SOUTHERN CROSS AUSTEREO PTY LIMITED SUBMISSION TO ACMA

DRAFT VARIATION TO LICENCE AREA PLAN – REMOTE CENTRAL AND EASTERN AUSTRALIA RADIO – NO. 1 OF 2013

ACMA FILE REFERENCE 2010/1753

Southern Cross Austereo Pty Ltd (SCA) owns and controls 78 commercial radio licences across 44 licence areas through its subsidiary licensee companies. SCA makes the following submission on behalf of its subsidiary company, Dubbo FM Radio Pty Ltd, which operates the commercial radio service 2DBO in the Dubbo RA1 licence area.

The focus of SCA’s submission is the proposed changes to the broadcast site at Mt Cenn Cruaich, Warrumbungle, New South Wales as a result of requests made by Rebel Radio Network Pty Ltd (RRN) with respect to its radio service 4RBL in the Remote Commercial Radio Service North East Zone RA1 (North East Zone).

1. Executive Summary

SCA submits that:

(a) RRN’s Revised Proposal (as defined below) results in significant signal overspill into adjacent licence areas, including the Dubbo RA1 licence area in which SCA broadcasts;

(b) the ACMA has not fully considered the measures available to substantially reduce the signal overspill to an acceptable level, nor has it given proper consideration to the economic impact this overspill will have on the operations of commercial radio licensees in the Dubbo RA1 licence area;

(c) there are equally economic and efficient alternative transmission systems available for use by RRN which will significantly reduce the signal overspill into the Dubbo RA1 licence area; and

(d) the ACMA should do its own modelling on the transmission system proposed by SCA to satisfy itself that it is a more suitable and viable alternative and, having done so modify the proposed technical operating conditions for Warrumbungle accordingly.

2. Warrumbungle, New South Wales Proposal

The Australian Communications and Media Authority’s (AMCA) explanatory paper to the draft variation to the North East Zone licence area plan\(^1\) (Explanatory Paper) notes that since 2004 RRN has, through a number of proposals to the ACMA, sought to change its transmission site location within the Warrumbungle region and increase its maximum power levels so that it could improve reception to various communities within the North East Zone\(^2\).

The Explanatory Paper further notes that in assessing RRN’s proposals the ACMA found that there would be excessive and avoidable signal overspill into the adjacent

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\(^1\) Australian Communications and Media Authority, Draft Variation to Licence Area Plan – Remote Central and Eastern Australia Radio – No. 1 of 2013, Explanatory paper – Part B: North East Zone, July 2013, Sydney.

\(^2\) Ibid at page 27.
Dubbo RA1 and Gunnedah RA1 licence areas, particularly in relation to the Coonabarabran and Gilgandra townships. Late last year RRN revised its Warrumbungle proposal suggesting that the ACMA consider allowing a particular directional antenna pattern based on the use of a RFS 828 DA antenna (Revised Proposal).

Whilst acknowledging that the Revised Proposal did not remove RRN’s signal overspill into adjacent licence areas, the ACMA concluded that the overspill is ‘an acceptable consequence of the provision of the Rebel service within the North East Zone licence area’.

3. Signal Overspill into Dubbo RA1

In assessing and prioritising requests to vary licence area plans the ACMA is required to balance competing objects listed in section 3 of the Broadcasting Services Act 1992 (BSA), including that of ‘providing a regulatory environment that will facilitate the development of a broadcasting industry in Australia that is efficient, competitive and responsive to audience needs’ against the planning criteria in section 23 of the BSA. ACMA policy also requires that in considering requests to vary the characteristics of an existing radio service that there not be excessive signal overspill outside the licence area.

SCA submits that the Revised Proposal will result in excessive signal overspill into the adjacent Dubbo RA1 licence area in that it will permit RRN to broadcast to the township of Gilgandra, which approximately represents 7.6% of the Dubbo RA1 licence area population. SCA’s analysis of the overspill, based on the location, height, power and type of antenna (RFS 828 DA antenna) RRN proposes to use is set out in Attachment 1 to this submission. The yellow areas are an urban stereo grade signal, red areas are a suburban stereo grade signal, blue is a rural stereo grade signal and the green/aqua is a rural monaural grade signal. As is evidenced in Attachment 1, Gilgandra falls within the blue rural stereo grade signal.

The signal overspill not only impacts SCA’s operations as a commercial radio licensee in the Dubbo RA1 licence area, but also those of two other licensees. The licence area is already; for a market of its size, competitive in nature and it is arguable there is no capacity for further entrants. Further, and most critically, the signal overspill is avoidable.

4. Alternative Measures to Avoid Overspill

SCA submits that there is an equally economic and efficient alternative transmission system which could be used by RRN in the Warrumbungle region which will enable it to provide its planned grade of service to the North East Zone, whilst at the same time, significantly reduce the signal overspill into the Dubbo RA1 licence area.

The antenna proposed by RRN is a 4 bay, RFS FM 828 DA antenna. This type of antenna has a low front to back ratio, which has the limitation of not being able to limit the effective radiated power in the direction of Gilgandra to an acceptable level, being a rural stereo grade signal.

In contrast a 2 bay, RFS CP 902 antenna, which behaves much like a yagi-uda array, provides a superior front to back ratio in comparison to the RFS FM 828 DA antenna, and in turn limits the amount of effective radiated power in the direction of Gilgandra to an acceptable level (rural monaural grade signal). Attachment 2 to this submission

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3 Id.
4 Id at page 29.
5 Id at page 31.
6 Section 3(1)(b) of the Broadcasting Services Act 1992 (Cth).
7 Australian Communications and Media Authority, Assessing and prioritising requests to vary radio licence area plans (LAPs), Policy guidelines, July 2013, Sydney at page 9.
8 Taken from the population figures set out in Table 5 of Explanatory Paper, at n.1 above at page 30.
sets out the contrasting coverage prediction plots associated with the use of the RFS CP 902 antenna.

With 2 bays, the RFS CP 902 antenna achieves an EMAX of 5 kW as it has the same forward gain as 4 bays of the RFS FM 828 DA antenna. Wind loading profiles of both antennae are approximately the same.

Finally, the purchase and installation of the alternative antenna is equivalent to that proposed by RRN, which means that RRN would suffer no detriment from an economic perspective.

SCA requests that the ACMA do its own modelling using a 2 bay, RFS CP 902 antenna to satisfy itself that this antenna is a much better choice and, having done so, modify the proposed technical operating conditions for Warrumbungle accordingly.

Southern Cross Austereo Pty Ltd
16 September 2013

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9 SCA contacted Radio Frequency Systems which priced both antenna systems at around $20,000.