



Production Sound Ltd

Response to Radio Spectrum Management
discussion document
“DRAFT Five year Spectrum Outlook 2017-2021

15th February, 2017.

By email: radiospectrum@med.govt.nz

This response is made on behalf of Production Sound Ltd.

Any enquiries with respect to the response should be made to

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- 1) As an owner an operator of wireless microphone in the screen production industry sector, Production Sound Ltd thanks the RFS for the opportunity to comment on the Radio Spectrum Management DRAFT Five Year Spectrum Outlook 2017-2021.

It is encouraging at least to see mention of wireless microphones within the plan.

However, there remains the paradox that RSM fails to regard as a priority, the planning and provision of adequate wireless microphone spectrum which is essential for the production of New Zealand entertainment and media content in the new technology services in the recent and future reallocations of 600 to 800 MHz spectrum.

- 2) Comment on Section: 5.8 Aeronautical & maritime:

“In another aeronautical area, RSM is currently assessing the technical and operational viability of allowing wireless microphones in certain unused portions of the aeronautical bands allocated for DME aviation applications (Distance Measurement Equipment). This initiative has been considered by other countries (e.g. United Kingdom¹³) as an option to alleviate the demands of wireless microphone users who became spectrum-constrained after the transition from analogue to digital television.”

I note that UK regulatory environment for PSME wireless microphone operation is based on a site and duration specific licensing model which is in complete contrast to the New Zealand GUL regime. The UK regulator OFCOM has a higher level of practical control over the use of wireless microphone usage than RFS and can restrict the usage of this spectrum if any interference with aeronautical services becomes a problem on a geographic basis. Such an approach would require the RFS to implement a wireless microphone licensing regime.

It must also be noted that the use of higher frequencies do not ameliorate the loss of lower frequency spectrum with respect to body worn wireless microphones due to the increased impact of body absorption of RF energy. This results in less effective operating range.

- 3) Recommendation for the inclusion in the draft plan.

I request the RFS to include in the draft plan the allocation of 9 MHz of the 10MHz guard band in the 748 to 758 MHz spectrum for use by wireless microphones within the current GUL licence regime. Within the current US reallocation of the 600MHz spectrum, an 11MHz guard band between 652 and 663 MHz has a 1 MHz lower buffer, 4 MHz of licensed wireless microphone and 6MHz of unlicensed wireless microphone and WSD spectrum. Such an allocation in the 748 to 758 MHz guard band would allow use of currently available wireless microphones and would at least provide some spectrum protection for the future. An isolated group of

frequencies within 748 to 758 MHz would allow for practically harmonious operation of a group of IEM / IFB / camera audio link channels with lower frequency 500 to 700 MHz wireless microphones.

I would also encourage the RFS to include in the work programme, a detailed analysis of the future wireless microphone spectrum requirements of the major industry sectors of film and television production, live entertainment and sport along with the usage in the education, commerce and the wider New Zealand community. Given that the RFS is a business unit with MBIE, this is a reasonable request to support significant and relevant economic, cultural and social activity.

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