



## TERMS OF REFERENCE

### SUPPLY, DELIVERY, INSTALLATION, TESTING, AND COMMISSIONING OF THREE (3) BRAND-NEW VIDEOCONFERENCE SYSTEMS FOR MWSS BOARD ROOM, ADMINISTRATOR'S CONFERENCE ROOM, AND FINANCE CONFERENCE ROOM Contract no. MWSS-2021-VCS

#### A. OBJECTIVES

In line with the objective of Metropolitan Waterworks and Sewerage System Corporate Office (MWSS-CO) to boost productivity, save time and reduce travel expenses, AND promote collaboration, the agency is in need for a Video Conference System to facilitate those benefits without requiring constant travel for face-to-face communication. This initiative will provide safeguards to MWSS-CO's Officers, employees and stakeholders from any contact as the world is facing a global crisis due to the COVID 19 pandemic. This Project will help MWSS to connect with our clients and other stakeholders to collaborate, solve problems, and hold effective and efficient meetings in real time.

#### B. MODE OF PROCUREMENT

The mode of procurement shall be in accordance with R.A. 9184 through a small value procurement as prescribed under Section 53.9 and Annex "H" of the 2016 Revised Implementing Rules and Regulations (RIRR).

#### C. MINIMUM TECHNICAL SPECIFICATIONS

Please be guided with the following minimum specifications.

##### Board Room:

Item/Requirement	Quantity	Minimum Specifications
Complete Videoconference Equipment System with Camera, Speaker, Microphone, TV Monitor, Wire Connectors, Brackets and Power cables		
Speaker	2	<ul style="list-style-type: none"><li>Speaker volume: 95 dB @1W at ½ meter (+/-2 dB); 100dB SPL @7.5W at ½ meter (+/-2 dB)</li><li>Distortion: 200 Hz–300 Hz &lt;2.5%, 300 Hz–10 kHz &lt; 1% @7.5 W</li><li>At least 3 inches speaker driver</li><li>Mounting Kit</li></ul>
Microphone with complete set of wires	5	<ul style="list-style-type: none"><li>Pickup range: 15 ft / 4.5m diameter</li><li>Four omnidirectional microphones with eight beamforming elements</li><li>Mute button with LED status indicator</li><li>Chain up to 7 Microphone (pods)</li></ul>
Camera	1	<ul style="list-style-type: none"><li>Ultra-HD imaging system supports:<ul style="list-style-type: none"><li>4K, 1440p, 1080p, 900p, 720p at 30fps</li><li>1080p, 720p at 30fps and 60 fps</li></ul></li><li>Smooth motorized pan, tilt and zoom<ul style="list-style-type: none"><li>Pan: ±90°</li></ul></li></ul>

Item/Requirement	Quantity	Minimum Specifications
		<ul style="list-style-type: none"> <li>○ Tilt: +50° / -90°</li> <li>○ 15x HD zoom</li> <li>● 90° field of view with Autofocus</li> <li>● Lens parks at -90° in sleep mode for assured privacy</li> <li>● Standard tripod thread</li> <li>● Mounting Kit</li> </ul>
Table Hub	1	<ul style="list-style-type: none"> <li>● Single cable (CAT6A) connection to Display Hub</li> <li>● Active speaker detection: connect up to 7 Microphone (pods)</li> <li>● Connector for Microphone (pod)</li> <li>● HDMI Type A for wired content sharing</li> <li>● HDMI Type A for display Power input</li> <li>● USB Type C (Ultra HD / 4K capable)</li> <li>● USB Type A</li> <li>● USB Type B (connects to meeting room computer)</li> <li>● RJ45 (Ethernet)</li> <li>● Mounting Kit</li> </ul>
Display Hub	1	<ul style="list-style-type: none"> <li>● HDMI Type A (x2) (connects to displays)</li> <li>● USB C (connects to Camera)</li> <li>● USB Type B (connects to meeting room computer)</li> <li>● RJ45 (connects to Table Hub)</li> <li>● Mini XLR (x2) (connects to Speakers) Powers one or two Speakers</li> <li>● Power input</li> </ul>
Remote Control	1	<ul style="list-style-type: none"> <li>● Remote control with batteries</li> </ul>
Cables		<ul style="list-style-type: none"> <li>● Complete set of cables to connect all system/components</li> </ul>
Compatibility		<ul style="list-style-type: none"> <li>● Skype for Business and Microsoft Teams</li> <li>● Google Hangouts Meet</li> <li>● Zoom</li> <li>● Cisco Jabber and Webex</li> </ul>
Monitor	2	<ul style="list-style-type: none"> <li>● 1 set - 55 inches UHD LED smart TV (with wall bracket)</li> <li>● 1 set - 40 inches UHD LED TV</li> <li>● 4K Resolution</li> <li>● Remote Control with batteries</li> </ul>
Warranty		<ul style="list-style-type: none"> <li>● 2-years warranty</li> </ul>

