

## **Request for Proposal**

# **Supply, Installation and Commissioning of Hub equipment(s) for ROT/Non-Interactive Punjab Tele-Education network**

**Punjab ICT Education Society  
(PICTES)  
2021-22**

O/o Director Public Instructions (Secondary Education), Punjab

4<sup>th</sup> Floor, Vidya Bhawan, E-Block  
Phase-8, S.A.S. Nagar (Mohali)  
Contact No. – 0172-5218801 (Edusat), 5212319  
Email: [edusat.punjab@punjabeducation.gov.in](mailto:edusat.punjab@punjabeducation.gov.in)

## DEFINITIONS

Unless the context otherwise requires, the following terms whenever used in this tender and contract have the following meanings:

- “Client” or “DPI” or “DPI (SE)” means Director Public Instructions (Secondary Education), Punjab.
- “PICTES” means Punjab Information & Communication Technology Education Society.
- “ROT” Receive only Terminal
- “SIT” Satellite Interactive Terminal
- “Department” or “DSE” means Department of School Education.
- “State HUB” means Head Quarters of Punjab ICT Education Society where the Studios/Hub have been established and running at Phase-8, SAS Nagar
- "Contract/Agreement/Contract Agreement" means the agreement to be signed between the successful Vendor and client.
- “Bidder” or “Vendor” means firm / company / business entity / Consortium of firms who submits bid in response to this tender.
- “Tender evaluation committee/committee” means the committee constituted by Education Department for evaluation of bids.
- “Contract” means the contract entered into by the parties with the Client for supply, install, repair & maintenance of hardware/software with the entire documentation specified in the tender separately for the Project.
- “Similar work” refers to the similar type of SATCOM project.
- “State” means State of Punjab.
- “GCC” mean General Contract Conditions.
- “Proposals” or “Bids” means proposal or bid submitted by Vendors in response to this tender issued by the Client for selection of HSMP.
- “INR” means currency in Indian Rupees.
- "SLA" means Service Level Agreement.
- “Three Financial Years” means FY 2017-18, 2018-19& 2019-20.
- “DTE” means Department of Technical Education
- “DHE” means Department of Higher Education.
- “DME” means Department of Medical Education and Research.
- “eRA” or “RA” means Reverse Auction (Online Live Interactive)

## CONTENTS

<b>Document Control Sheet</b> .....	4
<b>Guidelines for online tendering procedure</b> .....	5
<b>1.0 Introduction:</b> .....	6
<b>2.0 Scope of Work:</b> .....	7
<b>3.0 Terms and Conditions:</b> .....	8
<b>Annexure-1</b> .....	15
<b>Technical Specifications</b> .....	15
<b>Annexure-2</b> .....	18
<b>Price bid Format</b> .....	18
<b>Performa 'I'</b> .....	19
<i>BID PROPOSAL SHEET</i> .....	19
<b>Performa 'II'</b> .....	21
<i>PARTICULARS OF VENDOR</i> .....	21
<b>Performa 'III'</b> .....	22
<i>Special Power of Attorney</i> .....	22
<b>Performa 'IV'</b> .....	23
<i>(Turnover of Vendor)</i> .....	23
<b>Performa 'V'</b> .....	24
<i>Prior Experience</i> .....	24
<b>Performa 'VI'</b> .....	25
<i>Affidavit of Self Declaration</i> .....	25
<b>Performa 'VII'</b> .....	26
<b>PAN, TAN, GST number</b> .....	26

## Document Control Sheet

1	<b>Tender No.</b>	Tender ID: 2021_DSE_67053_1 Ref ID. PICTES/EDUSAT/2021-22/02
2	<b>Description</b>	Request for Proposal Supply, Installation and commissioning of Hub equipment(s) For ROT/Non-Interactive Punjab Tele-Education network
3	Start date & time of sale of tender (Only available in downloadable form at website mentioned)	As mentioned on the eproc website
4	Last Date and Time for submission of Queries/Clarifications	As mentioned on the eproc website
5	Date and Time for Pre-Bid Meeting	As mentioned on the eproc website
6	Last date and time for submission of bids	As mentioned on the eproc website
7	Date and time of opening of Pre-Qualification cum Technical bid	As mentioned on the eproc website
8	Date of Opening of Commercial bids	To be intimated later
9	Date of Reverse Auction	To be mentioned on the eproc website after completion of the Commercial bid process.
10	<b>Address for Communication</b>	PICTES O/o Director Public Instruction (SE), 4 <sup>th</sup> Floor, VidyaBhawan, E-Block Phase-8, S.A.S. Nagar (Mohali) <b>Contact No.- 0172-5218801, 0172-5212319</b>
11	<b>Location of tender document</b>	Tender document can be downloaded from the website: <a href="https://eproc.punjab.gov.in">https://eproc.punjab.gov.in</a> and <a href="http://www.ssapunjab.org">www.ssapunjab.org</a>
12	<b>Cost of RFP document &amp; Mode of Payment</b>	Rs. 1,000/- (Rs. One Thousand Only) through online mode only.
13	<b>Earnest Money Deposit (EMD) &amp; Mode of Payment</b>	Rs. 50,000/- (Rs. Fifty Thousand Only) through online mode only.  Exemption for MSME as prescribed in the law of the land.
14	<b>Contact details</b>	Email: edusat.punjab@punjabeducation.gov.in

