



Submission to Department of Communications Spectrum Review Issues Paper

20 June 2014

1. Introduction

The Australian Subscription Television and Radio Association (ASTRA) welcomes the opportunity to comment on the Terms of Reference for, and broader scoping questions relating to, the Spectrum Review being undertaken by the Department of Communications ('the Department') and the Australian Communications and Media Authority (ACMA).

About ASTRA and the subscription television industry

ASTRA is the peak industry body for subscription television (STV) in Australia. ASTRA was formed in September 1997 when industry associations representing subscription (multichannel) television and radio platforms, narrowcasters and program providers came together to represent a new era in competition and consumer choice.

ASTRA's membership includes the major STV operators, as well as over 20 independently owned and operated entities that provide programming to these platforms, including Australian-based representatives of international media companies, small domestic channel groups and community-based organisations.

In 2012-13, STV invested around \$700 million in Australian content production, employing 6600 Australians and adding \$1.6 billion to the Australian economy.

The Australian STV industry makes extensive use of radiofrequency spectrum for a range of essential operational purposes, including:

- television outside broadcast (TOB) operations – the STV industry provides Australia's most comprehensive coverage of live sporting events, as well as sports news coverage and the broadcast of other outdoor planned events such as music festivals, requiring certainty of access to sufficient TOB spectrum to undertake these activities;
- international satellite feeds – a significant number of ASTRA members make extensive use of satellite transmissions to receive international channel feeds, and for live coverage of international sporting and other events;
- delivery of STV services to subscribers using direct-to-home satellite services;
- wireless microphones in studio and outside broadcast productions; and
- land mobile for television production communications.

2. ASTRA's general position on spectrum management and policy

ASTRA recognises that spectrum management and policy needs to balance at times competing public policy objectives, ensuring sufficient spectrum capacity is available for the effective operation of essential services, defence and other public interest needs, while ensuring sufficient flexibility for the market to efficiently and effectively determine allocations appropriate to the evolving needs of a communications environment constantly developing new technologies and services. Spectrum allocation policy also needs to reflect international agreements on technical standards and uses for particular frequencies, particularly given international moves toward spectrum use harmonisation may impact on the certainty required for long-term infrastructure investment.

ASTRA has previously expressed support for the ACMA's five spectrum management principles:

- Allocate spectrum to the highest value use or uses;
- Enable and encourage spectrum to move to its highest value use;

- Use the least cost and least restrictive approach to achieving policy objectives;
- To the extent possible, promote both certainty and flexibility;
- Balance the cost of interference mitigation and the benefits of greater spectrum utilisation.

ASTRA firmly believes that spectrum for commercial activities should be subject to price-based allocation processes, particularly where commercial entities that use spectrum for the delivery of their services are in direct competition. Market-based pricing of spectrum for commercial use is more likely to encourage the most efficient use of spectrum to provide the services that consumers of media and communications services want. Conversely, exclusive use of spectrum for commercial activities allocated by means other than market-based mechanisms may not necessarily provide the same incentive for efficient spectrum use.

In a converging media and communications environment that is bringing once distinct industry sectors into greater direct competition in the delivery of services and content, the allocation of spectrum for commercial activities by means other than a market-based approach will almost inevitably preference particular industry sectors to the commercial detriment of other participants. Spectrum allocated for carriage of commercial FTA television services represents perhaps the most significant example of spectrum allocation for commercial activities on distinctly non-commercial terms:

- Analysis undertaken by Deloitte Access Economic for ASTRA in 2011 estimated that access to spectrum for the commercial FTA broadcasters was worth approximately \$505 million per year, with the value of access to spectrum for national FTA broadcasters a further \$352.4 million.¹
- In 2012-13 the commercial FTA broadcasters paid license fees of \$294 million, but effectively paid just \$151 million after receiving the rebate. The cost to the taxpayer of this rebate over the period 2012-13 to 2015-16 is \$761 million.

The results of the auction of the digital dividend spectrum in April 2013 revealed a market value of \$1.36 per MHz/pop for digital dividend spectrum. If these results are used as a guide, the market value of the spectrum held by FTA broadcasters could be *considerably* higher. While the value for the specific spectrum bands still held by FTA broadcasters after the completion of switchover is difficult to estimate with any precision – due to the uncertainty over future designations of these bands for uses such as mobile broadband – applying this market value suggests that the FTA broadcasters’ remaining holdings of 210 MHz may hold a value of approximately \$6.5 billion.

