Response to 5-year spectrum outlook 2022-2026.

From Lisa Fahrenberger, RF coordination and monitoring for large scale music and sport events.

First of all, I have welcomed the dialogue in the past years and are thankful to have been invited to the table as part of WUNZ. I am grateful for the opportunity to contribute to this plan.

As I am deeply involved in the frequency coordination and monitoring of large-scale events, as well as pre-event planning and management of spectrum use by wireless microphones etc. I am worried that this falls off the table in the further planning. We are here, and we are an important part of New Zealand's economy. If it wasn't for Covid, the sector (live events) would have created several million dollars of income for our core and associated industries this summer alone.

To the questions:

• Have we identified the range of technological advancements and probable new demands relevant to New Zealand?

The response from WUNZ, of which I am a member, explains that we are dependent on international manufacturers building equipment for other ITU zone's regulations.

We have explained before, that manufacturers are unlikely to develop equipment or even specific tuning restriction especially for NZ as our market is too small. We are dependent on what's available internationally.

With possible changes to the NZ spectrum, I would hope for a redesign of the regulations around import and sale of wireless microphones etc. to enable distributors to sell a wider range of products, i.e., those products which tuneable range overlaps with legal NZ spectrum.

In terms of equipment, it is relevant to New Zealand that there is existing equipment available for 960-1195MHz block and the 1785–1805MHz block.

If RSM is to open the 960-1165MHz block I would suggest this would be reserved for professional users with a comprehensible database of the available white space and clear guidelines for usage.

• Have we prioritised the right issues that we will need to actively manage through our work programme (to the extent this is possible to predict now)?

Wireless Users NZ notes that GUSL's for wireless microphones actually expire in March 2025 Will the GUSL for radio mics in both the 500MHz and 600MHz bands will be renewed?

Also, Section 3.1.2 refers to spectrum sharing, however there are no tools or database available which would allow a user in a specific location to determine which Television White Space devices are being used in real time.

Furthermore, I would like to repeat that while smaller event or applications might well be able to function within the white spaces in the 500MHz block this does not work for larger RF requirement events like large sport events, events with a lot of media attention, multi band festivals, large scale musical theatres, large corporate events with multiple rooms and parallel events in the same building, large film/TV sets). These events need workable spectrum and have enough economic impact to warrant priority.

• Are there other matters that we should cover?

Please allow for enough time for radio microphone owners to be prepared for any change that might come.

Discuss opening up the guard bands for radio microphone use: 698–703 MHz, 748–758 MHz and 803 -806 MHz

For the future of a much more reduced, shared or splintered spectrum for radio microphone use: Maybe discuss designing an app for users to check what spectrum they can use at any location. See my points about the 960-1165MHz block and spectrum sharing.

Thank you for reading, Kind regards, Lisa Fahrenberger

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