

September 15, 2020

Before the
Australian Communications and Media Authority
ACMA
Australia

In the Matter of “Replanning of the 3700–4200 MHz band” Options Paper

The Dynamic Spectrum Alliance (the Alliance) is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing.¹

The Alliance’s goals are to make spectrum abundant for broadband to connect the next four billion people, stimulate wireless innovation for next generation broadband, and accelerate an inclusive digital economy. The Alliance appreciates the opportunity to respond to the Australian Communications and Media Authority’s (ACMA’s) invitation for comments on its “Replanning of the 3700–4200 MHz band” Options Paper (the Options Paper)².

As noted in our previous submissions to ACMA, the Alliance encourages ACMA to consider adoption of Dynamic Spectrum Access (DSA) in the 3.7-4.2 GHz band to enable sharing between the Fixed Satellite Service (FSS), Point-to-Point (PTP) incumbents and new wireless broadband (WBB) users on both a wide area (WA) and local area (LA) basis. Such sharing would maximize the overall public benefit by making more efficient use of this spectrum³ and would achieve other important national objectives, such as

¹ A full list of Dynamic Spectrum Alliance members is available on the Dynamic Spectrum Alliance’s website at www.dynamicspectrumalliance.org/members.

² “Replanning of the 3700–4200 MHz band” Options Paper, ACMA https://www.acma.gov.au/sites/default/files/2020-07/Replanning%20of%20the%203700-4200%20MHz%20band%20options%20paper_1.docx

³ Managing spectrum efficiently and effectively for the benefit of all Australians is a key priority for the ACMA as stated in the [Corporate plan 2019–20](#).

developing a digital economy and smart cities, leveraging and developing artificial intelligence applications, rolling out 5G deployment, and improving digital connectivity.

There is increased interest in the 3.7-4.2 GHz band internationally for 5G services, particularly given the large bandwidths potentially available in this range. We encourage ACMA to consider introducing new WBB services across the whole band to maximize the opportunity for all interests. Given that the band is allocated on a co-primary basis in the Australian Radiofrequency Spectrum Plan (ARSP) to the fixed, fixed-satellite (space-to-earth) and mobile services, it is well suited for spectrum sharing.

The use of commercially available dynamic spectrum access solutions would greatly facilitate the use of this critical mid-band spectrum for new WBB services, while enabling incumbent services to continue to use the band on a protected basis. The Alliance and its member companies have extensive experience in enabling sharing of both fixed and mobile broadband services with FSS and PTP incumbents and are ready to assist ACMA in its efforts to introduce WBB in this band while also maintaining access for existing users. Regulators in a number of countries have authorized automated and even dynamic frequency coordination databases to manage real-time assignments in shared bands and to protect incumbent operations (including military and public safety systems) from harmful interference. These database technologies are widely available, sufficiently mature, scalable and secure.⁴

Adopting a spectrum sharing model in the 3.7-4.2 GHz band will enable more users to access scarce and valuable spectrum resources, leading to lower-costs, lower barriers to entry, and most effective allocation for smaller businesses, farmers for agricultural connectivity, etc. This, in turn, enables and encourages competition and innovation by existing service providers as well as new entrants.

While the 2019 discussion paper and submissions discussed views on DSA techniques for licensing of WBB services, the ACMA in the Options paper is not specifically proposing use of DSA in the 3700–4200 MHz band. The Alliance believes that the ACMA should again consider DSA techniques for the band, considering the arguments that were just exposed, as well as the submissions that were received to the 2019 discussion paper. As stated by the ACMA, WISP stakeholders generally promoted localised WBB applications in all or part of the 3700–4200 MHz band, Australia-wide, with strong support for Dynamic Spectrum Allocation (DSA) if possible, or apparatus licensing, including AWLs. Additionally, four submissions supported DSA arrangements in the 3700–4200 MHz band.

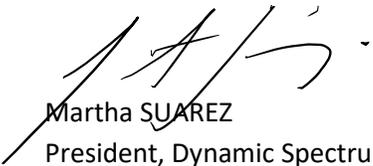
⁴ http://dynamicspectrumalliance.org/wp-content/uploads/2019/03/DSA_DB-Report_Final_03122019.pdf

Finally, we strongly urge the ACMA to:

- i) Introduce spectrum sharing and dynamic spectrum access techniques to the 3.7-4.2 GHz band;
- ii) Consider the costs and benefits of allowing multiple access options (tiers of licenses) in the band versus exclusive licensing; and
- iii) Adopt a “use-it-or-share-it” policy to prevent licensees from warehousing valuable spectrum resources. This independently of the selected replanning option for the 3700–4200 MHz band.

Please do not hesitate to contact me for further discussions or clarifications on the subject matter.

Best regards,



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President, Dynamic Spectrum Alliance