

Wireless Spectrum update: The sky is not falling (yet)

The industry seems a buzz at the moment with rumours that “the Government” is about to sell off the spectrum currently used by wireless microphones and as such “all” wireless microphone systems would become unusable. This is an over exaggeration of fact fanned by media and industry gossips who love a good conspiracy theory.

Whilst it is difficult to pin point the source of these rumours, we suspect the purveyors of these stories may have picked up press releases regarding the situation in the USA (which is a problem for wireless microphone users) and published these releases assuming the same situation automatically applies in Australia. Not true. Let’s review a few facts.

- Wireless Microphone frequency allocation is regulated in Australia by the Australian Communications and Media Authority (ACMA) www.acma.gov.au. The ACMA is an Australian Federal Government Authority. They are not bound to follow the actions of the FCC (the US regulator); although logic says, they will be keenly monitoring the situation in the USA.
- The ACMA has NOT released any official statements indicating intent to reallocate spectrum currently utilised by wireless microphone systems.
- The ACMA DID release a discussion paper in December 2006 titled “Strategies for Wireless Access Services”. In this paper, the UHF TV broadcast band (520-820MHz) was identified as a potential LONG TERM (not further described) opportunity for additional services.
- The Australian Wireless Audio Group (AWAG) was formed to represent the interests of Australian wireless microphone and in-ear monitor systems. AWAG’s mission is to work cooperatively with the ACMA and other government regulators to ensure the industry’s voice is heard and endeavours to develop a solution that takes the industry’s needs into consideration.

- AWAG members consist of representatives from most of the major wireless microphone importers/distributors, plus key end users. AWAG works under the guidance of the Australian Music Association (AMA). Check the AMA web site regularly for AWAG updates: www.australianmusic.asn.au.



Figure 1 Cover, Live Sound International. December 2007

The situation in the USA

The current situation in the USA is significantly worse than in Australia. US wireless microphone users face two threats:

Sell off of the 700MHz Band

The FCC is currently running an auction for 100MHz of spectrum currently shared by TV broadcasters and wireless audio products. Bidding has been fast and furious. Bidder's identities are hidden to comply with US corporate law. However, several large telcos and mega corporations, such as Google, have confirmed that they are bidding. The auction recently closed with a bid total of US\$19.5 Billion. Not bad for selling air!

White Space Devices

In addition to the 700MHz sell off, the FCC is considering approving a new breed of portable wireless networking devices designed to utilise 'white spaces' – unused channels within the TV band. That is, the space currently shared by wireless microphone products.

It is proposed that these devices would automatically detect and avoid active TV transmitters (spectrum sensing). The FCC is currently testing proto types. The first samples submitted failed to adequately detect other transmitters.

White spaces devices are being promoted by a coalition of mega corporations including Microsoft, Google, Dell, HP, Intel, Phillips, Samsung etc. In other words, big money.

Shure are working closely with the FCC to ensure that proposed white spaces devices will detect and avoid frequencies occupied by wireless microphones.

Further details can be viewed at:

www.shure.com/ProAudio/PressRoom/WhiteSpaces/index.htm.

Follow the dots

The writing is on the wall for 700MHz in the USA as far as wireless microphone users are concerned. This means that new systems will be compacted into the remaining spectrum (450 – 698MHz) which will be shared with existing TV broadcast stations and, if approval is granted, white space devices. So it is going to get tight.

Will Australia follow in the footsteps of the USA?

That is the million...no...several billion dollar question. No one knows for sure. Government officials are not saying, however I imagine the large dollars raised by the FCC auction would be hard to resist. The new communications minister Senator Stephen Conroy recently committed to the switch off date for Analogue TV in Australia to be 2013. So we are reasonably certain (but no guarantees) that any possible changes would not be implemented until post this date.

What can I do?

Support AWAG. They are your voice. Periodically check the AMA web site and the Jands web site for updates. Until then, stay alert, not alarmed. The sky is not falling (yet).

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Your comments are most welcome, as are suggestions for other topics you may like covered in future articles. Jeff MacKenzie can be contacted directly via email on jmackenzie@jands.com.au.