# KING HAMAD UNIVERSITY OF NURSING & ALLIED SCIENCES, ISLAMABAD

# **Tender Document**

"Provision Of Audio Visual Communication for educational activities for establishment of King Hamad University Of Nursing & Allied Sciences In Islamabad"

Submission Deadline: 26-07-2023 @1:30 PM

Opening of Bids: 26-07-2023 @1:30 PM

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#### **Section 1. Letter of Invitation**

1. The King Hamad University of Nursing & Allied Sciences Islamabad (M/O NHSR&C) invites sealed bids from interested firms for the "Supply, Installation & Commissioning of Smart Classrooms Solution" under the following Items.

S.No	Items	Quantity
1	Interactive Blackboard 86"	10
2	Interactive Black Board 98"	1
3	Interactive Flat Panel 70"	4
4	Open Pluggable Specifications (OPS) System	18
5	Smart LED TV 65"	1
6	Interactive Recording and Remote Lecture Solution	1
7	EPTZ Camera	1
8	Students Camera	1
9	Control pad	1
10	Sound Pickup Solution	1
11	Instructor Tracking Camera with Expansion Mic	14
12	Ceiling Speaker system with Wireless Microphone	36
13	3KVA or above Rackmount Online-UPS	12
14	Metal Rack/Cabinet with Digital Keypad/NFC lock	2
15	Hands on Training and Capacity Development	-

- 2. The bidder must be registered and duly recognized in Pakistan and be registered with FBR; possess Manufacturer's status or Authorized Distributor/Dealer status with authorization from Manufacturer/ Principal specific for this tender, with sufficient financial, technical and human resources to take up the task assigned and complete the same within prescribed time limit on the finalization of contract with M/O NHSR&C .The procurement shall be completed in according with the Public Procurement Rules.
- 3. All the firms / bidders should submit proposals as per Rule 36 (a) of PPRA Rules, 2004 (Single Stage Two Envelope Procedure). Technical Bids will be opened in the presence of bidders and committee members.
- 4. The tender documents containing detailed information, terms and conditions etc. can be obtained from the Office of Deputy Director (IT), M/o National Health Services, Regulation & Coordination, Islamabad or can be downloaded from website of M/o NHSR&C (www.nhsrc.gov.pk)
- 5. 2% of the bid will be deposited as bid Security in shape of pay order in favor of Deputy Director (IT) for the project titled "Establishment Of King Hamad University Of Nursing & Allied Sciences In Islamabad", with Financial Bid, which in case of unsuccessful tenders will be released and in case of

- successful bidders after satisfactory completion of work.
- 6. Bidder(s) interested in participating in the tender process are advised to submit their Bid Proposal(s), along with the Earnest Money amounting 2% of their Bid Value in the shape of CDR, in accordance with the instructions in this tender document enclosed with Financial Bid.
- 7. Bid Proposal(s) [Technical and Financial Separate] must reach The M/o NHSR&C) on specified Date and closing time. Any late Bid(s) shall not be accepted and returned unopened. Accepted Bids will be opened on the same day by closing time, in presence of bidders who chose to attend. In case of sudden holiday on bid opening day, bids will be opened on next working day.

The Tender shall be executed in accordance with PPRA Rule 36(b) "Single Stage, Two Envelope Procedure".

#### This advertisement is also available on M/o NHSR&C and PPRA websites

**Project Director** 

Project "King Hamad University of Nursing & Allied Sciences Islamabad (M/O NHSR&C)" 3<sup>rd</sup> Floor Kohsar Block, Secretariate Islamabad

Phone: 9216288

# **Section 2. Instruction to Bidders (ITB)**

A. GENERAL TE	RMS
1. Introduction	1.1 Bidders shall adhere to all the requirements of this ITB, including any amendments made in writing by M/O NHSR&C. This ITB will be governed under Rule 36(b) Single Stage, Two Envelope Procedure of Public Procurement Regulatory Authority.
	1.2 Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by M/O NHSR&C. The Institute is under no obligation to award a contract to any Bidder as a result of this ITB.
	1.3 M/O NHSR&C reserves the right to cancel the procurement process at any stage without any liability of any kind for M/O NHSR&C, upon notice to the bidders or publication of cancellation notice M/O NHSR&C.
2. Fraud & Corruption, Gifts and Hospitality	2.1 M/O NHSR&C strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of M/O NHSR&C vendors and requires all bidders/ vendors observe the highest standard of ethics during the procurement process and contract implementation.
	2.2 Bidders/ vendors shall not offer gifts or hospitality of any kind to M/O NHSR&C staffmembers including recreational trips to sporting or cultural events, theme parks offers of holidays, transportation, or invitations to extravagant lunches or dinners.
	2.3 In pursuance of this policy M/O NHSR&C:
	(a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question;
	(b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing M/C NHSR&C contract; or counseling or canvassing staff or elected representatives; or engaging in collusion with other bidders.
3. Eligibility	3.1 A Bidder should not be suspended, debarred, or otherwise identified as ineligible by any Government/ Semi-government/ or any other international Organization. Bidders are therefore required to disclose to M/O NHSR&C whether they are subject to any sanction or temporary suspension imposed by these organizations.
	3.2 It is the Bidder's responsibility to ensure that its employees, sub-contractors, service providers, suppliers and/ or their employees meet the eligibility requirements as established by M/O NHSR&C.
4. General Terms	4.1 The Bidder should be registered with Sales Tax and Income Tax Department
	4.2 The Bidder should have not been blacklisted by any Government/ semi-Government organization.
	4.3 An affidavit that there is no litigation against the firm.

B. PREPARATION OF BIDS		
5. General Considerations	5.1 In preparing the Bid, the Bidder is expected to examine the ITB in detail. Material deficiencies in providing the information requested in the ITB may result in rejection of the Bid.	
	5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the ITB. Should such errors or omissions be discovered, the Bidder must notify the Procurement Committee accordingly.	
6. Cost of Preparation of Bid	6.1 The Bidder shall bear all costs related to the preparation and/ or submission of the Bid, regardless of whether its Bid is selected or not. M/O NHSR&C shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process.	
7. Language	7.1 The Bid, as well as any, and all related correspondence exchanged by the Bidder and M/O NHSR&C, shall be written in the language(s) specified in the BDS.	
8. Documents Comprising the Bid	<ul> <li>8.1 The Bid shall comprise of the following documents and related forms of which details are provided in the BDS. All pages of the Bid shall be signed, stamped and properly paginated.</li> <li>a) Returnable Forms as referred in Section 6 shall be properly filled in Ink or Typed. Forms filled in using a pencil shall not be considered and substantiate the annulment of the Bid Proposal.</li> <li>b) Documents Establishing the Eligibility and Qualifications of the Bidder;</li> <li>c) Technical Proposal covering Technical Specifications and Solution Details.</li> <li>d) Financial Proposal covering Price Schedule.</li> <li>e) Bid Security, if required by BDS;</li> <li>f) Any attachments and/ or appendices to the Bid.</li> </ul>	
9. Documents Establishing the Eligibility and Qualifications	9.1 The Bidder shall furnish documentary evidence of its status as an eligible and qualified supplier, using the Forms provided under Section 6 and providing documents required in those forms. In order to award a contract to a Bidder, its qualifications must be documented to M/O NHSR&C's satisfaction.	
10. Technical Bid Format and Content	10.1 The Bidder is required to submit a Technical Bid using the Standard Forms and templates provided in Section 6 of the ITB.	
	10.2 Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by the Purchaser, at no expense to the Institute. If not destroyed by testing, samples will be returned at Bidder's request and expense, unless otherwise specified.	
	10.3 When applicable and required as per Section 5, the Bidder shall describe the necessary training program available for the maintenance and operation of the equipment offered as well as the cost to the Institute. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.	
	10.4 When applicable and required as per Section 5, the Bidder shall certify the availability of spare parts for a period of at least two (2) years from date of delivery, or as otherwise specified in this ITB.	
11. Price Schedule	11.1 The Price Schedule shall be prepared using the Forms provided in Section 6 of the ITB and taking into consideration the requirements in the ITB.	
	11.2 Any requirement described in this ITB but not priced in the Price Schedule, shall be assumed to have been included in the prices of other activities or items, as well as in the final total price.	

12. Bid Security	12.1	A Bid Security shall be provided in the amount and form indicated in the Bidding Document for Services (BDS). The Bid Security shall be valid for the duration as referred in BDS.
	12.2	The Bid Security shall be included along with the Bid. If Bid Security not found in the Bid, the Bid shall be rejected.
	12.3	If the Bid Security amount or its validity period is found to be less than what is required, The Bidder should have not been blacklisted by any Government/semi-Government organization. shall reject the Bid.
	12.4	In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their bid and the original of the Bid Security must be sent via courier or hand delivery as per the instructions in BDS.
	12.5	The Bid Security will be forfeited by M/O NHSR&C, and the Bid rejected, in the eventof any, or combination, of the following conditions:
		a) If the Bidder withdraws its offer during the period of the Bid Validity specified in
		b) the BDS, or;
		c) In the event the successful Bidder fails:
		i. to sign the Contract after M/O NHSR&C has issued an award; or
		ii. to furnish the Performance Security, insurances, or other documents that M/O NHSR&C may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
13. Currencies	13.1	All prices shall be quoted in the currency indicated in the BDS in Pak Rupees.
14. Joint Venture, Consortium or Association	14.1	If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that: (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by an intent letter or an Agreement among the legal entities duly notarized, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between M/O NHSR&C and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.
	14.2	After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association or any change in the constitution of the JV, Consortium or Association shall not be altered without the prior written consent of M/O NHSR&C/ Procurement Committee.
	14.3	The lead entity and the member entities of the JV, Consortium or Association shall abide by the provisions of Clause 15 herein in respect of submitting only one Bid.
	14.4	The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entities in the joint venture in delivering the requirements of the ITB, both in the Bid and the JV, Consortium

or Association Agreement or Intent Letter. All entities that comprise the JV, Consortium or Association shall be cumulatively subject to the eligibility and
technical qualification assessment by M/O NHSR&C as defined in Section 4: Evaluation Criteria.
A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between:
a) Those that were undertaken together by the JV, Consortium or Association; and
b) Those that were undertaken by the individual entities of the JV, Consortium or Association.
Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials.
The Bidder (including the individual members of any Joint Venture) shall submit only one Bid, either in its own name or as part of a Joint Venture.
Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:
a) they have at least one controlling partner, director, or shareholder in common; or
b) any one of them receive or have received any direct or indirect subsidy from the other/s; or
c) they have the same legal representative for purposes of this ITB; or
d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.
Bids shall remain valid for the period specified in the BDS, commencing on the Deadline for Submission of Bids. A Bid valid for a shorter period may be rejected by M/O NHSR&C and rendered non-responsive.
During the Bid validity period, the Bidder shall maintain its original Bid without any change, including the availability of the Key Personnel.
In exceptional circumstances, prior to the expiration of the Bid validity period, M/O NHSR&C may request Bidders to extend the period of validity of their Bids. Therequest and the responses shall be made in writing and shall be considered integral to the Bid.
If the Bidder agrees to extend the validity of its Bid, it shall be done without any change to the original Bid.
The Bidder has the right to refuse to extend the validity of its Bid, in which case, the Bid shall not be further evaluated.

