

27 October 2015

The Manager  
Spectrum Planning Section  
Spectrum Infrastructure Branch  
ACMA

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ASTRA welcomes the opportunity to comment on the Australian Communications and Media Authority (ACMA) Discussion Paper *Beyond 2020 – A spectrum management strategy to address the growth in mobile broadband capacity* (the Discussion Paper).

ASTRA's members make use of spectrum to deliver a diverse range of news, information, sport and entertainment programs which deliver significant social benefits to a broad cross-section of the Australian community. In 2015, one third of Australians subscribe, along with millions more who watch subscription content in public venues. Every week more than 1000 hours of first-run locally produced content is broadcast, as well as the best international content.

Use of spectrum also enables the subscription television industry to make substantial economic contributions. In 2014/15 ASTRA members invested more than \$796 million in local content production, added \$2.083 billion to the economy, and created jobs for 8370 Australians.

In order to deliver these outcomes, the industry has made substantial investments in infrastructure and operations based on existing spectrum allocations and designations.

For these reasons, our members have a significant interest in the strategies and procedures through which the ACMA considers possible changes to spectrum allocations and we welcome the decision by the ACMA to reconsider its approach to assessing mobile broadband capacity demand and the decision to consult widely whilst doing so.

In summary, ASTRA welcomes the key positions taken by the ACMA in relation to the challenge of meeting demand for mobile broadband capacity:

- Acknowledging the difficulties and past challenges in accurately forecasting quantitative estimates of capacity demand.
- That existing allocations for mobile broadband are adequate, although ASTRA acknowledges that this applies only in the short term (between now and WRC 2019).
- Eschewing quantitative targets in favour of a contingency based planning approach.

- Highlighting the importance of measures other than additional spectrum in addressing increasing capacity demand (including improving technology efficiency and appropriate network deployment).
- The important role for stakeholder consultation when considering if mobile broadband is becoming the highest value use for a spectrum band.
- Acknowledgement of the impact of spectrum re-farming on incumbent users.
- Continued use of the total welfare standard, which incorporates an assessment of social and other non-economic benefits of particular spectrum uses.

### *Addressing mobile broadband capacity growth*

ASTRA has consistently acknowledged the increasing use of mobile broadband to deliver economically and socially significant services, with an increasing number of services offered by ASTRA's members being delivered to mobile devices. ASTRA's members have pioneered the delivery of content services to mobiles, through innovations such as the dedicated 2012 London Olympics app, the Fox Sports app, Foxtel Go and AFL Live and NRL Live.

However, ASTRA has also consistently argued that the challenge of meeting increasing demand for mobile broadband capacity should not result in spectrum allocations which come at the expense of other services which also make significant economic and social contributions.

We welcome the ACMA's acknowledgement that "the development of spectrum management arrangements that support the growth in mobile broadband capacity must be balanced with the ongoing requirements for other uses of the spectrum" (page 1). We also agree with the ACMA's statement that "spectrum will continue to be a key enabler for many other, non-mobile broadband, services that provide economic and societal benefits to Australia." (page 27)

For these reasons, ASTRA supports the ACMA's proposed 'contingency'-based planning approach to assessing mobile-broadband needs. Given the significant impact on incumbent users of spectrum re-allocation, and on the consumers who make use of the services provided over that spectrum, an approach which is based on known need rather than speculative need is the most appropriate.

We also welcome the ACMA's acknowledgement of the limitations of demand forecasting and the recognition that "attempting a definitive estimate of the total amount of spectrum required at a particular point of time in the future is both challenging and fallacious." (page 20).

In the Paper, the ACMA formulates a strategy for responding to the identification of a need for additional mobile broadband capacity. ASTRA strongly supports the commitment by the ACMA to a multi-faceted consideration of how to meet the challenge of increasing demand for mobile broadband services. We welcome a holistic consideration of all the tools available to meet an increase in demand for capacity, with a focus on the outcome of service delivery and with spectrum being one of several inputs to delivering this outcome.

