

NATIONAL UNIVERSITY OF MODERN LANGUAGES  
SECTOR H-9, ISLAMABAD

TENDER NOTICE

Proposals as per PPRA (rule 36 B) are invited from well reputed and GST registered firms for up-gradation of existing FM Radio equipment at Main Campus, Islamabad.

The tender documents, wherein terms & conditions and other details are given, can be obtained from office of the undersigned OR can be downloaded from NUML's website ([www.numl.edu.pk](http://www.numl.edu.pk)) against payment of non-refundable fee of Rs. 5,000/- in shape of Bank Draft/Pay Order. Bank draft/Pay Order must be provided at the time of bid submission and bid will not be accepted without non-refundable fee. 5% earnest money of the project will be provided in the shape of separate Bank draft/CDR.

The tender must reach "**Administration Branch**" Jinnah Block in sealed envelope at 1100 hrs on 2<sup>nd</sup> April 2024 which will be opened on the same day at 1130 hrs in presence of the available bidders.

The University reserves the right to reject all the bids or proposals at any time prior to the acceptance of a bid or proposal.

Director IT  
Tele: 9265100  
Ext: 2234

# **Tender Document For Up-Gradation of FM Radio Equipment (NUML)**

**Date of Issuance: 15<sup>th</sup> March, 2024**

**Date of Submission: 2<sup>nd</sup> April, 2024**



**Email: [radionuml@numl.edu.pk](mailto:radionuml@numl.edu.pk)**

**Web: [www.numl.edu.pk](http://www.numl.edu.pk)**

**Tel. No.: 051-9265100-109 Ext. 2230, 2233-34**

**NATIONAL UNIVERSITY OF MODERN LANGUAGES  
Sector H-9, Islamabad**



## Table of Contents

INVITATION TO BID.....	3
[For FM Radio Upgradation] .....	3
1.0 SCOPE OF WORK.....	4
2.0 GUIDELINES FOR THE PROJECT.....	4
3.0 BIDS SUBMISSION REQUIREMENTS .....	4
4.0 SELECTION PROCEDURE .....	6
5.0 GENERAL TERMS & CONDITIONS .....	6
6.0 HARDWARE AND SERVICE REQUIREMENTS .....	7
7.0 WARRANTY .....	8
8.0 MEET OR EXCEED SPECIFICATIONS.....	8
9.0 CLARIFICATION AND AMENDMENT IN TENDER DOCUMENT .....	8
10.0 Annexure-A Technical Proposal shall be part of Technical Proposal .....	9
11.0 Annexure-B Financial Proposal shall be part of Financial Proposal (Price of each Module should be provided).....	<b>Error! Bookmark not defined.</b> 4
12.0 Annexure - C: Firm's References.....	20
13.0 Annexure - D: Technical Evaluation Criteria .....	21
14.0 Annexure - E: Specimen for Affidavit .....	22
15.0 Annexure - F: Proposal Submission Form .....	23

## INVITATION TO BID

### [For FM Radio Upgradation]

NATIONAL UNIVERSITY OF MODERN LANGUAGES (NUML) is the leading linguistic public sector university is focused on reforming the Information & Communication Technology by deploying various ICT facilities. Information Communicational Technological Infrastructure have already been established in University.

2. Bidding documents, containing detailed terms and conditions, etc. are available *at office of Director-IT, Salam Block*. Price of the bidding documents is Rs. 2500/-

3. The bids, prepared in accordance with the instructions in the bidding documents, must reach *at office of the **Director Administration, Jinnah Block, on 2<sup>nd</sup> April, 2024 at 1100Hrs***. Bids will be opened the same day at 1130Hrs. This advertisement is also available on PPRA website at [www.ppra.org.pk](http://www.ppra.org.pk) and NUML Website, [www.numl.edu.pk](http://www.numl.edu.pk).

Mohammad Raza Parwez  
Director IT, NUML  
SectorH-9, Islamabad  
Ph: +92 (51) 9265087  
Email: [dir-it@numl.edu.pk](mailto:dir-it@numl.edu.pk)



## 1.0 SCOPE OF WORK

Objective of this consolidated bidding document is to procure/install the FM Radio equipment as a turnkey project.