## **Guidelines for online tendering procedure**

For participating in the above e-tendering / Reverse Auction process, the HMSPs shall have to get themselves registered with <https://eproc.punjab.gov.in> and also get user ID and Password. Class-3 Digital Signature is mandatory to participate in the e-tendering process.

Interested Vendors can purchase the tender document online from the website.

Vendor may also find the latest Contact information for the above process on their website.

## 1.0 Introduction:

Introduction	Noted (Yes / No)
<p>The Tele-Education network of Punjab (Nodal agency PICTES) is planning to upgrade the Receive Only Terminals (ROT) network for supporting educational needs of Punjab state. Punjab Tele-Education Network is operational in Ku-Band and has 3 interactive channels and 1 broadcast (ROT) channel comprising 3.8m Ku-band HUB, 3 Teaching end studios (Analog Output), 516 SITs and 3289 ROTs.</p> <p>The Interactive part of the Hub (inclusive of 516 SITs) is non-functional and presently, the transmission is made available on ROTs only. The Analog output from teaching end /studio is connected to Encoder (at present Scopus/Codico E-1000) through Composite Video (CV) and analog XLR ports for video and Audio respectively in the Hub rack.</p> <p>Presently, the 16W Agilis BUC and LNB have gone faulty and the transmission is through L- Band Encoder-cum-Modulator (Single unit) and 40WSSPA (make CPI).</p>	
<p>Out of the presently field installed 3289 ROTs, 500 STB support DVB-S and the rest 2789 STB support both DVBS-2 &amp;DVB-S reception. At present, the transmission is in DVB-S standard however, PICTES desires to build the capacity for DVB-S2 standard also.</p> <p>The objective of this proposal is to procure, install and Commission of new Equipment(s) in ROT Chain of HUB for transmission to existing 3289 Receive only Terminal (ROT) network, as per Scope of Work &amp; Terms &amp; Conditions of this proposal.</p>	

## 2.0 Scope of Work:

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

Sr. No.	Scope of Work for the Vendor	Compliance (Yes/No) / Noted	Remarks, if any
2.1	Supply, Installation and Commissioning of Equipment as per specifications, & other details given in <b>Annexure-1</b> .		
2.2	Vendor to prepare the Acceptance Test Plan (ATP) document in mutual agreement with the PICTES. The document shall cover, but not limited to the following: <ul style="list-style-type: none"><li>• Block Diagram</li><li>• Brief description of each test detailing test method and expected outcome.</li><li>• Functional tests for equipment to be supplied and installed with co-located ROT &amp; few other remote ROTs across state as well.</li><li>• Test and measurement equipment to be arranged by vendor during installation and ATP.</li></ul>		
2.3	Vendor to impart operations training to the personnel working in Punjab ICT Education Society (EDUSAT Wing), for equipment that shall be supplied, installed and commissioned. Necessary standard operating procedures, training, documentation, Diagrams, etc. should also be provided to the PICTES without any extra cost.		
2.4	Vendor should provide minimum one-year standard warranty for the equipment supplied.		
2.5	Vendor has to configure, install & commission the supplied material in mutual agreement and discussion with PICTES. Transmission parameters will be provided during installation & commissioning of the equipment.		

