Request for Proposal (RFP)

Audio-Visual System for Main Meeting Room for the Higher Council for Science and Technology (HCST)

March 17, 2025

1. Introduction

The Higher Council for Science and Technology (HCST) is soliciting proposals for the supply, installation, and commissioning of an audio-visual system for our main meeting room. The purpose of this RFP is to gather detailed proposals from qualified vendors to provide a comprehensive audio-visual solution that meets our specific requirements.

2. Scope of Work

The selected vendor will be responsible for the design, supply, installation, configuration, testing, and commissioning of a complete audio-visual system. This includes all necessary hardware, software, cabling, and training for end-users. The vendor is fully responsible for all installation activities, including but not limited to any required cabling work, mounting of equipment, etc. The vendor will also provide post-installation support, including maintenance and troubleshooting.

3. System Requirements

Proposals should cover and address the following requirements for the audio-visual system:

3.1 Audio System

The audio system must deliver high-quality sound throughout our 12m x 8m meeting room, supporting up to 24 participants with clear audio capture and reproduction. The following components and capabilities are required:

Speakers and Sound Distribution

 High-fidelity speakers suitable for the 12m x 8m meeting room that ensure consistent sound pressure levels at all seating positions with minimal variance in the speech frequency range. Vendors should propose an appropriate speaker configuration (standard units, line arrays, or distributed solutions) with clear justification for their choices based on room acoustics and coverage needs.

Amplification System

- **Power requirements**: Sufficient amplification to drive all proposed speakers at optimal performance levels without distortion.
- **Configuration options**: Vendors may propose standalone amplifiers, powered speakers with built-in amplifiers, or integrated solutions.
- Technical specifications:
 - Appropriate output channels and power for the proposed speaker type, quantity, and impedance
 - Protection against overheating and short circuits
 - Proper power-to-speaker matching to ensure optimal audio performance

Audio Mixing and Processing

- Mixing capabilities: System must manage all audio sources with:
 - Multi-channel control with user-friendly interface
 - USB interface for computer audio input/output for conferencing and recording
 - Low noise operation with ample headroom
 - Seamless integration with the complete AV solution

Audio processing features:

- Automatic functions: AGC, feedback suppression, echo cancellation, ambient noise compensation
- Manual controls: User interface for fine-tuning key parameters (gain, equalization, noise reduction)
- Preset functionality: Pre-configured settings for typical use cases and ability to save custom presets
- Implementation flexibility: These functions may be delivered through standalone devices or integrated components, provided they effectively maintain audio clarity and stability.

Microphone System

• **Coverage requirement**: Clear and reliable audio capture for 24 simultaneous participants.

- Standard configuration includes:
 - 20 tabletop microphones: Wireless with high-fidelity capture, noise cancellation, compact design, long battery life, and efficient charging.
 - 2 lavalier microphones: Wireless with high-fidelity capture, noise cancellation, discreet design, long battery life, and efficient charging.
 - **2 handheld microphones**: Wireless with flexibility in movement, appropriate polar pattern, ergonomic design, long battery life, and quick recharging.
- Alternative solutions: Vendors may propose different microphone technologies (e.g., beamforming arrays, ceiling microphones) that deliver equivalent or superior performance, with appropriate justification.
- **Power requirements**: All microphone systems must feature long battery life and user-friendly charging solutions.

System Integration Features

- Multi-zone capability: System must support configuration of multiple audio zones.
- Networking standards: Support for Dante, AVB, or equivalent standards-based networked audio protocols compatible with existing and future infrastructure.

Proposal Requirements

Vendors must describe how their proposed audio solution:

- Achieves feedback-free, clear audio for all participants
- Provides appropriate manual control options with sufficient granularity
- Integrates all components into a cohesive, easy-to-operate system
- Accommodates the room dimensions and participant requirements

3.2 Video System

The video system should provide high-quality visuals suitable for presentations, video conferencing, and interactive collaboration in our 12m x 8m meeting room.

Interactive Display

- Size: Minimum 85-inch interactive flat panel display appropriate for viewing distances of 2m to 10m.
- Resolution: 4K resolution for sharp image quality.
- Refresh Rate: Minimum 60 Hz refresh rate for smooth video playback.
- Alternative Solutions: While an interactive flat panel is preferred, vendors may propose alternative display solutions (e.g., video wall, projection system). These

alternatives must meet or exceed the specified size, resolution, refresh rate, and viewing angles of the interactive flat panel.