## 2.0 GUIDELINES FOR THE PROJECT

Bidders bid for the following items :-

FM Radio of NUML is installed with its Transmitter and Studio Room in separate blocks/buildings. The detail specification with BOQ is given below in this document.

- i. Control Switcher Panel
- ii. Captures exceptional broadcast level imagery
- iii. Desktop computer & graphic card
- iv. Blackmagic, SDI Cables & ½ Co-axial cable
- v. FM Dipole Antenna
- vi. Articulating microphone boom arm
- vii. Microphone type condenser & Goosneck Mic
- viii. Portable voice recorder
- ix. Headphones Noise Cancelling, Twisted Pair Microphone cable
- x. FM Stereo Transmitter (500 Watt)
- xi. Neutrik Professional, XLR Chassis, Connector Male & Female
- xii. Studio Panel
- xiii. Behringer Microamp
- xiv. LED
- xv. Temperature, Humidity Monitoring & Alarm Rackmount
- xvi. Nutriks Phono Panelmount Connector
- xvii. Shifting of Tower
- xviii. Installation in all aspects

## 3.0 BIDS SUBMISSION REQUIREMENTS

The objective of bid submission requirement is to provide bidders with the information to submit their bid in response of this Tender in order/sequence as set forth in this document. Bidders must follow following requirement for their proposals/bids.

Bidders must confirm the following standards in the preparation and submission of the bid.

### 3.1 PPRA rule 36 (b) shall be adopted:

**Single Stage Two Envelope bidding procedure: -**

- 3.2 PPRA rule 36 (b) least cost method shall be adopted i.e. technically qualify but financially lowest.
- 3.3 The Vendor is required to submit Technical Bid and Financial Bid in separate envelopes.
- 3.4 Bids will include the prices quoted for each equipment as at **Annexure –B** in Pak Rupees.
- 3.5 The quoted prices must include all taxes, customs and freight charges for delivery and installation of equipment at the required location as mentioned in **Annexure-A** at their own risk and cost.

- 3.6 The Bidder shall furnish earnest money equal to 5% of the total value of Bid in the form of Bank Draft/Pay Order issued by a scheduled bank of Pakistan in favour of “Rector, National University of Modern Languages”, valid for at least **six month (06 month)** and enclosed in a separate envelope along with the respective Lot of financial proposal. No Bid shall be entertained without earnest money. Earnest money of the successful bidder will be released on completion of the project.
- 3.7 The Ten percent (10%) of total contract value shall be retained as a Security, which will be released after satisfactory completion of warranty period (i.e one year)
- 3.8 Proposals sent to NUML by fax or email shall not be accepted.
- 3.9 Bidders should provide complete technical details with original printed brochure both for the equipment and services required under this Tender Document.
- 3.10 Bidders are required to submit their proposals conforming to the specifications and terms & conditions provided in this Tender Document.
- 3.11 Failure to abide by any instructions of this Tender Document may, at the NUML’s sole discretion, result in rejection of the Bidder’s Proposal and disqualification.
- 3.12 NUML has no obligation to locate or acknowledge any information in the Vendor’s Proposal that is not presented under the appropriate outline according to these instructions and at the proper location.
- 3.13 Bidder’s Proposal/Bid/Offer must be received, in writing, at National University of Modern Languages, Sector H-9 Islamabad in the office of **Director Administration, Jinnah Block, 1<sup>st</sup> Floor, Room #36**, by the date and time specified herein. NUML will not be responsible for any delays in delivery or expenses for the development or delivery of proposals. Any Proposal/Bid/Offer received after Proposal/Bid/Offer submission date and time shall be rejected.
- 3.14 Bidder must provide electronic copy of the submitted bid along with all supporting documents after relevant bid opening if asked.
- 3.15 Bidder must fully respond to each requirement within the Technical specifications by fully describing the manner and degree by which the Bid meets or exceeds said requirement(s).
- 3.16 It is responsibility of the Bidder to clearly identify all costs associated with any item or series of items in this Tender Document. The Bidder must include and complete all parts of the cost Proposal in a clear and accurate manner. Omissions, errors, misrepresentations, or inadequate details in the Bidder’s cost proposal will may be considered as valid ground for rejection of the Bidder’s proposal. Costs that are not clearly identified will be borne by the Bidder. The Bidder must complete the respective “Cost Information Submission Form” **Annexure-B** in this Tender Document, which outlines the minimum requirements for providing cost information. The Bidder should supply supporting details as described in **Annexure B**, the Cost Information Submission Form.
- 3.17 Prices quoted in the bid shall be valid for **90 days**. After the contract, firm shall not have the right to change the price. All prices must be quoted in Pak Rupees, and must clearly state all applicable taxes which must be included in quoted price.
- 3.18 All the equipment will be supplied and installed by the firm within **60 days** from the date of supply order. In case of failure to deliver in the specific time period (i.e. 60 days), a penalty @ 0.10% of the contract amount will be imposed on daily basis for the total number of days delayed. However, the penalty should not exceed 10% of the contract amount.



