

17 August 2012

Mr Mark Arkell
Manager
Spectrum Engineering
Australian Communications and Media Authority

By email: Mark.Arkell@acma.gov.au

Dear Mark

Draft RALI: Television Outside Broadcast (TOB) Services in the bands 1980-2010 MHz and 2170-2200 MHz

The Australian Subscription Television and Radio Association (ASTRA) appreciates the opportunity to comment on the draft RALI for TOB services in the 1980-2010 MHz and 2170-2200 MHz bands.

ASTRA welcomes the release of the draft RALI as an important step towards the allocation of licences for TOB operations in these bands. ASTRA makes the following comments in relation to some aspects of the draft RALI:

- ***TOB services are not afforded protection from interference and a TOB licensee must not operate a TOB service if its operation causes harmful interference to another radiocommunications service.***

ASTRA seeks clarification on the lack of protection from interference for TOB services. We recognise that TOB services in these bands would not be protected from interference from existing fixed-link services, and that the ACMA's intention is that TOB licensees will be required to self-coordinate operation of TOB services. However we query whether non-protection extends to interference to TOB services from unauthorised (unlicensed) radiocommunications services in these bands, or where a TOB licensee operates a TOB service contrary to previously agreed arrangements, causing interference to another TOB licensee.

- ***No defined channel arrangements.***

On balance, ASTRA supports this approach. While frequency coordination between TOB licensees without more formalised administrative arrangements (such as a centralised booking system) may be problematic, the flexibility of undefined channel arrangements is appropriate for efficient use of spectrum for TOB services.

- ***Guard bands***

ASTRA supports the 5 MHz guard bands listed in the Assignment Requirements for both the 1980-2010 MHz and 2170-2200 MHz, to provide protection to (and from) adjacent mobile services. ASTRA notes this concurs with the ASTRA-commissioned report by Kordia.¹

¹ Kordia, *ACMA's proposed new 2GHz ENG bands*, April 2012. This report was submitted as part of ASTRA's response in June 2012 to the ACMA's invitation to comment on the revised proposal for supporting 2.5 GHz TOBN licensees and third-party users of the 2.5 GHz band in the alternative bands.

- **Power limited to 23dBm/8 Mhz EIRP**

ASTRA notes the power limitations for both bands would not impede STV TOB operations, including stadium operations.

- **No airborne transmitters.**

ASTRA notes the prohibition on airborne transmitters in the 1980-2010 MHz and 2170-2200 MHz bands. Our understanding is that it is the same as the prohibition on airborne transmitters in the 2200-2300 MHz band, and that the ban is intended to apply to airborne transmitters on helicopters and other aircraft. However, we seek to clarify that this ban would not prohibit the use, for example, of crane-mounted cameras, or cameras on stadium roof-tops, for televising sporting and other outdoor events in the 1980-2010 MHz and 2170-2200 MHz bands, and that the prohibition would not impact on devices such as the FOX Sports Oktocopter (a remote controlled flying camera kept within the stadium).

- **No operation of services in the 2170-2200 MHz band with 100km of an Earth station receiver operating within the band 2200-2300 MHz.**

ASTRA acknowledges the importance of protecting sensitive Earth station receivers for space science operations, and that Earth station receivers in the vicinity of Perth and Canberra should receive appropriate protection. We note however that, in relation to the Tidbinbilla Earth station, the Kordia Report demonstrated that TOB operations could be undertaken at Canberra stadium co-channel in the 2200-2300 MHz band, given that the surrounding hilly terrain will mean sufficient obstruction loss for ground-based TOB operations, therefore operation in the adjacent 2170-2200 MHz would offer further protection.² We also note that Fox Sports have been issued temporary licenses in this band which have been used in Canberra and Perth stadiums (to our knowledge, without incident).

Please contact Simon Curtis, Policy and Regulatory Affairs Manager, on (02) 9776 2688, to discuss further anything in the above.

Yours sincerely



Petra Buchanan
CEO

² Kordia Report, p.37.