### INTERNATIONAL DEVELOPMENT LAW ORGANIZATION INVITATION TO BID

Reference: ITB N_58_2021_KYR	Date: 12 August 2021

Dear Sir/Madam,

The International Development Law Organization (IDLO) kindly invites your Company/Organization to submit a Bid for **ICT Equipment**. The full requirement is described in Annex C.

We also request that your Bid is submitted using the format specifically detailed in Annex D, E and F.

Bids submitted by email must be limited to a maximum of **10MB**, virus-free and no more than two email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

Bids shall be evaluated based on the criteria set in Annex B.

IDLO is not bound to accept any Bid, nor award a Contract, nor be responsible for any costs associated with a Bidder's preparation and submission of a Bid, regardless of the outcome or the manner of conducting the selection process.

IDLO encourages every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to IDLO if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this Invitation to Bid (ITB).

By submitting a Bid in response to this information, Bidders are confirming acceptance of IDLO General Terms and Conditions for the Procurement of Goods or Services and IDLO Supplier Code of Conduct in full and; Payment Policy where payment is made within 30 days after delivery of service on presentation of complete and correct invoice.

This ITB consists of the following Annexes. Please be guided by these in preparing your Bid:

a.	Instructions to Bidders	Annex A
b.	Preliminary Screening Criteria	Annex B
C.	Terms of Reference (TOR)	Annex C
d.	Bid Submission Form	Annex D
e.	Bidder Information Form	Annex E
f.	Price Schedule	Annex F
g.	IDLO Special Conditions of Contract	Annex G
h.	IDLO General Terms and Conditions for the Procurement of Goods or Services and IDLO Supplier Code of Conduct	Annex H



For any questions/clarifications related to this ITB before Deadline for Submissions of Bid, please contact IDLO on <a href="tenders@idlo.int">tenders@idlo.int</a> and mention Clarifications ITB N\_58\_2021\_KYR in the subject section of your email.

Deadline for Submission of Proposals: On or before **Date: August 19, 2021 Time: 15:00 Hours Rome, Italy local time.** 

Thank you and we look forward to receiving your Bid.

Sincerely yours, International Development Law Organization | IDLO Kyrgyzstan Country Office



## ANNEX A INSTRUCTIONS TO BIDDERS

1.	General Considerations	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.  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 IDLO.		
2.	Cost of the Bid	The Bidder shall bear all costs associated with the preparation and submission of the Bid.		
		IDLO will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.		
3.	Currency of Bid	Bids shall be nominated exclusively in <b>Kyrgyz Soms</b> .		
		Note: Local Suppliers must comply with any applicable laws regarding doing business in other currencies		
4.	Language of the Bid	The Bid and all correspondences and documents relating to the Bid exchanged by the Bidder and IDLO shall be written in the English language.		
5.	Deadline for Submissions of Bid	The Bid shall be addressed to IDLO on or before  Date: August 19, 2021  Time: 15:00 hours Rome, Italy local time.		
		Note: Proposals submitted by email must be limited to a maximum of <b>10MB</b> , virus-free and no more than two email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.		
6.	Delivery Term and Place	Incoterms Delivery Duty Paid Goods will be delivered within 30 days after receipt of PO or contract from IDLO to: 180a Chui Avenue, Bishkek, Kyrgyzstan		
7.	Customs clearance , if needed, shall be done by:	□ IDLO  Supplier □ N/A		
8.	Special Packing Requirement or Temperature Control	☑ N/A  ☐ Yes		
9.	Documents comprising the Bid	The Bid shall comprise the following components:  1. Bid Submission Form (see Annex D);  2. Bidder Information Form (see Annex E)  3. Price Schedule (Annex F)		



10. Contents of solicitation documents	The Bidder is expected to examine all corresponding instructions, forms, terms and specifications contained in the Solicitation Documents. Failure to comply with these documents will be at the Bidder's risk and will affect the evaluation of the Bid.		
11. Clarification of solicitation documents	A prospective Bidder requiring any clarification on this ITB may contact IDLO by email on <a href="mailto:tenders@idlo.int">tenders@idlo.int</a> no later than 72 hours prior to the deadline for submission of Bids.		
	Please mention <b>Clarification ITB N_58_2021_KYR</b> in the subject section of your email.		
	Written copies of the organization's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective Bidders that have received the Solicitation Documents or posted on IDLO website.		
	Any delay in IDLO's response shall not be used as a reason for extending the deadline for submission, unless IDLO determines that such an extension is necessary and communicates a new deadline to all the Bidders.		
12. Amendments of solicitation documents	At any time prior to the deadline for submission of Bids IDLO may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Solicitation Documents by amendment.		
	All prospective Bidders that have received the Solicitation Documents will be notified in writing of all amendments to the Solicitation Documents.		
	In order to afford prospective Bidders reasonable time for taking the amendments into account and preparing their offers, the procuring IDLO entity may, at its discretion, extend the deadline for the submission of Bids.		
13. Format, signing sealing, marking and submission of Bids	The Bid shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the Bid.		
	The Bid must be submitted using the format specifically detailed in Annex D, E and F.		
	A Bid shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the Bid.		
	Before the stipulated deadline, the Bidder shall send one email to the following e-mail address:  tenders@idlo.int with the Subject: "Submission for ITB N_58_2021_KYR"		



14. Joint Venture, Consortium, or Association

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 a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between IDLO and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.

After the Deadline for Submission of Bid, the lead entity identified to represent the JV, Consortium or Association shall not be altered without the prior written consent of IDLO.

The lead entity and the member entities of the JV, Consortium or Association shall abide by the requirement outlined in the following section in respect of submitting only one bid.

The description of the organization of the IV, Consortium or Association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the RFP, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by IDLO.

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.

JV, Consortium or Associations are encouraged for high value, multisectoral requirements when the spectrum of expertise and resources required may not be available within one firm.

The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the RFP, both in the Bid and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by IDLO.



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 the are found to have any of the following:  a) they have at least one controlling partner, director of shareholder in common; or  b) any one of them receive or have received any direct of indirect subsidy from the other/s; or  c) they have the same legal representative for purposes of the ITB; or  d) they have a relationship with each other, directly of through common third parties, that puts them in a position to have access to information about, or influence on the Bider.	5. Only One Bid
of, another Bidder regarding this ITB process;  e) they are subcontractors to each other's Bid, or subcontractor to one Bid also submits another Bid under in name as lead Bidder;  f) or some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for the ITB process. This condition relating to the personnel, does not apply to subcontractors being included in more that one Bid.	
16. Late Bids  Any Bid received by IDLO after the deadline for submission of Bid pursuant to clause <i>Deadline for the submission of Bid,</i> will be rejected and sent back unopened or destroyed unopened if the return cannot be secured unless the Bid was sent by email but was not proper received due to issues in IDLO mailing system.	5. Late Bids
17. Validity Period of Bids  All Bids will be valid for <b>90 days</b> from the deadline for submission of Bids. In exceptional circumstances IDLO may request the Bidders to extend the validity of the Bid beyond what has been initially indicated in this ITB. The Bidders shall be invited to confirm the extension is writing, without any modification whatsoever on the Bid. The Bidder may choose not to extend the validity period of the Bid upon request of IDLO.	7. Validity Period of Bids
18. Modification and withdrawal of Bids  The Bidder may modify/withdraw its Bid after the Bid's submission provided that written notice of the withdrawal is received by IDLO prior to the deadline prescribed for submission of Bids.	
The Bidder's modification/withdrawal notice shall be prepared sealed, marked, and dispatched in accordance with the provision of clause Deadline for Submission of Bids.	
No Bid may be modified nor withdrawn after the deadline for submission of Bids.	
No Bid may be modified/withdrawn in the Interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder in the Bid Submission Form.	
19. Amendment of the Bid At any time prior to the deadline of Bid submission, IDLO may for ar reason, such as in response to a clarification requested by a Bidde	9. Amendment of the Bid



