AV Functionality Matrix

System Functionality Brief Descriptions / Notes

The descriptions below are intended as reference to describe the AV functionality categories included in the AV matrix for each space that is part of the State of Wyoming Capitol project.

- **Temporary AV Systems Required**: A temporary system must be designed and specified for use during the legislative sessions that will take place during the construction period. While certain limitations due to the portability and temporary nature of these systems shall be expected, they shall mimic as closely as possible the permanent systems in order to allow standard procedures and policy to take place.

- **Divisible / Zoned Space**: Space will include multiple zones and may have divisible walls to allow it to be used for multiple concurrent sessions.

- **Fixed furniture/layout**: Orientation and layout of the room will be fixed. Permanent furniture is to be expected.

- **Flexible furniture configurations**: Orientation and layout of the room will be flexible with furniture and layout changes possible for different events. AV systems shall accommodate room flexibility.

- **Individual microphones per talker**: Conference/hearing style systems shall provide individual microphones for every talker (or for a small limited group of talkers in some cases) to allow a dynamic multi-user discussion to take place.

- **“Room” microphone for audio or video conferencing speech**: A single or small set of microphones installed in strategic locations in the room (i.e. ceiling mounted) will “pick up” speech from those speaking in the room for distribution to remote listeners via audio and/or video conferencing.

- **Individual loudspeakers per seat**: Individual loudspeakers will be provided in close proximity to each listener (or to primary listeners) in order to provide a distributed listening environment, limit the reinforced audio energy in the room and control feedback appropriately.

- **Shared gooseneck or podium style microphones**: System shall allow for a podium, lectern and/or round table style setup with participants using a shared set of microphones for meetings and presentations. Gooseneck microphones and/or hand held microphones may be provided depending on room configuration.

- **Wireless microphones**: A complement of wireless microphones will be provided to allow presenter’s flexibility and/or for audience participation.

- **Request to talk functionality or Chairman Control**: Audio systems shall allow RTS mode in which a Chairman and/or Clerk is responsible for managing the meeting by turning microphones on and/or off based on request to speak controls at each user’s position.

- **In-room speech reinforcement**: Sound reinforcement system will provide in-room speech in addition to AV and external audio sources.

- **Audio conferencing**: System shall allow for telephone and/or IP based audio conferences to take place where external users can “call” into the room and participate in the meeting as if they were present. In this case, in-room sound reinforcement system will also output sound from far end and in-room microphones are directed to remote end.
• **Full range AV audio**: System shall provide a full range high quality audio system for AV and multimedia sound reinforcement in addition to speech.

• **Audio streaming**: Audio system will be equipped with a real-time encoding system capable of delivering audio streams to an OFE audio streaming server for “broadcast” distribution.

• **Audio recording and Audio archival with metadata**: Audio recording and archival systems will be provided to allow proceedings to be kept on record.

• **Assistive listening systems**: Assistive listening systems will be provided to serve the needs of the hearing impaired. ADA requirements for assistive listening shall be met and/or exceeded.

• **Press distribution**: Audio systems will provide a direct feed to press and media outlets for transcription, recording and/or broadcasting.

• **Overflow to/from other spaces**: A “clean” audio feed will be provided to allow other spaces to be used for overflow or monitoring of events/sessions.

• **Private / secure mode of operation**: Systems shall allow for private/secure sessions and/or meetings to be held by providing capabilities to shut off all audio feeds leaving the secure perimeter of the room.

• **Large format video presentation (projection or large displays)**: A video display or video projection system shall be provided to allow all those present in the space to clearly see visual materials provided as part of a presentation. Quantity, dimensions and location of presentation devices shall be adjusted according to room dimensions, layout and other architectural requirements.

• **Centralized/managed video presentation sources**: All content displayed will be managed by a central resource and presented using a limited and controlled set of devices (for example, a dedicated in-room PC or a centralized server).

• **User-driven video presentation sources**: Users will be allowed to use their own equipment to present visual materials. Connectivity shall be provided in the room to allow for wired and/or wireless devices to be used to deliver content.

• **Content from portable laptops and/or mobile devices**: Wireless content distribution systems shall be included to allow users to “stream” content from their portable devices to the video presentation systems.

• **Document camera**: A fixed or portable document camera shall be provided for physical evidence presentation.

• **CATV Feeds**: A direct feed from CATV and a dedicated tuner will be provided to allow broadcast signals to be displayed via the presentation system.

• **Permanent video cameras (videoconferencing quality)**: Video cameras will be permanently mounted at technically optimum locations in the room to allow for videoconferencing applications without additional setup or portable equipment use.

• **Permanent video cameras (broadcast quality)**: Video cameras will be permanently mounted at technically optimum locations in the room to allow for videoconferencing, video streaming and video broadcasting applications without additional setup or portable equipment use.

• **Portable video cameras with in-room connectivity**: Connectivity will be provided at locations in the room to allow for portable cameras to be connected for use in videoconferencing, video streaming and/or video broadcasting applications.
• **Automated camera control**: Systems will be provided to allow for cameras to pan/tilt/zoom automatically based on predefined presets to allow views of participants based on set microphone use or speech activity.

• **Video streaming**: Video system will be equipped with a real-time encoding system capable of delivering video streams to an OFE audio streaming server for “broadcast” distribution.

• **Video Recording and Video archival with metadata**: Video recording and archival systems will be provided to allow proceedings to be kept on record.

• **Integrated AV controls systems for AV systems**: An integrated AV control system will be provided to provide user-friendly control of all AV devices as well as peripheral systems. Where appropriate, a wired and/or wireless touchpanel will be provided. Web based controls, tablet applications and basic keypads shall be considered according to space needs.

• **Lighting controls integrated to AV systems**: Lighting switches and/or dimmers will be tied to AV control system to allow presets to be recalled from AV control system.

• **Shade controls integrated to AV systems**: Motorized shade systems will be tied to AV control system to allow presets to be recalled from AV control system.

• **Voting and meeting management systems**: The use of electronic voting systems is required and should incorporated into the AV systems design.

• **Voting boards**: Display boards showing results and information from voting system shall be incorporated. These might be dedicated and/or shared with the video presentation systems.

• **Digital signage - Information Systems**: Information only displays and/or kiosks shall be provided with general information regarding the Wyoming State Capitol and/or current information such as schedule of events, news, etc.

• **Digital signage - Directory services**: Directory systems shall be incorporated to allow users to obtain directions to locations at the Wyoming State Capitol complex.

• **Digital signage - Interactive systems**: Interactive systems shall be provided for wayfinding or related applications.