#### 18. Clarification on ITB 18.1 Bidders may request clarifications on any of the ITB documents no later than the (from the Bidders) date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a M/O NHSR&C, staff member, M/O NHSR&C shall have no obligation to respond or confirm that the query was officially received. 18.2 M/O NHSR&C will provide the responses to clarifications through the method specified in the BDS. M/O NHSR&C shall endeavor to provide responses to clarifications in an expeditiousmanner, but any delay in such response shall not cause an obligation on the partof M/O NHSR&C to extend the submission date of the Bids, unless M/O NHSR&C deems that such an extension is justified and necessary. 19. Amendment in ITB 19.1 At any time prior to the deadline of Bid submission, M/O NHSR&C may for any reason, such as in response to a clarification requested by a Bidder, modify the ITB in the form of an amendment to the ITB. Amendments will be made available to all prospective bidders. If the amendment is substantial, M/O NHSR&C may extend the Deadline for submission of Bid to give the Bidders reasonable time to incorporate the amendment into their Bids. 20. Alternative Bids Unless otherwise specified in the BDS, alternative Bids shall not be considered. 20.1 If submission of alternative Bid is allowed by BDS, a Bidder may submit an alternative Bid, but only if it also submits a Bid conforming to the ITB requirements. Where the conditions for its acceptance are met, or justifications are clearly established, M/O NHSR&C reserves the right to award a contract basedon an alternative Bid. If multiple/ alternative bids are being submitted, they must be clearly marked as "Main Bid" and "Alternative Bid" 21. Pre-Bid Conference 21.1 When appropriate, a pre-bid conference may be conducted at the date, time and location specified in the BDS. All Bidders are encouraged to attend. Nonattendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the ITB, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/ posted as an amendment to ITB.

C. SUBMISSION AN	D OP	ENING OF BIDS
22. Bid Proposal Submission	22.1	The Bidder shall submit a duly signed and numbered all pages of the complete Bid in an Envelope sealed and marked as per ITB 22.6, and in accordance with <b>PPRA Rule 36(b)</b>
	22.2	The Outer Envelope should contain Two (02) separate sealed envelopes, one of which comprising the Forms (A – F) and supporting documents in accordance with requirements in the BDS, shall be marked as "Technical Proposal". Whereas the other envelope containing the Form G: Price Schedule Form shall be marked as "Financial Proposal" along with sealed Bid Security
	22.3	Bid can be delivered either personally, or by courier as specified in the BDS.
	22.4	The Bid shall be signed by the Bidder or person(s) duly authorized to commit

	the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Bid. There should not be errors and/ or over-writings. Corrections (if any) should be made clearly and initialed with dates.
	22.6 Bidders must be aware that the mere act of submission of a Bid, in and of itself, implies that the Bidder fully accepts the General Contract Terms and Conditions.
	22.7 Hard copy submission by courier or hand delivery allowed or specified in the BDS shall be governed as follows:
	a) The signed Bid shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail.
	(b) The Bid Proposals must be sealed and submitted in an envelope, which shall:
	<ul> <li>i. Bear the name of the Bidder;</li> <li>ii. Be addressed to KHUNAM as specified in the BDS; and</li> <li>iii. Bear a warning not to open before the time and date for Bid opening as specified in the BDS.</li> <li>If the envelope with the Bid is not sealed and marked as required, KHUNAM shall assume no responsibility for the misplacement, loss, or premature opening of the Bid.</li> </ul>
23. Deadline for Submission of Bids and Late Bids	23.1 Complete Bids must be received by M/O NHSR&C in the manner, and no later than the date and time, specified in the BDS and shall only recognize the actual date and time that the bid was received by M/O NHSR&C.
	23.2 shall not consider any Bid that is received after the deadline for the submission of Bids.
24. Withdrawal, Substitution, and	24.1 A Bidder may withdraw, substitute or modify its Bid after it has been submitted at any time prior to the deadline for submission.
Modification of Bids	24.2 A bidder may withdraw, substitute, or modify its Bid by sending a written notice to M/O NHSR&C, duly signed by an authorized representative, including a Power of Attorney. The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be submitted in the same manner as specified for submission of Bids, by clearly marking them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"
	24.3 Bids requested to be withdrawn shall be returned unopened to the Bidders, except if the bid is withdrawn after the bid has been opened.
25. Bid Opening	25.1 The Procurement Committee of M/O NHSR&C will open the Bid in the presence of Bidders' representative(s) who choose to attend.
	25.2 The Bidders' names, modifications, withdrawals, the condition of the envelope labels/ seals, the number of folders/ files and all other such other details as KHUNAM may consider appropriate, will be announced at the opening. No Bid shall be rejected at the opening stage, except for late submissions, in which case, the Bid shall be returned unopened to the Bidders.
	25.3 In case of public holiday on bid opening day, bids will be opened on next working day.

D. EVALUATION OF	BIDS
26. Confidentiality	26.1 Information relating to the examination, evaluation, and comparison of Bids, and the recommendation of contract award, shall not be disclosed to Bidders, even after publication of the contract award.
	Any effort by a Bidder to influence M/O NHSR&C in the examination, evaluation and comparison of the Bids or contract award decisions may, at M/O NHSR&C's decision, result in the rejection of its Bid and may subsequently be subject to consequences.
27. Preliminary Examination	27.1 M/O NHSR&C shall examine the Bids to determine whether they are complete with respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Bids are generally in order, among other indicators that may be used at this stage. M/O NHSR&C reserves the right to reject any Bid at this stage.
28. Evaluation of Eligibility and Technical	28.1 Eligibility and Technical Qualification of the Bidder will be evaluated against the Minimum Eligibility/Qualification requirements specified in the Section 4: Evaluation Criteria.
Qualification	28.2 In general terms, Bidders that meet the following criteria may be considered qualified:
	<ul> <li>They are not included in the list of blacklisted or barred companies published on PPRA website, any federal or Provincial government department;</li> </ul>
	<ul> <li>They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments,</li> </ul>
	<ul> <li>They have the necessary experience, technical expertise, production capacity, quality certifications, quality assurance procedures and other resources applicable to the supply of goods and/ or services required;</li> </ul>
	<li>d) They are able to comply fully with the General Terms and Conditions of Contract;</li>
	<ul><li>e) They do not have a consistent history of court/ arbitral award decisions against the Bidder; and</li><li>f) They have a record of timely and satisfactory performance with their clients.</li></ul>
29. Evaluation of Bid Proposals	29.1 The evaluation team shall review and evaluate the Bids on the basis of their responsiveness to the Schedule of Requirements and Technical Specifications and other documentation provided, applying the procedure indicated in the BDS and other ITB documents. When necessary, and if stated in the BDS, M/O NHSR&C may invite technically responsive bidders for a presentation related to their Bids. The conditions for the presentation shall be provided in the bid documentwhere required.
30. Due diligence	30.1 M/O NHSR&C reserves the right to undertake a due diligence exercise, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:
	<ul> <li>a) Verification of accuracy, correctness and authenticity of information provided by the Bidder;</li> </ul>
	b) Validation of extent of compliance to the ITB requirements and evaluation criteria based on what has so far been found by the evaluation team;
	<li>Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder;</li>
	d) Inquiry and reference checking with previous clients on the performance on on-going or completed contracts, including physical inspections of

	previous works, as deemed necessary;
	<ul> <li>e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder;</li> <li>f) Other means that M/O NHSR&amp;C may deem appropriate, at any stage withinthe selection process, prior to declaring the Bidder as Qualified.</li> </ul>
31. Clarification of Bids	To assist in the examination, evaluation, and comparison of Bids, The King Hamad University of Nursing & Allied Sciences Islamabad (M/O NHSR&C), at its discretion, request any Bidder for a clarification of its Bid.
	M/o NHSR&C request for clarification and the response shall be in writing and no change in the prices or substance of the Bid shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by (M/O NHSR&C) in the evaluation of the Bids in accordance with the ITB.
	Any unsolicited clarification submitted by a Bidder in respect to its Bid, which is not a response to a request by (M/O NHSR&C), may not be considered during the review and evaluation of the Bids.
32. Responsiveness of Bid	(M/O NHSR&C) determination of a Bid's responsiveness will be based on the contents of the bid itself. A substantially responsive Bid is one that conforms to all the terms, conditions, specifications and other requirements of the ITB without material deviation, reservation, or omission.
	32.2 If a bid is not substantially responsive, it shall be rejected by M/O NHSR&C and maynot subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
33. Right to Accept, Reject, Any or All Bids	(M/O NHSR&C) reserves the right to accept or reject any proposal in response to the ITB, to render any or all of the proposals as non- responsive, and to reject all Proposals in response to the ITB at any time prior to award of contract, while assigning the reason(s) thereof.
	33.2 (M/O NHSR&C) shall not be obliged to award the contract to the lowest priced offer.
	M/o NHSR&C reserves the right to reject the tender at any time with no reason either.

#### 34. Nonconformities, Reparable Errors and Omissions

- 34.1 Provided that a Bid is substantially responsive, M/O NHSR&C may waive any nonconformities or omissions in the Bid that, in the opinion of M/O NHSR&C, do not constitute a material deviation.
- 34.2 M/O NHSR&C may request the Bidder to submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 34.3 For the Price Schedule that are submitted, M/O NHSR&C shall check and correct arithmetical errors as follows:
  - a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of M/O NHSR&C there is an obvious misplacement of the decimal point in the unit price; in which case, the line item total as quoted shall govern and the unit price shall be corrected;
  - b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected; and
  - c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an

	arithmetic error, in which case the amount in figures shall prevail.
	34.4 If the Bidder does not accept the correction of errors made by M/O NHSR&C, its Bid shall be rejected.
35. Bidder Grievance	35.1 The King Hamad University of Nursing & Allied Sciences Islamabad (M/O NHSR&C) grievance readdress procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the Bidder may lodge a complaint to the M/O NHSR&C's Complaint/Grievance Readdress Committee
E. AWARD OF CON	TRACT
36. Evaluation	36.1 The Ministry of NHSR&C will conduct the evaluation solely based on response to this tender received from the firms.
	36.2 Evaluation shall be undertaken in the following steps:
	<ul> <li>a) Preliminary Examination including Technical Specifications and other compliances</li> <li>b) Arithmetical check and ranking of bidders who passed preliminary examination by price.</li> <li>c) Evaluation of prices</li> </ul>
	36.3 Price comparison shall be based on the landed price, including transportation, insurance and the total cost of ownership (including spare parts, consumption, installation, commissioning, training, special packaging, etc., where applicable)
37. Integrity Pact	37.1 Bidders will also be required to submit a signed Integrity Pact on a stamp paper of appropriate value as part of their response. The text of Integrity Pact is available at Annex – I.
38. Award Criteria	38.1 Prior to expiration of the period of Proposal validity, M/O NHSR&C shall award the contract to the Bidder that is found to be responsive to the requirements of the Technical Specifications and has offered the lowest price.
	38.2 M/O NHSR&C shall not be obliged to award the contract to the lowest priced offer, if the response is found deficient to the Technical Specifications and other compliances.
	38.3 In case of tie in Financial Bid Value, the Contract will be awarded to the bidder having secured higher Score in Technical Evaluation.
39. Contract Signing	39.1 After the approval of any Work Award, a Contract Agreement on the stamp paper of appropriate value, shall be executed by M/O NHSR&C with Selected Bidder (i.e. Contractor) within 15 days from the date of issuance of LoI (Letter of Intent)/ Purchase Order.
	39.2 Failure to signing of Contract Agreement by the selected Bidder Firm with The M/O NHSR&C within the stipulated time may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, KHUNAM may award the Contract to the Second highest rated or call for new Proposals.
40. Right to Vary quantity at the Time of Award	40.1 At the time of award of Contract, M/O NHSR&C reserves the right to vary the quantity of goods and/ or services, without any change in the unit price or other terms and conditions.