	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, IDLO may extend the Deadline for submission of bid to give the Bidders reasonable time to incorporate the amendment into their Bids.		
20. Bidders' conference	⊠ N/A □ <del>Yes</del>		
21. Right to accept, reject, or render non-responsive any or all Bids	IDLO reserves the right to accept or reject any Bid, to render any or all of the Bids as non-responsive, and to annul the solicitation process and to reject all Bids at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for IDLO's action. Furthermore, IDLO shall not be obliged to award the contract to the lowest priced offer.		
22. Clarification of Bids	To assist in the examination, evaluation and comparison of Bids, IDLO may at its discretion ask the Bidder for clarification of its Bid. The request for clarification and the response shall be in writing and no change in price or substance of the Bid shall be sought, offered or permitted.		
23. Evaluation of Eligibility and Qualification	In general terms, Bidders that meet the following criteria may be considered qualified:  a) They are not included in IDLO Sanctions lists (EU, US, UN); b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial commitments, c) They have the necessary similar experience, technical expertise, production capacity where applicable, quality certifications, quality assurance procedures and other resources applicable to the provision of the services required; d) They are able to comply fully with IDLO General Terms and Conditions of Contract and IDLO Supplier Code of Conduct; e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and f) They have a record of timely and satisfactory performance with their clients.		
24. Price variation	Bidders shall not vary their prices for any reason after the deadline of the tender and while the Bid is still valid.		
25. Preliminary Screening	IDLO will screen the Bids' Annex D and E to determine whether they are complete, whether the documents have been properly signed, and whether the Bid is generally in order.		
26. Correction of errors	In the event of a discrepancy between the unit price and the total price, the unit price shall prevail and the total price shall be corrected by IDLO. If the Bidder does not accept the final price based on IDLO's correction of errors, its Bid will be rejected.		



27. Due Diligence	<ul> <li>IDLO 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> <li>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> <li>c) 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> <li>d) Inquiry and reference checking with previous clients on the performance on on-going or contracts completed, including physical inspections of previous works, as necessary;</li> <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 IDLO may deem appropriate, at any stage within the selection process, prior to awarding the contract.</li> </ul> </li></ul>
28. Responsiveness of Bid	IDLO will determine the substantial responsiveness of each Bid to the ITB. For purposes of this Clause, a substantially responsive Bid is the one which materially conforms to the requirement of the tender and any mandatory terms contained in the Solicitation Documents.  IDLO's determination of a Bid's responsiveness is based on the contents of the Bid itself without recourse to extrinsic evidence.
29. Evaluation of Bid	All eligible Bids are assessed whether they are compliant, i.e., meet or exceed the specifications of the ITB
30. Right to Vary Requirements at the time of the Award	<ul> <li>N/A for Framework Agreement</li> <li>Yes - At the time of award of Contract, IDLO reserves the right to vary (increase or decrease) the quantity of goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.</li> </ul>
31. Contract Award	Contract Award shall be granted according to:  a) Full submission of relevant documentation as per Preliminary Screening Criteria (Annex B);  b) Full submission of Bid Submission Form (Annex D) signed and stamped;  c) Full submission of Bidder Information Form (Annex E);  d) Full submission of Price Schedule (Annex F) signed and stamped;  e) Lowest priced, most technically acceptable/compliant offer;



32. Contract Signature	Within five (10) calendar days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to IDLO. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Bid Security, if any, and on which event, IDLO may award the Contract to the Second Ranked Bidder or call for new Bids.	
33. Debriefing	In the event that a Bidder is unsuccessful, the Bidder may request a debriefing from IDLO. The purpose of the debriefing is to discuss the strengths and weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future bids for IDLO procurement opportunities. The content of other bids and how they compare to the Bidder's submission will not be discussed.	
34. Payment Terms	IDLO will make payment within <b>30 days</b> after satisfactory receipt of all goods and upon submission of the invoice by the Supplier.	
35. General Terms and Conditions and Supplier Code of Conduct	Any Contract or Purchase Order that will be signed as a result of this ITB shall be subject to the IDLO's General Terms and Conditions and Supplier Code of Conduct attached as Annex H.  The mere act of submission of a Bid implies that the Bidder accepts both Annexes in full.	
36. Liquidated Damages	☐ N/A  ☑ Yes - For late delivery of Goods, IDLO shall be entitled to claim liquidated damages from the Contractor in accordance with Article 23 of the General Terms and Conditions.  Liquidated damages for inferior quality or non-conformance of specifications of Goods will be assessed on a case-by-case basis in accordance with the severity of the problem as determined solely by IDLO. The application of this liquidated damages provision shall not relieve the Contractor of its obligations or liabilities pursuant to this Contract	
37. Partial Bid	Not permitted  ☐-Permitted	



## ANNEX B PRELIMINARY SCREENING CRITERIA

#### A. MINIMUM ELIGIBILITY CRITERIA

Subject	Criteria	Document Submission Requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Valid Certificate of Incorporation/Registration
Tax Revenue	Vendor is registered with pertinent country's revenue authority.	Valid Tax Compliance Certificate
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with ITB Annex A Clause 21.	Self-Attestation Letter
Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 3 years.	Self-Attestation Letter
Bankruptcy	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.	Self-Attestation Letter
Certificates and Licenses	<ul> <li>Duly authorized to act as Agent on behalf of the Manufacturer, or Power of Attorney, if bidder is not a manufacturer</li> <li>Official appointment as local representative, if Bidder is submitting a Bid on behalf of an entity located outside the country</li> <li>Quality Certificates for the Goods</li> <li>Statement whether Export/Import Licenses, if applicable</li> <li>Brochures</li> <li>Description of all related services offered, physical address and contact details for office.</li> </ul>	Product Catalogues or Brochures (Product Data Sheets) attesting compliance with Technical Specifications as mentioned under Annex C Provision of Serial Numbers at Time of Shipment to be included in Contract and to be counter-checked by IDLO at the time of Delivery Quality Certificates for the Goods (ISO), if available Manufacturer's Authorization of the Company as a Sales Agent (if Supplier is not the manufacturer), if available Full Company Profile with physical address and contact details of the office



#### **B. QUALIFICATION CRITERIA**

QUALIFICATION	Criteria	Document Submission Requirement
Previous Experience	Minimum 2 contracts of similar value and nature implemented over the last 2 years with UN Agencies, INGOs, Embassies or Government State Agencies indicating contactable domain email references for verification (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Copies of two contracts/ LPOs / reference letters with contactable domain email addresses for verification
Financial Standing	Minimum average annual turnover of EUR 15.000 for the past 2 years. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).  Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability by submitting an audited financial statements (balance sheets, including all related notes, and income statements) for the last 2 years  (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Financial Statements for the past two (2) years



## ANNEX C TERMS OF REFERENCE / TECHNICAL SPECIFICATIONS ICT EQUIPMENT

#### **General Requirements**

- 1. Equipment and consumables must ensure a consistently high quality of operation and be reliable.
- 2. Used, reconditioned, recycled, or modified in any way equipment or consumables are not allowed.
- 3. Equipment from leading manufacturers should be provided.
- 4. All proposed equipment characteristics must meet or exceed the minimum technical characteristics indicated in this technical specification.
- 5. Full warranty (factory warranty and maintenance servicing guarantee) for the supplied equipment and consumables must be valid for at least 12 months.
  - i. During the warranty period, the restoration of equipment operability at the Customer's site shall be within one working week.
  - ii. During the warranty period, if it is impossible to restore the functionality of the failed equipment (in a warranty case), it must be replaced with the same model or a similar counterpart (as agreed with the Customer) within 14 working days.
- 6. The equipment must be supplied with a full set of drivers for installed devices on electronic media.
- 7. Delivery at the request of the supplier or buyer can be carried out ahead of schedule.
- 8. All hardware must be designed for operation in the following conditions (GOST 2132-80 / for enclosed spaces/):
  - power supply parameters (220 V + 10 / -15%, 50 Hz +/- 1 Hz);
  - ambient temperature from + 10 ° C to + 32 ° C;
  - relative humidity from 40% to 80% at a temperature of 23 ° C. Life time of the equipment must be at least 5 years.



