



AUSTRALIA

Submission by Free TV Australia

Replanning the 2GHz band

Australian Communications and Media Authority

September 2020

1. Summary

- Free TV welcomes the opportunity to provide a submission to the Australian Communications and Media Authority (ACMA) on the options paper for replanning the 2GHz band.
- The ongoing importance of electronic news gathering and television outside broadcast (TOB) was again recently highlighted by the extensive free-to-air television coverage of the 2019/20 bushfire crisis, the reporting on the clean-up operation and the devastating impacts of the subsequent floods.
- Many of these events are covered by Free TV members using spectrum that is adjacent to the bands that are the subject of this replanning project.
- In selecting the preferred option for replanning the 2GHz band, the ACMA should be mindful of the potential for new services in the 2GHz band to create adjacent channel interference that could impact on vital news gathering services.
- In moving to the next stage of replanning the 2GHz band, the potential for adjacent channel interference should be studied, with appropriate constraints put in place to ensure that there is no impact on existing TOB services as provided in the 2010-2110 MHz and 2200-2290 bands.

2. Introduction

Free TV Australia is the peak industry body for Australia's commercial free-to-air broadcasters. We advance the interests of our members in national policy debates, position the industry for the future in technology and innovation and highlight the important contribution commercial free-to-air television makes to Australia's culture and economy. We proudly represent all of Australia's commercial free-to-air television broadcasters in metropolitan, regional and remote licence areas.

Our members have a fundamental role in bringing local content to Australian audiences. This includes the provision of local news services, current affairs, sports and other culturally significant programs that are relevant and responsive to regional and rural areas.



2.1 Our existing TOB licence holdings and sharing capability

Seven Network, Nine Entertainment and Network TEN have Australia wide licences in the bands 2010-2110 and 2200-2300MHz and operate in accordance with the ACMA's RALI FX21.

In cooperation with the ACMA, Australian TOB licensees have developed and maintained internationally recognised best practices for the implementation and licensing of electronic news gathering and television outside broadcast coverage. In recent years advanced technologies have been introduced to improve spectrum management to meet the spectrum demand for television news and outside broadcasting demand within these frequency ranges, including:

- high efficiency video coding,
- centralised management of Australia wide channel usage, and
- increased sub channel / time-based sharing between Seven Network, Nine Entertainment and Network TEN.

These advances reflect substantial peaks in the demand for television news and outside broadcasting by the public from Australian commercial television services.

The 1980–2010 MHz and 2170–2200 MHz bands are currently used for TOB services on a shared and non-exclusive basis for short-term applications, such as covering special events. It has been understood, as set out in RALI FX21, that the use of these bands for TOB was only temporary pending this replanning work.

3. Protection against adjacent band interference

While Free TV members do not hold licences in the bands 1980-2010 and 2170-2200MHz, we do have an interest in aspects of the ACMA’s proposals for replanning of these bands, primarily due to the potential that new entrant services may cause adjacent channel interference with our existing services. We appreciate that the ACMA preliminary assessment of the options against desirable planning outcomes in the Options Paper includes reference to ensuring coexistence with adjacent band services is addressed.

Consistent with this approach, we are concerned to ensure that the ACMA planning process includes a robust assessment of each alternative use of the 2GHz band with respect to potential out-of-band interference into TOB at 2010MHz and 2200MHz.

We have particular interest in the potential coexistence requirements at the band edges between TOB and any complementary ground component that would be required to enable deployment of terrestrial wireless broadband (including 4G/5G services) and mobile satellite infrastructure.

As part of its assessments of the options, explicit consideration should be given to the potential dislocation, loss of services and costs associated with potential renegotiation of existing agreements which may be required in the candidate bands identified as destinations for the reallocated incumbent licensees currently within the bands 1980-2010 and 2170-2200MHz.

4. Technical feedback on the proposed options

4.1 Timeframes for reallocation

Several proposals within the Options Paper potentially require complex reallocation in a range of bands, not least of which are the requirements of the incumbent licensees in the bands 1980-2010 and 2170-2200MHz.

We would request the ACMA consider, within the technical frameworks to be developed, the potential widespread impact on fixed service infrastructure – links and networks, which may be required in the candidate bands identified as destinations for the re allocated incumbent licensees currently within the bands 1980-2010 and 2170-2200MHz.

Similarly, the appropriate reallocation period for any geographical area and frequency segment that may be subject to spectrum licence reallocation will be very important for any new service and the incumbent licensees currently within the bands 1980-2010 and 2170-2200MHz.

4.2 Complexity of existing arrangements in 7.2GHz band

Free TV notes that the ACMA is of the view that the majority of existing TOB licensees currently in the 2 GHz band could be reallocated to either the 7.2 GHz or 8.3 GHz bands.

We suggest that the 7.2GHz option should not be the preferred option selected by the ACMA given the complexity of the existing arrangements that include agreements between TOB licensees, the CSIRO and the Commonwealth on behalf of the Department of Defence in the 7.2GHz.