42. Performance Security	42.1 A performance security, if required in the BDS, shall be provided in the amount specified in BDS, well prior to the Contract signing by both parties. Where a performance security is required, the receipt of the performance security by M/O NHSR&C shall be a condition for rendering the contract effective.
43. Bank Guarantee for Advanced Payment	43.1 No Payment will be released in advance.
44. Liquidated Damages	<ul> <li>(M/O NHSR&amp;C) shall apply Liquidated Damages for the damages and/ or risks caused to KHUNAM resulting from the Contractor's delays or breach of its obligations as per Contract.</li> <li>a) In case of delay the Procurement Committee, M/O NHSR&amp;C reserves the right to impose a penalty not exceeding 10% of the total amount of the Contract Value at the rate as referred in the Sample Contract at Annexure – II.</li> <li>b) If the Contractor fails to complete work as per M/O NHSR&amp;C requirement, the ,M/O NHSR&amp;C reserves the right to reject it altogether or impose a penalty not exceeding 50% of the total amount of the Contract.</li> <li>c) If the Contractor fails to provide supplies/ services as per M/O NHSR&amp;C requirements, M/O NHSR&amp;C may forfeit his earnest money as well as Performance Security, and the work will be done at the risk and cost of Bidder.</li> <li>d) In case of any dispute, matter will be referred to , M/O NHSR&amp;C whose decision will be binding on both the parties.</li> </ul>
45. Force Majeure	45.1 "Force Majeure" means an event which is beyond the reasonable control of a party and which makes a party's performance of its obligations under the Purchase Order/ Work Order/ Contract impossible or so impractical as to be considered impossible under the circumstances, and includes, but is not limited to, War, Riots, Storm, Flood or other industrial actions (except where such strikes, lockouts or other industrial issues are within the power of the party invoking Force Majeure), confiscation or any other action by Government agencies. In all disputes between the parties as to matters arising pursuant to this Purchase Order/ Work Order/ Contract, the dispute will be referred to , M/O NHSR&C whose decision will be final.
46. Delivery of Goods	46.1 Contractor will be required to deliver the goods as per the Delivery Schedule referred in BDS without claiming any additional cost to the M/O NHSR&C at the designated site(s) and in quantities as referred in the Contract.
47. Payment Provisions	47.1 Payment pertaining to the equipment may be made through LC (Letter of Credit) which will be opened in favor of Principal/ Distributor/ Manufacturer by M/O NHSR&C within 30 Days after Signing the Contract. However, payment(s) will be made only upon M/O NHSR&C's acceptance of the goods and/ or services performed. 70 % of payment will be made on equipment delivery and remaining 30% will be after the installation and commissioning of the project. In case the payment against the equipment is made through LC, the payment(s) pertaining to local services (i.e. importation and custom clearance, delivery at site, installation, configuration and commissioning) will be made through cross cheque in favor of the selected bidder. The terms of payment through LC will be at-sight, whereas payment against local services shall be within thirty (30) days, after receipt of invoice. Payment will be affected by bank transfer in the currency of the contract.
	47.2 The Contractor shall provide all necessary supporting documents along with claim/ invoice, delivery challan and any other relevant documents as required by the King Hamad University of Nursing & Allied Sciences Islamabad (M/O NHSR&C) .

# **Section 3. Bid Data Sheet**

The following data for the goods and/ or services to be procured shall complement, supplement, or amend the provisions in the Invitation to Bid. In the case of a conflict between the Instructions to Bidders, the Bid Data Sheet, and other annexes or references attached to the Bid Data Sheet, the provisions in the Bid Data Sheet shall prevail.

She	heet shall prevail.			
BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements	
1.		Background of the Project	(M/O NHSR&C) is novel in its content and holistic in approach. The project concept is based on the slogan of "SkillingPakistan" to create a high-quality technical education infrastructure. This unique educational institution in Pakistan will closely collaborate with several institutions in Austria and China and award multiple foreign degrees. This is a historic and visionary initiative as it is probably the first time that an institution will be established in Pakistan with many foreign universities giving degrees to students who study in it.	
2.		Objective	The main objective is to establish a smart classroom Solution. The desired solution is conceived by considering the challenges available inside our traditional classroom of traditional education system. This desired smart classroom must have the capability of scalability and it can be utilized in multi-facet usage as per the following layers of smart classroom i.e.  1- Active Smart Classroom (Teacher Centric)  2- Blended Learning Smart Classroom	
3.		Scope of Work	Supply and Installation/ Deployment of Smart Classroom Solution The required items in various as referred in Section – 5 have been sought by M/O NHSR&C from a reputed Firms/ Companies. The supplier is expected to supply high quality products meeting the specification as stipulated in this ITB, which conforms to the international quality standards. The time specified for delivery, Installation and Commissioning in the tender form shall be deemed to be the essence of the contract and the Successful Bidder shall arrange within the specified period.  Post-Commissioning <b>Warranty and Support Services</b> It is required that Manufacturer's Warranty for at least One (01) year	
			from the date of commissioning to M/O NHSR&C be provided by the Supplier within the quoted cost of items.  Moreover, additional Warranty for next Three (03) years should be quoted separately in USD by the Bidder on annual payment basis However, it will be at sole discretion of M/O NHSR&C to avail additional Warranty in subsequent year(s) or otherwise.	
4.	7	Language of the Bid	English	

5.	22, 23, 27	Submitting Bids for Parts or subparts of the Schedule of Requirements (partial bids)	The Purchase Committee shall consider the Bids as referred in Section – 5. Any item not quoted shall have reasonable grounds to reject the Bid
6.	20	Alternative Bids	Not Allowed.
7.	16	Bid Validity Period	180 days
8.	13	Bid Security/ Earnest Money (Refundable)	Required in the amount of: 2% of the Bid Value. In case of options, earnest money shall be based on the maximum quoted price of the same items.  Acceptable Forms of Bid Security: Denominated in Pak Rupees duly issued by a Pakistani Bank or branch of a Foreign Bank, in the form of Demand Draft/ Pay Order in favor of Project Director, KHUNAM
9.	42	Liquidated Damages beyond	Will be imposed as follows:  Percentage of contract price per day of delay up to a maximum of 10%.
10.	40	Performance Security	Within stipulated time after issuance of Purchase Order and prior to the signing of Contract, as <b>10% of the Contract value</b> for the duration of Warranty period referred in RFP. Performance Security in shape of Bank guarantee or Insurance guarantee.
11.	12	Currency of Bid	Pakistani Rupees (PKR)
12	31	Deadline for submitting requests for clarifications/ questions	<b>5 days</b> before the submission deadline
13	31	Contact Details for submitting clarifications/ questions	Project Director King Hamad University of Nursing & Allied Sciences Ministry of NHSR&C Islamabad
14.	18, 19, and 21	Manner of Disseminating Supplemental Information to the ITB and responses/ clarifications to queries	Direct communication to prospective Bidders by email and/ or Posting on the website:
15	23	Deadline for Submission	As mentioned in tender notice

16.	22	Number of Set(s) of Bid	Technical Proposal(s)
			- One (01) Original
			- One (01) Copies
			- Soft copy of Technical Proposal in a USB Flash Drive
			Financial Proposal(s)
			- One (01) Original

17.	22	Allowable Manner of Submitting Bids	☑ Hand Delivery with representative present at Technical Bidding Opening Time
18.	22	Bid Submission Address	☑ By Courier/ Hand Delivery: Project Director- King Hamad University of Nursing & Allied Sciences Ministry of National Health Services, Regulations & Coordination Islamabad
19.	22	Electronic submission (email) requirements	Not Allowed
21.	27, 36	Evaluation Method	Eligible and qualified bids meeting the M/O NHSR&C requirementsand technical responsive as stipulated in this ITB
22.		Evaluation Method for the Award of Contract	Lowest priced technically responsive.
25.	35	M/o NHSR&C will award thecontract to:	One Bidder Only
26.	39	Type and Contract Terms and Conditions that will apply	M/O NHSR&C General Terms and Conditions for Contracts for Goods and/ or Services.
27.	46	Delivery, Installation and Commissioning	

S.no	Delivery	Installation	Commissioning
1	6-8 weeks	3 weeks	1 week

# **Section 4. Evaluation Criteria**

#### **Preliminary Examination Criteria**

Bids will be examined to determine whether they are complete and submitted in accordance with ITB requirements as per below criteria on a Yes/ No basis:

- · Appropriate signatures.
- Minimum Bid documents provided.
- · Bid Validity.
- Bid Security submitted as per ITB requirements with compliant validity period.

#### **Minimum Eligibility and Technical Qualification Criteria**

Eligibility will be evaluated on a Pass/ Fail basis. If the Bid is submitted as a Joint Venture, there should be no more than two (02) companies in the Joint Venture and either of the company should meet the minimum criteria, unless otherwise specified.

Technical qualification will be evaluated on Score basis. Bidder will require to secure at least **70 percent** to qualify. Scores against each of the parameters in Section I, II & III will be according to documents provided by the Bidder, whereas scores in Section IV will be awarded by Technical Committee in response to Bidder's presentation.

	ELIGIBILITY		
S. #	Subject	Criteria	Reference Returnable Form(s)
1.	Bidder's Status	Participating as □ Individual Company □ JV/ Consortium	Form B: JV/ Consortium Information Form
2.	Legal Status	Bidder is a legally registered entity in Pakistan. Bidder (Lead Bidder) is/ are also registered with FBR for Income Tax. Bidder/ JV partner(s) must be Active Taxpayers and Listed.	Form C: Bidder Information Form
3.	Location of Offices	Bidder (Lead Bidder) has declared office in Karachi/ Lahore/ Islamabad for at least last Three (03) years.	Form C: Bidder Information Form
4.	Quoted Product Strength and Rating	Quoted product should have large implementation footprints.	Form C: Bidder Information Form
5.	Company in Operation	Bidder (Lead Bidder) is in operation for at least Three (03) years.	Form C: Bidder Information Form
6.	Financial Strength	Average annual turnover over last 3 years  Rs. 500 million or equivalent in Pak Rupee/ USD from IT  Services as per the published Audited Report.  (For JV/ Consortium/ Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form

7.	Relevant Experience	Min. No. of Projects successfully Completed or In-hand, of similar nature/ value/ complexity in last 3 years.  At least (03) projects of similar scale and implementation in the last three years. Pakistan or internationally  (For JV/Consortium/ Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form Form E: Technical Proposal Form
8.	Eligibility	Bidder(s) is not suspended, nor debarred, nor otherwise identified as ineligible by any Government/ Semi-government/ Autonomous organization in Pakistan, in accordance with ITB clause 3. Non-Blacklisting certificate must be provided.	Form A: Bid Submission Form
9.	Bankruptcy	Bidder(s) has not declared bankruptcy, is not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Bid Submission Form
10.	Technical Specification Compliance	Quoted Solution should have <b>Full Compliance</b> towards required features and functionalities as referred in Section 5.	Form F: Specifications Compliance Form
11.	Certificate and Licenses	<ul> <li>i. Certificate of Registration of the business</li> <li>ii. Certificate of Registration with FBR</li> <li>iii. Principal's/ Manufacturer's authorization letter.</li> <li>iv. Implementation Letters or Emails or Purchase/ Work Order(s)/ Agreement from the institutions/ organizations where the IT Services or Consultancy, was or being provided.</li> <li>v. Supporting photos/ snapshots, data sheets, documents depicting usage scenarios of the quoted solution.</li> </ul>	Form C: Bidder Information Form

vi. Bidder must be an authorized manufacturer/dealer of

quoted items.