#### **Specification of Goods**

Lot 1 – Equipment for Multimedia Hall

#	Item Name	Specification	Unit measure	Quantity
1	Negotiation system control unit with camera control function for automatic speaker tracking and Installation and Configuration Services	Microphone power supply, negotiation mode control, audio signal switching.  FIFO Mode (first in, first out mode): selects from 1 to 6 simultaneous speakers.  LIMIT mode: selects the number of speakers from 1 to 6.  FREE mode  CHAIRMAN mode  LIFO mode: last in first out.  Presenter mode  Number of simultaneous speakers: 1 to 6 (at least, the chairman unit and the delegate unit can be used simultaneously).  The negotiation system control unit, in addition to switching audio, must provide camera control for automatic tracking of the speaker (active microphone).  Built-in USB connector for conference recording. Supports USB sticks up to 64GB, a USB stick must be included.  On the front panel of the control unit there should be a full-fledged informative interface for controlling the unit: buttons for controlling speech modes and the number of consoles; the LCD screen should display the status and operating modes of the device.  Support for connecting 60 microphones, distributing them to 3 parallel outputs, 20 microphones per channel.  Possibility of increasing the number of connected microphones by connecting an additional scaling unit.  The presence of a 6.3 mm audio-in connector, which allows to add a music track to the signal from the consoles, and a variety of outgoing	UNIT	1



		<ul> <li>audio-out connectors for convenient audio signal output to various audio devices.</li> <li>Built-in I / O splitter that can be used to remotely control an audio conference.</li> <li>Availability of software to control all functions of the conference system.</li> </ul>		
		Technical characteristics:		
		<ul> <li>Power supply parameters: AC 220V±10% 50Hz;</li> <li>Rated voltage: 100Hz-12.5Hz;</li> <li>Output impedance: REC:200Ω LINE:200Ω BALANCE: 300Ω UNBALANCE: 400Ω;</li> <li>Input impedance: LINE:50KΩ PBIN:50KΩ;</li> <li>Signal to noise ratio: 100dB (1KHz THD1%);</li> <li>Dimensions (mm): 480x370x85;</li> <li>RACKMOUNT: Yes, 2 U;</li> <li>Microphone connection type: Wired;</li> <li>Complete set of required cords and consumables for commissioning.</li> </ul>		
		Technical Services: Installation and configuration of a control unit for conversations with a camera control function for automatic tracking of the speaker and feedback suppressor.		
2	Chairman microphone and Installation Services	<ul> <li>Directional Pattern: Unidirectional;</li> <li>LCD screen: Yes;</li> <li>Microphone body: «gooseneck» (other microphone form factors are allowed);</li> <li>Signal-to-noise ratio, dB: 68;</li> <li>Microphone type: Condenser;</li> <li>Microphone console type: Chairman</li> <li>Microphone connection type: Wired;</li> <li>Frequency response: 50Hz-17KHz;</li> <li>Sensitivity: -45±2dB@1KHz;</li> <li>Microphone power supply: from the control unit;</li> <li>Automatic tracking of camcorder connection: Yes;</li> <li>Power button: Yes;</li> <li>Status indicator and operating mode display: Yes;</li> <li>LCD screen: not less than 128*64 dots;</li> <li>Echo and noise cancellation function: Yes;</li> </ul>	UNIT	1



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3	Delegate microphone and Installation	<ul> <li>Color: Silver.</li> <li>Delegate units enable or disable function: Yes;</li> <li>Complete set of required cords and consumables for commissioning</li> <li>Technical Services: Installation of microphone</li> <li>Directional Pattern: Unidirectional;</li> <li>LCD screen: Yes;</li> <li>Microphone body: «gooseneck» (other microphone form factors are allowed);</li> <li>Signal-to-noise ratio, dB: 68;</li> <li>Microphone type: Condenser;</li> <li>Microphone console type: Delegate</li> <li>Microphone connection type: Wired;</li> <li>Frequency response: 50Hz-17KHz;</li> <li>Sensitivity: -45±2dB@1KHz;</li> <li>Microphone power supply: from the control unit;</li> <li>Automatic tracking of camcorder connection: Yes;</li> <li>Power button: Yes;</li> <li>Status indicator and operating mode display: Yes;</li> <li>LCD screen: not less than 128*64 dots;</li> <li>Echo and noise cancellation function: Yes;</li> <li>Color: Silver.</li> <li>Delegate units enable or disable function: Yes;</li> <li>Complete set of required cords and consumables for commissioning.</li> <li>Technical Services:</li> </ul>	UNIT	12
		Installation of microphones     Provides automatic channel mixing in		
4	Mixing console and Installation Services	<ul> <li>Provides automatic channel mixing in gain split mode;</li> <li>Provides stable, high quality audio output from all inputs in the unit without feedback, excessive ambient noise, or comb filtering;</li> <li>The controls and LED indicators on the front of the mixer should allow users to easily adjust I / O and gain levels, set and recall presets, turn phantom power on / off, low pass filter, automatic mixing and acoustic echo cancellation (AEC), change IP</li> </ul>	UNIT	1



		configuration (automatic or static) and other functions;  • 4 balanced mic inputs, 2 balanced mic / line inputs and 1 unbalanced stereo input;  • 1 stereo and 2 mono outputs;  • 2-channel USB audio interface for software codec integration (Skype, WebEx) or computer playback;  • Complete digital processing of inputs and outputs;  • 8 x 3 audio routing matrix;  • 6-channel Smart Mix;  • Built-in acoustic echo cancellation (AEC) processing;  • Front panel direct control and Web Remote function;  • IP control for third party administration;  • Cat5e cable can connect up to 6 mixers;  • RACKMOUNT: Yes, 1- 2 U.  Technical Services: Installation of mixing console internal sound system  • Advanced feedback suppression;		
5	Feedback suppressor	<ul> <li>24 programmable filters with LED indicators per channel;</li> <li>Stereo or mono channel processing;</li> <li>Fixed and sliding filter modes;</li> <li>Choice of filter off time;</li> <li>Specialized filter types: speech, music, music / speech;</li> <li>5 savable user presets;</li> <li>Input level measurement;</li> <li>XLR and TRS electronically balanced inputs and outputs;</li> <li>USB port for updating device firmware.</li> <li>Technical characteristics:         <ul> <li>Analog inputs:</li> <li>Number of inputs: 2</li> <li>Connectors: Male XLR and 1/4 "TRS</li> <li>Type: Electronic balanced / unbalanced, RF filtered</li> <li>Impedance: Balanced 50 Kohm, Unbalanced 25 Kohm</li> </ul> </li> </ul>	UNIT	1



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		<ul> <li>Maximum line input level: +20</li> <li>dBu</li> </ul>		
		o CMRR:> 40 dB, typically> 55dB @		
		1 kHz		
		<ul><li>Analog outputs:</li></ul>		
		<ul><li>Number of outputs: 2</li></ul>		
		<ul> <li>Connectors: male XLR and 1/4 "</li> </ul>		
		TRS		
		o Type: Electronic balanced /		
		unbalanced, RF filtered		
		o Impedance: Balanced> 120		
		ohms, unbalanced> 60 ohms		
		o Maximum output level: +20 dBu		
		A/D performance:		
		<ul> <li>Type: dbx Type IV ™ conversion system</li> </ul>		
		o Dynamic Range:> 110 dB A-		
		weighted,> 107 dB unweighted		
		o Type IV ™ dynamic range:> 119		
		dB, A-weighted; > 117 dB,		
		unweighted		
		<ul> <li>A/D conversion: 24 bit</li> </ul>		
		<ul> <li>D/A performance:</li> </ul>		
		<ul> <li>Dynamic Range: 112 dB A-</li> </ul>		
		weighted, 109 dB unweighted		
		<ul> <li>D/A conversion: 24 bit</li> </ul>		
		<ul> <li>General system characteristics:</li> </ul>		
		<ul> <li>Sampling rate: 48 kHz</li> </ul>		
		<ul> <li>Dynamic Range:&gt; 107 dB A-</li> </ul>		
		weighted,> 104 dB unweighted		
		<ul> <li>Harmonic distortion + noise:</li> </ul>		
		0.0043 percent Typ., at +4 dBu, 1 kHz		
		<ul><li>Amplitude-frequency response:</li></ul>		
		20 Hz - 20 kHz, +/- 1.0 dB		
		<ul><li>Channel-to-channel crosstalk:&gt;</li></ul>		
		100 dB typ.		
		o Input to Output Crosstalk:> 100		
		dB typ.		
		Other characteristics:		
		<ul> <li>Operating voltage: 100-240 V,</li> </ul>		
		50/60 Hz		
		<ul> <li>Power consumption: 8W</li> </ul>		
		RACKMOUNT: Yes, 1- 2 U.		
		Active 2-way speaker system;		
		Control: Volume (x2), D-CONTOUR:		
		FOH/MAIN, MONITOR, OFF, Low pass		2
6	Loudspeakers	filter;	UNIT	2
		<ul> <li>Power: 465 W / 1000 W (post / peak);</li> </ul>		
		Package contents: 12" LF + 1.4" HF		
		driver;		