### 3.0 Terms and Conditions:

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
3.1	It is a turnkey activity for supply, installation, commissioning & training by a Prime Vendor. Dependency on any other sub-vendors/sub-contractors shall be managed by the Prime Vendor, hereinafter referred as Vendor.		
3.2	If so required, vendor may visit the existing Hub location at PICTES, SAS Nagar, prior to submission of bid.		
3.3	Vendor to submit the BID in two parts: <b>Part-1: Techno-commercial Bid:</b> Vendor should provide point-to-point compliance as per Scope of work, Terms & Conditions & Specifications, Clauses and Annexures of the RFP. This part shall also contain copy of the Price bid (Part-2) but with the prices masked (No prices should be visible in Part-1). <b>Part-2: Commercial/Price bid:</b> Vendor to provide the prices as per <b>Annexure-2</b> . Vendors should clearly mention all applicable taxes.		
3.4	Vendor must be either the OEM or an authorized representative of the OEM or the System Integrator, either of the three could provide letter of undertaking confirmation of Technical specification & provide services after sale for the Equipment(s) to be supplied. Vendor to submit the OEM Authorization certificate/letter along with the Part-1 of the Bid.		
3.5	The quoted price should be valid for minimum 90 days.		
3.6	Vendor may take part in pre-bid meeting, which may be arranged at the PICTES premises in person or through Video conference to seek clarifications, if any. The date of the pre-bid meeting shall be communicated at the appropriate time through the website.		
3.7	After pre-bid meeting, the PICTES reserves the right to issue corrigendum/addendum through website.		
3.8	<b>Delivery Details:</b> Delivery Location for the Equipment: Vendor to deliver the material at Hub site of PICTES, at SAS Nagar.		
3.9	Vendor has to obtain the Certificate of delivery of material at Hub location from the PICTES/In-charge/Coordinator.		
3.10	Vendor shall coordinate with PICTES for obtaining the shipping authorization, any document related to movement of the material, if required.		
3.11	Vendor has to extend necessary support to PICTES to obtain regulatory clearances/licenses, in case required.		
3.12	<b>Delivery Period:</b> All activities defined under scope of work (2.1, 2.2, 2.3 and 2.5) should be completed within 120 days from the date of acceptance of Purchase order by the vendor.		
3.13	<b>Payment Terms:</b>		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
3.14	<p><b>Capital Expenditure</b></p> <ul style="list-style-type: none"> <li>80% of the value of material delivered at EDUSAT Hub of PICTES, SAS Nagar shall be made after successful delivery of above said material.</li> <li>Remaining 20% payment will be made within three months of the complete installation, commissioning and training.</li> </ul>		
3.15	<p>Payments shall normally be made within 30 days of submission of invoices along with certificates signed &amp; duly certified by authorized official of PICTES, SAS Nagar.</p>		
3.16	<p><b>Liquidated Damage (LD) Clause for initial supply &amp; installation:</b></p> <p>In the event, vendor fails to complete the activities, due to reasons attributable to vendor, under scope of work (2.1, 2.2, 2.3 &amp; 2.5) with in the delivery period, PICTES shall have the right to recover from the vendor, Liquidated Damages (LD), a sum at the rate of 0.5% per week of order value of the materials and services undelivered up to maximum of 10% of the value of undelivered materials and services.</p> <p>If all items are not supplied or partially supplied even after the period of late delivery charges, PICTES further reserve the right to blacklist the supplier.</p> <p><b>Liquidated Damage (LD) Clause for the Equipment during Warranty period:</b></p> <p>Vendor shall attend to complaint logged, identify, repair/replace the faulty item and make the Network operational within 2 working days from date of complaint lodging in case of faults which only calls for on-site repair. Permitted down time will be up to 7 working days for major failures which requires faulty items to be moved for repairs and temporary arrangement of alternate working items.</p> <p>For each subsequent week of delay attributable to vendor, after applicable down time from the date of complaint lodging, penalty of 0.5% of the total order value will be charged. Maximum Penalty calculated will be capped to 10% of the total order value. If the successful tenderer fails to rectify the fault or redress the complaint, same clause of penalty shall apply up to the maximum 10% of the total order value. PICTES further reserve the right to blacklist the supplier.</p>		
3.17	<p><b>Force Majeure:</b> Should a part or whole of the supplies &amp; services covered in this contract be delayed due to reasons of force majeure which shall include Lock-outs, general strikes (not limited to the contractor's establishment), riots, civil commotion, fire accidents, acts of God, war, stoppage of deliveries by Government, the schedules referred in the RFP shall be extended by a period(s) not in excess of duration of such force majeure event as per notified by GOI. Each party undertakes to</p>		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
