given specifications.
2. We confirm that we abide by the delivery schedule as laid out in tender enquiry.

**Company Seal****(Authorized Signatory of Company)**

Place : \_\_\_\_\_

Date : \_\_\_\_\_

## Annexure -IV

**BILL OF MATERIAL (unpriced)**

S.No	Description of Items to be supplied	Units	Qty	Vendor Compliance	Remarks/Vendor to Specify Make
1.	200 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand).	km	1.5		
2.	100 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand).	km	1		
3.	50 Pair , 0.5mm diameter, PIJF armoured copper cable (Single strand)	Km	4.5		
4.	20 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand)	km	3		
5.	10 Pair, 0.5mm diameter, PIJF armoured copper cable (Single strand)	Km	2		
6.	5 pair, 0.5mm diameter, Armoured FRLS copper cable (Single strand)	km	3		

**Signature of Authorized Person with Seal**

**TO BE SUBMITTED ALONG WITH TECHNICAL BID****Annexure -V****CHECK LIST**

<b>S.No</b>	<b>Description</b>	<b>Compliance</b>
1.	The detailed scope of work and technical specifications are under stood and price was quoted accordingly.	Yes / No
2.	Validity of Offer is 3 months	Yes / No
3.	Supporting documents is attached for Minimum Evaluation Criteria	Yes / No
4.	Declaration of Make in India content (MII as per point no :14)	Yes / No
5.	OEM authorization letters and Existing of OEM in copper cables manufacturing since 05 years is attached	Yes / No
6.	GST to be indicated in % if not mentioned it shall be assumed that the price quoted are inclusive of taxes	Yes / No
7.	Delivery Schedule is acceptable	Yes / No
8.	Accepted the Department Payment Terms	Yes / No
9.	Warranty after the receipt and acceptance for a period of minimum 12 months	Yes / No
10.	3% of the order value shall be submitted as e-PBG, valid till the completion of total contractual obligation (i.e. Supply period plus Warranty period plus 60 days).	Yes / No
11.	Liquidated Damages clause acceptable	Yes / No

**Signature of Authorized Person with Seal**

**Annexure -VI****PRICE BID Format:****(To be supplied along with price bid)**

S.NO	Item Description	Unit cost/km	Quantity In km's	Total Cost
1	200 Pair, 0.5mm diameter PIJF armoured Copper Cable (single strand)		1.5	
2	100 Pair, 0.5mm diameter PIJF armoured Copper Cable (single strand)		1	
3	50 Pair, 0.5mm diameter PIJF armoured Copper Cable (single strand)		4.5	
4	20 Pair, 0.5mm diameter PIJF armoured Copper Cable (single strand)		3	
5	10 Pair, 0.5mm diameter PIJF armoured Copper Cable (single strand)		2	
6	5 Pair, 0.5mm diameter Armoured Fire Retardant Low Smoke (FRLS) Copper Cable (single strand)		3	
	Total cost of cables supplied			
	GST for the supplied items			
	Grand total cost			

**Signature of Authorized Person with Seal**