Sr. No	Attribute	Description	Max Score		Criteria	Returnable Forms
1	Section I - General Corporate	e Profile	15			
				8	Min. required + 12 year	Form C:
		Number of years in		6	Min. required + 9 year	Bidder
а	Bidders in Business	providing IT Services		4	Min. required + 6 year	- Information Form
				2	Min. required + 3 Years	
				7	3x Financial Strength	Form D:
_		Annual Turnover		7	2x Financial Strength	Qualification
b	Financial Standing	averaged over last 3		5	1.5x Financial Strength	- Form
		years		3	1x Financial Strength	-
2	Section II - Business Profile		15			
		Projects of IT Services -	1	LO	Min. No. of Projects +8	Form D:
а	Relevant Experience	Proof Required Projects		8	Min. No. of Projects + 4	Qualification
	, , , , , , , , , , , , , , , , , , ,	Delivered		6	Min. No. of Projects + 2	- Form
b	Education Sector Experience	Number of similar projects delivered in education sector		5	1 point for each project successfully delivered up to max of 5 projects	Form D: Qualification Form
3	Section – III: Product Accept local context	ance and Strength(s) in	20			
a	Product's Presence in Pakistan	Quoted product is already implemented in higher education/Public sector in Pakistan	10		Installed in any of the higher education institute in Pakistan	Form E: Project Proposal Form
b	Compliance to Technical & Functional Specifications	Specifications and functionalities offered of same product corresponding to Technical & Functional requirements as stipulated in Section 5.	10		No. of functionalities complied by Bid in consideration/ Total No. of functionalities listed * Max. Score	Form F: Project Proposal Form
4	Section – IV: Presentation/D	emo on Quoted Solution	50			
a	Project Understanding	Demonstration of approach to understand and complete the project	20		To be assigned by the Technical Committee	Form E: Project Proposal Form
b	Project Management Approach	Approach towards planning and implementing the project.	20		To be assigned by the Technical Committee	Form E: Project Proposal Form
с	Salient and Value- Added Features	Key features of the quoted solution and value addition which can be brought in by the bidder or Principal.	10		To be assigned by the Technical Committee	Form E: Project Proposal Form
	Grand Total		100			
	<ul> <li>Bids shall be evaluated on both Eligibility and Technical Qualification Criteria.</li> <li>Bidders meeting the Eligibility Criteria and able to secure 70 percent in Technical qualification shall be declared as Technically Qualified Bidders for the next step, i.e. Opening of Financial Bid.</li> </ul>			e 70 percent in		

#### **Financial Evaluation**

- Detailed analysis of the price schedule based on requirements listed in Section 5 and quoted for by the bidders in Form F.
- Price comparison shall be based on the total cost of ownership over 3 years, including solution installation and configuration cost, trainings, and extended warranty costs.
- Comparison with budget/internal estimates. Tender will be awarded to "most advantageous bid".

# **Section 5a: Technical Specifications of the Required Goods**

# Item No. 01: Interactive Digital Recording Host with H.323 capability

	Quantity: 1	
IP Video Input		
IP Camera Input	4 channel	
Compression	H.265 / H.264	
Resolution	1080p	
Frame Rate	30fps	
Recording		
Compression	H.265 / H.264	
Resolution	1080p	
Frame Rate	30fps	
Bitrate	128 ~ 8192Kbps	
Streaming	Flash/ HTML5	
Continuous Presence	Cinema mode, PiP, VIP1+2, VIP1+3, 4	
Audio		
Compression	G.711a / G.711u / ADPCM / G.722 / AAC-LC	
Bitrate	32 ~ 128kbps	
Functions	AEC, AGC, ANS, AFC	
Interfaces		
Video Input	2 x DVI-I or more	
Video Output	2 x DVI-I or more	
Audio Input	6 x Mic in or more	
Addio iliput	2 x Line in, Stereo or more	
Audia Output	2 x Line out, Stereo or more	
Audio Output	S/ PDIF	
	1 x Gigabit network port, RJ45 interface	
Ethernet	2 x 10/ 100M, RJ45 interface	
	4 x 10/ 100M, RJ45 interface (PoE)	
Internal HDDs	2 x SATA (1 x 1TB 2.5" HDD) or more	
Control	2 x RS485, 8 x RS232	
Protocols		
Video Conferencing	H.323, H.239, H.460	
Environmental		
Power	100 ~ 240V AC, 50 ~ 60Hz	
Support Required		
Recording	Image Composition Auto Directing	

# Item No. 02: EPTZ Camera

Quantity: 1			
Camera			
Image Sensor	1/1.8" progressive scan CMOS		
Pixels	6.0 Megapixel or higher		
Focal Length	6 ~ 138mm, 23x optical or higher		
Aperture Ratio	F1.5 (W) ~ F3.4 (T), DC drive		
Pan / Tilt Range	Pan: ±5°, Tilt: ±15°, manual		
Illumination	Color: 0.002lux @ (F1.5, AGC ON) B/W: 0.0002lux @ (F1.5, AGC ON)		
Shutter Speed	1 ~ 1/30,000s or better		
S/N Ratio	≥ 52dB or better		
Digital Noise Reduction	2D, 3D noise reduction		
Video			
Compression	H.265/ H.264		
Image Resolution	1080p or higher		
Frame Rate	1 ~ 30fps or better		
Bitrate	32kbps ~ 16mbps		
Multi-stream	Main stream 1: 1080p Main stream 2: 1080p Secondary		
	stream: D1		
Image Adjustment	Brightness, Contrast, Saturation, Sharpness		
Image Flip	Flip / Mirror / Rotation at 90°, 180°, 270°		
PTZ	ePTZ, Auto tracking		
Audio			
Compression	G.711a / G.711u / ADPCM / G.722 / G.722.1c/ G.726/ AAC-LC		
Bitrate	32 ~ 64kbps		
Audio Function	Bi-directional audio/ AEC/ Mixed audio recording/ Dumb/ Mute		
Network			
Network Protocols	TCP/ IP, UDP, HTTP, DHCP, DNS/DDNS, RTSP, PPPoE, NAT, QoS, UPnP, SMTP		
System			
User Authentication	Multilevel, Password		
Interfaces			
Ethernet	1 x Gigabit network port, RJ45 interface		
Audio In / Out	1 x Line in / 1 x Line out		
Control	1 x RS485		
Memory Slot	Micro SD card slot, supports 256GB or more		
Environmental			
Power	12V DC ± 10% / PoE (IEEE802.3at)		
Support Required			
Camora	While Balance Gain Control Electronic Defog		
Camera	Backlight Compensation		
Video	Privacy Masking Auto Directing HLC		
Video	Motion Detection		
System	Recovery		

Heartbeat Detection
Automatic Network Replenishment (AN)

# Item No. 03: Audience Camera

Quantity: 1			
1/3" progressive scan CMOS			
4.0 Megapixel or higher			
Color: 0.05 lux @ (F1.4, AGC ON) B/W: 0 lux with IR			
1 ~ 1/ 30,000s or better			
>50dB or better			
Ф14			
DC drive			
-Z2812: 2.8~12mm @ F1.4 motorized varifocal lens			
Manual / Semi-Automatic / Auto			
-Z2812: 106° ~ 33°			
Pan: 0° ~ 355° Tilt: 0° ~ 75° / Rotation: 0° ~ 355°			
20 ~ 40m or more			
Smart IR			
H.265 / H.264 / MJPEG			
Main stream: 2592×1520			
Secondary stream: D1			
Main stream: 2592×1520@30fps			
Secondary stream: D1@30fps			
32kbps ~ 16Mbps			
At least 4 zones			
At least 4 zones			
3D noise reduction			
Flip/ Mirror/ Rotation at 90°, 180°, 270°			
G.711a / G.711u / ADPCM / G.722 / AAC-LC / G.722.1c / G.726			
32kbps ~ 64kbps			
Bi-directional audio/ AEC/ Mixed audio recording/ Dumb/ Mute			
TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP, RTSP, PPPoE,			
FTP, VSIP, UPnP, 802.1x, NAT, QoS, SMTP, IPv4, IPv6			
(optional)			
IPC Control (IE, Firefox, Chrome)			
10 Users or more			
ONVIF (Profile S, Profile G), GB/T 28181-2011, API,CGI			
(			
Alarm input/ Network disconnect/ Disk full/ Disk error			

	Motion detection/ Tampering/ Guard line/ Defocus/ Scene change/ Enter guard area/ Exit guard area/ Object left/	
Intelligent	Object removal/ Gathering/ Audio surge	
Alarm Events	Alarm report/ Recording/ Text overlay/ Snapshot/ External output/ Email notice/ Acoustic alarm	
Interfaces		
Ethernet	10/ 100M, RJ45 interface	
Audio In / Out	2 x Line in / 1 x Line out	
Control	1 x RS485	
Alarm In / Out	1 x Input / 1 x Output	
Video Out	1 x BNC, 1.0V [p-p] / 75Ω	
Memory Slot	Micro SD card slot, supports up to 128GB	
Power Output	1 x DC12V / 0.1A Output	
Electrical		
Power	AC24V±10% / DC12V ± 10% / PoE (IEEE802.3af)	
Support Required		
Camera	While Balance Gain Control	
Carriera	Backlight Compensation (Off / BLC / WDR / HLC)	
	Multi-stream Video Freeze ROI	
Video	Digital Defog	
System	Automatic Network Replenishment (AN)	

# Item No. 04: Interactive Digital Smart Blackboard 86" or 98" (with extra writing boards 40" diagonal on each side)

# Quantity: 10 Nos - 86" and 1 Nos 98"

Appearance		
Frame	Aluminum-magnesium alloy	
Surface	photoelectric glass	
LCD		
Display Screen Size	1898~x1069~	
Luminance	480cd/m2 or better	
Visible angle	178°/178° or more	
Contrast	4000:1 or higher	
Resolution	3840*2160 or higher	
Lifetime	50,000h or more	
Side Blackboard panels for writing	YES	
Touch Sensitivity		
Technology	Capacitive Touch with Mesh Technology	
Touch Points	10 or more	
Interfaces		
land the late of a co	1*HDMI, 1*TOUCH USB, 1*VGA, 3*USB2.0,	
Input Interface	1*USB3.0,1*RS232,1*Audio in	
LAN Port	1*RJ45	
Power		

Voltage	AC100V~240V 50/ 60Hz
Support Required	
Writing Tools	Regular Chalk, Dust-free Chalk, Liquid Chalk
Display ON/ OFF Switch	One-button switch, Gesture Recognition support for screen lock
Screen Mode Switch	Switchable between full and half screen
Surface Glass	Explosion-proof, Water-resistant, Dust-proof
Installation Mode	Both Stand & Wall Mounting Kits
	English Language, featuring:
	- Interactive whiteboard functions, e.g., writing, painting, remark, save, highlight, zoom, etc.
	- Intelligently identify & convert hand-writing characters/ formula/ shape into printing format
	- Screen recording and save into '.avi' file
Teaching Application	- Downloading courseware via QR code scanning Screen pages adding and previewing.
	- Previewed pages illustrated on the two-split screen, four- split screen, horizontal and vertical screen for comparison teaching
	- Upload documents (picture, PowerPoint, etc.)
	- Annotating while playing video
Built-in-Microphone Array	YES
lte	m No. 05: Open Pluggable System (OPS)
	Quantity: 14 Nos
CPU	Intel Core i5 or higher
CPU Memory	Intel Core i5 or higher  8G DDR4 or higher
Memory	8G DDR4 or higher
Memory Hard Disk Audio	8G DDR4 or higher 256G SSD or higher
Memory Hard Disk	8G DDR4 or higher 256G SSD or higher 2*15W or better
Memory Hard Disk Audio Wireless	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac
Memory Hard Disk Audio Wireless	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M
Memory Hard Disk Audio Wireless	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV
Memory Hard Disk Audio Wireless LAN	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01
Memory Hard Disk Audio Wireless LAN SmartTV	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio Resolution/ Contrast	8G DDR4 or higher  256G SSD or higher  2*15W or better  Build-in Wi-Fi, IEEE 802.11b/g/n, ac  Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09  1920*1080/ 4000:01
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio Resolution/ Contrast Processor	8G DDR4 or higher  256G SSD or higher  2*15W or better  Build-in Wi-Fi, IEEE 802.11b/g/n, ac  Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09  1920*1080/ 4000:01  4 Core CPU + 4 Core GPU
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio Resolution/ Contrast Processor RAM	8G DDR4 or higher  256G SSD or higher  2*15W or better  Build-in Wi-Fi, IEEE 802.11b/g/n, ac  Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09  1920*1080/ 4000:01  4 Core CPU + 4 Core GPU  1GB DDR3 or higher
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio Resolution/ Contrast Processor RAM Flash Memory	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09 1920*1080/ 4000:01 4 Core CPU + 4 Core GPU 1GB DDR3 or higher 8GB eMMC or higher
Memory Hard Disk Audio Wireless LAN  SmartTV TV Type Aspect Ratio Resolution/ Contrast Processor RAM Flash Memory Network	8G DDR4 or higher 256G SSD or higher 2*15W or better Build-in Wi-Fi, IEEE 802.11b/g/n, ac Build-in network card, 10M/ 100M/ 1000M  Item No. 06: Smart LED TV  Quantity No: 01  65-inch LED TV  LED  16:09 1920*1080/ 4000:01 4 Core CPU + 4 Core GPU 1GB DDR3 or higher 8GB eMMC or higher Ethernet, WIFI(802.11 b/g/n), WIFI Hotspot

