

Request for Information (RFI)

25_04_RFI_DIPLOMA_AUDIO_VIDEO

AV Solutions for Diploma Area - ICTP Trieste

1. Introduction

The Abdus Salam International Centre for Theoretical Physics (ICTP) is an international scientific institution classified as a Category I Institute of UNESCO, operating under a trilateral agreement between the Italian Government, the International Atomic Energy Agency (IAEA), and UNESCO.

ICTP is globally recognized for its scientific excellence and hosts over 6,000 scientists, researchers, and students annually from around the world. The ICTP campus is located in the Grignano-Miramare area of Trieste, Italy. It is designed to facilitate research, education, and scientific collaboration, featuring lecture and study rooms, laboratories, guest accommodations, and catering services.

The Centre has recently renovated a lecture room area in the Leonardo Building. This area requires the implementation of Audio-Visual (AV) solutions to support its educational and scientific activities. While not binding, these AV solutions may serve as a reference point for future renovations at ICTP, helping to set a consistent standard across the campus.

This Request for Information (RFI) is issued by ICTP to gather market insights regarding AV solutions suitable for the recently renovated Diploma Area. The aim is to understand cost ranges and evaluate possible solutions across different budget tiers. This RFI is not a solicitation for bids or proposals and does not constitute a commitment to issue a Request for Proposal (RFP) in the future.

The aim is to explore available technologies, understand cost ranges, and evaluate possible solutions across different budget brackets to inform a future formal procurement process.

2. Objectives

- Identify innovative AV solutions suitable for ICTP's educational and conference environment.
- Enhance audio-visual quality for lectures, presentations, and events.
- Ensure seamless integration with existing infrastructure and ease of use.

- Gather indicative cost estimates and potential configurations across varying price ranges, categorized by different budget levels to facilitate comparative analysis.

3. Scope of the RFI

This RFI focuses on AV systems for:

- Main Lecture Hall: Divisible into two separate rooms with an acoustically insulated foldable wall.
- Four Small Lecture Rooms: Located around the main hall.
- Control Room: Centralized management of AV systems across all rooms.

4. Technical Requirements

4.1 Main Lecture Hall (Divisible into Two Rooms)

General Setup:

- Foldable acoustic wall for separation.
- Cabling infrastructure available both in the floor and ceiling.
- Room Dimensions: See LB_diploma area_02-A3.pdf
- Network Infrastructure: There is a limited Ethernet / TCP-IP network in the area and some available conduits for different or additional cables.
- Integration with Existing ICTP Systems: The main ICTP AV control area is located on a lower floor and to the right of the supplied diagram / schematic and it will be possible to interconnect the two.

For Each Lecture Room when divided:

- 5 monitors on the panellist table (mirroring main screen content) with fast-connect options for removable tables.
- 5 power sockets on the table (one in front of each panellist).
- 1 PC with monitor at the podium for presentations.
- USB-C/HDMI connections for the podium PC and lecturers' laptops, enabling audio/video input/output integration.
- 1 Full HD LED Wall (already acquired).
- 3 cameras (2 at the back, 1 front-facing for audience capture) with SDI/HDMI/NDI outputs.
- 2 ceiling DANTE microphones (Sennheiser TCC2 or equivalent).
- 5 wireless microphones (Sennheiser SL Table stand 133-S DW with MEG 14-40-B or equivalent).
- 3 inductive charging bases (CHG 2W or equivalent).
- DANTE ceiling pendant speaker system for sound reinforcement.

- 2 digital DANTE handheld wireless microphones and 1 bodypack with lavalier mic (Sennheiser or equivalent).
- Touch control panel for managing camera presets, recording layouts, and room functions (lights, curtains, HVAC).
- Centralized rack system for AV equipment (preferably concealed).
- Manual selection of recording layouts (blackboard only, slides only, combined views) with start/pause/stop functions.
- Full integration with videoconferencing platforms (Zoom, Teams, Meet) acting as a virtual webcam.
- Optional: Automated tracking system for lecturers, using ceiling microphone tracking.
- DSP/Audio Mixer for remote audio management (e.g., Allen & Heath AHM-32).
- Recorder/streamer (e.g., Extron SMP 352) with FTP transfer capability.
- Protection against accidental activation of wall, light, and curtain controls.

Merged Room Configuration:

- 10 wireless microphones.
- Centralized AV control from the control room.
- LAN remote controller for managing multiple cameras.
- SDI video matrix, SDI video mixer with at least 27" Multiview monitor.
- Multitrack recording capability.
- Desirable uncompressed recording of the program output.
- PCs dedicated to videoconferencing, streaming, editing, remote control, and real-time graphics.
- Audio/video stream distribution to multiple endpoints (screens, recorders, VC software).

