

Burgess Hill Town Council – Streaming Of Council Meetings 18th May 2021

The following report looks at the options and challenges for Burgess Hill Town Council to continue offering remote access to its meetings post-pandemic.

Background

With the lifting of certain Covid-19 restrictions by the government, virtual council meetings have now come to an end.

During the past 14 months, residents have been able to witness the decision-making process at the Town Council via 'Zoom' conferencing software from the comfort of their own homes.

It is Burgess Hill Town Council's wish to continue to offer a similar convenience to residents, but any virtual offering must be cost-effective and time-efficient for the council and without requiring a greater number of officers to be present at meetings.

Audio/Visual Challenges

As a third-tier local authority, it would not be practical for resource and budgetary reasons to offer a multi-camera live webcast similar to what is provided by West Sussex County Council. The town council would also not be able to run a whole set of wireless microphones for each member, officer, and public speakers in attendance.

It would be more realistic for Burgess Hill Town Council to run one static camera, likely to be placed high up in the corner of the chamber to have a wide view of the councillors. There are cameras with built-in microphones, but they would not be adequate to pick up the sound of members speaking at the opposite side of the room, some 10 metres away.

The council chamber is not optimal for capturing speech due to the number of reflective surfaces causing reverberation. The best solution within budget and ease of setup is to run a set of omnidirectional microphones placed in the middle of the table. Omnidirectional microphones pick up sound from all directions and not just where the capsule is pointing.

From initial testing, two microphones should be adequate, one placed nearer the chairman's end of the table and the other towards the rear of the table which would also be able to pick up the voices of any public speakers on the back row.

Officer Involvement

With the town council seeking to avoid using an additional member of staff to run the live streaming, the set-up needs to be simple and not require too much monitoring when the meeting is in progress.

What is the behaviour of people who currently choose to connect to a live stream of a council meeting? Do they both watch and listen to the stream, or do many just listen while multi-tasking? If the council are running one static camera, the answer is likely to be the latter.

Burgess Hill Town Council could opt to run an audio-only stream via a low-cost streaming host with an audio player embedded on the council's website.

The officer's requirement would be to set up a pair of microphones in the middle of the table which would be run into an audio interface and then connected to a computer. After an initial one-time setup of the server, website integration and software installation, an officer would be able to 'go live' with just one click.

Equipment With Multiple Uses

If Burgess Hill Town Council are prudent with their choice of equipment, it can be utilised for other purposes. Audio equipment does not tend to be superseded as much as computers and cameras and can be useful for a decade if taken care of. A mixing desk and microphones can be used for podcasting, voiceovers, focused pre-recorded and live videos – all of which the council should be looking at providing as part of an updated communication strategy.

Conclusion

Burgess Hill Town Council should embark on the live streaming of its council meetings by initially offering an audio stream via its official website.

The process will require no more than a 15-minute set-up time by an officer prior to a meeting commencing.

The initial set-up for this new offering (organising a streaming host, website integration) appear to be within the capabilities of the council to achieve without any outsourcing.

Equipment purchases should be made with value for money in mind along with consideration for the council's other communication aims.

The cost of introducing audio streaming is expected to be in the region of £400 along with a small recurring fee for server bandwidth.

The Audio Streaming Process

Software

The audio from the meeting would be fed into a computer in the council chamber. Using a piece of free software called 'BUTT' - Broadcast Using This Tool <https://sourceforge.net/projects/butt/> the audio is sent to a 'shoutcast' or 'icecast' streaming server provided through internet-radio.org.

Once the software has been setup with the server details, it's then a simple single click to start the stream, and another click to end it. The software will remember the stream details for future sessions.

Audio Streaming Service

Internet-radio.org offer 'pay as you go' bandwidth with a maximum of 500 simultaneous listeners to the stream. 50gb of bandwidth is available for £14.40

Source: <https://www.internet-radio.com/servers/prices/#fullpaygprices>

If the council were to stream at 128kbs quality, a 2-hour meeting listened to by 50 people for the full duration would use up 6gb of our bandwidth, costing approximately £1.75.

How To Listen

An audio player would be embedded into the relevant pages of the town council website. This is a piece of free HTML5 code which is usually a straightforward process for someone familiar with editing the background code of a WordPress page.

An example of coding required for the default browser player can be found here:

<https://www.shoutcheap.com/best-html5-player-for-shoutcast-icecast-mp3-aac-and-ogg/>

The only future administration requirement for the website would be to update the date above the player to let people know of the next live stream.

Required Equipment List

2x Small diaphragm pencil condenser microphones with omni-directional pick-up pattern.

Suggested Item – Behringer B-5. Currently on sale for just £46 each at GAK

<https://www.gak.co.uk/en/behringer-b-5-condenser-microphone/1060>

Audio Interface/Mixer

An audio interface/mixer or portable XLR recorder with the ability to operate in dual mono mode is required. It must feature phantom power for the special type of microphones to work. It is wise to choose something the council could make use of away from council meetings.

For Example - Behringer QX1204USB £130.80 at Amazon

https://www.amazon.co.uk/Behringer-QX1204USB-Premium-Preamps-Compressors/dp/B00CTKI5WO/ref=sr_1_10

USB Soundcard

If a traditional audio mixer is chosen, a simple USB soundcard with RCA inputs would be required.

Suggested item – Behringer UCA202 £17 at Amazon

<https://www.amazon.co.uk/Behringer-UCA202-U-Control-low-latency-Interface/dp/B000KW2YEI>

Headphones

For monitoring the sound, a neutral sounding pair are best.

Suggested item – AKG K52 £26 at GAK

<https://www.gak.co.uk/en/akg-k52-closed-back-headphones/129477>

Accessories

2x microphone stands, 2x XLR microphone leads, cables for the mixer.

Expected total cost in the region of £80-£110 dependent on quality sought.

Total Cost £350-£400 (based on the purchase of a mid-range mixer)