- 3.19 Bidders are required to fill and sign page(s) of the **Annexure-A & Annexure-B** while following the format given. Financial Proposals not following the given format may lead to the rejection of bid. Soft copy can be provided if required.
- 3.20 Bidder may can apply for more than one lot, but in that scenario, separate earnest money for each lot be submitted which must be enclosed in the Financial Proposal.
- 3.21 The University reserves the right to increase or decrease the quantity of the equipment/items while placing the order.
- 3.22 By applying in this tender, the bidder acknowledges that the quoted items, its software or hardware modules, database, definitions or support are not provided, manufactured, grown, produced, shipped from, or otherwise originate from any of the following countries; **India or Israel**.
- 3.23 Pre-conditions set by the contractor/bidder in addition to the abovementioned terms & conditions will not be accepted, and will lead to the rejection of the bid.

## 4.0 SELECTION PROCEDURE

- 4.1 NUML's intent in issuing this Tender Document to award a contract to the lowest evaluated bid and best responsive Bidder who meets required standard of specifications and other factors including the mandatory requirements as indicated in the document.
- 4.2 The firm shall have to obtain 35 marks out of 70 to qualify for inclusion in the next stage for opening financial bids. Financial bids of the firms, obtaining less than 35 marks shall not be opened.

## 5.0 GENERAL TERMS AND CONDITIONS

The following General Terms and Conditions apply to this Tender Document

- 5.1 Last date of submission of Bids is **April 2<sup>nd</sup>, 2024** at **1100** hours and the proposals will be opened on the same day at **1130** hours.
- 5.2 The bidder should be registered with Sales Tax and Income Tax Department.
- 5.3 The bidder must provide last Five (05) years experienced records / documents e.g. work orders/project completion certificate in the same field.
- 5.4 An affidavit to the effect that the firm is not blacklisted by any Government/Semi Government Organization (Specimen of Affidavit **Annexure-E**).
- 5.5 The Rector NUML reserves the right to accept/reject all bids.
- 5.6 On request by the bidders, NUML shall intimate the reasons of rejection of bids but will incur no liability on this account nor is required to justify the rejection of bids.
- 5.7 An effort by a Bidder to influence NUML, directly or indirectly **THROUGH UNFAIR MEANS** in NUML's proposal evaluation, proposal comparison or contract award decision, to meet or discuss with any NUML official unless desired by the NUML may result in rejection of the Bidder's Proposal and blacklisting for any future tender of NUML.
- 5.8 All responses to this Tender Document shall become the property of NUML.
- 5.9 NUML will not bear any expense incurred in preparation of the proposals in response to this Tender Document.
- 5.10 NUML will not allow any compensation to the Selected Bidder for any variations in the rate of exchange of rupee against dollar or any other currency. No additional claim arising out of change in legislation, exchange rate variation or any sort of taxes will be entertained.
- 5.11 The Bidders must Bid for an integrated against an Lot/item. Price comparison shall be item wise.