Camera System

- High-Resolution PTZ Camera: Minimum 4K resolution with pan, tilt, and zoom capabilities.
- Auto-Tracking: Al-driven participant tracking with voice/facial recognition.
- Integrated Audio: Built-in microphone arrays with acoustic echo cancellation (AEC).
- **Streaming Support**: Simultaneous streaming and compatibility with common video compression formats.
- Mounting Options: Vendors should recommend a mounting option (ceiling, wall, etc.) with justification based on room dimensions and use.
- Multi-Camera Solutions: Acceptable if they provide seamless coverage.

Video Conferencing Compatibility

- Platform Support: Full and seamless compatibility with major conferencing platforms like Zoom and Microsoft Teams.
- **Integration**: Seamless integration with the installed microphones and speakers for easy online meetings.

3.3 Integration and Control

This section outlines the requirements for seamless integration and centralized control of the entire audio-visual system.

Network Infrastructure

- Managed Network Switches: Vendor must provide all necessary managed network switches to support the AV system.
- Requirements:
 - **Port Capacity**: The vendor will determine and specify the appropriate number of network ports based on their complete solution design.
 - **Bandwidth**: Sufficient bandwidth to support all networked AV components simultaneously.
 - PoE+: Include PoE+ (Power over Ethernet Plus) capabilities where required by proposed devices.
 - **Justification**: Provide detailed justification for the proposed network infrastructure as part of the technical approach.

 Protocol Support: Ensure the network solution supports all audio-visual components and protocols specified in the proposal (including audio networking, video conferencing, and control systems).

Centralized Control System

- **Unified Interface**: A user-friendly, centralized control system for managing all AV components (audio, video, conferencing) with:
 - Dedicated touch panel
 - Software application on tablet/PC
 - Voice control

Features:

- Intuitive controls
- Real-time feedback on system status
- Network-based control (TCP/IP) for integration and remote management
- **Usability**: Vendors must clearly explain how their proposed solution ensures a simple and easy-to-use experience.

4. Training and Support

- **User Training:** Provide comprehensive training for end-users on the operation of the AV system, including how to use the system for online meetings.
- Warranty: Provide a minimum two-year warranty on all hardware and software components, starting from the date the new system becomes live and in use. The warranty must include onsite support, technical support, maintenance (including remote management and diagnostics), and all firmware updates. Vendors may include cloud-based diagnostic tools or predictive maintenance solutions as part of their proposal.
- Annual Maintenance Contract (AMC): Beyond the initial two-year warranty period, vendors must provide an option for an annual support contract (AMC). The AMC should include all the support services covered in the initial warranty
- Spare Parts Availability: The vendor guarantees the availability of spare parts for at least six years post-installation. In the event that parts become unavailable, the vendor will bear the cost to make the system operational again, even if it requires providing new devices.
- Service Level Agreement (SLA): The vendor must provide tiered support based on issue severity, with guaranteed response times.

- Critical issues: (e.g., complete system failure during a meeting) Response within 2 hours, with continuous effort until resolution.
- High-priority issues: (e.g., major audio/video malfunction affecting multiple users) - Response within 4 hours, with resolution or workaround by the next business day.
- Standard issues: (e.g., minor functionality problems or cosmetic issues) Response within 1 business day, with resolution within 3 business days.

The SLA must clearly define each issue level (Critical/High/Standard) with examples, and commit the vendor to the corresponding response and resolution times.

5. Intellectual Property Rights

If the vendor uses any third-party components, the vendor will ensure that HCST has the necessary licenses and permissions to use these components in accordance with their terms of use.

6. Proposal Requirements

Proposals must include:

- **Executive Summary**: A brief overview of the proposed solution and its key benefits. This should be a concise summary that captures the essence of the proposal.
- Company Information:
 - Overview of your company, including its mission, history, and relevant experience in audio-visual installations for private and government settings.
 - Include a description of your company's organizational structure and key personnel.
 - Provide copies of any relevant certifications or licenses held by the company and its personnel.
- Relevant Project Experience: A description of three projects that best demonstrate
 your company's experience and capabilities relevant to the requirements of this RFP.
 At least one project should be for a government or scientific organization, if possible.
 For each project, include:
 - Project name and client
 - Brief description of the specific challenges, proposed solution, and key technologies used.
 - Quantifiable outcomes or benefits achieved (e.g., improved efficiency, cost savings, enhanced user experience).
 - Project dates (start and end).
- Client References: Provide contact information for three clients who can speak to your company's performance and reliability on similar AV projects. These references

can be, but are not required to be, clients mentioned in the "Relevant Project Experience" section. Include:

- Client name and organization
- Project name
- Contact person (with title)
- Phone number and email address
- o Brief description of the project the reference can speak to