	<p>advise the other as soon as it becomes aware of the circumstances of such force majeure event in writing So that actions under the such provisions can be mutually reviewed and agreed upon between Vendor and PICTES.</p> <p>If during the covid pandemic period any relaxation is granted by Gol/Govt. of Punjab the same shall be made applicable.</p>		
3.18	<p><b>Bank Guarantee as Security:</b> The successful Party/Bidder shall be required to furnish Bank Guarantees of 10% of the Price-Bid.</p> <p>Bank guarantees have to be provided to ensure satisfactory performance during of the period of the contract. The Performance Bank Guarantee of the party should be valid upto two months after the expiry of the warranty period (Warranty period will start from the date of installation and acceptance test).</p> <p>Bank Guarantee can be forfeited by giving one-month notice in the following cases:</p> <ol style="list-style-type: none"> <li>1. When the terms and conditions of contract are breached/infringed.</li> <li>2. When contract is terminated due to non-performance of the vendor</li> <li>3. The decision of DPI (SE) in this regard shall be final.</li> </ol> <p>The validity of the bank guarantee shall be 1 year 6 months. i.e. 120 days delivery period + 1 year warranty period + 2 months extra period. Totally 545 days.</p>		
3.19	<p><b>Arbitration:</b></p> <p>A steering group shall be formed comprising of authorized representative of DPI (SE) and the Vendor. The group shall tackle the implementation related, operational issues, and any frontline disputes. The Vendor and DPI (SE) shall make every effort to resolve any disagreement or dispute arising between them amicably.</p> <p>Only in situations where such disputes do not get amicably resolved even after 15 days from the commencement of such informal negotiation between the two parties, either party may require that the dispute be referred for resolution to the formal mechanisms that may include, but are not restricted to the ones specified below: -</p> <ol style="list-style-type: none"> <li>i. In case of all disputes or differences arising out of the contract, the matter shall be governed by Arbitration and Conciliation Act 1996, amended in the year 2015.</li> <li>ii. All disputes are referable to SAS Nagar/Chandigarh courts only.</li> </ol>		
3.20	<p><b>Indemnity Clause:</b> Vendor will indemnify the PICTES/Punjab ICT Education Society/Department of School Education by way of Indemnity Bond against any action, claim or proceedings</p>		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
	relating to infringement of all or any of the prevailing laws like workman's Compensation Act 1923, Contract Labor (Regulation and Abolition) Act 1938, Industrial Disputes Act 1947, Employee's State Insurance Act 1952 during the currency of the order or any other Act specifically not mentioned. PICTES or any other government body/users shall not be responsible for any injury or loss of life to any of the vendor's personnel deployed for carrying out this work.		
3.21	Vendor must have average annual turnover of Rs. 1.0 Crore (One Crore) turnover per year in the 3 financial years. (FY 2017-18, 2018-19 & 2019-20) CA Certificate to be enclosed along with balance sheet PICTES may review: Revenue requirement may be reduced/ avoided/ removed/relooked for wider participation, if need be. Authentic certificate from the practicing fellow member of Institute of Chartered Accountant of India (FCA) confirming the turnover. <b>Performa 'IV'</b> . Balance Sheet to be attached as proof for Reference.		
3.22	Vendor should have been operating profitably for the three financial years as on 31 <sup>st</sup> March2020. Certificate from the practicing member of Institute of Chartered Accountant of India (FCA). <b>Performa 'IV'</b> . Balance Sheet to be attached as proof for Reference.		
3.23	The Vendor must have executed/executing at least one or two similar work(s) worth amounting to a total of minimum <b>Rs. 40 Lac</b> for Govt. Sector/ PSUs/ reputed institutions/ Large corporates in the last 5 years up to the date of publication of this RFP.  Attach proof of certificates of running/completion satisfactorily of these projects from respective clients. <b>Performa 'V'</b> .		
3.24	<b>Earnest Money Deposit (EMD)</b>  a) The Vendor shall furnish, as part of the Pre-Qualification Bid cum Technical bid, an Earnest Money Deposit (EMD) as mentioned in document control sheet.  b) The EMD shall be in Indian Rupees and shall be submitted online.  c) EMD of all unsuccessful Vendors would be released by DPI (SE) after award of contract to the successful Vendor. EMD will be valid for 3 months and the same will be released to the successful Vendor within 30 days after the submission of Bank Guarantee (BG) & signing of Contract, whichever is earlier.  d) The EMD amount is interest free and will be refundable to the unsuccessful Vendors without any accrued interest on it.  e) The EMD lying with the DPI (SE) in respect of other tender/ Tender Document/ RFP/ Expression of Interest etc. awaiting		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