- 5.12 Supply, Installation, configuration, testing and commissioning of all the mentioned equipment will be responsibility of the firm. Vendor must install all equipment and components and must ensure that the equipment is integrated/operational and function properly at all variables.
- 5.13 Bids are liable to be rejected if they are not conforming to the terms, conditions and specifications stipulated in this Tender document.
- 5.14 During the examination, evaluation and comparison of the bids, the NUML at its sole discretion may ask the bidder for clarifications of their bids.
- 5.15 The amount submitted as Earnest Money shall be refunded to the unsuccessful bidders after decision of the "Tender Committee" for the award of said tender.
- 5.16 If there is a discrepancy between unit price and total price in the submitted bid which is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between the words and figures, the amount in words shall prevail. If there is a mistake in addition/ totaling, that shall be corrected.
- 5.17 The bid security is required to compensate NUML against the consequences of:
  - 5.17.1 Subsequent unauthorized variations and/or modifications of the terms of bid.
  - 5.17.2 If the bidder does not accept correction of his bid prices which is in the interest of Commission.
  - 5.17.3 Occurrence of any of such events as solely judged by NUML, will entitle NUML to forfeit the bid security.
- 5.18 Incomplete and conditional bids will not be entertained.
- 5.19 For this tender, all updates/changes shall be communicated through email.
- 5.20 In case of any dispute between the two parties of any matter arising out of after signing the contract agreement, the case shall be referred to Rector, NUML whose decision shall be final and binding on both parties.
- 5.21 NUML or its representative shall have the right to inspect and/or to test the equipment to confirm their conformity to the contract specifications. The Technical Specifications shall specify what inspections and tests NUML requires and where they are to be conducted. NUML shall notify the contractor, in writing, of the identity of any representatives entrusted for this purpose.
- 5.22 Only transactions, amendments, changes and/or variations in this Tender Document that are in writing from NUML and duly agreed upon by NUML shall be considered official. No negotiations, decisions, or actions executed by the Vendor as a result of any discussions with any NUML employee shall be considered official.
- 5.23 If the work is not executed according to the satisfaction of the NUML, the Rector NUML reserves the right to reject it altogether or impose a penalty not exceeding 10% of the total amount of contract.
- 5.24 If the work is not to the satisfaction of the NUML, the Rector NUML has the right to cancel the order, get work done by some other firm at the risk and cost of the vendor, subject to the condition that if the NUML has to pay any amount in excess of the agreed amount, the difference will be recovered from the vendor.
- 5.25 Refurbished and end of life / sale equipment shall not be acceptable.
- 5.26 The items delivered shall be according to the items mentioned in the Bid and no bidder shall be allowed to change brand name or quality of items without official approval of the Rector NUML.

## **6.0 HARDWARE AND SERVICE REQUIREMENTS**

Following are the minimum hardware and service requirements which the Selected Bidder/vendor will be required to fulfil.

- 6.1 Delivery and Installation should be at Islamabad Campus at the risk and cost of successful bidder.





- 6.2 Vendor must install all equipment and components and must ensure that the proposed equipment is fully integrated/operational and function properly at all variables.
- 6.3 Vendor must provide adequate protection to install equipment against electrical surges.
- 6.4 Vendor must ensure that all systems are in first class working condition and free of short circuits, ground loops.
- 6.5 At time of installation, Vendor must provide owner's manuals, manufacturer's data sheets, and a complete equipment list.
- 6.6 Vendor shall provide on-call support (5 days a week) including assistance with operation and maintenance of the system at respective location all free of cost for a minimum period of one year from the date of the first successful start/functioning/operation of the equipment and subsequent issuance of site acceptance.
- 6.7 A site survey may be required at no cost to NUML to determine specific project efficacy at location. Any components needed during installation resulting from failure to perform a site survey must be provided at Vendor's expense.

## 7.0 WARRANTY

Following Warranty clauses are applicable to the equipment under this tender

- 7.1 The successful Bidders shall warrant the equipment with no end of life guarantee, its components to be free from any sort of defects in material and workmanship for a minimum period of 1 year from date of complete installation, testing and commissioning shall repair or replace on a timely basis any defective component, assembly or portion free of cost. Technical support should be available on call basis.
- 7.2 The Successful Bidder will warrant that the equipment supplied under the Work Order/Purchase Order are new, un-used, and incorporate all recent improvements in design and materials and which should be of good quality as per acceptable standards. Quoted equipment should meet all design, quality and other technical requirements listed in this document or explicitly mentioned somewhere else in other such projects.

## 8.0 MEET OR EXCEED SPECIFICATIONS

For all Lots the specifications provided in this Tender Document are the minimum requirements of NUML. Bidders must meet or exceed these specifications to meet the actual requirements of this Project and its successful practical implementation.

## 9.0 CLARIFICATION AND AMENDMENT IN TENDER DOCUMENT

A bidder requiring any clarification of the Tender Document may so notify to contacts given below in writing or via email. NUML may respond in writing through email, letter or web notification to any request for clarification of the Tender Document, which are received at least seven (07) days prior to the date of Bid submission.