		<ul> <li>Frequency response: 52Hz - 20kHz (-10dB);</li> <li>Maximum sound pressure level (SPL): 131 dB;</li> <li>Connectors: XLR In - 1/4" combo Mic / Line, XLR In - 1/4" combo Line + 2 x RCA, XLR out;</li> <li>Optional: 35 mm cup holders for standard post mounts + 3 suspension mounts (M8 x 15 mm)</li> <li>A stand for installing a speaker system with the ability to adjust the height of the speakers up to 180 cm, the weight of the installed equipment is up to 50 kg.</li> <li>Complete set of required cords and consumables for commissioning.</li> <li>Note: It is allowed to use inactive speakers</li> </ul>		
		with a mixing amplifier for wall mounting.		
7	Camera	<ul> <li>Resolution: 1080p/60, 1080p/50, 1080i/60, 1080i/50, 1080p/30, 1080p/25, 720p/60, 720p/50, 720p/30, 720p/25, 640x480p/240 SD: 480i, 576i;</li> <li>Lens and sensor: 1 / 2.7``, CMOS, sensor: 2.07M;</li> <li>Magnification (optical): 12x, f3.5mm ~ 42.3mm, F1.8 ~ F2.8;</li> <li>Minimum illumination: 0.05 Lux @ (F1.8, AGC ON);</li> <li>Shutter: 1/30s ~ 1/10000s;</li> <li>White balance: Auto, 3000K/Indoor, 4000K, 5000K/Outdoor, 6500K_1, 6500K_2, 6500K_3</li> <li>Back light compensation: Yes;</li> <li>Noise reduction: 2D&amp;3D;</li> <li>Signal to noise ratio: ≥55dB;</li> <li>Viewing angle (horizontal): 72.5° ~ 6.9°;</li> <li>Viewing angle (vertical): 44.8° ~ 3.9°;</li> <li>Rotation angle (vertical): -30° ~ +90°;</li> <li>Rotation speed (horizontal): 1.7° ~ 100°/s;</li> <li>Rotation speed (vertical): 1.7° ~ 69.9°/s;</li> <li>Frame transformation: Yes;</li> <li>Freezing image: Yes;</li> <li>Presets: 255;</li> <li>Preset accuracy: 0.1°;</li> </ul>	UNIT	1



- Color system: YUV 4:2:2;
- Video formats USB3.0: 1080p/60, 1080p/50, 1080p/30, 1080p/25, 720p/60, 720p/50, 720p/30, 720p/25;
- USB video switching protocol: UVC 1.0;
- UVC PTZ;
- Video compression: H.265/H.264/MJEPG;
- Video stream: Main, Sub;
- Stream resolution (Main): 1920x1080, 1280x720, 1024x576;
- Stream resolution (Sub): 720x576, 720x480, 320x240;
- Video bitrate: 128Kbps ~ 8192Kbps;
- Bitrate type: Variable Rate, Fixed Rate;
- Frame rate: 50Hz: 1fps ~ 50fps, 60Hz: 1fps ~ 60fps;
- Audio compression: AAC;
- Audio bitrate: 96Kbps, 128Kbps, 256Kbps;
- Supported protocols: TCP/IP, HTTP, RTSP, RTMP, Onvif, DHCP, Multicast, etc.;
- HD output 1xHDMI: Version 1.3;
- SD output 1xCVBS: 3.5mm mini jack, 1Vp-p, 75Ω;
- Network interface 1xRJ45: 10M/100M Ethernet Interface;
- Audio interface 1-ch: 3.5mm Audio Interface, Line In;
- USB 1xUSB3.0: Type B female jack;
- 1xUSB2.0: Type A female jack;
- Control interfaces: 1xRS232 In: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P 1xRS232 Out: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only 1xRS485: 2pin Phoenix Port, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P;
- Power supply: PoE (Power over Ethernet);
- Input voltage: DC 12V;
- Power consumption: 1.0A (Max);
- Operating temperature: -10°C ~ 40°C (14°F ~ 104°F);
- Storage temperature: -40°C ~ 60°C (-40°F ~ 140°F);
- Power consumption: 12W (Max);



8	Interactive whiteboard	<ul> <li>Complete set of required cords and consumables for commissioning;</li> <li>Camera wall mount included.</li> <li>Brightness: 550 cd / m2;</li> <li>Contrast: 10000:1;</li> <li>Resolution: 3840 × 2160;</li> <li>Supports Wi-Fi;</li> <li>Diagonal: 86";</li> <li>Supports 4K;</li> <li>Screen format: 16:9;</li> <li>Response time: 6 ms;</li> <li>VESA: 800 x 400 mm;</li> <li>Number of touches: at least 20 touches;</li> <li>Viewing angle: 178 degrees;</li> <li>Video input: RJ45-IN x 1, COAX x 1, RS232 x 1, AV x 1, YPBRP x 1, PC Audio In x 1, VGA x 1, VGA § DP Touch x 1, DP In x 1, HDMI x 2, USB 3.0 x 2, USB 2.0 x 2, TF Card x 1;</li> <li>Video output: RJ45 Out x 1, HDMI Out x 1, Earphone Out x 1;</li> <li>Built-in speakers: 2 x 15 W;</li> <li>Active area: 1895.04 x 1065.96 mm;</li> <li>Input method (recognition): Finger, marker;</li> <li>Package contents: remote control, power cable, USB cable, HDMI cable, wall mount, manual;</li> <li>Thin frames,</li> <li>Complete set of required cords and consumables for commissioning.</li> <li>Functional characteristics:</li> <li>Built-in computing unit: at least Android 8.0, 4-core processor, 32 gb of internal memory, HDMI OUT;</li> <li>Support for the function of connecting to the interactive panel of mobile phones, tablets, etc.;</li> <li>Broadcasting the screen of the connected gadget to the panel and vice versa (at least 4 devices);</li> <li>Controlling the integrative panel using a phone or tablet.</li> </ul>	UNIT	1
9	Document Camera and Installation Services	<ul> <li>Image sensor: 1/4 " CMOS color image sensor;</li> <li>Total Pixels: 5 Megapixels;</li> <li>Output Resolution: 5M (2592 x 1944);</li> <li>TV Lines: 1000 (Maximum);</li> </ul>	UNIT	1



		<ul> <li>Total magnification: 8X digital zoom;</li> <li>Frame rate: 30 fps;</li> <li>Focusing: auto / manual;</li> <li>Capture area: 483 x 362 mm;</li> <li>Image rotation: Electronic rotation 0° / 90° / 180° / 270° (via software);</li> <li>Annotation: Yes (via software);</li> <li>Direct recording: Yes (via software);</li> <li>Image Effects: Color / B &amp; W / Negative / Freeze (via software);</li> <li>Image Adjustment: Auto / Manual (via software);</li> <li>Presentation tools: Yes (Spotlight and BLIND via software);</li> <li>Built-in microphone: Yes;</li> <li>Shooting Mode: Single / Continuous;</li> <li>Backlight: Built-in, LED;</li> <li>Mini USB 2.0 port: Yes (connects to PC);</li> <li>Power supply: USB powered.</li> <li>Technical Services:</li> <li>Installation of the camera, debugging of the automatic guidance function, joint work with the audio conference system</li> </ul>		
10	Conference control device and Installation Services	<ul> <li>Management server:</li> <li>Housing: Server housing 2U-4U.</li> <li>Processor (number of CPU cores: 4; number of threads: 8; frequency: 3.6GHz - 4.0GHz; L2 cache size: 2MB; L3 cache size: 4MB; number of GPU cores: 10; GPU frequency: 1300 MHz; PCI Express PCIe version: 3.0; Max. Memory speed: Up to 2933MHz; Memory type: DDR4; number of memory channels: 2.</li> <li>Motherboard (4xDDR4,12xUSB, USB 3.1, ATX, M.2,2PCIe, PCIe16x DVI VGA HDMI).</li> <li>RAM: 32 GB (DDR4 16GB PC-21333 (2666MHz) x 2 pcs.).</li> <li>SSD: 3D 240GB 3D TLC 2,5"" SATAIII.</li> <li>HDD: 3TB, 5400rpm, 3.5", SATA3.</li> <li>Power supply unit: 550W, 230V, 120mm fan PWM Active PFC.</li> <li>Video card: 1-2GB GDDR5, 128Bit, 2xDVI-I, HDMI, DP.</li> <li>Optical drive: Yes.</li> <li>Silent cooling package: Yes;</li> </ul>	UNIT	1



 Pre-installed operating system: Microsoft Windows 10 Professional Original - OEM.