# Item No. 07: Teacher/ Speaker Mic along with Ceiling Bracket/ J- Rod (8 ft or more adjustable)

#### **Quantity: 01**

Receiver	
Frequency range	740-820MHz
Oscillation modes	PLL
Adjustment method	FM
Maximum Deviation	±50KHz
Sensitivity	18dBuV
SNR	≥89dB or better
Frequency response	60Hz-15KHz (+/- 3dB)
Operating voltage	DC 12V
Balanced output	0-300mV/600Ω
Dynamic range	≥105dB
	Transmitter
Frequency range	740-820MHz
Oscillation modes	PLL
Adjustment method	FM
Maximum Deviation	±50KHz
Transmit Power	10mW or better
Frequency stability	≤±0.005%
Power supply	AA battery *2
Frequency selection	Infrared

# Item No. 08: Student/ Audience Wireless Mic along with Ceiling Bracket/ J- Rod (8 ft or more adjustable)

Sensitivity Directional property Impedance output	-38dB hypercardiod ≤135°
, , ,	
Impedance output	
	200Ω±30%
Output amplitude	300mV or more
Max. Sound Pressure	132dB,1kHz at 1% T.H.D
Dynamic range	Typical 115dB, 1kHz at max sound pressure
SNR	>=70dB
Phantom Power	DC 48V
Output connector	XLR-3-12C
Others	Ceiling Mount Bracket, Length 1200mm or more

# Item No 09 - Control Pad

# Quantity: 01

Port	RS232/RS485
Baud Rate	9600bps
9600bps	OLED
Control	Button
Power Supply	DC12V (±25%)
Power consumption	<2W
Operate Temperature	0°C~+40°C
Storage Temperature	-20°C~+50°C
Humidity	≤90% (non-condensation)
Size	200mm*120mm*46mm
Weight	0.5kg

# Item No 10 - Interactive Flat Panel 70"

Size	1719.3mm×1039.9mm×101mm
Installation	Support ordinary wall-mounted and moveable stand installation
Weight	54KG
Appearance design	Streamlined, non - acute safety design
Material	Aluminum magnesium alloy metal material
Compound mode	Touch all in one machine
Color	Gun gray
Support liquid pen writing and passive touch pen writing on its surface	
Display size/mm	1650.24mm*928.26mm
Display ratio	16:9
Resolution	3840*2160
Brightness	320cd/m <sup>2</sup>
Constrast ratio	1400 : 1
Color temperature	10000K
Colour gamut	0.72
Viewing	178°/178°
Life	≥50000H
Input	100V~240V/5A/60HZ/50HZ
Power	285w(MAX)
Standby power	0.5w
HDMI output	HDMI*1
MIC IN	MIC IN*1
RS232	RS232 *1

Line OUT	Line *1
PC Audio in	PC Audio *1
VGA in	VGA*1
COAX out	COAX*1
RJ45 in	RJ45*1
HDMI in	HDMI*2
Touch USB2.0	Touch*1
USB 2.0 Audio	USB 2.0*1
USB 3.0	USB 3.0*1
HDMI input	HDMI*1
Transmission	Type-C*1 (Support 10W charging)
USB input	USB2.0*1 (PC+Android) +USB3.0*1 (PC+Android)
Power	Device power switch/standby button (including indicator light)
Home	Signal source will switch to the Android interface
Setting	OSD touch menu interface will be displayed
Lock screen	Lock the screen
Lock Touch	lock the touch function
Record the screen	Record
Volume +	The sounds will be amplified
Volume -	The sounds will be decreased
Chip	V811
Memory	4G bytes DDR4 ,2400MHZ
Storage	32 GB Flash
System	Support Android 8.0 version
CPU	Intel 13/15/17
Memory	4G (16G max)
Hard disk	128G/SSD Solid state drive (optional high configuration)
Operating system	Window10 Professional /Chinese
Wired network	Network interface card10M/100M;Realize TV Android networking +OPS computer networking, support LAN wake-up
Wireless network	Both Android and OPS can achieve wireless Internet access, Android only supports 2.4G, OPS supports 2.4G, 5G dual-band WiFi network sharing
Touch technology	Infrared touch
Touch points	min 10 points max 20 points
Writing accuracy	≤2mm
Glass depth	4mm photoelectric glass
Writing	Fingers, capacitive pen
Drive	Driver-free, plug and play, intelligent automatic calibration
OS	Android, Win 7, Win8, Win10
Speaker	Full range speaker, power: 2*12W

Item No. 11: Teacher Tracking Camera with Expansion Microphone	
Quantity: 14	
VIDEO STANDARDS AND PROTOCOLS	H.264 AVC, H.264 High Profile, H.265, H.239
VIDEO INPUT	1x HDMI
VIDEO OUT	2x HDMI Touch display compatible
PEOPLE VIDEO RESOLUTION	4K, 30 fps (TX and RX) from 2048 Kbps • 1080p, 60 fps from 1740 Kbps or higher 1080p, 30 fps from 1024 Kbps 720p, 60 fps from 832 Kbps 720p, 30 fps from 512 Kbps
CONTENT VIDEO RESOLUTION	UHD (3840 x 2160) or higher  HD (1920 x 1080p) or higher  WSXGA+ (1680 x 1050) or higher  UXGA (1600 x 1200) or higher  SXGA (1280 x 1024) or higher  WXGA (1280 x 768) or higher  HD (1280 x 720p) or higher  XGA (1024 x 768)  SVGA (800 x 600)
MICROPHONES	UHD (3840 x 2160)  WUXGA (1920 x 1200) - HD (1920 x 1080)  WSXGA+ (1680 x 1050) - SXGA+ (1400 x 1050)  SXGA (1280 x 1024)  HD (1280 x 720)  XGA (1024 x 768)  Content frame rate  5–60 fps (up to 4K resolution at 15 fps in call)
CONTENT SHARING	Apple Airplay - Miracast - HDMI input - Whiteboarding
CAMERA	5x digital zoom or higher 121° DFOV, 110° HFOV or higher UHD 2160p (4K) capture resolution or higher Automatic group framing Automatic speaker framing Presenter Mode Secondary cameras can be added via USB and HDMI

AUDIO INPUT	3x MEMS microphones, plus 2x 2nd order microphones 1x HDMI 1x 3.5 mm line-in Input for optional expansion microphone 3x MEMS microphones, plus 2x 2nd order microphones Up to 25 ft of microphone pick up range or higher Optional expansion microphone available
AUDIO OUTPUT	Stereo speakers Power Handling (RMS) 20 Watts Power Handling (MAX) 40 Watts Sensitivity 86.1 dB 3.5 mm audio output • 1x HDMI
OTHER INTERFACES	2x USB-A (3.0) 1x USB-C Bluetooth® 5.0** WiFi 802.11a/b/g/n/ac (MIMO) Multi-channel Concurrency**
AUDIO STANDARDS AND PROTOCOLS	22 kHz bandwidth 20 kHz bandwidth with G.719 (M- Mode) 14 kHz bandwidth with Siren 14 technology, G.722.1 7 kHz bandwidth with G.722, G.722.1 3.4 kHz bandwidth with G.711, G.728, G.729A
NETWORK	IPv4 IPv6 1x 10/100/1G Ethernet Auto-MDIX H.323 and/or SIP up to 6 Mbps running Video App Lost Packet Recovery (LPR) technology Dynamic bandwidth allocation Reconfigurable MTU size Web proxy support—Basic, Digest, and NTLM
SECURITY	Media encryption (H.323, SIP): AES-128, AES-256 or better H.235.6 support Authenticated access to admin menus, web interface, and API BFCP Local account password policy configuration Security profiles Local account and login port lockout Secure defaults Remote logging with support for TLS Active directory external authentication
OPTIONS	Mount kit Stand Bluetooth remote control Studio Extension Microphone

INTEROPERABILITY	Zoom Certified
	Microsoft Teams Certified
	USB device mode
	Support for native 3rd party applications includes Zoom, Microsoft Teams,
	BlueJeans, Dialpad, GoToRoom, RingCentral and StarLeaf
DIGITAL SIGNAGE	Raydiant, Appspace
ELECTRICAL	Auto sensing power supply
	Typical operating voltage/power
	- 37 VA @ 120 V @ 60 Hz
	- 37 VA @ 230 V @ 50/60 Hz • Typical BTU/h: 65
ENVIRONMENTAL SPECIFICATION	Operating temperature: 0 to 40 °C
ENVIRONMENTAL SI ECII ICATION	Operating humidity (non-condensing): 15 to 80%
	Non-operating temperature: -40 to 70 °C
	Non-operating humidity (non- condensing): 5 to 95%
	Hom operating narmany (non-condensing). 3 to 33%
EXPANSION MICROPHONE	Contains one analog Microphone Array and one 7.6m/25' RJ11 connection type
	cable. Range 20 feet or higher
PHYSICAL CHARACTERISTICS	30 W x 4 H x 4 D (Inches) 762 W x 102 H x 102 D (MM)
	5.6 lbs/2.54 kg
Item No. 12: Inst	allation, Configuration, Commissioning, and Training
item No. 12. Ilist	anation, configuration, commissioning, and framing

Complete installation of all equipment/ components pertaining to Smart

Classroom setup as per manufacturer's guidelines. Configuration of all equipment/ components for an optimum and efficient output of the facility meeting the objectives and requirements. Testing and commissioning of the complete setup as per the requirements and satisfaction of M/O NHSR&C.

Installation, Configuration &

Commissioning

# **Section 5b: Special Terms and Conditions**

	•Writing: various of lines and colors are available.
	•Assistant board: Teachers can write, remark on the assistant board and store it
	separately while playing multimedia courseware
	•Spotlight: Highlight any part you need.
	Magnifier: Magnify any part you need
	Hand gesture operation
	Hand gesture eraser: Under handwriting mode, you can eraser with your palm.
	•Hand gesture control: You can zoom and rotate any image, audio, video, and graphics by hand gesture
	Intelligent identification
	•Writing characters identification: The handwriting characters including Chinese, English and numbers can be identified and turned to print. Deleting any part of the print by drawing a line on it.
Functional	
Requirements	Formula identification: The handwriting formula can be identified.
	• Shape identification: Any regular or irregular shapes can be identified, such as irregular five-pointed star.
	•Interactive smart blackboard functions, e.g., writing, painting, remark, save, highlight, zoom, etc.
	•Intelligently identify & convert hand-writing characters/ formula/shape into printing format
	•Screen recording and save into '.avi' file
	Downloading courseware via QR code scanning Screen pages adding and previewing.
	•Previewed pages illustrated on the two-split screen, four- split screen, horizontal and vertical screen for comparison teaching
	•Upload documents (picture, PowerPoint, etc.) Annotating while playing video
	Capability of ZOOM & MS TEAMS Audio/Video Connectivity

### **Training**

• The firm supplying the item/ equipment(s) will demonstrate the operation/ working of the supplied goods to the satisfaction of KHUNAMand provide training. Suppliers are advised to provide details on formal training covering aspects as mentioned below.