### **Incharge Radio & TV**

Babar Iqbal

Ph: +92333-5065560

### **Program Producer**

Shahbaz Akhtar

Sector H – 9, Islamabad

Ph: +92 0321-5080322

+92 51 9265100-109 Ext: 2233-34

Email: radionuml@numl.edu.pk

### **HoD Media & Communication**

### **Studies**

Sector H – 9, Islamabad

Ph: +92 51 9265100-109

Email: hod-mcs@numl.edu.pk





**10.0** Annexure-A Technical Proposal shall be part of Technical Proposal (data should be provided in softcopy along with page reference number of supporting documents/ manuals and also see the technical evaluation criteria- Annex "D" Serial # 3)

S.#	Lot	Item	Specification	Ref Page # of Documentary Proof	Qty	Specification Quoted by the Bidder	Comments
1.		i.	<p>a. control switcher panel virtual Streamlined structure that integrates guide switching, resource recording, webcasting, mixer, pan-tilt control, and special effects transitions.</p> <p>Support can choose PGM/PVW 4 groups of 12 downstream key settings. Support 12-channel PGM and PVW switch preview.</p> <p>Support matching Tianying 4K Fusion Media Virtual Studio. System to realize the push-pull pan and rocker effect of virtual machine position. Support 4-channel wired/wireless PTZ camera preset position, camera pan and iris zoom. Support one key FTB key black output. Support 8 Tally outputs. Provide 15PIN pan/tilt PTZ control interface.</p> <p>Or equivalent</p>		01		
		b.	<p>Camera, captures exceptional broadcast level imagery in up to UHD 60P, 4:2:2 10-bit Produces incredible depth of field with high sensitivity and low noise, even in low light Powerful image processing for</p>		02		

		exceptional results Intelligent cropping of a feed enables a single camera to produce two video feeds up to FHD Smooth, fast, and accurate autofocus with 'deep learning', head detection, eye detection and tracking Including NDI HX, SRT, FreeD, RTMP/RTMPS, RTP/RTSP, Canon XC and Standard Communication protocol NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries A host of connectors such as 12-G-SDI, 3G-SDI, HDMI, Gen lock				
		c. Blackmagic 4 SDI Input card 4k		01		
		d. SDI Cables with SDI Connector		02		
		e. FM Dipole Antenna, 4 dipole FM antenna Vertical Polarized and almost Omni Directional 2dB gain per dipole, Complete with splitter and interconnecting cables, ready to use for 500 watts		01 Set		
		f. 1/2" Co-axial cable(200M) with 4 connectors		01		
		g. Articulating microphone boom arm Durable steel construction Internal springs for silent and effortless positioning 28" maximum arm reach 5/8"-27 mic clip threading 5lb maximum weight capacity C-clamp mount (2" maximum grip) included Flange mount (with wood screws) included		05		






	h.	Microphone Type Condenser Mono/Stereo Mono Polar Pattern Cardioid Diaphragm Size .66" (16.93mm) Frequency Response 20Hz-20kHz Max SPL 130dB SPL (0.5% THD); 150dB SPL w/Pad Output Impedance 200 ohms Signal to Noise Ratio 75dB (A weighted) Self Noise 19dB (A weighted) Low Cut Filter 300Hz, -6dB/octave Pads -20dB Color Black Connector XLR & USB		05		
	i.	5.25" microphone pop filter Dual-layer 4.75" nylon mesh screen reduces vocal popping ("P-Pops") and sibilance Durable 8" gooseneck for optimal filter positioning C-clamp mount (1" maximum grip) fits most standard mic stand shafts and booms		05		
	j.	Portable hand mic recorder, with internal memory Built-in USB connector S-Microphone system. Focus and wide stereo recording, Auto voice recording reduces background noise.		01		
	k.	Bi-amplified design with 70 watts of distributed power for cohesive, accurate sound 5" low-frequency drivers with Kevlar cones for rich, defined lows 1" high-frequency drivers with natural silk		01		



