

To: WIA Spectrum Strategy Committee, WIA President and Board

From: Dale Hughes, VK1DSH

Re: Report on ACMA Spectrum tune-up: Spectrum for 5G broadband in mmWave bands

Date: 5 September 2017

I attended the ACMA “Spectrum tune-up: Spectrum for 5G broadband in mmWave bands” meeting in Canberra held on Tuesday 5 September 2017. Meeting attendees were also located in Sydney and Melbourne and the three sites were linked using the ACMA video conference facility. The meeting started at 09:30 and ended at 13:30 with approximately 40 people in attendance across the three sites. See <https://www.acma.gov.au/theACMA/spectrum-tune-up-spectrum-for-5g-broadband-in-mmwave-bands> for more details of the meeting.

The main purpose of the meeting was to inform industry and stakeholders of ACMA plans to move forward with releasing the 24.25 to 27/27.5 GHz frequency band for 5G Mobile Broad Band (MBB) applications. In this case the ACMA wants to accelerate the usual process of re-farming frequency allocations, even in advance of the decisions that might be made as part of WRC-19 agenda item 1.13 which is considering additional mm wave frequency bands for IMT use.

Presentations outlining the possible scope and applications of MBB in the millimetre (mm) wave bands were given by a number of industry representatives and the ACMA outlined the processes to be undertaken with respect to consultation, possible licensing scenarios and sharing studies. The bandwidth required for proposed MBB applications is significant with estimates ranging from 2 to 12 GHz. In Australia the main users of the spectrum are currently satellite operators and some fixed service providers.

The amateur service, which has a primary allocation in the 24 to 24.05 GHz frequency band and a secondary allocation in the 24.05 to 24.25 GHz frequency band and is not directly affected by the ACMA proposal, though it is possible there might be adjacent band interference issues. (Curiously this issue was raised by an unidentified person in the Melbourne office)

The proposed changes to the frequency re-farming process, if they occur, set an interesting precedent because it will make Australia proactive in opening up the spectrum to 5G even before WRC-19 decisions are made, operational standards are firmly set and suitable equipment is widely available.

The meeting also covered some of the other mm wave bands that might be also be considered in the WRC-19 agenda item 1.13 negotiations ; for the WIA, the main concern is the primary amateur allocation between 47 and 47.2 GHz which, for the moment, appears to be a low priority IMT candidate band.

The ACMA undertook to circulate the various presentation to the meeting attendees and I'll circulate them (unless they are marked confidential) to the Spectrum Strategy committee along with any other relevant information.

The WIA may wish to make a submission on the proposed changes to the re-farming process and notify the ACMA about any concerns it has about adjacent band interference.

Dale Hughes VK1DSH

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