

31 January 2017

By email: [spectrumlicensingpolicy@acma.gov.au](mailto:spectrumlicensingpolicy@acma.gov.au)

Dear Sir/Madam

The Australian Subscription Television and Radio Association (**ASTRA**) welcomes the opportunity to comment on the Australian Communications and Media Authority's (**ACMA**) Five Year Spectrum Outlook (**FYSO**).

ASTRA's members rely on spectrum to provide a diverse range of news, information, sport and entertainment programs which deliver significant social benefits to a broad cross-section of the Australian community. ASTRA's members also deliver substantial economic benefits including through investment in local content production.

As stated in previous submissions to the ACMA on spectrum management, it is useful to industry to have visibility of the ACMA's view on the environmental, regulatory and policy factors which will influence the performance of its spectrum management functions. In that vein, ACMA is to be congratulated for including in the FYSO a dedicated 12-month plan in which the ACMA specifies clearly identified milestone tasks and timings for priority spectrum management activities to be completed. ASTRA is highly supportive of the inclusion of this plan as a regular feature of future FYSOs and notes that the earlier ASTRA is aware of the ACMA's activities, the more useful such a plan will be for ASTRA's members and industry in terms of understanding the impact of ACMA's activities and priorities.

### **FYSO principles for spectrum management**

ASTRA notes that the FYSO continues to reference the 'highest value use' principle, which ASTRA understands guides the ACMA's approach to managing spectrum. However, ASTRA reiterates its previously stated views that the 'highest value use' of spectrum cannot always be measured purely by the monetary value of spectrum for one use against another, and that overall flow through value to the economy of different spectrum use should also be taken into consideration.

ASTRA also supports the ACMA's stated intention to balance the cost of interference and the benefits of greater spectrum utilisation. It is important that the cost of interference is properly assessed across all spectrum users and that one sector is not overly burdened with that cost.

### **Mobile broadband (questions 1-3)**

ASTRA supports making spectrum available for the growth of mobile broadband. However ASTRA considers that this needs to be balanced against the interests of other spectrum users and in particular, incumbents.

ASTRA supports the ACMA's broadband work program to 'monitor' international development in the mmW bands and encourages the ACMA to actively participate in the

international ITU process to develop a view on the highest value use, and to understand sharing/interference issues that may arise between current and future users of a band. Considering the importance of 5G development, ASTRA recommends that the ACMA prioritises the pioneer mmW bands (26 GHz) and move to investigation stage for this band.

The existence of many unsold MBB spectrum lots demonstrates that the ACMA (Australia) can afford to take time to carefully monitor international activity and plan for new spectrum allocations. ASTRA suggests that the ACMA prioritise the investigation of mmW bands for mobile broadband versus other potential mobile broadband bands below 6 GHz. This is because bands below 6GHz have already been investigated through the ITU WRC process.

### Comments on specific bands

- **2 GHz** – ASTRA submits that the frequency bands 1980-2010 MHz and 2170-2200 MHz should be retained at the initial investigation stage. Rather than delaying further work until the second half of 2017, ASTRA encourages the ACMA to monitor the WRC-19 process regarding these bands and wait until then to proceed beyond initial investigation stage, when there is clarity about use for either satellite delivered services or terrestrial MBB. There may be prospects for continued shared use of this spectrum for ENG in Australia depending on international outcomes.
- **3.6 GHz** – ASTRA notes that in the ACMA's commentary on 3.6GHz as a potential candidate band for mobile broadband, the ACMA makes no mention of potential interference issues for adjacent C-Band users. We refer to ASTRA's submission dated 9 December 2016 on the ACMA's consultation paper addressing Future Use of the 1.5 GHz and 3.6 GHz Bands (**5G Submission**) in which we drew ACMA's attention to the potential risk of interference for existing licensed C-band earth stations in the adjacent 3.7 to 4.2 GHz band and the need for appropriate interference protection measures for existing licensed C-band earth stations in the adjacent band.

### Other

In relation to dynamic spectrum access (**DSA**), ASTRA has concerns about the investigation of more intense sharing techniques based on DSA in both the C band (3700MHz to 4200MHz) and Ku band (11.7GHz to 12.7GHz) due to the potential for interference to existing satellite services. ASTRA is also concerned that the ACMA has again raised DSA in the USA in the 3550-3700 MHz band, since as noted in ASTRA's 5G Submission, this was acknowledged a failure.<sup>1</sup>

ASTRA notes that active investigation and advice on widespread FTA TV reception difficulties is part of the regulatory and service planning projects for 2016-17. ASTRA considers that this project is essentially a subsidy for the FTAs in terms of the costs of delivering their service to viewers and is entirely inconsistent with the amount of attention other industries are afforded to the investigation of interference issues. ASTRA submits that the ACMA should consider extending resources for the active investigation of these complaints to other industries, including the subscription TV and radio industries, given both the broad social and economic impact that these industries have as well as the significant interference issues potentially faced by these industries by increased usage of spectrum adjacent to vital C-Band services. (eg C band).

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<sup>1</sup> See *In the Matter of Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, GN Docket No. 12-354, Comments of IEEE 802, 14 May 2015, <https://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=0ahUKEwig9tfi99bRAhWHNJQKHbpZBq8QFggZMAA&url=https://mentor.ieee.org/802.11/dcn/15/11-15-0683-02-0reg-comments-in-fcc-15-47.docx&usg=AFQjCNEswHe-gVYVloxVzfWO8VaaVQN3CQ&bvm=bv.144686652,d.dGo>.

We note that the ACMA has previously mentioned seeking further engagement with industry and government regarding DVB-T2 and HEVC. ASTRA is keen to remain engaged on this issue and, in that regard we note our ongoing support for efficiency in FTA spectrum use, provided that where spectrum is no longer needed it is returned to the Government rather than gifted to the FTAs to enable additional services.

If you have any queries or would like to discuss the issues raised in this submission, please contact Holly Brimble, Policy and Regulatory Manager ([holly.brimble@astra.org.au](mailto:holly.brimble@astra.org.au)).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andrew Maiden', with a long horizontal stroke extending to the right.

Andrew Maiden  
CEO