#### Touch screen control panel:

- Display characteristics:
- o Design: ultra-thin;
- o Diagonal: 23.8", 60.5cm;
- o Panel: IPS LED, AG coated glass;
- o Resolution: 1920 x 1080 @ 60Hz;
- Aspect ratio: 16:9;
- o Brightness: 250 cd / m<sup>2</sup> standard;
- Contrast: 1000: 1 standard;
- Enhanced contrast: 5M:1:
- o Response Time (GTG): 4ms;
- Viewable area: horizontal / vertical: 178° / 178°, right / left: 89° / 89°, up / down: 89° / 89°;
- o Color support: 16.7mln 8bit;
- Horizontal Frequency: 30 80kHz;
- o Pixel size: 0.274mm;
- o Bezel color and finish: grey, matt.
- Sensor characteristics:
  - Touch Technology: Projected capacitive;
  - Touch Points: 10 (HID, requires a supported OS);
  - Touch input: stylus, finger, glove (latex);
  - Touch interface: USB;
  - Palm rejection: Yes.
- Interfaces and functions:
  - Analog signal input: VGA x1;
  - Digital signal input: HDMI x1;
  - Audio output: Loudspeakers 2 x 2W;
  - HDCP: Yes;
  - USB HUB: x2 (v.3.0);
  - Water and dust resistant: IPX1 (front);
  - o OSD Lock: Yes.
  - Height adjustment system (HAS):
     70mm;
  - Screen tilt angle: 5 ° up; 90 ° down;
  - O VESA mount: 100 x 100mm:
  - MTBF: 30,000 hours (including backlight);
  - Certificates: CB, CE, TÜV-Bauart, EAC, VCCI-B, ROHS support, ErP, WEEE, EPEAT, REACH;
  - o Energy efficiency class: A.



			1	
		Complete set of required cords and consumables for commissioning.  Wireless set of computer mouse and keyboard: Wireless 2.4G, 1000DPI, Nano receiver, 12 multimedia keys, batteries included, grey.  Technical Services: Installing input / output devices, launching the conference control device (installing software, testing and debugging the operation of the control station), checking the work as a whole.		
11	Equipment installation cabinet and Assembly/Installation Services	<ul> <li>Size: 600*600 or 800*1098mm;</li> <li>Capacity: 19", 22U;</li> <li>Material: Cold rolled steel;</li> <li>Coating: Powder-polymer with preliminary phosphating of the surface;</li> <li>Carrying profile thickness: 2 mm;</li> <li>Features: Removable side panels with lock;</li> <li>Front door: Tempered glass;</li> <li>Color: Black;</li> <li>Number of shelves included: at least 1 piece;</li> <li>Surge protector for 19" cabinets and racks: 1 pc.; 5 C13 sockets + 5 Schuko sockets, 2 m, 16A, 2500W;</li> <li>Fan panel with thermostat: Material: Cold rolled steel; Fan dimensions: 12*12*3.8 cm; Number of fans: 2 pcs.;</li> <li>Cable organizer 19" 1U with cover, metal: Yes;</li> <li>Cable organizer 19" 2U with cover, metal: Yes;</li> <li>Thermostat: Yes.</li> <li>Complete set of required cords and consumables for commissioning.</li> <li>Technical Services:</li> <li>Assembly, installation and cable management of a cabinet for installing equipment in a conference room, installing equipment in a cabinet.</li> </ul>	UNIT	1
12	A set for providing training videoconferencing in computer labs	<ul> <li>Sensor: 1/2. 7", CMOS, 2.07M;</li> <li>Scan mode: progressive;</li> <li>Focus f=3,5 mm;</li> <li>Viewing angle: 84°;</li> <li>Autofocus: Yes;</li> </ul>	UNIT	1



<ul> <li>Built-in microphone: Yes, (supports noise cancellation);</li> <li>Minimum illumination: 0.5 Lux @ (F1.8, AGC incl.);</li> <li>Shutter: 1/30s~1/10000s;</li> <li>White balance: automatic, manual;</li> <li>Camera bracket: bracket with damper;</li> <li>Digital noise reduction: 2D, 3D digital noise reduction;</li> <li>Backlight compensation: Yes;</li> <li>Color system / compression: YUY2/H. 264/MJPEG;</li> <li>Video format: 1080p @ 30fps / 25fps, 720p @ 30fps / 25fps, 960x540p @ 30fps / 25fps;</li> <li>USB video communication protocol: UVC 1.0;</li> <li>USB interface: 1xUSB 2.0: Type A;</li> <li>Input voltage: 5V (USB power supply);</li> <li>Power consumption: 280mA.</li> <li>Headset for video conferencing:</li> </ul>	
<ul> <li>Headphone type: on-ear;</li> <li>Noise cancelling microphone: Yes;</li> <li>Microphone mount: movable;</li> <li>Mute the microphone: Yes;</li> <li>Single-sided headset: Yes;</li> <li>Mount type: overhead;</li> <li>Cable connection: one-way;</li> <li>Connection type: wired;</li> <li>Connector: USB;</li> <li>Volume control: Yes.</li> </ul>	



## Lot 2 – Server and Network Equipment, Software Server Package for Audio-Video Conference Communication

# Ite	m Name	Specification	Unit measure	Quantity
Aud confer 1 softwa	Li	censing:  License type: Indefinite; Total number of client online connections: At least 15 separate devices;  Authorization requirements: Possibility of user authorization in the system without binding to equipment.  must be compatible with MS Windows Server Standard 2016  echnologies and protocols used:  Audio codec: Opus, iSAC, Speex, G.711, G.722, G.723.1, G.728, G.729;  Video codec: VP8, H.264, H.263;  HD quality support; Support for the total picture quality from all 4K participants (3840 x 2160) in a group conference; Support for 4K quality (3840 x 2160) in a 1-to-1 video call; Supports scalable video coding (SVC) technology; Support for WebRTC technology; Support for SVC technology in WebRTC; Improving Fullduplex Speech Quality; ICE protocol support;  API authorization through the OAuth2 protocol;  Solution architecture: client-server;  Platforms:  The ability to participate in conferences via the web interface;  The ability to manage the server using the web interface;  Availability of special client applications with support for multipoint video conferencing for operation in operating systems (Windows, Mac OS X, Linux, Android, iOS); Support for viewing WebRTC conferences in iOS 11+ for the Safari browser  Conference types:  1-to-1 video call; Symmetric conference - group video communication mode where all participants see and hear each other		Quantity



- Video broadcasting (asymmetric video conference) is a group video communication mode, during which all participants see and hear only one presenter, while he/she sees and hears all participants;
- A conference call (role-based video conference) is a video communication mode with the participation of more than 2 users, in which some of the participants are speakers, and the rest are listeners. In this case, any of the conference participants can take the floor as a speaker on the screen, and the maximum number of speakers on the screen must be at least 36;
- Webinar is a video communication mode using WebRTC technology, in which users can join webinars using any browser using a guest URL link. Mobile and one-time client applications are available for Android, iOS and Internet Explorer users;

#### **Functionality:**

- Maximum number of participants in one conference: at least 15;
- Number of participants simultaneously on the screen: at least 36;
- Adjustment to the user communication channel: individually for each participant in a multipoint video conference (scalable video coding technology) in terms of resolution and number of video stream frames per second;
- The ability to scale the system without increasing server system requirements;
- Video conferencing scheduler; The presence of an address book with at least four statuses of contacts (online, offline, busy, not defined);
   Demonstration of presentations;
   Demonstration of presentations in webRTC conferences via a browser;
   Public and private chats between users; The ability to transfer files by means of the chat of the client application; Work of a personal chat without creating a conference; The ability to view the history of missed, incoming, outgoing calls in



- chronological order with the ability to make a call; missed call notification; The ability to display the desktop in a separate window using WebRTC technology; The ability of the conference host to control the layout of video windows in conferences via WebRTC; The ability to call ip-cameras (RTSP), call them into a conference without using third-party tools, with the ability to receive audio in AAC and MP3 formats;
- Group policies the ability to divide users into groups and give them various rights (on the video conference server); The ability to record a video conference from the client application with notification and with the permission of the opposite party; The ability to record a conference on the server; The ability to select certain video streams of the conference for recording (on the server / in the client software); Support for choosing the resolution of the recorded video conference: 1080p, 720p, 480p, 360p; The ability to install the client for users without administrator rights; The ability to display in real time the speed of sending and receiving data per second in the client application; Traffic saving mode when displaying video in small windows; Personal or shared address book of the user in the client application; Support for an independent video window from each participant as part of the general picture of the conference n\*m; Echo cancellation function for HDMI devices; Show of "live" slides, dynamically formed from images of the selected screen:
- The presenter has the ability to control the state of the listener's equipment in a role-based conference; The ability to open presentations \*.ppt, \*.pptx using drag & drop; The presence of a button for inviting users to the conference from the chat window during the conference; The ability to move each conference participant into a separate