	<p>approval or rejected or on account of contracts being completed, will not be adjusted towards EMD for this Tender Document.</p> <p>f) The Earnest Money will be forfeited on account of one or more of the following reasons: -</p> <ul style="list-style-type: none"> <li>i. Vendor withdraws its Bid during the validity period specified in Tender Document.</li> <li>ii. Vendor does not respond to requests for clarification of its bid.</li> <li>iii. Vendor fails to provide required information during the evaluation process or is found to be non-responsive.</li> </ul> <p>In case of a successful Vendor, the said Vendor fails to sign the Agreement in time; or furnish Bank Guarantee(security)</p> <p>Exemption for MSME as prescribed in the law of the land.</p>		
3.25	<p><b>Termination of Work Order for convenience:</b> The PICTES reserves the right to terminate, by prior written 1-month notice, the whole or part of the contract, at any time for its convenience. The notice of termination shall specify that termination is for the PICTES's convenience, the extent to which performance of work under the work order is terminated, and the date upon which such termination becomes effective.</p>		
3.26	<p>Power of attorney (if any) in the name of the person(s) authorized by the Vendor or Board resolution as authorized signatory is one of the members of board resolution to sign bid documents. <b>Performa 'III'</b></p>		
3.27	<p>Vendor should be registered either under</p> <ul style="list-style-type: none"> <li>• Companies Act, 2013 or</li> <li>• Partnership firms registered under Limited Liability Partnerships (LLP) Act, 2008 or Partnership Firms registered under Indian Partnership Act, 1932.</li> </ul> <p>Certificate of Incorporation or Partnership Deed</p>		
3.28	<p>The Vendor shall not be under a declaration of ineligibility for corrupt or fraudulent practices.</p> <p>The Vendor should also not be blacklisted by any State Govt./ Central Govt./ PSU for any reason. <b>Performa 'VI'</b></p>		
3.29	<p>The Vendor must have valid PAN/TAN/GST number issued by the concerned department. Vendor must submit copy of PAN/TAN/GST numbers &amp; <b>Performa 'VII'</b></p>		
3.30	<p>DPI (SE) reserves the right to reject or accept or withdraw the tender in full or part without assigning any reasons thereof and revising quantity as per requirement of department. No dispute of any kind can be raised against the rights of DPI(SE) in any court of law or elsewhere. The bidder will accept all conditions of</p>		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
	the bid document unconditionally or depending upon the decisions of the Tender Committee. Conditional bid shall be rejected straight away		
3.31	DPI (SE) may, at its own discretion, extend the date for submission of bids. In such case all rights and obligations of the DPI (SE) previously fixed subject to the deadline will thereafter be subject to the deadline as extended.		
3.32	<p>This invitation for bids is open to all bidders who fulfil pre-qualification criteria as specified under this RFP. Formation of consortium (maximum of 2 members) for this project is allowed. First party/Primary Bidder would be completely responsible for discharging of all responsibilities related to the bid finalization and successful implementation of project (if selected as the "Service Provider").</p> <p>This clause may be clearly mentioned along with the required Lead Role and Responsibility of the First party/Primary Bidder for the fulfillment of the Project under the consortium in the Consortium Agreement to be submitted by the bidder in this case.</p>		
3.33	In the event, if any bidder submits false information the department will take necessary penal action including forfeiture of EMD, PBG and blacklisting of the bidder(s).		
3.34	Bidders shall quote only those products in the bid which are not obsolete in the market and have at least 3 years residual market life i.e. the offered product shall not be declared end-of-life by the OEM before this period.		
3.35	Order passed by Govt. of Punjab (Department of Industries and Commerce) i.e. Public procurement "Preference to make in Punjab order 2019" dated- 3rd September 2019 are applicable on this bid".		
3.36	Relaxation in Experience and past turnover would be given to the Start-ups based in Punjab as per the Notification issued by Govt. of Punjab (Department of Industries and Commerce) regarding "Relaxation of Norms in Public Procurement for Start-ups based in Punjab" dated 16-08-2019".		
3.37	<p><b>REVERSE AUCTIONING (eRA)</b></p> <p>The following procedure and terms &amp; conditions shall be applicable for Reverse Auction:-</p> <p>i In case the no. of eligible bidders is equal to 4 or more than that, the H1 (Highest) bidder shall not be</p>		

