

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, 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?

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?
- b) 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?
- c) the declines in talkback, fixed audio links and ADS licences?

Your response

Confidential? – N

I don't have experience with event coordination. The online booking system is good but needs to have a quicker response time. Often jobs happen extremely quickly and they are finished before I get a response

Confidential? – N

The reality of small scale shoots using multiple channel of wireless is not captured by your document. Most content production is a small crew affair that requires multiple channel of wireless for talent and for client monitoring

Confidential? – N

Confidential? –N

A0 increasingly demanding technical requirements when filming - wireless microphones are the only tools available to meet the producers demands

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 channel 38 and VHF)?
- c) talkback, fixed audio links and ADS licences?

Confidential? – N

On many productions every artist is mic'd – more and more channels are constantly being used

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

Confidential? – N

Yes

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

Numbers of wireless needed for single productions. Dme band only accessible via using the latest kit but increasingly more common.

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

Confidential? – N

Wider availability of gear that can access those bands

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? – N

Not sure

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 high fidelity are essential

Confidential? –N

Changes in efficiency of spectrum use

Question 11: What changes in spectrum use

Narrow band technology on wireless packs

(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?

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? – 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 technologies? Confidential? – Y / N

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:

d) the bandwidth required for the largest sporting events like Formula 1 at Silverstone and The Open Championship?

e) the bandwidth required for nationally important state events such as The Coronation?

f) the bandwidth used at horse racing fixtures and other major sporting events?

Potential news bands

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?

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?

Changes in efficiency of spectrum use

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?

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

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?

Question 25: Are there any barriers to adopting working practices that could enable more efficient use

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

Confidential? – Y / N

of spectrum by wireless video? What could industry do and what could Ofcom do to facilitate those efficiencies?

Other comments

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

Confidential? – N

I am a location sound recordist. I run up to 16 channels of wireless mics (mixture of Lectrosonics, wisycom, Sennheiser) for talents plus Iem set ups on multiple frequencies

Please tell us how you came across about this consultation.

Somebody told me or shared it with me

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