- window, with the ability to resize this window; The ability to inform the administrator about system failures by e-mail; The ability to integrate into the system of devices operating under the H.323/SIP protocol; The ability to transmit and receive two streams (cameras and content) to and from H.323/SIP terminals (Under H.239 / BFCP protocols); Possibility of remote control of the video conferencing terminal camera (By FECC / H.281 protocols); Managing one's own traffic (enable / disable video / audio of other participants); The ability to transfer video streams directly between client applications bypassing the server in the video call mode;
- Possibility of planning role-based video conferences with an arbitrary number of participants on the podium from 1 to 36; API for working with the user's address book; API for working with group conferences (creating, editing conferences, viewing the list of conferences); The ability to set individual limits for channel bandwidth for users and groups;
- The ability to create and use templates when scheduling conferences; The ability to set individual preferences for system administrators, including the choice of the interface language and time zone;
- Web-based conference scheduling interface for users with link authorization from client applications; Block with information about connected and not connected participants for running conferences; The ability to launch a scheduled conference only with certain participants from the list of invitees; The ability to invite users to a running scheduled conference by ID and alias; The ability to quickly
- access widgets for integrating a window with a conference on external sites, including for already running conferences; The ability to connect to the conference from client applications



- by calling the presenter who participates in the conference via a browser; The ability to select the supported versions of the TLS protocol in the HTTPS settings section (TLSv1.2, TLSv1.3);
- The ability to select the interface language on the web pages of conferences scheduled on the server; Control panel reports (event log, chat message log, settings change log); The ability to export logs in CSV format; The ability to connect unregistered users (guests) to the conference.

#### **Technical requirements:**

- Minimum bandwidth of a communication channel for participation in an audio conference: no more than 16 KBps;
- Minimum bandwidth of a communication channel for participation in a video conference: no more than 32 KBps.

## Integration capabilities of the videoconferencing platform:

- Remote server management (API);
- The ability to select video and audio codecs on the server web configurator page: h.264, h.263++, h.263+, h.263, x-h.264uc, g.722.1c (24, 32, 48 kBits/s), g.722.1 (24, 32 kBits/s), speex, g.722, g.728, g.723, g.711ulaw, g.711alaw, g.729a;
- Possibility of registration of SIPsubscribers on a software videoconferencing server;
- Possibility of registration of h.323subscribers on the software videoconferencing server. H.323gatekeeper functionality;
- The ability to integrate with the Skype for Business software server;
- Integration with ECM/CRM/ERP Internet sites.

#### **Security:**

 Authorization of system users: the ability to select an authorization mechanism separately for each user, or import settings from Active Directory; The ability to transfer media streams and signaling data between client



- applications and the server over one TCP port with TLS encryption; The ability to restrict access to the server by a computer in the local network, IP address ranges, as well as server administrator accounts;
- Control data encryption: support for the TLS transport layer security protocol for client-server connections, as well as connections via third-party SIP and WebRTC protocols; Encryption of media data: WebRTC - using DTLS and SRTP protocols and algorithms;
- Encryption of media data: SIP via SRTP; Media data encryption: H.323 using the H.235 protocol; The ability to integrate the system with cryptographic libraries certified for compliance with GOST;
- The ability to integrate the system with software or hardware and software VPN gateways of third parties, providing end-to-end encryption of all corporate traffic on the ports used by the services of the video conferencing system;
- Autonomous work in a closed network: deployment of the system in a secure loop without the need for an Internet connection;
- SSL Encryption;
- An option that enables mandatory authorization when trying to log into the server control panel at <a href="http://localhost/">http://localhost/</a>;
- Access to the server API using the secure OAuth 2.0 protocol.

#### **Conference management software:**

- License type: Indefinite; Number of licenses, pcs: at least 1 piece;
- Presentation demonstration functionality; Support for video conferencing from the touch screen; Videoconferencing control functionality from a browser within the network;
- Functionality for obtaining statuses of subscribers of the address book of the video conferencing system;



		<ul> <li>Functionality for creating and managing group video conferences; Call functionality of H.323 and SIP terminals;</li> <li>Functional differentiation of access rights for the administrator and users of the videoconferencing system;</li> <li>Functional prohibition of changing the network and hardware settings of the video conferencing system for users;</li> <li>Functionality of the administrator's choice of the user authorization mode (Login by pin code; Login by password; Unprotected login).</li> <li>Technical Services:         <ul> <li>Installing and running the software part of the audio-video conference server; installing a licensed server operating system, licensing the video conferencing server, configuring the</li> </ul> </li> </ul>		
		server OS services and configuring the video conferencing server parameters;		
2	Audio-video conference server hardware	<ul> <li>Operating system: MS Windows Server Standard 2016, 2 processors physical server, license Qty: 20 cores, English, 64-bit, Digital</li> <li>Processor:         <ul> <li>Quantity: 2 pcs; 10 cores each, 2.4 - 3.0 GHz, 20 cores total - 40 threads, at least 25 MB SmartCache</li> <li>Maximum memory: 768 GB or more</li> <li>Memory slots: 24 DIMM slots</li> </ul> </li> <li>Memory type: DDR3 RDIMM, LRDIMM or UDIMM or higher</li> <li>Expansion slots: 1 PCle Gen3 slot for full and half profile height cards and 1 PCle Gen2 slot for low profile cards</li> <li>Network controller: 1 Gb Ethernet adapter, 4 ports per controller, 2 ports per controller</li> <li>Power supply unit: Main + Hotswappable redundant power supply, at least 500W</li> <li>Storage controller: Installed cache memory capacity, MB: 1000 or more; Interface speed: at least 6 Gbps; Connector standard: PCI Express 3.0 x8; Number of input / output channels:</li> </ul>	UNIT	1



		8; Supported RAID levels: RAID-1; RAID-0; RAID-10; RAID-5; RAID-50; RAID-6; RAID-60.  • Form factor: 1 U or 2 U; rack mount kit • Infrastructure management, Remote administration manager: Yes • RAM: At least 64 GB		
		Hard drives:  SAS - 2 pcs.; Form factor - 2.5 ";  Volume: at least 900 GB;  Spindle speed: at least 10,000  rpm; Interface bandwidth: 6  Gbps.  SSD - 2 pcs.; Form factor - 2.5  "; Volume: not less than 2TB;  Recording and writing - not  less than 500 Mbps; Bandwidth  of the interface: 6 Gbps.		
3	Server cabinet for equipment placement and Installation Services	<ul> <li>Size: 600*800*2000 mm</li> <li>Capacity: 19", 42U</li> <li>Material: Cold rolled steel</li> <li>Coating: Powder-polymer with preliminary phosphating of the surface</li> <li>Carrying profile thickness: 2 mm</li> <li>Load: 800 kg or more</li> <li>Features: Removable side panels with lock</li> <li>Front door: Tempered glass</li> <li>Color: Black</li> <li>Number of shelves included: Not less than 2 pcs.</li> <li>Surge protector for 19" cabinets and racks: 1 piece.; 5 C13 sockets + 5 Schuko sockets, 2 m, 16A, 4000W</li> <li>Fan panel with thermostat: Material: Cold rolled steel; Fan dimensions: 12*12*3.8 cm; Number of fans: 4 pcs; Thermostat: Yes; automatic on / off: Yes.</li> <li>Technical Services: Assembly and installation of a server cabinet for equipment placement.</li> </ul>	UNIT	1
4	Uninterrupted power supply unit	Main characteristics:  • UPS Type: Online;  • Power: 3000VA / 2700W; Input voltage: 220V; Output voltage: 220V +/- 1%; Input frequency: 40-70Hz; Output frequency: 50/60 ± 0.1Hz; AVR operating range: 110-288V; Number	UNIT	1