		<p>domes and integrated waveguides for smooth, clear highs</p> <p>Optimized rear ports for extended low-frequency response</p> <p>Magnetic shielding eliminates interference with other electronic equipment</p> <p>XLR balanced and 1/4" balanced/unbalanced inputs for connecting mixers, amplifiers, instruments, DJ gear, and more</p> <p>Volume control (Single)</p>				
		<b>l.</b> Headphones Noise Cancelling		<b>06</b>		
		<b>m.</b> FM Stereo Transmitter (500 Watt) Frequency Range : 87.0MHz~108 MHz Frequency Range : 87.0MHz~108 MHz Frequency Setting step : 10KHz Carrier Frequency precision : $\pm 200\text{Hz}$ Audio Input Impedance : $600\Omega$ Balance Separation : 60dB Pilot Signal Modulation : 8%~10% S/N : $\geq 75\text{ dB}$ (30H~15 kHz, 100%) Audio Input Level : $\pm 10\text{dBm}$ , step 0.01dB Audio Harmonic Distortion : $< 0.05\%$ Output Load Impedance : $50\Omega$ Audio response : $\pm 0.05\text{dB}$ (30Hz~15KHz) 15.Sub-carrier Suppression : $\geq 65\text{dB}$		<b>01</b>		
		<b>n.</b> Twisted Pair Microphone Cable (100 m) is a standard diameter 2-conductor microphone cable for general purpose audio		<b>01</b>		

		applications. The high-density braided copper shield and 2 inner conductors, which are composed of 60 thin strands of copper wire, allow for maximum flexibility and reduced handling noise. The PVC outer jacket resists cracking and tearing even in sub-zero environments.				
		o. Neutrik Professional 1/4" Plugs		30		
		p. Neutrik XLR Chassis Connectors		30		
		q. Neutrik XLR Connectors Male & Female		60		
		r. Goosneck Mic		02		
		s. Studio Panel 5XLR,5Phono,5 Rj45 XLR,5Male XLR		02		
		t. USB 3.0 Extension Cable 10m		04		
		u. USB to HDMI Converter Adapter 3.0 - Black		02		
		v. Temperature, Humidity Monitoring and Alarm Rackmou		01		
		w. Nutriks Phono Panelmount Connector		20		
		x. Digital clock with seconds (Red Color)		02		
		y. Broadcast Rack 42U		01		
		z. PDU		02		
		aa. Rack mount Fan		01		
		ab. Shifting of Tower		01 Job		
		ac. Installation in all aspects		01 Job		
2.	ii.	a. <b>Desktop Computer</b> Core i7 11th Gen Built in Motherboard 750w power 16GB Ram, Samsung 980 pro SSD M2 24 inch LED Keyboard & Mouse Rackmount Case or equivalent		01		
		b. Graphic Card Nvidia 4GB DDR6		01		

*Man* *QTV* *Q*





		c.	LED Size 32" Make Orient, Ecostar, Haier HD Display or equivalent		01		
--	--	----	--	--	----	--	--

**Note:**

This project may please be completed on Turnkey basis.

Installation, configuration, testing and commissioning of all the mentioned equipment will be responsibility of the firm. Vendor must install all equipment and components and must ensure that the equipment is integrated/operational and function properly at all variables.

**11.0 Annexure-B Financial Proposal shall be part of Financial Proposal (Price of each Module should be provided)**

S.#	Lot	Item	Specification	Qty	Unit Price Pak Rs	Total Cost Pak Rs (Inclusive of Taxes)
1.	i.	a.	control switcher panel virtual Streamlined structure that integrates guide switching, resource recording, webcasting, mixer, pan-tilt control, and special effects transitions. Support can choose PGM/PVW 4 groups of 12 downstream key settings. Support 12-channel PGM and PVW switch preview. Support matching Tianying 4K Fusion Media Virtual Studio. System to realize the push-pull pan and rocker effect of virtual machine position. Support 4-channel	01		