Level	
Basic	Demonstrate the operations/ working to end users; Identify the do's and don'ts; And aspects deem necessary for long-life functioning of supplied goods.
Hands-on	Demonstrate technical features; Elaborate technical configuration(s) performed for integration with the overall setup;
Advanced	Provide trainings to Operators for troubleshooting and smooth operations using system manuals

## **Section 6: Returnable Bidding Forms / Checklist**

This section serves as a checklist for preparation of your Bid. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Bid submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Bid, please ensure compliance with the Bid Submission instructions of the BDS 22.

#### **Technical Bid:**

Have you duly completed all the Returnable Bidding Forms?	
+ Form A: Bid Submission Form	
+ Form B: Joint Venture/Consortium/ Association Information Form	
+ Form C: Bidder Information Form	
→ Form D: Qualification Form	
+ Form E: Technical Bid Proposal Form	
→ Form F: Specifications Compliance Form	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	

#### **Financial Bid:**

Torm G: Price Schedule Form
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#### Form A: Bid Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	M/O NHSR&C -SLS-ITB-101		

We, the undersigned, submit our Bid for the award of contract to supply the goods and related services required for [Insert Title of goods and services] in accordance with your Invitation to Bid No. [Insert ITB Reference Number]. We hereby submit our Bid, which includes this Bid proposal.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/ Consortium/ Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by any of the Government/ Semi-government/ Autonomous organization.
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any Organization in Pakistan.
- c) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against us that could impair our operations in the foreseeable future;
- d) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the KHUNAM, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the KHUNAM

We declare that all the information and statements made in this Bid are true and we accept that any misinterpretation or misrepresentation contained in this Bid may lead to our disqualification and/ or sanctioning by the KHUNAM.

We offer to supply the goods and related services in conformity with the Bidding documents and in accordance with the Schedule of Requirements and Specifications.

Our Bid shall be valid and remain binding upon us for the period specified in the Bid Data Sheet. We understand and recognize that you are not bound to accept any Bid you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Bid and bind it, should KHUNAMaccept this Bid.

Name:	
Title:	
Date:	
Signature:	

[Stamp with official stamp of the Bidder]

## Form B: Joint Venture/ Consortium/ Association Information Form

Name	e of Bidder:	[Insert Name of Bidder]		Date:	Select date		
ITB re	eference:	M/O NHSR&C-SLS	5-101				
	To be completed and returned with your Bid if the Bid is submitted as a Joint Venture/ Consortium/ Association.						
No		ner and contact inf ers, fax numbers, e-ma		_	pe of go		onsibilities (in services to be
1	[Complete]			[Complete]			
2	[Complete]			[Complete]			
_	[complete]			[complete]			
3	[Complete]			[Complete]			
Name of leading partner (with authority to bind the JV, Consortium, Association during the ITB process and, in the event a Contract is awarded, during contract execution)  We have attached a copy of the below referenced document signed by every partner, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the saidjoint venture:  \[ \begin{align*} \text{Consortium/ Association agreement} \end{align*}  We hereby confirm that if the contract is awarded, all parties of the Joint Venture/ Consortium/ Association shall be jointly and severally liable to KHUNAMfor the fulfillment of the provisions of the Contract.							
Name of partner: Name of partner:							
Signature: Signature:							
Date: Date:		<u> </u>					
Name	e of partner:		Name	e of partner:			
Signature: Signature:							
<b>.</b> .							

## **Form C: Bidder Information Form**

Legal name of Bidder	[Complete]				
Legal address & Branch Offices	[Complete]				
Year of registration	[Complete]				
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]				
Are you a KHUNAM registered vendor?	☐ Yes ☐ No If yes, [insert KHUNAM vendor number]				
Countries of operation	[Complete]				
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]				
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]				
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]				
Does your organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies, education, vocational trainings, social responsibility towards people with Special needs, or membership of trade institutions promoting such issues	[Complete]				
Contact person that KHUNAMmay contact for requests for clarifications during Bid evaluation (Only Lead Bidder)	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]				

## Please attach the following documents:

- 1. Company Profile, which should not exceed fifteen (15) pages, including printed brochures and product catalogues relevant to the goods and/ or services being procured.
- 2. Proposed timetable for delivery, installation and commissioning plan for the required and quoted items to KHUNAM after the award of Contract.
- 3. Certificate of Registration of the business.
- 4. Principal's Authorization Letter in favor of Bidder.
- 5. A proofing document confirms the offered warranty for at least One (01) year, supported by the manufacturer's certificates, if applicable.
- 6. Proven records of Projects of similar nature/ value/ complexity in which delivery and services or consultancy were xtended to institute(s).
- 7. Full detailed description of the specifications of the proposed items in addition to catalogues clearly showing the proposed specifications responding to the requirements.
- 8. Supporting photos of the proposed items (if applicable).
- 9. Latest Audited Financial Statements (Income Statement and Balance Sheet) including Auditor's Report for the past (3 years).

Note: To be filled in by each partner in case Bid is submitted as a JV/ Consortium/ Association

#### Form D: Qualification Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	M/O NHSR&C-SLS-101		

If JV/ Consortium/ Association, to be completed by each partner.

## **Previous Relevant Experience**

Please list all Projects successfully completed in the last 3 years, covering following aspects;

- a) Scope of the projects/ assignments.
- b) Activities performed for the successful completion of the project.
- c) Support Services Contracts in hand with SLA for the supplied goods or services.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/ JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts them selves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevantdocuments and references if so requested by KHUNAM.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

## **Financial Standing**

Annual Turnover for the last 3 years	Year	PKR
	Year	PKR
	Year	PKR

Latest	Credit	Rating	(if any),	indicate	the
source					

Financial information (in PKR equivalent)	Historic information for the last 3 years			
	Year 1	Year 2	Year 3	
	Information from Balance Sheet			
Total Assets (TA)				
Total Liabilities (TL)				
Current Assets (CA)				
Current Liabilities (CL)				
	Information from Income Statement			
Total / Gross Revenue (TR)				
Profits Before Taxes (PBT)				
Net Profit				
Current Ratio				

☐ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a chartered accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

### Form E: Technical Bid Proposal Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	M/O NHSR&C-SLS-101		

The Bidder's Bid should be organized to follow this format of the Technical Bid Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same may be viewed as non-responsive.

#### **SECTION 1: Qualification, capacity and expertise**

- 1.1 Bidder's general organizational capability: management structure, financial stability and project financing capacity, project management controls, extent of work to be subcontracted (if so, provide details).
- 1.2 Bidder's relevance of specialized knowledge and experience on similar engagements done in the region/country. Bidder should submit a detailed description of the projects executed (quantities/ nature, value, beneficiary)

#### **SECTION 2: Management Structure and Key Personnel**

- 2.1 Describe the overall management approach toward planning and implementing the project. Include an organization chart for the management of project describing relationship of key positions and designations.
- 2.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to scope of goods and/or services.

#### Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/ Qualifications	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
	[Insert]
Professional certifications	<ul> <li>[Provide details of professional certifications relevant to the scope of goods and/or services]</li> <li>+ Name of institution: [Insert]</li> <li>+ Date of certification: [Insert]</li> </ul>
Employment Record/ Experience	[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position and location of employment.
	[Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above condescribes my qualifications, my experiences, and other relevant information about myself.					
Signature of Personnel	Date (Day/Month/Year)				

#### SECTION 3: Scope of Supply, Technical Specifications and Training(s)

This section should demonstrate the Bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed

description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

- 3.1 A detailed description of how the Bidder will deliver the required goods and services, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 3.2 Explain whether any work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 3.3 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 3.4 Details on post-deployment trainings on-site hands-on training.

#### **SECTION 4: Registration & Certifications (if applicable)**

This section should demonstrate the Bidder's responsiveness towards its registration with the relevant national body and international organizations Certifying the bidder's qualifications with respect to Quality and Project Management.

- 4.1 Provide a copy of valid Certificate issued by International Organization for Standardization certifying the bidder's compliance and practices towards quality management principles and standards in their offered products/ solutions and services.
- 4.2 Provide a copy of valid Certificate issued by International Organization for Standardization certifying the bidder's compliance and practices towards information security management principles and standards in their offered products/ solutions and services.

#### **SECTION 5: Warranty and Support Services**

This section should demonstrate the Bidder's responsiveness to the post-commissioning warranty and support services of the goods supplied, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements. All important aspects should be addressed in sufficient detail.

- 5.1 A detailed description of how the Bidder will provide the Warranty claims to the users, keeping in mind the span and complexity of the project in context of local conditions and project environment.
- 5.2 Explain whether any services or work would be subcontracted, to whom, how much percentage of the requirements, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team.
- 5.3 Details how the post-delivery/ deployment Support Services will be provided to the users keeping in consideration the criticality of IT systems, and dependency of university administration and operations on such systems.

## **Form F: Specifications Compliance Form**

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
ITB reference:	M/O NHSR&C-SLS-101		

The Bidder's Bid should be organized to follow this format of the Technical Bid Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same may be viewed as non-responsive.

			Your response Compliance with specifications			
	Goods and services to be Supplied (based on the Technical Specifications provided in Section 5a & Section 5b)		Quoted Specifications	Type/ Model no. & Country of Origin		
Re	equired Items		Offered Item			
Item No. 01: Interactive Digital Recording Host with H.323 capability		(If No, indicate discrepancies)				
IP Video Input						
IP Camera Input	4 channel					
Compression	H.265 / H.264					
Resolution	1080p					
Frame Rate	30fps					
Recording						
Compression	H.265 / H.264					
Resolution	1080p					
Frame Rate	30fps					
Bitrate	128 ~ 8192Kbps					
Streaming	Flash/ HTML5					
Continuous Presence	Cinema mode, PiP, VIP1+2, VIP1+3, 4					
Audio						
Compression	G.711a / G.711u / ADPCM / G.722 / AAC-LC					
Bitrate	32 ~ 128kbps					
Functions	AEC, AGC, ANS, AFC					
Interfaces						
Video Input	2 x DVI-I or more					
Video Output	2 x DVI-I or more					
Audio Input	6 x Mic in or more					
	2 x Line in, Stereo or more					
Audio Output	2 x Line out, Stereo or more					
	S/ PDIF					