Sr. No.	Description	Compliance (Yes/No) / Noted	Remarks, if any
	<p>eligible to participate in further process of the tender and his tender shall be rejected.</p> <p>ii Online Reverse Auction Bid Decrement value, date and time of Auction, shall be available on eProcurement portal only after completion of the Financial Bid. The bidders may quote the bids from their own offices /place of their choice. Internet connectivity is to be ensured by bidders themselves.</p> <p>iii Only those bidders who are considered technically and commercially eligible, shall be eligible to participate in RA process.</p> <p>iv The bidders are advised not to wait till the last moment to enter their bid so as to avoid complications related to internet connectivity, network problems, system crash down, Power failure etc. No request for extension in time period of RA due to any of the above reasons shall be entertained by PICTES.</p> <p>v If no bidder participates in the Reverse Auction, the rates secured in the Commercial Bid or L1 rates shall be considered for placing the order.</p> <p>vi After completion of online Reverse Auction, the Closing Price (CP) shall be considered as L1 rate for further processing.</p>		

## Annexure-1

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### Technical Specifications

#### 1.0 Integrated Satellite Modulator and Encoder with interfaces

Sr. No	Generic specifications	Compliance (Yes/No) / Noted	Remarks, if any
1	Integrated Satellite Modulator and Encoder with necessary interfaces (to accept analog Audio/Video inputs from the Studio)		
2	The offered Encoder cum Modulator should be a standalone unit with easy to use front panel control or web based GUI.		
	<u>Encoder related features/Specifications:</u>		
3	Should be capable of MPEG-2 and MPEG-4 AVC SD/HD 4:2:0, 8-bit encoding or better		
4	Audio encoding of up to eight stereo or 16 mono channels		
5	Should support AAC/HE-AAC or equivalent for Audio Codec		
6	Inputs: composite PAL video BNC input SD-SDI (SMPTE259M) serial digital video. Analog stereo pair XLR input In case composite video and XLR audio input ports are not available on the offered Encoder cum Modulator, for interfacing analog Video and Audio outputs from the Studio, suitable convertors to be supplied.		
7	Should preferably have web-based control and monitoring facilities.		
	<u>Modulator related features/specifications:</u>		
8	Output frequency: 950-1700 MHz (L-Band)		
9	Output level:-35 to +5 dBm or better		
10	Supported standards: DVB-S & DVB-S2		
11	10MHz Reference: a. Provision for Internal reference b. Provision for external reference input c. External reference output is Optional		
	<u>Other features/specifications:</u>		
12	Power: For operations in Indian standard power supply. (230 +/- 10% VAC; 47-53 Hz). If needed, appropriate power adapter should be included.		
13	Operating Temperature: 0° to 50° C		
14	Humidity: Up to 85 % non-condensing or better		
15	19" Rack Mountable (Preferred)		
16	Suitable cables with appropriate length to be supplied by the vendor.		

## 2.0 40W Ku Band BUC:

Sr. No	Description		Compliance (Yes/No) / Noted	Remarks, if any
1	Technology	GaN		
2	Transmit Frequency	13.75 to 14.50 GHz (Ext. band)		
3	Input Frequency	L-band (950 MHz-1700 MHz)		
4	Saturated Output Power	46 dBm (Minimum)		
5	Linear Gain (Small signal gain)	Minimum 65 dB		
6	Gain flatness	+/- 2 dB or 4 dB peak to peak maximum over full band		
7	Gain variation over Temp.	+/- 2.0dB or better		
8	Third order IMD (two tones, 5 MHz apart)	-25 dBc or better at 3 dB output power backoff		
9	Spurious	-55 dBc Max at Plinear (Plinear is the highest output power at which IMD specifications are met)		
10	VSWR	Input: 1.5:1 or better Output: 1.5:1 or better		
11	IF Input Interface	N-Type Female		
12	Output interface	WR75G		
13	Reference Frequency	10 MHz internal reference with Autosensing mechanism for 10 MHz External reference input		
14	Phase Noise	at 1KHz offset : -70 dBc/Hz max at 10KHz offset : -80 dBc/Hz max at 100KHz offset : -90 dBc/Hz max		
15	External reference Frequency	10 MHz		
16	External reference Power Level	Suitable window within -10 to 5 dBm		
17	External reference switching	BUC Should automatically switch to internal reference, if external reference is removed		
18	Monitoring & Control	Monitoring & Control is required through Ethernet / RS232		
19	Operating Temperature	-30 to +55 degree C		
20	Humidity	Up to 100%		
21	Weather Protection	As per IP65 or equivalent/better		
22	Primary Power	For operations in Indian standard power supply. (230 +/- 10% VAC; 47-53 Hz). If needed, appropriate power adapter should be included.		
23	Mounting kit	Mounting kit along with necessary accessories to be provided for mounting BUC on 3.8M Ku-band Antenna		

## 3.0 Ku-Band PLL LNB:

Sr. No	Description		Compliance (Yes/No) / Noted	Remarks, if any
<b>RF Specifications</b>				
1	RF Frequency (Input)	10.95 – 11.70 GHz		
2	Output Frequency (L-Band)	950 to 1700 MHz		

3	LO Frequency	10 GHz		
4	LO Stability	± 1 PPM or better		
5	Gain @ 25 °C	60 dB typical		
6	Reference	Internal		
7	Noise Figure @ 25 °C	≤ 1.0 dB		
8	Input Interface	WR-75G		
9	Output Interface	N Type female or F type female		
10	Power Requirement	Within +12 to +24 VDC		
11	Operating Temperature	-30 to +55 degree C		

#### 4.0 Wave Guide Assembly & Cables

Sr. No	Description	Compliance (Yes/No) / Noted	Remarks, if any
1	Two numbers (02) of L-band RG11 cables of approx. 50 meters length each. (Vendor shall visit the premises and provide appropriate length)		
2	Two number (02) of BNC cable of approx. 30 meters length each. (Vendor shall visit the premises and provide appropriate length)		
3	Two numbers (02) of flexible waveguides of approx. 1 meter length each, for connecting BUC to the antenna feed		

## Annexure-2

(To be filled in the BOQ and uploaded in Commercial Bid of e-Tendering Portal)