3. Responses to the questions for stakeholders

In response to the five “questions for stakeholders” listed in the Issues Paper, ASTRA submits the following:

What additional issues should be considered by the review?

In ASTRA’s view, greater emphasis could be placed on the importance of new and emerging technologies and their potential impact on future spectrum management and policy. For example, spectrum regulatory authorities in a number of countries are giving close attention to cognitive radio, a developing radiofrequency technology, as a potential means for more efficient spectrum use. Other new technologies, like IoT and M2M², while potentially advancing quality of life, impose a greater demand on spectrum capacity.

¹ See Appendix C to ASTRA’s submission to the Convergence Review, October 2011.

² Internet of Things and Machine-to-Machine.

Are there any issues you think should be taken off the table?

This Review needs to be holistic and comprehensive to ensure its conclusions and recommendations reflect the most appropriate way forward. ASTRA does not consider that there are any issues relevant to spectrum management and policy that should be beyond the scope of this Review.

Which issues should be given priority and why?

ASTRA considers there are a number of issues in spectrum management and policy that are becoming increasingly important:

- The media and communications environment is evolving rapidly through technological and other developments, leading to an emerging need for more innovative and novel approaches to licensing spectrum use – this could include licensing according to the type of service that is to be provided, with an emphasis on interference management to enable more effective and efficient use of increasingly scarce spectrum;
- Spectrum used for commercial activities should be allocated according to market-based mechanisms – in particular, spectrum should not be allocated to particular commercial entities or industry sectors on terms that give those entities or industry sectors a competitive advantage;
- Close consideration should be given to existing legislative arrangements that mean spectrum for some forms of commercial use are treated differently to others, and whether (particularly in light of an increasingly convergent media and communications environment) such differentiation continues to be appropriate or necessary;
- Australia, through both the ACMA and the Federal Government, should strive for greater participation and engagement in international fora – the harmonisation of spectrum use is of critical long-term importance, and it is vital that Australia's interests be strongly represented in the international radiocommunications arena.

Which issues can be addressed in the short term (the next 12-18 months) and which should be considered over a longer period?

What should be the extent of reform – can the framework be improved by adjusting what is currently in place or are more fundamental changes required?

Fundamental changes to the regulatory framework for spectrum management (which could conceivably include drafting, from first principles, new primary legislation) may well be the most effective means to implement significant changes to the existing framework, but would obviously be a substantial and lengthy process. Conversely, making adjustments to the existing framework has the very real potential to add to the piecemeal nature of existing legislation and increase the complexity of an already complex regulatory framework.

In ASTRA's view, the spectrum management framework will require holistic and comprehensive reform. As such, longer-term development and implementation is the approach most likely to ensure the new framework is consistent and cohesive, while flexible enough to adapt to evolving technologies and changing spectrum use priorities over time.

4. Comments on the terms of reference

ASTRA makes the following comments on the terms of reference for the Review:

1. Simplify the framework to reduce its complexity and impact on spectrum users and administrators, and eliminate unnecessary and excessive regulatory provisions

ASTRA would support simplifying the spectrum regulatory framework, including the objects of the *Radiocommunications Act 1992* (Cth) (Radcomms Act), provided efficient use of spectrum and consistent treatment across the different sectors of spectrum users is enshrined in any future framework.

The planning, allocation, licensing and re-issuing processes within the Radcomms Act, and the array of supporting legislative instruments, are highly complex. To some extent, complexity is unavoidable, given Australian spectrum management must be consistent with international radiocommunications management frameworks while also addressing allocation, interference and other operational issues specific to Australia. Even so, ASTRA would agree that scope exists to simplify these processes, and to reduce unnecessary regulatory compliance costs associated with technical regulation and interference management requirements.

2. Improve the flexibility of the framework and its ability to facilitate new and emerging services including advancements that offer greater potential for efficient spectrum use, while continuing to manage interference and providing certainty for incumbents

ASTRA would agree that greater flexibility may be required to ensure an appropriate balance between sufficient access to spectrum for new and emerging services and continuing to manage interference and provide certainty for incumbent licensees of affected bands.