**Administrator's Conference Room:**

Item/Requirement	Quantity	Minimum Specifications
Complete Videoconference Equipment System with Camera, Speaker, Microphone, TV Monitor, Wire Connectors, Brackets and Power cables		
Speaker	2	<ul style="list-style-type: none"> <li>• Speaker volume: 95 dB @1W at ½ meter (+/-2 dB); 100dB SPL @7.5W at ½ meter (+/-2 dB)</li> <li>• Distortion: 200 Hz–300 Hz &lt;2.5%, 300 Hz–10 kHz &lt; 1%@7.5 W</li> <li>• At least 3 inches speaker driver</li> <li>• Mounting Kit</li> </ul>
Microphone	2	<ul style="list-style-type: none"> <li>• Pickup range: 15 ft / 4.5m diameter</li> <li>• Four omnidirectional microphones with eight beamforming elements</li> <li>• Mute button with LED status indicator</li> <li>• Chain up to 7 Microphone (pods)</li> </ul>
Camera	1	<ul style="list-style-type: none"> <li>• Ultra-HD imaging system supports:               <ul style="list-style-type: none"> <li>○ 4K, 1440p, 1080p, 900p, 720p at 30fps</li> <li>○ 1080p, 720p at 30fps and 60 fps</li> </ul> </li> <li>• Smooth motorized pan, tilt and zoom               <ul style="list-style-type: none"> <li>○ Pan: ±90°</li> <li>○ Tilt: +50° / -90°</li> <li>○ 15x HD zoom</li> </ul> </li> <li>• 90° field of view with Autofocus</li> <li>• Lens parks at -90° in sleep mode for assured privacy</li> <li>• Standard tripod thread</li> <li>• Mounting Kit</li> </ul>
Table Hub	1	<ul style="list-style-type: none"> <li>• Single cable (CAT6A) connection to Display Hub</li> <li>• Active speaker detection: connect up to 7 Microphone (pods)</li> <li>• Connector for Microphone (pod)</li> <li>• HDMI Type A for wired content sharing</li> <li>• HDMI Type A for display Power input</li> <li>• USB Type C (Ultra HD / 4K capable)</li> <li>• USB Type A</li> <li>• USB Type B (connects to meeting room computer)</li> <li>• RJ45 (Ethernet)</li> <li>• Mounting Kit</li> </ul>
Display Hub	1	<ul style="list-style-type: none"> <li>• HDMI Type A (x2) (connects to displays)</li> <li>• USB C (connects to Camera)</li> <li>• USB Type B (connects to meeting room computer)</li> <li>• RJ45 (connects to Table Hub)</li> <li>• Mini XLR (x2) (connects to Speakers) Powers one or two Speakers</li> <li>• Power input</li> </ul>

Item/Requirement	Quantity	Minimum Specifications
Remote Control	1	<ul style="list-style-type: none"> <li>Remote control with batteries</li> </ul>
Cables (complete set)		<ul style="list-style-type: none"> <li>Complete set of cables to connect all system/components</li> </ul>
Compatibility		<ul style="list-style-type: none"> <li>Skype for Business and Microsoft Teams</li> <li>Google Hangouts Meet</li> <li>Zoom</li> <li>Cisco Jabber and Webex</li> </ul>
Monitor	1	<ul style="list-style-type: none"> <li>1 set - 55 inches UHD LED smart TV (with wall bracket)</li> <li>4K Resolution</li> <li>Remote Control with batteries</li> </ul>
Warranty		<ul style="list-style-type: none"> <li>2-years warranty</li> </ul>