### Price bid Format

**Table 1: (For L1 Evaluation)**

Sr. No.	Description for Items	Qty	Unit Price (in Rs.)	Amount without taxes (in Rs.)	Taxes (in Rs.)	Total Amount with taxes (in Rs.)
1	Equipment					
1.1	<b>Integrated Satellite Modulator and Encoder with interfaces</b>	1				
1.2	40W Ku- Band BUC	1				
1.3	Ku-Band PLLLN	1				
2	Wave Guide Assembly & Cables					
2.1	Waveguide with assembly accessories	2				
2.2	L-Band Cable,	2				
2.3	BNC-BNC cable	2				
3	<b>Service charges for Installation, Commissioning &amp; training etc.</b>	1				
4	<b>Miscellaneous items:</b> Vendor to specify any other additional items/activities, if required for I&C like connectors etc. (Vendor to suggest required quantities and will be considered as 1 Lot)	1 Lot				
<b>L1 Evaluation total</b>						

**Note:**

1. The selected bidder, however, shall be responsible for complete activities as listed out in this tender.
2. The price bid in table 1 shall be considered for L1 evaluation. PICTES may place order for less/more items/quantities as per its discretions.
3. During the concurrence/execution of the order if there is any changes in taxes as determined by Govt. of India the same shall be made applicable on PICTES.

## Performa 'I'

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### *BID PROPOSAL SHEET*

Vendor's Proposal Reference No. & Date :

Vendor's Name & Address :

Person to be contacted :

Designation :

Telephone No.                      Mobile No. :

Email :

To:

Director Public Instructions (SE),  
4th Floor, Block- E, Vidhya Bhawan, Phase-8,  
SAS Nagar.

**Subject: Supply, Installation and Commissioning of Hub equipment(s)for ROT/Non-Interactive Punjab Tele-Education network.**

Dear Sir,

**1.0** I undersigned Vendor, having read and understand the specifications and all bidding documents in respect of maintenance of hardware item do hereby propose to provide maintenance services as specified in the bidding document.

#### **2.0 PRICE AND VALIDITY**

2.1 All the prices mentioned in our proposal are in accordance with the terms as specified in bidding documents. All the prices and other terms and conditions of this proposal are valid for a period mentioned in the RFP from the last date of submission of bids.

2.2 In exceptional circumstances, the DPI(SE) may solicit the Vendor's consent for extension of the period of validity. The request and the response thereto shall be made in writing. Extension of validity period by the Vendor shall be unconditional. A Vendor can refuse the request without forfeiting the Earnest Money Deposit. A Vendor accepting the request shall not be permitted to modify its Bid any way. The bid security shall also be suitably extended.

2.3 We do hereby confirm that our bid prices include all taxes and cess including Income Tax.

2.4 We have studied the Clauses relating to valid Indian Income Tax and hereby declare that if any Income Tax, Surcharge on Income Tax and any other Corporate Tax is altered under the law, we shall pay the same.

#### **3.0 EARNEST MONEY**

We have submitted the required earnest money through e-payment gateway. It can liable to be forfeited in accordance with the provisions of bid document.

#### **4.0 DEVIATIONS**

We declare that all the services shall be performed strictly in accordance with the fine-tuned Technical specifications. Further we agree that additional conditions, if any, found in the proposal documents, other than those stated in deviations Performa, shall not be given effect to.

**5.0 BID PRICING**

We further declare that the prices stated in our proposal are in accordance with your terms & conditions in the bidding document.

**6.0 QUALIFYING DATA**

We confirm having submitted in qualifying data as required by you in your bid document. In case you require any further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

**7.0 CONTRACT PERFORMANCE SECURITY**

We hereby declare that in case the contract is awarded to us, we shall submit the performance Guarantee Bond in the form of Bank Guarantee as per terms of bid document.

**8.0** We hereby declare that our proposal is made in good faith, without collusion or fraud and the information contained in the proposal is true and correct to the best of our knowledge & belief.

**9.0** Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.

**10.0** We are not blacklisted by any Government/Semi Government organization.

**11.0** We understand that you are not bound to accept the lowest or any bid you may receive.

Thanking you,  
Yours faithfully,

(Signature)

Date:

Name:

Place:

Designation:

Business Address:

Seal

## Performa 'II'

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

(Vendors are required to submit on their letterhead)

### PARTICULARS OF VENDOR

Detail of Vendor						
	First Party/Primary Bidder			Second Party/Secondary Bidder (In-case applied under consortium)		
Name						
Address						
Year of establishment						
Telephone		Mobile			Mobile	
E-mail						
Details of Authorized Person						
Name						
Address						
Telephone		Mobile				
E-mail						

As of the date the information furnished in all parts of this form is accurate and true to the best of my knowledge.