In particular, close scrutiny of strategies other than spectrum re-farming will be vital in ensuring that unnecessary impacts on incumbent spectrum users are minimised. We welcome the acknowledgement in the Discussion Paper of the importance of technology efficiency and network deployment in this regard. As acknowledged by the ACMA, incumbent operators invest heavily in equipment and systems that need to be replaced when shifting to other frequencies as a result of spectrum re-allocation. Strategies for addressing mobile broadband capacity growth which minimise these impacts should always be preferred. The example of telecommunications carriers transitioning from 2G to 4G technologies within their 1800 MHz spectrum holdings is instructive.

Where re-farming of new spectrum does need to occur to support mobile broadband use, incumbent licensees should be properly compensated for their costs or given incumbency rights allowing them to negotiate a commercial arrangement with the new owner.

We also welcome the ACMA's commitment to stakeholder input when considering whether the highest value use of spectrum is becoming mobile broadband. Transparency, information and consultation with affected parties will remain essential if an accurate assessment of the overall value of competing uses is to be formed.

The methods described in the Discussion Paper for considering highest value use continue to be appropriate. ASTRA continues to support the Total Welfare Standard as a means of assessing a full range of interests and finding the appropriate balance of those interests. In particular, we welcome the acknowledgement of the economic and societal benefits that come from spectrum use other than for mobile broadband. For example, ASTRA has consistently noted the range of social benefits that arise from the carriage of a diverse range of news and information services on the subscription TV platform, whose carriage is enabled by the use of C-Band satellite services.

Our understanding of the Total Welfare Standard is that in assessing significant costs and benefits arising from a regulatory proposal, that the same weight is given to all recipients of these costs and benefits. Given the Standard seeks to identify which use will generate the greatest net benefit for the community, rather than simply focussing on economic value encapsulated in willingness to pay, ASTRA supports this as the most appropriate approach to assessing the value of spectrum use. However, ASTRA is unaware of this approach being put into practice by the ACMA in recent allocations and therefore the concept needs to be developed and tested for it to be an effective tool in future decision making.

ASTRA also welcomes the ACMA's acknowledgement that in making these assessments, it must view the use of spectrum holistically and must consult with affected stakeholders in order to enable "informed determinations" regarding value. We also welcome the acknowledgement that it will consider issues such as relocation or retuning costs for incumbent users and any detrimental effects to service delivery that a change in use of the band may create.

ASTRA also supports a consideration of highest value use which takes into account variances between geographic bands over time. For example, ASTRA's members' desire to protect C-Band operations is focussed on particular locations (such as

Foxtel's facility at North Ryde and Telstra's facility at Oxford Falls) and ASTRA has never sought to forestall alternative uses in these bands in other locations.

*ACMA's proposed mobile broadband strategies and work program*

ASTRA broadly agrees with the assumptions on pages 38 and 39 of the Discussion Paper, in particular:

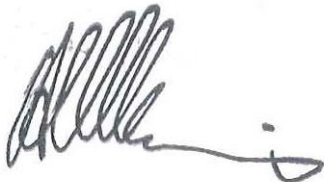
- That the highest value use of spectrum will vary between bands and geographic areas (#1).
- That Australia currently has adequate spectrum for mobile broadband, albeit only in the short term (between now and WRC 2019) (#4).
- Spectrum will continue to be a key enabler for other, non-mobile broadband services (#6).
- That established frameworks for spectrum already in use for mobile broadband services will need to be continually reviewed to ensure efficient use of the spectrum is maximised (#9).
- There are a variety of ways other than refarming spectrum to increase mobile broadband capacity (#10).

*Comments on current mobile broadband spectrum planning projects*

ASTRA would like to refer the ACMA to the separate submissions made by members Foxtel and Telstra for comments on specific spectrum bands and planning projects.

Thank you for the opportunity to comment on the ACMA's Discussion Paper. If you have any queries in relation to the above, 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 flourish extending to the right.

Andrew Maiden  
CEO