 



		wired/wireless PTZ camera preset position, camera pan and iris zoom. Support one key FTB key black output. Support 8 Tally outputs. Provide 15PIN pan/tilt PTZ control interface. Or equivalent			
		b. Camera, captures exceptional broadcast level imagery in up to UHD 60P, 4:2:2 10-bit Produces incredible depth of field with high sensitivity and low noise, even in low light Powerful image processing for exceptional results Intelligent cropping of a feed enables a single camera to produce two video feeds up to FHD Smooth, fast, and accurate autofocus with 'deep learning', head detection, eye detection and tracking Including NDI HX, SRT, FreeD, RTMP/RTMPS, RTP/RTSP, Canon XC and Standard Communication protocol NDI is a trademark or registered trademark of NewTek, Inc. in the United States and other countries A host of connectors such as 12-G-SDI, 3G-SDI, HDMI, Gen lock	02		
		c. Blackmagic 4 SDI Input card 4k	01		
		d. SDI Cables with SDI Connector	02		
		e. FM Dipole Antenna, 4 dipole FM antenna Vertical Polarized and almost Omni Directional 2dB gain per dipole, Complete with splitter and interacting cables, ready to use for 500 watts	01 Set		
		f. ½" Co-axial cable(200M) with 4 connectors	01		
		g. Articulating microphone boom arm Durable steel construction Internal springs for silent and effortless positioning	05		

		28" maximum arm reach 5/8"-27 mic clip threading 5lb maximum weight capacity C-clamp mount (2" maximum grip) included Flange mount (with wood screws) included			
		h. Microphone Type Condenser Mono/Stereo Mono Polar Pattern Cardioid Diaphragm Size .66" (16.93mm) Frequency Response 20Hz-20kHz Max SPL 130dB SPL (0.5% THD); 150dB SPL w/Pad Output Impedance 200 ohms Signal to Noise Ratio 75dB (A weighted) Self Noise 19dB (A weighted) Low Cut Filter 300Hz, -6dB/octave Pads -20dB Color Black Connector XLR & USB	05		
		i. 5.25" microphone pop filter Dual-layer 4.75" nylon mesh screen reduces vocal popping ("P-Pops") and sibilance Durable 8" gooseneck for optimal filter positioning C-clamp mount (1" maximum grip) fits most standard mic stand shafts and booms	05		
		j. Portable hand Mic recorder with internal memory Built-in USB connector S-Microphone system. Focus and wide stereo recording, Auto voice recording reduces background noise.	01		

		<b>k.</b> Bi-amplified design with 70 watts of distributed power for cohesive, accurate sound 5" low-frequency drivers with Kevlar cones for rich, defined lows 1" high-frequency drivers with natural silk domes and integrated waveguides for smooth, clear highs Optimized rear ports for extended low-frequency response Magnetic shielding eliminates interference with other electronic equipment XLR balanced and 1/4" balanced/unbalanced inputs for connecting mixers, amplifiers, instruments, DJ gear, and more Volume control (Single)	01		
		<b>l.</b> Headphones Noise Cancelling	06		
		<b>m.</b> FM Stereo Transmitter (500 Watt) Frequency Range : 87.0MHz~108 MHz Frequency Range : 87.0MHz~108 MHz Frequency Setting step : 10KHz Carrier Frequency precision : $\pm 200\text{Hz}$ Audio Input Impedance : $600\Omega$ Balance Separation : 60dB Pilot Signal Modulation : 8%~10% S/N : $\geq 75\text{ dB}$ (30H~15 kHz, 100%) Audio Input Level : $\pm 10\text{dBm}$ , step 0.01dB Audio Harmonic Distortion : $< 0.05\%$ Output Load Impedance : $50\Omega$ Audio response : $\pm 0.05\text{dB}$ (30Hz~15KHz) 15.Sub-carrier Suppression : $\geq 65\text{dB}$	01		



		n.	Twisted Pair Microphone Cable (100 m) is a standard diameter 2-conductor microphone cable for general purpose audio applications. The high-density braided copper shield and 2 inner conductors, which are composed of 60 thin strands of copper wire, allow for maximum flexibility and reduced handling noise. The PVC outer jacket resists cracking and tearing even in sub-zero environments.	01		
		o.	Neutrik Professional 1/4" Plugs	30		
		p.	Neutrik XLR Chassis Connectors	30		
		q.	Neutrik XLR Connectors Male & Female	60		
		r.	Goosneck Mic	2		
		s.	Studio Panel 5XLR,5Phono,5 Rj45 XLR,5Male XLR	2		
		t.	USB 3.0 Extension Cable 10m	4		
		u.	USB to HDMI Converter Adapter 3.0 - Black	2		
		v.	Temperature, Humidity Monitoring and Alarm Rackmou	1		
		w.	Nutriks Phono Panelmount Connector	20		
		x.	Digital clock with seconds (Red Color)	2		
		y.	Broadcast Rack 42U	1		
		z.	PDU	2		
		aa.	Rack mount Fan	1		
		ab.	Shifting of Tower	1 Job		
		ac.	Installation in all aspects	1 Job		
2	ii.	a	<b>Desktop Computer</b> Core i7 11th Gen Built in Motherboard 750w power 16GB Ram, Samsung 980 pro SSD M2 24 inch LED Keyboard & Mouse Rackmount Case or equivalent	01		