Ethernet	1 x Gigabit network port, RJ45		
	interface		
	2 x 10/ 100M, RJ45 interface		
	4 x 10/ 100M, RJ45 interface		
Laterra el LIDD e	(PoE)		
Internal HDDs	2 x SATA (1 x 1TB 2.5" HDD) or more		
Control	2 x RS485, 8 x RS232		
Protocols			
Video Conferencing	H.323, H.239, H.460		
Environmental			
Power	100 ~ 240V AC, 50 ~ 60Hz		
Support Required	·		
Recording	Image Composition Auto		
	Directing		
Item No. 02: EPTZ Camera			
Camera			
Image Sensor	1/1.8" progressive scan CMOS		
Pixels	6.0 Megapixel or higher		
Focal Length	6 ~ 138mm, 23x optical or		
	higher		
Aperture Ratio	F1.5 (W) ~ F3.4 (T), DC drive		
Pan / Tilt Range	Pan: ±5°, Tilt: ±15°, manual		
Illumination	Color: 0.002lux @ (F1.5, AGC		
	ON) B/W: 0.0002lux @ (F1.5,		
Claustian Crass al	AGC ON)		
Shutter Speed	1 ~ 1/30,000s or better		
S/N Ratio	≥ 52dB or better		
Digital Noise Reduction	2D, 3D noise reduction		
Video	11.265/11.264		
Compression	H.265/ H.264		
Image Resolution	1080p or higher		
Frame Rate	1 ~ 30fps or better		
Bitrate	32kbps ~ 16mbps		
Multi-stream	Main stream 1: 1080p Main		
	stream 2: 1080p Secondary		
1 A 1'	stream: D1		
Image Adjustment	Brightness, Contrast, Saturation, Sharpness		
Image Flip	Flip / Mirror / Rotation at 90°,		
95	180°, 270°		
PTZ	ePTZ, Auto tracking		
Audio			
Compression	G.711a / G.711u / ADPCM /		
	G.722 / G.722.1c/ G.726/ AAC-		
<b>D</b>	LC		
Bitrate	32 ~ 64kbps		
Audio Function	Bi-directional audio/ AEC/		
	Mixed audio recording/ Dumb/ Mute		
Network	iviate		
HOLWOIK		<u> </u>	

Network Protocols	TCP/ IP, UDP, HTTP, DHCP, DNS/DDNS, RTSP, PPPoE, NAT, QoS, UPnP, SMTP	
System		
User Authentication	Multilevel, Password	
Interfaces		
Ethernet	1 x Gigabit network port, RJ45 interface	
Audio In / Out	1 x Line in / 1 x Line out	
Control	1 x RS485	
Memory Slot	Micro SD card slot, supports 256GB or more	
Environmental		
Power	12V DC ± 10% / PoE (IEEE802.3at)	
Support Required		
Camera	While Balance Gain Control Electronic Defog	
	Backlight Compensation	
Video	Privacy Masking Auto Directing HLC	
	Motion Detection	
System	Recovery	
	Heartbeat Detection	
	Automatic Network Replenishment (AN)	
Item No. 03: Audience		
Camera		
Image Sensor	1/3" progressive scan CMOS	
Pixels	4.0 Megapixel or higher	
Illumination	Color: 0.05 lux @ (F1.4, AGC ON) B/W: 0 lux with IR	
Shutter Speed	1 ~ 1/ 30,000s or better	
S/N Ratio	>50dB or better	
Lens		
Mount Type	Ф14	
Auto Iris	DC drive	
Focal Length	-Z2812: 2.8~12mm @ F1.4 motorized varifocal lens	
Focus Control	Manual / Semi-Automatic / Auto	
Angle of View	-Z2812: 106° ~ 33°	
Adjustment Range	Pan: 0° ~ 355° Tilt: 0° ~ 75° / Rotation: 0° ~ 355°	
Infrared		
IR Distance	20 ~ 40m or more	
IR Intensity	Smart IR	
Video		
Compression	H.265 / H.264 / MJPEG	
Image Resolution	Main stream: 2592×1520	

	Secondary stream: D1		
Frame Rate	Main stream:		
	2592×1520@30fps		
	Secondary stream: D1@30fps		
Bitrate	32kbps ~ 16Mbps		
Privacy Masking	At least 4 zones		
Motion Detection	At least 4 zones		
Digital Noise Reduction	3D noise reduction		
Image Flip	Flip/ Mirror/ Rotation at 90°, 180°, 270°		
Audio			
Compression	G.711a / G.711u / ADPCM / G.722 / AAC-LC / G.722.1c / G.726		
Bitrate	32kbps ~ 64kbps		
Audio Function	Bi-directional audio/ AEC/ Mixed audio recording/ Dumb/ Mute		
Network			
	TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP, RTSP, PPPoE,		
Network Protocols	FTP, VSIP, UPnP, 802.1x, NAT, QoS, SMTP, IPv4, IPv6		
	(optional)		
User Interface	IPC Control (IE, Firefox, Chrome)		
User Access	10 Users or more		
Application Programming	ONVIF (Profile S, Profile G), GB/T 28181-2011, API,CGI		
Alarm			
Alarm Triggers	Alarm input/ Network disconnect/ Disk full/ Disk error		
	Motion detection/ Tampering/ Guard line/ Defocus/ Scene change/ Enter guard area/ Exit guard area/ Object left/		
Intelligent	Object removal/ Gathering/ Audio surge		
Alarm Events	Alarm report/ Recording/ Text overlay/ Snapshot/ External output/ Email notice/ Acoustic alarm		
Interfaces			
Ethernet	10/ 100M, RJ45 interface		
Audio In / Out	2 x Line in / 1 x Line out		
Control	1 x RS485		
Alarm In / Out	1 x Input / 1 x Output		
Video Out	1 x BNC, 1.0V [p-p] / 75Ω		
Memory Slot	Micro SD card slot, supports up to 128GB		
Power Output	1 x DC12V / 0.1A Output		

Electrical			
Power	AC24V±10% / DC12V ± 10% /		
	PoE (IEEE802.3af)		
Support Required			
Camera	While Balance Gain Control		
	Backlight Compensation (Off /		
	BLC / WDR / HLC)		
	Multi-stream Video Freeze ROI		
Video	Digital Defog		
System	Automatic Network		
	Replenishment (AN)		
	Digital Smart Blackboard 86" or		
98 (with extra writing b	oards 40" diagonal on each side)		
Appearance			
Frame	Aluminum-magnesium alloy		
Surface	photoelectric glass		
LCD			
Display Screen Size	1898~x1069~		
Luminance	480cd/m2 or better		
Visible angle	178°/178° or more		
Contrast	4000:1 or higher		
Resolution	3840*2160 or higher		
Lifetime	50,000h or more		
Touch Sensitivity			
Technology	Capacitive Touch		
Touch Points	10 or more		
Interfaces			
Input Interface	1*HDMI, 1*TOUCH USB, 1*VGA, 3*USB2.0,		
	1*USB3.0,1*RS232,1*Audio in		
LAN Port	1*RJ45		
Power			
Voltage	AC100V~240V 50/ 60Hz		
Support Required			
Writing Tools	Regular Chalk, Dust-free Chalk, Liquid Chalk		
Display ON/ OFF Switch	One-button switch, Gesture Recognition support for screen lock		
Screen Mode Switch	Switchable between full and half screen		
Surface Glass	Explosion-proof, Water- resistant, Dust-proof		
Installation Mode	Both Stand & Wall Mounting Kits		
Teaching Application	English Language, featuring:		
	- Interactive whiteboard		
	functions, e.g., writing, painting, remark, save, highlight, zoom,		
	etc.		

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	- Intelligently identify &			
	convert hand-writing			
	characters/ formula/ shape into printing format			
	- Screen recording and save			
	into '.avi' file			
	- Downloading courseware via			
	QR code scanning Screen			
	pages adding and previewing.			
	- Previewed pages illustrated			
	on the two-split screen, four-			
	split screen, horizontal and			
	vertical screen for comparison			
	teaching			
	- Upload documents (picture,			
	PowerPoint, etc.)			
	- Annotating while playing			
	video			
	Built-in-Microphone Array			
Item No. 05: Open Plugg	gable System (OPS)			
CPU	Intel Core i5 or higher			
Memory	8G DDR4 or higher			
Hard Disk	256G SSD or higher			
Audio	2*15W or better			
Wireless	Build-in Wi-Fi, IEEE			
	802.11b/g/n, ac			
LAN	Build-in network card, 10M/ 100M/ 1000M			
Item No. 06: Smart LED	τv			
SmartTV	65-inch LED TV			
TV Type	LED			
Aspect Ratio	0.672916667			
Resolution/ Contrast	1920*1080/ 4000:01			
Processor	4 Core CPU + 4 Core GPU			
RAM	1GB DDR3 or higher			
Flash Memory	8GB eMMC or higher			
Network	Ethernet, WIFI(802.11 b/g/n),			
	WIFI Hotspot			
Audio Output Power	2*8W			
Connectivity	3*HMDI, 2*(2.0) USB, 1*			
	headphone, 1* EtherLAN			
Operate System	Android 7.0 or higher			
Item No. 07: Teacher/ Sp Bracket/ J- Rod	peaker Mic along with Ceiling			
(8 ft or more adjustable)				
Receiver				
Frequency range	740-820MHz			
Oscillation modes	PLL			
Adjustment method	FM			
Maximum Deviation	±50KHz			
Sensitivity	18dBuV			
Schistoricy	Todbav		1	<u> </u>

SNR	≥89dB or better		
Frequency response	60Hz-15KHz (+/- 3dB)		
Operating voltage	DC 12V		
Balanced output	0-300mV/600Ω		
Dynamic range	≥105dB		
Transmitter			
Frequency range	740-820MHz		
Oscillation modes	PLL		
Adjustment method	FM		
Maximum Deviation	±50KHz		
Transmit Power	10mW or better		
Frequency stability	≤±0.005%		
Power supply	AA battery *2		
Frequency selection	Infrared		
	dience Wireless Mic along with		
Ceiling Bracket/ J- Rod (8	ft or more adjustable)		
Frequency response	100Hz~18KHz		
Sensitivity	-38dB		
Directional property	hypercardiod ≤135°		
Impedance output	200Ω±30%		
Output amplitude	300mV or more		
Max. Sound Pressure	132dB,1kHz at 1% T.H.D		
Dynamic range	Typical 115dB, 1kHz at max sound pressure		
SNR	>=70dB		
Phantom Power	DC 48V		
Output connector	XLR-3-12C		
Item No 09 - Control Pad			
Port	RS232/RS485		
Baud Rate	9600bps		
9600bps	OLED		
Control	Button		
Power Supply	DC12V (±25%)		
Power consumption	<2W		
Operate Temperature	0°C~+40°C		
Storage Temperature	-20°C~+50°C		
Humidity	≤90% (non-condensation)		
Size	200mm*120mm*46mm		
Weight	0.5kg		
· · · · · · · · · · · · · · · · · · ·	5.5Kg	<u> </u>	

Item No 10 - Interactive Fl	at Panel 70"		
Size	1719.3mm×1039.9mm×101mm		
Installation	Support ordinary wall-mounted and moveable stand installation		
Weight	54KG		
Appearance design	Streamlined, non - acute safety design		
Material	Aluminum magnesium alloy metal material		
Compound mode	Touch all in one machine		
Color	Gun gray		
Support liquid pen writing and passive touch pen writing on its surface			
Display size/mm	1650.24mm*928.26mm		
Display ratio	16 : 9		
Resolution	3840*2160		
Brightness	320cd/m²		
Constrast ratio	1400 : 1		
Color temperature	10000K		
Colour gamut	0.72		
Viewing	178°/178°		
Life	≥50000H		
Input	100V~240V/5A/60HZ/50HZ		
Power	285w(MAX)		
Standby power	0.5w		
HDMI output	HDMI*1		
MIC IN	MIC IN*1		
RS232	RS232 *1		
Line OUT	Line *1		
PC Audio in	PC Audio *1		
VGA in	VGA*1		
COAX out	COAX*1		
RJ45 in	RJ45*1		
HDMI in	HDMI*2		
Touch USB2.0	Touch*1		
USB 2.0 Audio	USB 2.0*1		
USB 3.0	USB 3.0*1		
HDMI input	HDMI*1		
Transmission	Type-C*1 (Support 10W		
	charging)		
USB input	USB2.0*1 (PC+Android ) +USB3.0*1 (PC+Android )		
Power	Device power switch/standby button (including indicator light)		
Home	Signal source will switch to the Android interface		