• Compliance Statement:

- A detailed statement confirming that the proposed solution meets or exceeds all functional requirements outlined in this RFP.
- Confirmation of attendance at the mandatory site visit, including the date attended and the name(s) of company representative(s) present.
- The statement should explain how the proposed solution fulfills the intended functionality of each requirement (e.g., audio coverage, video quality, system control), even if achieved through alternative or integrated components.
- The compliance statement must clearly map the proposed design to the RFP's functional needs, demonstrating how the solution's capabilities align with or surpass each requirement, without being limited to a specific hardware configuration.
- This should be a point-by-point response to the requirements listed in the RFP
- Project Plan: Detailed timeline and milestones for the project, including:
 - Project start and end dates
 - Key milestones with specific deliverables
 - Task dependencies
 - Resource allocation
 - Risk assessment and mitigation plan
- **Team**: Details of the team members who will be directly working on the project. Include:
 - Name and title
 - Role and responsibilities on the project
 - Relevant qualifications and experience (summarized, with CVs attached as an appendix)
 - Do not include details or CVs for anyone who will not be directly working on the project.
- Cost Breakdown: Detailed pricing for all aspects of the proposed solution. Include:
 - Hardware costs (itemized)
 - Software costs (itemized)
 - Installation costs (labor, materials, etc.)
 - Training costs
 - Ongoing support and maintenance costs (if applicable)
 - Any other relevant costs
 - Specify any assumptions or exclusions related to the pricing.
- Warranty and Support:

- A clear description of the warranty terms and conditions for all hardware and software components.
- Details of the proposed support and maintenance services, including response times, escalation procedures, and service level agreements (SLAs).
- Appendices: Include any supporting documentation, such as:
 - Detailed CVs of team members
 - Product datasheets
 - Technical specifications
 - Client testimonials

7. Evaluation Criteria

Only proposals that are compliant with the above requirements will be evaluated based on the following criteria:

Criterion	Weight	Details
Thoroughness of Proposal	30%	Demonstrates a comprehensive understanding of HCST's needs and a complete, well-organized proposal addressing all RFP requirements.
User Experience and Ease of Use of Proposed Solution	20%	How intuitive and easy the proposed solution is for end-users to operate, manage, and troubleshoot.
Innovation and Modern Solutions	10%	Demonstrates the use of innovative technologies and solutions that enhance functionality, efficiency, or user experience beyond basic requirements.
Vendor Experience and Support	10%	Demonstrates the vendor's experience, qualifications, and ability to provide reliable ongoing support, maintenance, and training. This includes number of years providing similar solutions, number of relevant industry certifications, quality of provided CVs, etc.
Cost	30%	While not the sole determining factor, cost is a key consideration. Vendors should offer a competitive price that aligns with the value and quality of their services.

8. Payment Terms

Milestone	Deliverables	Payment (%)
Project Initiation	Signed contract, project kickoff meeting, detailed project plan.	20%
Design Approval	Finalized design approved by HCST.	10%

System Deployment	Full deployment of the system (all hardware and software installed, configured, and vendor-tested).	20%
Testing	Successful completion of testing by HCST (following vendor initial testing) with all identified issues fully resolved and documented HCST acceptance of test results.	10%
Training	Training to HCST staff (4 users) on the use and management of the system, including comprehensive system documentation and how-to manuals.	20%
Post-Deployment Support (after 30 days of going live)	Support (30 days live) Resolution of covered post- deployment issues, final sign-off by HCST confirming all project requirements are met.	20%

9. Mandatory Site Visit

A mandatory site visit is required for all vendors intending to submit a proposal. During this visit, vendors must inspect the meeting room where installation will take place to obtain a full understanding of the scope of work outlined in this RFP.

The site visit will allow vendors to:

- · Assess the physical dimensions and layout of the space
- Evaluate existing infrastructure and mounting options
- Identify potential installation challenges
- Ask questions about the room's usage patterns and specific requirements

HCST will announce the dates/times of the scheduled site visits. Only two sessions will be held. All vendors must attend one of these sessions. Alternative arrangements will <u>not</u> be made for vendors unable to attend these scheduled visits.

Registration for the site visit is required at least 2 working days in advance by contacting:

Name: Yazeed Al Sabagh

Email: yazeed.s@nafes.org.jo

Phone: 078-058-3213

Proposals from vendors who have not participated in the mandatory site visit will be considered invalid and will not be evaluated.

10. Submission Deadline

Proposals must be submitted by [Deadline Date]. Late submissions will not be considered.