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		and type of output connectors: 4 x Schuko; Mode switching time: 0 ms; Output signal form: Sinusoid; Number and type of batteries: 8 pcs * 12V / 7Ah; Battery installation: Internal; Connection of additional battery packs: Yes; Battery pack connection type: Anderson connector. Other characteristics: Front panel: LCD display + LED indicators; Interface for communication with a PC: USB / RS-232 (Smart technology); Remote monitoring: Yes; Automatic switch on: Yes; Silent mode: Yes; Battery full discharge protection: Yes; Short circuit and overload protection:		
		Yes;		
		• Dimensions: 4U.  General characteristics:		
5	Router and Installation Services	<ul> <li>Equipment type: Router; Versatile, highly customizable networking platform;</li> <li>Case: Metal; Management: Web interface, GUI (Graphical User Interface), Command Line Interface (CLI); Number of RJ45 ports (LAN): 10 x RJ45; software operating system version: up-to-date at the time of delivery;</li> <li>Contents of delivery: Power supply, rack mount, rubber feet, user manual;</li> <li>Form factor: RACK 1 U;</li> <li>Processor: at least 600 MHz; Memory: not less than 128 MB; Interface, connectors and outputs: 1 x USB, 5 ports 10/100/1000 Mbps, 5 ports 10/100 Mbps, 1 x SFP, any of the ports can be WAN;</li> <li>Network characteristics:</li> <li>Security: Advanced Packet Filtering, ALG (Application Layer Gateway), NAT (Network Address Translation), Port forwarding, SPI (Stateful Packet Inspection), ICMP blocking, DDOS attack protection, Storm Control,</li> </ul>	UNIT	1



Access Control List, RADIUS, Port Based Network Access Control;  Compliance with standards: 802.11e (Quality of service), 802.1ad (Port Trunk), 802.1d (Spanning Tree Protocol), 8.02.1g (Los), 802.1d (VLAN), 802.1s (User Authentication), 802.3ad (LACP); VPN server; PPTP, PPPOE, LZTP; IGMP (Multicast); Port rate limiting; Jumbo Frame; Virtual Server; NAT; DHCP server.  Technical Services: Setting up a network router, testing the network.  General characteristics:  Processor: 500 MHz; RAM: 128 MB; Flash memory: 16MB- 32MB; Interfaces: 24 ports: 10/10/10/00 Base-T; Indicators: Power, Link / Activity / Speed (per port); Dimensions: height: 1U; Contents of delivery: Switch, Power cable, 2 brackets for 19-inch rack installation, 4 rubber feet, Mounting kit, Quick Installation Guide; Network characteristics:  IEEE 802.3 100Base-TX (copper twisted pair); IEEE 802.3as 1000Base-TX (copper twisted pair); IEEE 802.3as flow control; Auto MDI / MDIX detection on all ports; Duplex mode: Half / full duplex [EEE 802.3x] flow control; Auto MDI / MDIX detection on all ports; Duplex mode: Half / full duplex feet for 10/100 Mbps, Full duplex for 1000 Mbps; Performance: 48 Gbps; Packet buffer: 512 KB; Max. redirection speed of 64- byte packets: not less than 35 Mbps; VLAN; port-based VLAN; 802.12 tagged VLAN; Auto Surveillance VLAN; Asymmetric VLAN; VLAN groups; Supports 128 static VLAN groups; Level 2 features: Flow Control (802.3x; HOL Blocking Prevention, IGMP Snooping, Supports 128 groups, IGMP				
General characteristics:  Processor: 500 MHz; RAM: 128 MB; Flash memory: 16MB- 32MB; Interfaces: 24 ports: 10/100/1000 Base-T; Indicators: Power, Link / Activity / Speed (per port); Dimensions: height: 1U; Contents of delivery: Switch, Power cable, 2 brackets for 19-inch rack installation, 4 rubber feet, Mounting kit, Quick Installation Guide; Network characteristics:  IEEE 802.3 108ase-T (copper twisted pair); IEEE 802.3ab 1000Base-T (copper t		Network Access Control;  Compliance with standards: 802.11e (Quality of service), 802.1ad (Port Trunk), 802.1d (Spanning Tree Protocol), 802.1p (QoS), 802.1Q (VLAN), 802.1x (User Authentication), 802.3ad (LACP); VPN server; PPTP, PPPoE, L2TP; IGMP (Multicast); Port rate limiting; Jumbo Frame; Virtual Server; NAT; DHCP server.  Technical Services: Setting up a network router, testing the		
Processor: 500 MHz; RAM: 128 MB; Flash memory: 16MB- 32MB; Interfaces: 24 ports: 10/100/1000 Base-T; Indicators: Power, Link / Activity / Speed (per port); Dimensions: height: 1U; Contents of delivery: Switch, Power cable, 2 brackets for 19-inch rack installation, 4 rubber feet, Mounting kit, Quick Installation Guide; Network characteristics: IEEE 802.3 10Base-T (copper twisted pair); IEEE 802.3ab 1000Base-T (copper twisted pair); IEEE 802.3az Energy Efficient Ethernet; Automatic negotiation of speed and duplex mode; Full duplex IEEE 802.3x flow control; Auto MDI / MDIX detection on all ports; Duplex mode: Half / full duplex for 10/100 Mbps, Full duplex for 1000 Mbps; Performance: 48 Gbps; Packet buffer: 512 KB; Max. redirection speed of 64- byte packets: not less than 35 Mbps; VLAN: port-based VLAN; 802.1Q tagged VLAN; Auto Surveillance VLAN; Woice VLAN; Wanagement VLAN; 83ymmetric VLAN; VLAN groups; Supports 128 static VLAN groups; Level 2 features: Flow Control (802.3x; HOL Blocking Prevention, IGMP Snooping (IGMP v1/v2/v3 awareness				
01100p1110) 04pp01 to 120 0104p0, 101f11	1 6 1	Flash memory: 16MB- 32MB; Interfaces: 24 ports: 10/100/1000 Base-T;  Indicators: Power, Link / Activity / Speed (per port);  Dimensions: height: 1U;  Contents of delivery: Switch, Power cable, 2 brackets for 19-inch rack installation, 4 rubber feet, Mounting kit, Quick Installation Guide;  Network characteristics:  IEEE 802.3 10Base-T (copper twisted pair); IEEE 802.3au 100Base-TX (copper twisted pair); IEEE 802.3ab 1000Base-T (copper twisted pair); IEEE 802.3az Energy Efficient Ethernet;  Automatic negotiation of speed and duplex mode; Full duplex IEEE 802.3x flow control; Auto MDI / MDIX detection on all ports; Duplex mode: Half / full duplex for 10/100 Mbps, Full duplex for 1000 Mbps;  Performance: 48 Gbps; Packet buffer: 512 KB; Max. redirection speed of 64-byte packets: not less than 35 Mbps; VLAN: port-based VLAN; 802.1Q tagged VLAN; Auto Surveillance VLAN; Voice VLAN; Management VLAN; Asymmetric VLAN; VLAN groups; Supports 128 static VLAN groups; Supports 128 static VLAN groups;  Level 2 features: Flow Control (802.3x; HOL Blocking Prevention, IGMP Snooping (IGMP v1/v2/v3 awareness	UNIT	1



		Snooping Querier), 802.3ad Link Aggregation -Max. 8 groups per device / 8 ports per group, Loopback Detection, Cable Diagnostics, LLDP, Port Mirroring (One-to-One, Many-to-One), Statistics, Spanning Tree Protocol (802.1D STP, 802.1w RSTP), QoS: 802.1p, 8 queues per port, Queuing • Security: Traffic segmentation; Broadcast / multicast / unicast storm protection; Prevention of DoS attacks; SSL; • Management: Web interface (Supports IPv4 / IPv6 access), management software.  Technical Services: Setting up a network switch, testing the network.		
7	A set of works and services for installation and launch	<ul> <li>Launching and checking the operation of equipment, setting up uninterrupted operation;</li> <li>Testing of all functions of the videoconferencing server in accordance with the TOR;</li> <li>Training of the Customer's technical specialist in the administration of the video conferencing server;</li> <li>Together with the technical specialist of the Customer, setting up the parameters of the videoconferencing organization and filling the main reference book, creating user groups;</li> <li>Testing the work of videoconferencing in training audiences, debugging the work of videoconferencing, if necessary.</li> </ul>	UNIT	1

#### ANNEX D BID SUBMISSION FORM

This Form must be submitted using the Supplier's Official Letterhead/Stationery in the format specified below)

Dear Sir / Madam,



Having examined the Solicitation Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide **Goods** for [INSERT AMOUNT OF MONEY AND CURRENCY] as may be ascertained in accordance with the Price Schedule (Annex F) attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to commence and complete delivery of all services specified in the contract within the time frame stipulated.