Efficient spectrum use and spectrum sharing

A market-based approach to allocating spectrum for commercial activities has been highly effective in promoting the most efficient and effective use of spectrum. A revised spectrum management framework should ensure that market-based approaches are the fundamental underlying principle of spectrum allocation for commercial use. As an example, allocation of the 'sixth channel' of broadcast spectrum by open auction (and including the possibility of that spectrum being allocated for new commercial television broadcasting licences) would encourage more efficient use of both the 'sixth channel' and broadcast spectrum generally. Subject to appropriate technical parameters to manage interference with adjacent services, radiocommunications and broadcasting legislation should not unnecessarily limit the types of new services that could make use of spectrum currently reserved for the transmission of broadcasting services.

Spectrum licensing gives significant flexibility in terms of the types of use permitted within allocated spectrum. However, it does not necessarily lend itself to enabling spectrum sharing where such use could lead to more effective and efficient spectrum use. Increasing spectrum scarcity could mean that new approaches to encourage greater spectrum sharing and coordination may also be necessary to maximise spectrum efficiency, with interference management becoming increasingly important with more services required to operate in the same bands.

Similarly, ASTRA considers that the framework for issuing apparatus licences should also be examined with a view to implementing alternative allocation and licensing processes – such as parameters-based licensing – that could enable licensing of a system of related apparatus, as opposed to the more resource intensive process of licensing individual devices. A new licence type that defines use based on the service being provided may prove effective in enabling

spectrum sharing while ensuring greater certainty to licensees through appropriate ongoing interference management.

More flexible planning instruments

In ASTRA's view, the Australian Radiofrequency Spectrum Plan adequately addresses its primary aim of defining the various bands and their planned primary and secondary uses, and any conditions associated with those uses. ASTRA recognises that the Spectrum Plan is, by necessity, a reflection of international planning documents developed within the International Telecommunications Union treaty framework.

3. Ensure efficient allocation, ongoing use and management of spectrum, and incentivise its efficient use by all commercial, public and community spectrum users

Private band management

ASTRA considers there is scope for investigating more innovative and novel approaches to encouraging more efficient spectrum use, particularly where spectrum is allocated to multiple users providing a specific type of service. We see significant merit in examining, for example, the feasibility of private band management as a means of developing and administering effective and efficient spectrum sharing arrangements. Private band management would also create the opportunity for businesses to have more flexibility in planning spectrum and choosing technologies.

This is particularly the case for spectrum use for short-term event-based operations, such as spectrum for television outside broadcast (TOB) operations, that can be planned and coordinated in advance. ASTRA has previously proposed a 'private park' arrangement for TOB spectrum that could include a simple online event booking system, with the administration for managing the frequencies and the booking system outsourced to an independent entity as spectrum band manager. As competing spectrum demands increase, the capacity for unmanaged self-coordination between users will be increasingly challenging (both in relation to TOB events and for other spectrum uses generally). A coordinated system under a 'private park' model would provide more certainty to all users of a particular spectrum band and could also future-proof accessibility for other users, such as ad hoc international users, and new market entrants.

Assistance for displaced spectrum users

ASTRA would also support an examination of financial assistance given to spectrum users displaced through reallocation processes. Irrespective of whether compensation for reallocation costs is appropriate in principle, we would argue that if any such compensation is to be provided it should be made on a consistent basis to all spectrum users required to move to alternative bands, and should not favour one particular sector or industry over another. As an example, the commercial FTA television sector received substantial government financial assistance for digital switchover, including assistance to implement digital television restack and to migrate the majority of its TOB operations from the 2.5 GHz band. Other sectors of the media industry directly impacted by some of these changes (including STV in relation to TOB spectrum) received no government financial assistance for costs associated with spectrum reallocation.

4. Consider institutional arrangements and ensure an appropriate level of Ministerial oversight of spectrum policy and management, by identifying appropriate roles for the Minister, the Australian Communications and Media Authority, the Department of Communications and others involved in spectrum management

Clear and consistent roles for the Minister and the regulator

ASTRA supports examination of the various roles of the Minister, the ACMA, the Department and industry stakeholders involved in spectrum management. In particular, it is important that there is an appropriate balance between the role of the Minister (as supported by the Department) in providing an overall policy framework and direction for spectrum management, and the ACMA as the independent regulator and manager of radiofrequency spectrum. The regulatory framework should promote an approach to spectrum management (including any necessary powers for the Minister) that ensures consistency in outcomes for all commercial spectrum users and does not favour one industry sector over another.