**Witness:**

**Signature** \_\_\_\_\_

**Signature** \_\_\_\_\_

**Name** \_\_\_\_\_

**Name** \_\_\_\_\_

**Designation** \_\_\_\_\_

**Designation** \_\_\_\_\_

**Address** \_\_\_\_\_

**Address** \_\_\_\_\_

**Company** \_\_\_\_\_

**Company** \_\_\_\_\_

**Date** \_\_\_\_\_

**Date** \_\_\_\_\_

**Company Seal**

(With name & designation of the person signing the bid)

## Performa 'III'

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### *Special Power of Attorney*

Know all me by these presents that we <<name of company>> incorporated in India under the Companies Act, 1956 and having its registered office at <<registered office address>>(India) (Hereinafter called the "Company") DOTH hereby nominate, constitute and appoint <<name of person in whose favour authority is being made under the attorney >>, <<Designation of the person>>, s/d/o <<father's name of the person>>, to be true and lawful attorney in fact and at law of the Company for and in the name and on behalf of the Company, to do, execute and perform all or any of the following acts, deeds, matters and things namely:-

1. To appear for and represent the Company to all intents and purposes in connection with the matters pertaining to signing and submission of tender BID NO: .....for selection of Vendor for <<project name>> and all affairs ancillary or incidental thereto.

2. AND the Company hereby agree that all acts, deeds and things lawfully done by the said attorney shall be construed as acts, deeds and things done by the Company itself on the above matter and the Company hereby undertakes to ratify and confirm all and whatever its attorney shall lawfully do or cause to be done for and on behalf of the Company by virtue of the powers hereby given.

In witness whereof <<name of person authorized to execute the attorney on behalf of Company>>, <<Designation of the person>> of the Company acting for and on behalf of the Company under the authority conferred by the <<reference of body/ notification/ authority orders like Board of Directors of the Company>> in its << reference/ number/ meeting held on>> dated <<date of reference>> has signed this Power of Attorney at <<place>> on this day of <<day>><<month>>, <<year>>.

The signatures of <<name of person in whose favour authority is being made under the attorney >> given below are hereby certified.

<<signature, name & designation of person executing attorney and name of company>>

WITNESS:

<<signature, name & designation of person witness to this attorney>>

<<signature & name of the person in whose favour authority is being made under the attorney >>

CERTIFIED:

<<signature, name & designation of person executing attorney and name of company>>

## Performa 'IV'

To be filled, Signed, scanned on the letterhead of the Chartered Accountant and Uploaded in Pre-Qualification of e-Tendering Portal

*(Turnover of Vendor)*

S.no	Financial Year (FY)	Turnover of Vendor in the three financial years (in INR)	Profit for the three financial years (in INR)	Net Worth (in INR)
1	FY 2019 – 20			
2	FY 2018 – 19			
3	FY 2017 – 18			

I have attached copy of **Balance Sheet** for the reference.

I hereby declare that the above information is true to best of my knowledge.

**(Name & Signature of CA)**

**Date:**

**Place:**

## Performa 'V'

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### *Prior Experience*

Using the format below, provide information in respect of work done of similar nature executed by the company.

S.No	Particulars	Details of first supply Order	Details of Second supply Order
1	Details of client along with address, telephone		
2	Contract no. & date		
3	Order Value (Rs. Lacs)		
4	Work / Job description		
5	Date of order issued		
6	Date of completion		

I hereby declare that the above information is true to best of my knowledge.

**(Signature of Authorized person)**

**Date:**

**Place:**

## Performa 'VI'

(To be filled, Signed, scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### *Affidavit of Self Declaration*

*(Vendors are required to submit the declaration on their letterhead)*

To,

**Director Public Instructions (SE),  
4<sup>th</sup> Floor, Block-E, Vidya Bhawan,  
Phase-8, SAS Nagar.**

**Sub: Declaration for not being ineligible due to corrupt or fraudulent practices or blacklisted by any Government or Public Sector Units in India.**

Dear Sir,

I (Name of the official.....) (Designation.....) hereby declare that my company has not been blacklisted /banned by any Government / Semi Government organizations for any reason. I further certify that I am competent authority of my company/firm has authorized me to make this declaration.

That in the event of any decrease in the quoted rates, we undertake to reduce rates correspondingly from the date the rates have been reduced.

I affirm that the Director Public Instructions (SE), Punjab is at liberty to take action against me/ the company represented by me, if any information submitted by me as required in RFP document proves to be wrong at any point of time. I/We have not been blacklisted by any State/Semi Government organization

#### **Deponent**

Verification:

I, the above named deponent do hereby verify, that the contents of the above affidavit are true and correct to the best of my knowledge and belief, no part of it is false.

**Deponent**

## Performa 'VII'

(To be filled, signed scanned and Uploaded in Pre-Qualification of e-Tendering Portal)

### PAN, TAN, GST number

Using the format below, provide information in respect of PAN, GST Registration of the company

S. No	Particulars	Details (To be filled in CAPITAL letters)	Proof of documents attached (Yes / No)	Page No.
1.	PAN number			
2.	TAN Number			
3.	GST Number			

I hereby declare that the above information is true to best of my knowledge.

**(Signature of Authorized person)**

**Date:**

**Place:**