



Production Sound Ltd

Location Audio Sales & Rentals

Submission: Options for 174-230 MHz Consultation Document

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Submitted by: David Madigan, Company Director

Q1) Should spectrum in Band III be allocated for radio microphones? If so, how much spectrum would satisfy demand in this area?

Commentary

The screen production industry in New Zealand and internationally uses VHF spectrum for IFB and wireless cueing applications.

VHF radio microphones are not widely used for professional applications due to the relatively long antennas required but IFB systems work well as the shield of headphone and earpiece cables is used as the receive antenna.

Significant numbers of low cost VHF radio microphones are used in New Zealand for public and semi professional applications.

For screen production, radio microphones and IFB systems are assembled into mobile carts or bags and it is necessary to maintain sufficient channel separation of physically close receivers and transmitters to avoid overloading the radio microphone receiver front ends. This becomes more of an issue as modern radio microphone receivers are required to tune wider bandwidths in order to cope with a lack of consistent viable frequency allocation. A practical solution is to deploy VHF IFB.

The majority of IFB systems currently in use in New Zealand are in the 216 - 217 MHz VHF band. USA based manufactures of these IFB systems also produce products for assistive listening (auditory aids) and tour guide applications in the 216 - 217 MHz VHF Band. The 216 - 217 MHz band is assigned for assistive listening applications on a primary basis in the US.

There is increased development and availability of professional VHF IFB products in the 174 - 216 band due to the decreasing availability of UHF spectrum worldwide.

Recommendations

- 1) A minimum of 8MHz of spectrum is assigned for wireless microphones including IFB is assigned in the 174 - 216 VHF band. This should be on a fixed nationwide allocated band for simplified compliance by importers and operators.
- 2) 216.00 to 217.999 in the VHF band is assigned for IFB, assistive listening and tour guide systems as allocated in the USA.

End of submission.

Production Sound Ltd . 9B Athens Road . Onehunga . Auckland 1061 . New Zealand

M: 021 741810 . E: davidm@ihug.co.nz . W: davidmsound.com