

**MEMBER QUESTIONS TO Corporate Services Scrutiny Committee Item 11**  
**27 September 2018**

**From Councillor Wright**

**Responses made by the Corporate Manager Democratic & Civic Support**

**Question 1**

Could we have a more detailed breakdown of costs against equipment necessary?

**Response 1**

A detailed breakdown of costs against equipment had been provided to Members as part of the report.

**Question 2**

If the current system of individual mics in the Guildhall isn't conducive to good sound quality particularly for live streaming, why replace them while using the same system?

**Response 2**

If properly set up the sound quality for live streaming had the potential to be better than the live sound, as acoustic feedback wasn't an issue with the stream. The current streaming sound did not come from the current system, but only from the microphone on the streaming camera which would account for the poor sound;

**Question 3**

The Guildhall system seems to fall down due to having a generic volume and equaliser setting for all mics regardless of the volume and vocal pitch of the speaker. This leads to some speakers - very often the females with higher pitched mid-high frequency ranges appearing to be at a lower volume to the male voices. I believe this to be fixable by using individual inputs with individual settings. This would be unviable for full council but could be done for front bench of either side perhaps?

**Response 3**

With a congress type system, it was not possible or practical to have individual settings for specific delegate units. It was possible to have a hand on the input level to the sound reinforcement system, to boost the level of quiet speakers, requiring a person to manage it. The microphone placements and usage were the two most important factors in receiving good audio quality;

**Question 4**

Alternatively, two over-head shot-gun mics could be used to enhance and amplify the speakers around the table without having to have individual mics. This would require stands or suspension units, 2 mics and a small mixing desk feeding into the audio speaker system. Two boundary mics placed on the table could do a similar job.

#### **Response 4**

Shotgun microphones would not be effective in a sound reinforcement role, particularly in a reverberant space, nor were boundary microphones. It was important to get the microphone close to the speaker, and the more microphones that were open, the lower the acoustic feedback threshold. This would not apply to the streaming audio where additional ambient microphones could assist with the sound from individual microphones;

#### **Question 5**

In my opinion (the opinion of the councillor), The Guildhall acoustics and layout and nature of full council meetings needs a different approach to the round the table conference setting of the meeting rooms in the Civic centre. Both of these rooms have dry acoustics and fairly uniform acoustic shape.

The Guildhall of course has high ceilings, lots of stone work and the full council meetings follow a different structure. If a system with a mixer was in place, the audio could be taken from the mixer directly into the laptop being used for live streaming allowing for more control over volume for the streaming.

#### **Response 5**

The Guildhall had high ceilings and stone work, which affected the acoustics of full council meetings, which followed a different structure. A system with a mixer could take assist the acoustics, however, the audio mixer would need to be connected directly into a laptop used for live streaming volume control, and have a sound engineer, operating it during meetings. More focus could be achieved by the addition of microphones mixed in to the streaming.