High-level industry engagement

ASTRA also submits that this Review should consider mechanisms in place (or that ought to be in place) for industry to support the development of overarching high level guidelines for the ACMA. ASTRA recognises that the ACMA provides well-established and effective mechanisms for industry input to the development of spectrum management priorities, particularly at the technical level in relation to Australia's participation in international radiocommunications forums. However, there is less scope for industry involvement in the development of the ACMA's longer term, strategic objectives.

The Radiocommunications Consultative Committee (RCC) was reformed in 2011 with the intention of being a peak consultative body on radiocommunications and spectrum management issues with a strategic focus, and provided a forum for industry stakeholders to provide such guidance. While the reformed RCC may have proved not to be the most appropriate vehicle for high-level industry engagement, ASTRA considers that Review should consider potential means for both the Department and the ACMA to receive high-level industry advice to guide strategic policy thinking.

Participation in international fora

ASTRA further submits that this Review should also examine the ACMA's role in international fora, and the level of Australia's participation, through the ACMA, in international efforts to harmonise spectrum use. An ongoing and proactive plan for international engagement developed collaboratively between the ACMA and industry would enhance ACMA's international representation activities. The available resources within the ACMA, the Government and industry should be optimised to develop a strategic approach to appropriately focus the ACMA's responsibilities in international fora. This Review should examine ways for the ACMA to be better resourced to undertake its continuing essential international role. This could include more coordinated efforts by industry and the ACMA to ensure effective industry support for the ACMA's international activities.

5. Promote consistency across legislation and sectors, including in relation to compliance mechanisms, technical regulation and the planning and licensing of spectrum

ASTRA fully supports the objective of creating a level regulatory playing field for spectrum users by treating users consistently and transparently. The Review should critically examine whether certain commercial services should continue to receive differentiated treatment compared to other commercial operators under existing legislation. Specifically, this Review provides a timely opportunity to reassess the regulation of broadcast spectrum under

radiocommunications and broadcasting legislation, and to consider whether the rules that limit access to broadcast spectrum continue to be appropriate and relevant in the post-switchover environment.

Consideration could be given to limiting the ACMA's broadcasting spectrum planning powers to technical and transmission issues, at least to the extent it relates to commercial and national FTA broadcasters. ASTRA acknowledges that, where there are government policy objectives for the terrestrial provision of national broadcasting and other non-commercial broadcasting services, the ACMA's planning powers may continue to need to make specific provision for spectrum required for these services. However, ASTRA questions the continuing need for the ACMA to have regard to matters such as the social, economic and demographic characteristics of a particular geographically defined market, or the "demand for new services" in a particular market, in its broadcasting planning processes, as is currently required under section 23 of the BSA, in relation to commercially-based services. ASTRA submits that the extent to which there is a "demand" for additional services in a particular geographic location is best left for the market to determine. While there would be a continuing role for the ACMA to minimise interference between services and to ensure adequate reception for consumers, the nature of the services themselves should be left the market (and ultimately the consumer) to decide.

6. Develop an appropriate framework to consider public interest spectrum issues

Spectrum is a scarce public resource, and ASTRA recognises the need for sufficient spectrum capacity to be reserved for public interest requirements, such as defence, emergency and essential services, scientific and meteorological use. Spectrum allocation policy also needs to reflect international agreements on technical standards and uses for particular frequencies, particularly given international moves toward spectrum use harmonisation may impact on the certainty required for long-term infrastructure investment.

ASTRA submits that, beyond these public interest requirements, market-based pricing of spectrum for commercial use is more likely to encourage the most efficient use of spectrum to provide the services that consumers of media and communications services want. ASTRA supports the Review's consideration of incentives to ensure public interest services use spectrum efficiently, including sharing with other spectrum users as appropriate.

7. Develop a whole-of-government approach to spectrum policy

ASTRA supports the development of an over-arching policy statement for the future direction of spectrum management. Ideally, such an approach would continue (and further prioritise) the use of market-based mechanisms for spectrum allocation, while recognising the need for appropriate allocations for public interest purposes.

8. Develop a whole-of-economy approach to valuation of spectrum that includes consideration of the broader economic and social benefits

ASTRA supports a whole-of-economy approach to spectrum valuation to the extent that such an approach is aimed at developing a consistent and transparent approach to valuing spectrum. We consider that spectrum allocated for commercial use should be valued primarily in relation to the market price for that spectrum. We recognise, however, that "highest value use" cannot always be measured purely by the monetary value of spectrum, and that overall flow-through value to the economy of different spectrum use should also be taken into consideration.