#### Finance Conference Room:

Item/Requirement	Quantity	Minimum Specifications
Complete Videoconference Equipment System with Camera, Speaker, Microphone, TV Monitor, Wire Connectors, Brackets and Power cables		
Speaker	2	<ul style="list-style-type: none"> <li>Speaker volume: 95 dB @1W at ½ meter (+/-2 dB); 100dB SPL @7.5W at ½ meter (+/-2 dB)</li> <li>Distortion: 200 Hz–300 Hz &lt;2.5%, 300 Hz–10 kHz &lt; 1%@7.5 W</li> <li>At least 3 inches speaker driver</li> <li>Mounting Kit</li> </ul>
Microphone	2	<ul style="list-style-type: none"> <li>Pickup range: 15 ft / 4.5m diameter</li> <li>Four omnidirectional microphones with eight beamforming elements</li> <li>Mute button with LED status indicator</li> <li>Chain up to 7 Microphone (pods)</li> </ul>
Camera	1	<ul style="list-style-type: none"> <li>Ultra-HD imaging system supports: <ul style="list-style-type: none"> <li>4K, 1440p, 1080p, 900p, 720p at 30fps</li> <li>1080p, 720p at 30fps and 60 fps</li> </ul> </li> <li>Smooth motorized pan, tilt and zoom <ul style="list-style-type: none"> <li>Pan: ±90°</li> <li>Tilt: +50° / -90°</li> <li>15x HD zoom</li> </ul> </li> <li>90° field of view with Autofocus</li> <li>Lens parks at -90° in sleep mode for assured privacy</li> <li>Standard tripod thread</li> <li>Mounting Kit</li> </ul>
Table Hub	1	<ul style="list-style-type: none"> <li>Single cable (CAT6A) connection to Display Hub</li> </ul>

Item/Requirement	Quantity	Minimum Specifications
		<ul style="list-style-type: none"> <li>• Active speaker detection: connect up to 7 Microphone (pods)</li> <li>• Connector for Microphone (pod)</li> <li>• HDMI Type A for wired content sharing</li> <li>• HDMI Type A for display Power input</li> <li>• USB Type C (Ultra HD / 4K capable)</li> <li>• USB Type A</li> <li>• USB Type B (connects to meeting room computer)</li> <li>• RJ45 (Ethernet)</li> <li>• Mounting Kit</li> </ul>
Display Hub	1	<ul style="list-style-type: none"> <li>• HDMI Type A (x2) (connects to displays)</li> <li>• USB C (connects to Camera)</li> <li>• USB Type B (connects to meeting room computer)</li> <li>• RJ45 (connects to Table Hub)</li> <li>• Mini XLR (x2) (connects to Speakers) Powers one or two Speakers</li> <li>• Power input</li> </ul>
Remote Control	1	<ul style="list-style-type: none"> <li>• Remote control with batteries</li> </ul>
Cables (complete set)		<ul style="list-style-type: none"> <li>• Complete set of cables to connect all system/components</li> </ul>
Compatibility		<ul style="list-style-type: none"> <li>• Skype for Business and Microsoft Teams</li> <li>• Google Hangouts Meet</li> <li>• Zoom</li> <li>• Cisco Jabber and Webex</li> </ul>
Monitor	2	<ul style="list-style-type: none"> <li>• 2 sets - 55 inches UHD LED smart TV (with wall bracket)</li> <li>• 4K Resolution</li> <li>• Remote Control with batteries</li> </ul>
Warranty		<ul style="list-style-type: none"> <li>• 2-years warranty</li> </ul>

**Note:** All major components (Speaker, Microphone, Camera, Display and Table Hub) of the VC System must be of the same brand excluding TV Monitor. Supplier shall submit technical data /brochure for all major components. Existing MWSS LED TV monitors (Board Room and Administrator’s Conference Room) will be incorporated to the new system to be installed.

#### D. DELIVERABLES

The Supplier shall ensure that all materials/equipment to be supplied are in good condition, brand new and free from defects and must conform to the specifications. The Supplier shall deliver and install all the items within forty-five (45) calendar days from receipt of the Notice to Proceed (NTP).

To assure performance of the obligations in the warranty clause, 5% will be deducted from the billing pursuant to RA9184 section 62.1.

**E. PAYMENT SCHEME**

Payment shall be made within fifteen (15) days upon delivery, installation, testing, and inspection by the Final Inspection and Acceptance Committee and submission of the required documents for request for billing subject to the usual government accounting and auditing rules and regulations. The items shall be subject to inspection by the Final Inspection and Acceptance Committee. Items found defective during inspection shall be immediately replaced within seven (7) days from date of inspection.

**F. OTHER DOCUMENTS REQUIRED FOR SUBMISSION**

1. Proof of PhilGEPS Registration
2. Mayor's or Business Permit
3. Income/Business Tax Return (Latest Calendar Year)
4. Duly Notarized Omnibus Sworn Statement, and if applicable, together with Special Power of Attorney or Secretary's Certificate.
5. Quotation Sheet