

28 November 2017

The Manager  
Spectrum Licensing Policy Section  
Spectrum Management Policy Branch  
Australian Communications and Media Authority  
PO Box 78  
Belconnen ACT 2616

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

Dear Sir/Madam

Thank you for the opportunity to comment on the ACMA's draft spectrum reallocation recommendation for the 3.6 GHz band (**Reallocation Recommendation**).

### **Executive Summary**

In-principle ASTRA supports moving the 3.6 GHz band to MBB use to facilitate a 5G rollout. However, ASTRA has some concerns about the manner in which the ACMA proposes to transition incumbent users out of the 3.6GHz and the level of planning that is required within such a short time period to ensure that both existing and new licensees of the band, and others in the adjacent 3.7-4.2 GHz band, have long term protection. Therefore, ASTRA believes that in reallocating the 3.6 GHz band the ACMA must:

- Identify the most appropriate locations for Earth Station Protection Zones (**ESPZ**) via detailed studies prior to the determination of new licences in the 3.6GHz band and excise those areas currently identified as potentially appropriate for ESPZ, from the spectrum re-allocation process.
- Engage with industry via the Satellite Services Working Group on relevant ITU studies on sharing requirements and ESPZ site selection process within not only C-band spectrum, but also other satellite bands, which might identify other more suitable locations for ESPZ and ensure that the most suitable locations are identified.
- Ensure that a strategy for ongoing protection of incumbent services in the 3.6GHz band and licenced C-Band earth stations in the adjacent 3.7 to 4.2 GHz band is developed in parallel with the investigation into appropriate ESPZ sites.
- Facilitate Government reimbursement of incumbent C-Band licensees for relocation costs. If not, at the very least, the ACMA should facilitate the negotiation of relocation costs of incumbent C-Band licensees agreed between and with incoming spectrum licensees in the 3.6 GHz band, and in future for the relocation costs of incumbents in other bands identified for reallocation for 5G services.

### **3.6 GHz metropolitan and regional Australia geographic boundaries**

The ACMA is considering three areas to be excised from Area C as proposed sites for possible future earth station protection zones near Quirindi, Moree and Roma in Northern NSW/Southern QLD. As argued in our submission on the ACMA's options paper addressing Future Use of the 3.6 GHz band (the **Options Paper**), ASTRA is prepared to consider proposals for relocation where a suitable alternative location can be found.

In our response to the Options Paper ASTRA noted a number of considerations which must be taken into account when considering candidate locations including natural topographic protection, proximity to Sydney, local infrastructure access, availability of high capacity trunk fibre at a reasonable cost and locally available, high quality technical and maintenance support. ASTRA also stated that we have not investigated suitable locations in any detail, but suitable topographic locations immediately west of the Blue Mountains, or on the Sydney-Canberra route (Goulburn/Southern Highlands) may also be worth investigation.

ASTRA considers that it is extremely important for the above factors to be considered in great detail, and for the identification of the most appropriate locations for Earth Station Protection Zones to be finalised prior to the determination of new licences in the 3.6GHz band, to ensure minimal disruption to incumbent and new services. Therefore ASTRA also considers that at the very least all three of the areas currently identified should remain excised from the spectrum reallocation until detailed studies determine the best location for such a zone.

There are a number of ITU reports and ongoing international studies which provide useful information for sharing requirements within not only C-band spectrum, but also higher frequencies which may later be identified for 5G services and require reallocation. Examples of such reports include ITU-R Report S.2368-0. We consider that it is critical that the ACMA engage with industry on these studies and the site selection process which might identify other more suitable locations for ESPZ. ASTRA considers that the Satellite Services Working Group is the best industry group to be consulted in this process.

### **Interference Protection**

ASTRA believes that alongside the above investigation into appropriate areas for ESPZ, a strategy for ongoing protection within and adjacent to those zones needs to be developed.

ASTRA is concerned by the proposal on page 19 of the Reallocation Recommendation that spectrum licences would commence before the end of the reallocation period and that this would allow spectrum licensees to operate “around” incumbent services throughout this period. Although the ACMA have provided that spectrum licensees will be required to afford protection to incumbent services we are concerned as to how the ACMA believes adequate protection of these services can be ensured and consider that reallocation should not occur until appropriate protection of existing services is ensured.

ASTRA also upholds its proposal outlined in our response to the Options Paper that licenced C-Band earth stations in the adjacent 3.7 to 4.2 GHz band would continue to be protected from interference from MBB services in the 3.6 GHz band through the development of a suitable Technical framework (similar to the 3.4 GHz band). This would be in recognition of the strong social dividend created by the use of that spectrum to deliver a diverse range of news and entertainment services.

### **Relocation Costs**

Last, ASTRA requests that the ACMA consider arrangements for the relocation costs of incumbent C-Band licensees in the 3.6 GHz band and in future for the relocation costs of incumbents in other bands identified for reallocation for 5G, such as the 3.8GHz band (3.7-4.2GHz).

As noted above, ASTRA supports proposals for relocation where the costs of relocation are reimbursed by government and if not, that they are negotiated and agreed between incumbent C-Band licensees and incoming spectrum licensees. ASTRA notes that the costs of relocation are exacerbated under the Reallocation Recommendation given the significant infrastructure costs involved in relocation to ESPZ, and the time pressure created by the

extremely short reallocation period anticipated for metropolitan areas, limiting the opportunity of incumbents to finalise alternative spectral arrangements.

ASTRA notes that in the FY 2013 Federal Budget national and commercial broadcasters received significant funding to support the restack of television broadcasting services to new channels and ENG clearance from the 2.5 GHz band.<sup>1</sup> This spectrum was apparatus licenced spectrum which became spectrum licenced for MBB i.e., whilst the money was paid to broadcasters for assistance with broadcasting services, circumstantially and cost wise this case was very similar to the challenge which C-Band spectrum satellite operators and users are currently faced with due to forced relocation.

Where Government compensation is unable to be obtained, ASTRA argues that the ACMA should at the very least facilitate the negotiation of relocation costs of incumbent C-Band licensees agreed between and with incoming spectrum licensees in the 3.6 GHz band, and in future for the relocation costs of incumbents in other bands identified for reallocation for 5G 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@foxtel.com.au](mailto:Holly.Brimble@foxtel.com.au)).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Holly Brimble', with a stylized, cursive script.

Holly Brimble  
Policy and Regulatory Manager

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