		<b>b</b>	Graphic Card Nvidia 4GB DDR6	<b>01</b>		
		<b>c</b>	LED Size 32" Make Orient, Ecostar, Haier HD Display or equivalent	<b>01</b>		

**Note:**

This project may please be completed on Turnkey basis.

Installation, configuration, testing and commissioning of all the mentioned equipment will be responsibility of the firm. Vendor must install all equipment and components and must ensure that the equipment is integrated/operational and function properly at all variables.





## 12.0 Annexure - C: Firm's References

(To be attach with Technical Proposal)

Relevant Services Carried Out in the Last Five Years  
That Best Illustrate Qualifications

List of Project with copy of completion certificate.





### 13.0 Annexure - D: Technical Evaluation Criteria

Weight of the Technical Scoring is 100% and Breakup is given below.

Technical Evaluation				Maximum 70 Marks
S. #	Technical Evaluation	Total Marks		Marks Obtained
1.	Firms past 05 years experienced in the relevant field.	20	Must attach Documentary proof 05 Years and above = 20 Marks Less than 5 years = 0 Marks (Zero marks means technically disqualified)	
2.	Vendor's presence for Technical Support Services	20	Must attach Documentary proof Head office in Islamabad/ Rawalpindi = 20 Branch Office in Islamabad/ Rawalpindi with technical team plus Head office in Pakistan = 10	
3.	Filled Technical Sheet Attached (Annex-A) with reference Page Number	10	Fulfill the requirement	
4.	Project completed in last one year amounting Rs; 2.0 Million	20	Projects: 5 and above = 20 Marks 4 = 16 Marks 3 = 12 Marks 2 = 08 Marks 1 = 04 Marks	
<b>Total</b>		<b>70</b>		
* However, supporting documents should be provided along with Technical proposal				

14.0 Annexure - E: Specimen for Affidavit

(To be attach with Technical Proposal)

From:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

To,

NATIONAL UNIVERSITY OF MODERN LANGUAGES H-9, Islamabad

Subject: Affidavit

1. We, M/s\_\_\_\_\_ having our office at \_\_\_\_\_

hereby undertake that as a result of contract between us and NATIONAL UNIVERSITY OF MODERN LANGUAGES for the Supply, Installation, Testing and Commissioning of **Operationalization of FM Radio (NUML)** if any conflict / dispute arises regarding the execution of work, we shall not resort to any court of law. The dispute / difference, if any, shall be settled as per relevant clauses of the tender document issued by NATIONAL UNIVERSITY OF MODERN LANGUAGES vide No.\_\_\_\_\_ dated \_\_\_\_\_ 2024.

2. We, M/s \_\_\_\_\_ is not black listed by any Government/Semi Government Organization in Pakistan.

Authorized Signature

M/S\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dated\_\_\_\_\_





## 15.0 Annexure - F: Proposal Submission Form

### PROPOSAL SUBMISSION FORM

**(To be attach with Technical Proposal)**

The Director IT  
National University of Modern Languages,  
H-9, Islamabad

Sir

We, the undersigned, offer to provide the services For “Supply, Installation, Testing and Commissioning of Operationalization of FM Radio (NUML)” in accordance with your Tender Document Dated \_\_\_\_\_, and our Proposal. We are hereby submitting our Proposal, which includes this Technical proposal, and a financial proposal sealed under separate envelopes.

We understand you are not bound to accept any Proposal you receive and reserves the right to accept or reject any offer and to annul the bidding process and reject all proposals without assigning any reason or having to owe any explanation whatsoever.

The decision of evaluating committee shall be final and cannot be challenged on any ground at any forum and the evaluating committee will not be liable for any loss or damage to any party acting in reliance thereon.

We remain,

Yours' sincerely

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Address: