

Consultation response form

Please complete this form in full and return to liz.hall@ofcom.org.uk.

Call for input: Sector Spectrum Review -
Programme Making and Special Events (PMSE)

Organisation 24 Bit Audio Ltd, 18 McCulloch
Meadows, Crowmarsh Gifford, Wallingford, OX10
8FX
Location sound recording for Film and TV

Confidentiality

We ask for your contact details along with your response so that we can engage with you on this consultation. For further information about how Ofcom handles your personal information and your corresponding rights, see [Ofcom's General Privacy Statement](#).

Nothing

None

Yes

Your response

Question

Section 3 –Spectrum use by the PMSE
sector in the UK

Question 1: What are your views on how our processes
work - for example our online booking system,

Your response

Confidential? – / N. Turnaround time is too slow for
short notice bookings

turnaround times, and event coordination. Do you think the current approach works well? How could we improve it?

Section 4 – PMSE historic trends

Question 2: Do you have any comments on how we have analysed and characterised wireless microphone and IEM demand, or suggestions for alternative ways of characterising this demand?

Question 3: Do you have any comments on how we have analysed and characterised wireless video demand, or suggestions for alternative ways of characterising wireless video demand?

Confidential? – / N. Your analysis does not take into account numerous small scale location work taking place across the UK on a daily basis.

Confidential? – Y / N. N/A

Section 5 – Future trends and opportunities

Wireless audio

Drivers of demand

Question 4: What factors have driven changes in the demand for audio PMSE applications, specifically for:

- a) the increased use of coordinated wireless microphones and IEMs, particularly the peak number of simultaneous assignments used at the largest events?
- a) the slight decline in the number of national wireless microphone licences (UHF channel 38 and VHF)? Has the extent of use of these licences changed, and if so why?
- b) the declines in talkback, fixed audio links and ADS licences?

Question 5: What factors could drive further changes in the demand for audio PMSE applications in the future, and what will this mean for future demand, specifically for:

- a) coordinated wireless microphones and IEMs, particularly the peak number of simultaneous assignments used at the largest events?
- b) national wireless microphone licences (UHF

Confidential? – / N

Confidential? – / N. The demand for more channels is increasing. Multiple lavalier and plant microphones are in use at any one time. All artists have to be mic'd and multiple camera use means more boom or plant microphones.

channel 38 and VHF)?

c) talkback, fixed audio links and ADS licences?

Question 6: Do you agree that, given the trends, we are right to focus on wireless microphones/IEMs? Confidential? – Y

Changes in the take-up of bands already available

Question 7: What factors have driven the take-up of different bands for wireless audio? What are the barriers to greater use of the DME band?

Confidential? – / N. The demand for more channels as mentioned above leads to the use of different bands. The purchase of new equipment is a barrier to DME use.

Question 8: What actions could enable greater take-up of the DME, DECT and licence exempt bands in the future?

Confidential? – / N. OFCOM should be sending users information about what is available.

Changes in spectrum availability

Question 9: Which potential additional bands might be suitable for wireless audio applications, particularly microphones and IEMs at the largest events and venues?

Confidential? – Y / N

Question 10: To what extent do the characteristics of different audio applications drive their requirements for spectrum – for example particular requirements for latency, resilience or capacity?

Confidential? – / N. Low latency and resilience are essential requirements

Changes in efficiency of spectrum use

Question 11: What changes in spectrum use (technology, working practices, different bands, etc) have enabled audio wireless growth to be accommodated to date, particularly the increased use of wireless microphones and IEMs at the largest events and venues in the context of reduced UHF spectrum availability?

Confidential? – Y / N

Question 12: What technologies are currently available or are being developed which can improve audio spectrum efficiency in the future, particularly in the use of wireless microphones and IEMs at the largest events and venues?

Confidential? – Y / N

Question 13: Are there any barriers to adopting more efficient technologies for audio applications, particularly for wireless microphones and IEMs at the largest events and venues? What could industry do and what could Ofcom do to facilitate greater use of those

Confidential? – / N. There are no barriers as long as quality and low latency are maintained.

technologies?

Question 14: What changes to working practices and spectrum planning could improve audio spectrum efficiency in the future, particularly in the use of wireless microphones and IEMs at the largest events and venues? Confidential? – Y / N

Question 15: Are there any barriers to adopting working practices that could enable more efficient use of spectrum by audio applications, particularly for wireless microphones and IEMs at the largest events and venues? What could industry do and what could Ofcom do to facilitate those efficiencies? Confidential? – Y / N

Wireless video

Confidential? – Y / N

Drivers of demand

Question 16: What factors (such as more complex events and use of higher resolution equipment) have driven the demand for wireless video bandwidth, in particular for:

- a) the increased bandwidth required for the largest sporting events such as Formula 1 at Silverstone and The Open Championship?
- b) the bandwidth required for nationally important state events such as The Coronation?
- c) the slow growth or decline in bandwidth used at horse racing fixtures?

Question 17: What factors could drive further changes in the demand for wireless video bandwidth in the future, and what will this mean for future demand, in particular for: Confidential? – Y / N

- a) the bandwidth required for the largest sporting events like Formula 1 at Silverstone and The Open Championship?
- b) the bandwidth required for nationally important state events such as The Coronation?
- c) the bandwidth used at horse racing fixtures and other major sporting events?

Potential news bands

Confidential? – Y / N

Question 18: What factors have influenced the degree of take-up of existing bands used by wireless video applications, particularly the growth in take-up of the 7

GHz band?

Question 19: Which potential additional bands might be suitable for video PMSE applications, particularly at the largest events and venues? Confidential? – Y / N

Question 20: To what extent do the characteristics of different video applications drive their requirements for spectrum – for example particular requirements for resilience or capacity? Confidential? – Y / N

Changes in efficiency of spectrum use Confidential? – Y / N

Question 21: What technologies are currently available or are being developed which can improve wireless video spectrum efficiency in the future?

Question 22: Are there any barriers to adopting more efficient technologies for wireless video? What could industry do and what could Ofcom do to facilitate greater use of those technologies? Confidential? – Y / N

Question 23: What types of video demand could realistically be supported by private (for example 5G) networks? Confidential? – Y / N

Question 24: What changes to working practices and spectrum planning could improve video spectrum efficiency in the future, particularly in the use of wireless microphones and IEMs at the largest events and venues? Confidential? – Y / N

Question 25: Are there any barriers to adopting working practices that could enable more efficient use of spectrum by wireless video? What could industry do and what could Ofcom do to facilitate those efficiencies? Confidential? – Y / N

Other comments

Question 26: Do you have any other comments or views on the issues raised in this document?

Confidential? – / N My investment in CH38 wireless equipment is in excess of £50000 and has taken many years to accumulate. I operate 10 channels in this band. I use this equipment on a daily basis UK wide. A reduction in the use of this spectrum would be devastating to my business and to me personally.

Please tell us how you came across about this consultation.

- Email from Ofcom
- Saw it on social media
- Found it on Ofcom's website
- Found it on another website
- Heard about it on TV or radio

- Read about it in a newspaper or magazine
- Heard about it at an event
- Somebody told me or shared it with me
- Other (please specify)

Please complete this form in full and return to liz.hall@ofcom.org.uk.