Setting	OSD touch menu interface will			
	be displayed			
Lock screen	Lock the screen			
Lock Touch	lock the touch function			
Record the screen	Record			
Volume +	The sounds will be amplified			
Volume -	The sounds will be decreased			
Chip	V811			
Memory	4G bytes DDR4 ,2400MHZ			
Storage	32 GB Flash			
System	Support Android 8.0 version			
CPU	Intel 13/15/17			
Memory	4G (16G max)			
Hard disk	128G/SSD Solid state drive			
	(optional high configuration)			
Operating system	Window10 Professional			
	/Chinese			
Wired network	Network interface			
	card10M/100M;Realize TV			
	Android networking +OPS			
	computer networking, support			
Minalaga naturada	LAN wake-up  Both Android and OPS can			
Wireless network	achieve wireless Internet			
	access, Android only supports			
	2.4G, OPS supports 2.4G, 5G			
	dual-band WiFi network			
	sharing			
Touch technology	Infrared touch			
Touch points	min 10 points max 20 points			
Writing accuracy	≤2mm			
Glass depth	4mm photoelectric glass			
Writing	Fingers, capacitive pen			
Drive	Driver-free, plug and play,			
	intelligent automatic calibration			
OS	Android, Win 7, Win8, Win10			
Speaker	Full range speaker, power :			
	2*12W			
	king Camera with Expansion			
Microphone	11.2C4 AVC 11.2C4 11.5 b Dr. 61-			
VIDEO STANDARDS AND PROTOCOLS	H.264 AVC, H.264 High Profile, H.265, H.239			
VIDEO INPUT	1x HDMI			
VIDEO OUT	2x HDMI			
1.520 001	Touch display compatible			
PEOPLE VIDEO	4K, 30 fps (TX and RX) from			
RESOLUTION	2048 Kbps • 1080p, 60 fps from			
	1740 Kbps or higher			
	1080p, 30 fps from 1024 Kbps			
	720p, 60 fps from 832 Kbps			
	720p, 30 fps from 512 Kbps			
CONTENT VIDEO	UHD (3840 x 2160) or higher			
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RESOLUTION			
	HD (1920 x 1080p) or higher		
	WSXGA+ (1680 x 1050) or		
	higher		
	UXGA (1600 x 1200) or higher		
	SXGA (1280 x 1024) or higher		
	WXGA (1280 x 768) or higher		
	HD (1280 x 720p) or higher		
	XGA (1024 x 768)		
	SVGA (800 x 600)		
MICROPHONES	UHD (3840 x 2160)		
WHEREITHEITES	WUXGA (1920 x 1200) - HD		
	(1920 x 1080)		
	WSXGA+ (1680 x 1050) -		
	SXGA+ (1400 x 1050)		
	SXGA (1280 x 1024)		
	HD (1280 x 720)		
	XGA (1024 x 768)		
	Content frame rate		
	5–60 fps (up to 4K resolution		
	at 15 fps in call)		
CONTENT SHARING	Apple Airplay		
COTTLETT STITUTE	- Miracast		
	- HDMI input		
	- Whiteboarding		
CAMERA	5x digital zoom or higher		
CAIVIERA	121° DFOV, 110° HFOV or		
	higher		
	UHD 2160p (4K) capture		
	resolution or higher		
	Automatic group framing		
	Automatic speaker framing		
	Presenter Mode		
	Secondary cameras can be		
	added via USB and HDMI		
AUDIO INPUT	3x MEMS microphones, plus 2x		
Nobio IIII 01	2nd order microphones		
	1x HDMI		
	1x 3.5 mm line-in		
	Input for optional expansion		
	microphone		
	3x MEMS microphones, plus 2x		
	2nd order microphones		
	Up to 25 ft of microphone pick		
	up range or higher		
	Optional expansion		
	microphone available		
AUDIO OUTPUT	Stereo speakers		
	Power Handling (RMS) 20		
	Watts		
	Power Handling (MAX) 40		

	Watts		
	Sensitivity 86.1 dB		
	3.5 mm audio output • 1x		
	HDMI		
OTHER INTERFACES	2x USB-A (3.0)		
	1x USB-C		
	Bluetooth® 5.0**		
	WiFi 802.11a/b/g/n/ac (MIMO)		
	Multi-channel Concurrency**		
AUDIO STANDARDS AND	22 kHz bandwidth		
PROTOCOLS	20 kHz bandwidth with G.719		
	(M- Mode)		
	14 kHz bandwidth with Siren 14		
	technology, G.722.1		
	7 kHz bandwidth with G.722, G.722.1		
	3.4 kHz bandwidth with G.711,		
	G.728, G.729A		
NETWORK	IPv4		
NETWORK	IPv6		
	1x 10/100/1G Ethernet		
	Auto-MDIX		
	H.323 and/or SIP up to 6 Mbps		
	running Video App		
	Lost Packet Recovery (LPR)		
	technology		
	Dynamic bandwidth allocation		
	Reconfigurable MTU size		
	Web proxy support—Basic,		
	Digest, and NTLM		
SECURITY	Media encryption (H.323, SIP):		
	AES-128, AES-256 or better		
	H.235.6 support		
	Authenticated access to admin		
	menus, web interface, and API		
	BFCP		
	Local account password policy		
	configuration		
	Security profiles		
	Local account and login port		
	lockout		
	Secure defaults		
	Remote logging with support		
	for TLS		
	Active directory external		
OPTIONS	authentication  Mount kit		
OFTIONS			
	Stand  Plustooth remote central		
	Bluetooth remote control		
INITEDODEDADULTV	Studio Extension Microphone		
INTEROPERABILITY	Zoom Certified		F.C.

	T			<u> </u>
	Microsoft Teams Certified			
	USB device mode			
	Support for native 3rd party			
	applications includes Zoom,			
	Microsoft Teams, BlueJeans,			
	Dialpad, GoToRoom,			
	RingCentral and StarLeaf			
DIGITAL SIGNAGE	Raydiant, Appspace			
ELECTRICAL	Auto sensing power supply			
EEECTRICALE	Typical operating			
	voltage/power			
	- 37 VA @ 120 V @ 60 Hz			
	- 37 VA @ 230 V @ 50/60 Hz •			
	Typical BTU/h: 65			
ENVIRONMENTAL	Operating temperature: 0 to 40			
SPECIFICATION	°C			
	Operating humidity (non-			
	condensing): 15 to 80%			
	Non-operating temperature: -			
	40 to 70 °C			
	Non-operating humidity (non-			
	condensing): 5 to 95%			
EVEN ANGLONIA MICROPHIONE	<u> </u>			
EXPANSION MICROPHONE	Contains one analog			
	Microphone Array and one			
	7.6m/25' RJ11 connection type			
	cable. Range 20 feet or higher			
PHYSICAL	30 W x 4 H x 4 D (Inches) 762			
CHARACTERISTICS	W x 102 H x 102 D (MM)			
	5.6 lbs/2.54 kg			
Item No. 12: Installation, Co	onfiguration, Commissioning,			
and Training				
In atallatian C. C	Consulate in stell 11 C II			
Installation, Configuration	Complete installation of all			
& Commissioning	equipment/ components			
	pertaining to Smart Classroom			
	setup as per manufacturer's			
	guidelines. Configuration of all			
	equipment/ components for an			
	optimum and efficient output			
	of the facility meeting the			
	objectives and requirements.			
	Testing and commissioning of			
	the complete setup as per the			
	requirements and satisfaction			
	of M/O NHSR&C.			
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## **Price Schedule in USD** (in case KHUNAM opens **LC** in favor of Principal/Manufacturer)

Quoted Items in compliance to the Technical Specificationsas referred in Section – 5a and Section – 5b		Quantity(a)	Unit Price [in	TotalPrice [in USD.]
S.No	Items		USD.](b)	3324
1	Interactive Blackboard 86"	10		
2	Interactive Black Board 98"	1		
3	Interactive Flat Panel 70"	4		
4	Open Pluggable Specifications (OPS) System	18		
5	Smart LED TV 65"	1		
6	Interactive Recording and Remote Lecture Solution	1		
7	EPTZ Camera	1		
8	Students Camera	1		
9	Control pad	1		
10	Sound Pickup Solution	1		
11	Instructor Tracking Camera with Expansion Mic	14		
12	Ceiling Speaker system with Wireless Microphone	36		
13	3KVA or above Rackmount Online-UPS	12		
14	Metal Rack/Cabinet with Digital Keypad/NFC lock	2		
15	Hands on Training and Capacity Development	-		

## **Local Services**

		Quantity (a)	Unit Price [in PKR] (b)	Total Price [in PKR]
8	Importation Charges (including Freight, Custom Clearance, and inland transportation)			
	Installation & Commissioning (a) Mounting of equipment (b) Installation of equipment (c) Configuration & Commissioning			
	Training (a) Level 1: Functional Training for end users (b) Level 2: Hands-on Configuration & software training			

## **Extended Warranty Price (at discretion of M/o NHSR&C)**

Annual warranty & Support service beyond standard warranty of the Quoted Items		2 <sup>nd</sup> Year (In Rs/USD)	3 <sup>rd</sup> Year (In	4 <sup>th</sup> Year (In Rs/USD)
S.No	Items	110,002,	Rs/USD)	1.5, 552,
1	Interactive Blackboard 86"			
2	Interactive Black Board 98"			
3	Interactive Flat Panel 70"			
4	Open Pluggable Specifications (OPS) System			
5	Smart LED TV 65"			
6	Interactive Recording and Remote Lecture Solution			
7	EPTZ Camera			
8	Students Camera			
9	Control pad			
10	Sound Pickup Solution			
11	Instructor Tracking Camera with Expansion Mic			
12	Ceiling Speaker system with Wireless Microphone			
13	3KVA or above Rackmount Online-UPS			
14	Metal Rack/Cabinet with Digital Keypad/NFC lock			
15	Hands on Training and Capacity Development			

Total Bid Value in Figures (Prices in PKR including GST):	
Total Bid Value in words (Prices in PKR including GST):	

Name & Designation of Authorized Person:			
Signature:	(Please affix company stamp here)		

## **Annex – I:** Integrity Pact

The Bidders will be required to submit the below text on stamp paper after filling in the details and duly signed as well as stamped, as part of their Technical Proposal.

# DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC PAYABLE BY THE SUPPLIER OF GOODS, SERVICES & WORK IN CONTRACTS WORTH RS. 10.0 MILLION OR MORE

(To be filled by the bidder as a part of ted	:hnical proposal)	
Contract Number:	Dated:	
Contract Value:		
Contract Title:		
interest, privilege or other oblig		ced the procurement of any contract, right Pakistan or any administrative subdivision or ugh any corrupt business partner.
declared the brokerage, commiss and shall not give or agree to give or juridical person, including it sponsor or subsidiary, any commisse or otherwise, with the object	sion, fees etc. paid or payable to anyon e to anyone within or outside Pakistan e s affiliate, agent, associate, broker, o hission, gratification, bribe, finder's fee t of obtaining or inducing the procuren	_represents and warrants that it has fully e and not given or not given or agreed to give ither directly or indirectly through any nature consultant, director, promoter, shareholder or kickback, whether described as consultant nent of a contract, right, interest, privilege of s been expressly declared pursuant hereto.
all persons in respect of or relate		ure of all agreements and arrangements with ot taken any action or will not take any action
discloser, misrepresenting facts and warranty. It agrees that any	or taking any action likely to defeat the contract, right, interest, privilege or oth ice to any other right and remedies ava	aking any false declaration, not making ful e purpose of this declaration, representation ner obligation or benefit obtained or procured ilable to GoP under any law, contract or othe
for any loss or damage incurred GoP in an amount equivalent to tbyas at	by it on account of its corrupt busines en time the sum of any commission, gra	agrees to identify GoF agrees to identify GoF agrees to identify GoF as practices and further pay compensation to atification, bribe, finder's fee or kickback giver or inducing the procurement of any contract am GoP.
[Buyer] [Seller / Supplier]		