4.2 Small Lecture Rooms (4 Rooms)

- 1 PC with monitor (already acquired).
- USB & HDMI connections for laptops.
- 1 large 4K screen (already acquired).
- 2 cameras (rear-mounted) with SDI/HDMI/NDI outputs.
- 1 ceiling DANTE microphone (Sennheiser TCCM or equivalent).
- Touch control panel for managing camera presets, recording layouts and environmental controls.
- Rack for AV equipment within the room.
- Recording/streaming to Extron SMP 352 or equivalent.
- Full integration with control room for centralized management.
- **Room Dimensions:** LB_diploma area_02-A3.pdf

- **Network Infrastructure:** There is a limited Ethernet / TCPIP network in the area and some available conduits for different or additional cables.
- **Integration with Existing ICTP Systems:** The main ICTP AV control area is located on a lower floor and to the right of the supplied diagram / schematic and it will be possible to interconnect the two.

4.3 Control Room

- Signal reception from all rooms (cameras, PCs, laptops, DANTE audio).
- Real-time monitoring for all rooms (audio and video).
- SDI/HDMI control monitors for auxiliary outputs.
- Dedicated PCs for videoconferencing, streaming, editing, remote control, and graphics.
- Talkback functionality.
- **Network Infrastructure:** There is a limited Ethernet / TCPIP network in the area and some available conduits for different or additional cables.
- **Integration with Existing ICTP Systems:** The main ICTP AV control area is located on a lower floor and to the right of the supplied diagram / schematic and it will be possible to interconnect the two.

5. Submission Requirements & Response Template

ICTP is available to arrange a **meeting, either at its premises or via Zoom**, with interested companies to provide additional context and clarify any details that may assist in completing the response.

If interested, please contact Procurement Office at procure@ictp.it.

5.1 Instruction for Vendors

- **Provide average cost estimates** for each budget tier, including hardware, software, installation, and basic maintenance.
- **List the Main Technical Features** for each tier, focusing on key functionalities without detailed specifications.
- **Indicate the Key Differences and Functionalities** that distinguish each tier, including:
 - **Main Differences:** Functionalities and technologies that set each tier apart.
 - **Scalability:** Potential for upgrading from Basic to Standard or Premium.
 - **Compatibility:** Integration with major videoconferencing platforms (e.g., Zoom, Teams, Meet).
- **Estimated Lifespan:** Expected durability and usage life of equipment at each tier.
- **Keep responses concise and high-level** to enable quick and effective comparison.

Tier	Scope Description	Estimated budget (€)	Main Technical Features <i>Please specify using below sample</i>	Key Differences and Functionalities
Basic Tier	Essential functionalities suitable for general presentations and lectures.	[Insert indicative budget]	<ul style="list-style-type: none"> - Basic connectivity (HDMI, USB-C) - Standard resolution displays - Basic audio system - Limited integration with VC platforms 	<ul style="list-style-type: none"> - Suitable for general use - Limited automation and control options - Minimal scalability and upgrade potential
Standard Tier	Enhanced functionalities with improved audio and video quality.	[Insert indicative budget]	<ul style="list-style-type: none"> - High resolution displays (Full HD/4K) - Advanced audio system with multiple microphones - Moderate integration with VC platforms - Basic automation and control panel 	<ul style="list-style-type: none"> - Enhanced user experience - Better sound and image quality - Some scalability options for future upgrades
Premium Tier	Advanced functionalities with state-of-the-art AV solutions.	[Insert indicative budget]	<ul style="list-style-type: none"> - Ultra-high resolution displays (4K+) - Superior sound system with advanced audio processing - Full integration with all major VC platforms - Advanced automation and control options (e.g., touch panel, voice control) - Recording and streaming capabilities 	<ul style="list-style-type: none"> - High-end user experience with advanced functionalities - Full scalability and integration potential - Suitable for hybrid conferences and high-profile events

5.2 Indicative Timeline

Please provide a general timeline, in case of a future bid and assignment, for:

- **Delivery of Equipment**
- **Installation and Setup**
- **Basic Testing and Commissioning**

A precise timeline is not required, only an average duration to understand project feasibility.

6. General Notes and Observations

- Indicate any prerequisites or requirements for infrastructure compatibility.
- Provide general observations or recommendations that could help ICTP in planning the procurement.
- Mention if there are any significant cost drivers or variables (e.g., currency fluctuations, supply chain issues).

Please keep responses concise and focused on high-level budget and technical overviews. Detailed specifications or comprehensive system architectures are not required at this stage.

7. Disclaimer

This RFI is issued solely for information-gathering purposes. ICTP is not obligated to proceed with any procurement as a result of this request. No contract or agreement will be entered into as a result of this RFI. ICTP reserves the right to alter the requirements or scope of this RFI at any time.

8. Attachments

Map of area (not as-is, indicative only) [25_04_RFI_DIPLOMA_AUDIO_VIDEO / lb_diploma_microphones_position.pdf](#)

Pictures of area as-is [PICTURES_NEW_DIPLOMA_AREA-BID-20250212T091038Z-001.zip](#)

9. Instructions for submission

Interested companies may request an editable version of this document to facilitate completion. Please follow the instructions below:

- **Submission Deadline:** 17 March 2025 at 13:00 CET
- **Submission Method:** Responses must be sent via email to procure@ictp.it
- **Email Subject Line:** 25_04_RFI_DIPLOMA_AUDIO_VIDEO – [Company Name]