We agree to abide by this Bid for a period of 90 days from the date fixed for opening of Bids in the Invitation to Bid, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We hereby accept the IDLO's General Terms and Conditions in full and Payment Policy of payment within 30 days after delivery of service on presentation of complete and correct invoice.

We understand that you are not bound to accept any Bid you may receive.

Company/Organization: $\_\_$	
Name:	
Title:	
Date: Select date	
Signature:	
	Duly authorized to sign this Bid



## ANNEX E BIDDER INFORMATION FORM

Name of Bidder:	[Insert Name of E	Bidder] Date: Select date
ITB reference:	ITB N_58_2021_I	KYR
Legal name of Bidder	ſ	[Complete]
Legal address		[Complete]
Year of registration		[Complete]
Bidder's Authorized F Information	lepresentative	Name: [Complete] Title: [Complete] Telephone numbers: [Complete]
		Email: [Complete]
Are you an IDLO ven	dor?	☐ Yes ☐ No If yes, [insert IDLO vendor number]
Countries of operatio		[Complete]
No. of full-time emplo		[Complete]
Quality Assurance Ce ISO 9000 or Equivaler provide a Copy of the	rtification (e.g. nt) (If yes,	[Complete]
Does your Company I accreditation such as ISO 14064 or equivale the environment? (If Copy of the valid Certification)	ISO 14001 or ent related to yes, provide a	[Complete]
Contact person that contact for requests during Bid evaluation	for clarifications	Name: [Complete] Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Please attach the follocuments: As per Annex B – Prel	_	<ul> <li>Valid Certificate of Incorporation/ Business Registration</li> <li>Valid Tax Compliance Certificate</li> </ul>
Screening Criteria	······································	<ul> <li>Self-Attestation Letter on No Vendor Debarment,</li> <li>Bankruptcy or Litigation History</li> </ul>
		<ul> <li>Product Catalogues or Brochures (Product Data Sheets) attesting compliance with Technical Specifications as mentioned under Annex C.</li> <li>Quality Certificates for the Goods (ISO), if available</li> <li>Manufacturer's Authorization of the Company as a Sales Agent (if Supplier is not the manufacturer), if available</li> <li>Full Company Profile with physical address and contact details of the office premises.</li> <li>Copy of minimum 2 contracts of similar value and nature implemented over the last 2 years with UN Agencies, INGOs, Embassies or Government State Agencies indicating contactable domain email references for verification.</li> </ul>



- Financial Statements for the past two (2) years
- Provision of Serial Numbers at Time of Shipment to be included in Contract and to be counter-checked by IDLO at the time of Delivery



# ANNEX F PRICE SCHEDULE

Table 1 Lot 1 – Equipment for Multimedia Hall

4	ω	2	1	#
Mixing Console and Installation Services	Delegate Microphone and Installation Service	Chairman Microphone and Installation Services	Negotiation system control unit with camera control function for automatic speaker tracking and Installation/Configuration Services	ltem
Unit	Unit	Unit	Unit	Unit measure
14	12	1	ъ	Quantity
☐ Comply☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	□ Comply □ Not Comply. Alternative specification offered (please attach)	Compliance with Technical Specifications in Annex B
				Unit rate in KGS
				Installation or Assembly Costs (provide Costs below)
				Total amount in KGS

11	10	9	8	7	9	5	
Equipment installation cabinet and Assembly/Installation Services	Conference Control Device and Installation Services	Document Camera and Installation Services	Interactive whiteboard	Camera	Loudspeakers	Feedback suppressor	
∪nit	Unit	Unit	Unit	Unit	Unit	Unit	
ь	1	1	1	1	2	1	
☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	<ul><li>□ Comply</li><li>□ Not Comply. Alternative specification offered (please attach)</li></ul>	<ul><li>□ Comply</li><li>□ Not Comply. Alternative specification offered (please attach)</li></ul>	<ul><li>□ Comply</li><li>□ Not Comply. Alternative specification offered (please attach)</li></ul>	☐ Comply☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	
			N/A	N/A	N/A	N/A	

								12
								A set for providing training videoconferencing in computer labs
								Unit
								1
						Total Cost f		☐ Comply☐ Not Comply. Alternative specification offered (please attach)
	Taxes / VAT (	Other Char				Cost for Installation/Assembly Services (Lot 1)	Total Co	
Grand Total (Lot 1)	Taxes / VAT (%) if applicable	Other Charges (please specify)	Customs Clearance	Insurance	Freight	nbly Services (Lot 1)	Total Cost of Goods (Lot 1)	N/A

Lot 2 – Server and Network Equipment, Software Server Package for Audio-Video Conference Communication

5	4	ω	2	1	#
Router and Installation Services	Uninterrupted power supply unit	Server cabinet for equipment placement and Installation Services	Audio-video conference server hardware	Audio-video conference server software (bundle) and Installation Services	ltem
Unit	Unit	Unit	Unit	Unit	Unit measure
1	1	1	1	1	Quantity
□ Comply □ Not Comply. Alternative specification offered (please attach)	☐ Comply☐ Not Comply. Alternative specification offered (please attach)☐ Comply.	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	☐ Comply ☐ Not Comply. Alternative specification offered (please attach)	Compliance with Technical Specifications in Annex B
					Unit Rate in KGS
	N/A				Installation or Assembly Costs (provide Costs below)
					Total Amount in KGS

Grand Total (Lot 2)					
Taxes / VAT (%) if applicable					
Other Charges (please specify)					
Customs Clearance					
Insurance					
Freight					
Cost for Installation/Assembly Services (Lot 2)	Total Cost f				
Total Cost of Goods (Lot 2)					
	☐ Comply☐ Not Comply. Alternative specification offered (please attach)	1	UNIT	A set of works and services for installation and launch	7
	☐ Comply☐ Not Comply. Alternative specification offered (please attach)	17	Unit	Network switch and Installation Services	6

Grand Total for LOT 1 + LOT 2
Taxes (if applicable)
Total Costs for Customs Clearance for LOT 1 + LOT 2
Total Cossts for Insurance LOT 1 + LOT 2
Total Freight Costs for LOT 1 + LOT 2
Installation and/or Assembly Costs for LOT 1 + LOT 2
Total Cost of Goods for LOT 1 + LOT 2
Grand Total for LOT 1 + LOT 2

Table 3
Offer for After-Sale Services and Other Conditions

Other Information		Responses	SOS
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter proposal
Warranty:			
Full warranty (factory warranty and maintenance servicing guarantee) for the supplied equipment and consumables valid			
for at least 12 months			
Delivery on basis of Incoterms DDP to 180a Chui Avenue, Bishkek Kyrgyzstan			
Goods delivered within 30 days after receipt of PO or contract			
from IDLO			
from IDLO			

Name, position and signature of the Bidder	Bidder's Stamp
Duly authorised to sign this Bid	
Date:	

## ANNEX G IDLO SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement and/or amend the IDLO General Terms and Conditions for the Procurement of **Goods**. Whenever there is a conflict, the provisions of the Special Conditions of Contract shall prevail over those in IDLO General Terms and Conditions for the Procurement of **Goods**.

Place of delivery	IDLO Kyrgyzstan Country Office, Bishkek
Delivery date	Goods shall be delivered within 30 days from receipt of PO/Contract from IDLO to 80a Chui Avenue, Bishkek, Kyrgyzstan
Payment terms	IDLO will process payment within 30 days after satisfactory receipt of all goods/ provision of services and upon receipt of the complete and correct invoice by the service provider.



## ANNEX H IDLO GENERAL TERMS AND CONDITIONS FOR THE PROCUREMENT OF GOODS OR SERVICES AND IDLO SUPPLIER CODE OF CONDUCT

Any proposal submission will imply the unconditional acceptance of IDLO General Terms and Conditions for Goods and Services and adherence to the Supplier Code of Conduct.

The documents are available on IDLO Procurement Website:

https://www.idlo.int/sites/default/files/documents/general terms and conditions for goods aug ust 2020.pdf

https://www.idlo.int/sites/default/files/documents/general terms and conditions for services au gust 2020.pdf

https://www.idlo.int/sites/default/files/documents/idlo-supplier-code-of-conduct.pdf

