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

**Re: Comments and Views of Lockheed Martin – Australia Pty Ltd on ACMA Draft
Spectrum Reallocation Recommendation for the 3.6 GHz Band**

Dear Sir or Madam:

Lockheed Martin Corporation, on behalf of Lockheed Martin – Australia Pty Ltd (“LMA”), provides these comments in connection with the Australia Communications and Media Authority (“ACMA”) Draft Spectrum Reallocation Recommendation for the 3.6 GHz band, as released in October 2017 (“ACMA Draft Recommendation”). The ACMA Draft Recommendation was included in a Notice dated 26 October 2017, issued under Section 153G of the Radiocommunications Act 1992.

Earlier this year, in response to ACMA’s call for comments on ACMA’s Consultation No. IFC 9/2017 (regarding the future approach to the 3.6 GHz band), LMA stated that its principal interest in this proceeding stems from LMA’s need to continue its longstanding operation of two 14.2 meter earth station antennas utilizing frequencies in the 3.6 GHz fixed-satellite service (“FSS”) space-to-Earth frequency band at its Uralla, New South Wales earth station complex.¹ LMA noted that since its inception nearly 20 years ago, LMA’s Uralla facility has been a critical component part of a global network of earth station facilities used to control satellites through launch and transfer orbit to the satellites’ intended locations in the geostationary arc. LMA also informed ACMA that the Uralla facility is essential to providing communications during a satellite’s initial in-orbit testing, which is a necessary technical and contractual step prior to the owner/operator seeking to use the satellite to provide services for which it is intended, and that the Uralla site’s location in Australia and the C-band FSS capability it possesses enables LMA to provide frequent support to satellite missions from commercial operators around the world.²

¹ See Comments and Views of Lockheed Martin – Australia Pty Ltd on ACMA Consultation No. IFC 9/2017, Future Approach to the 3.6 GHz Band (filed August 10, 2017) (“LMA Comments”), at 1.

² *Id.*, at 2.

In its earlier Comments, LMA maintained that ACMA can provide assurance of the long-term viability of the Uralla site consistent with its objectives of meeting the growing demand for additional spectrum in Australia for mobile broadband (“MBB”) operations using spectrum in the 3.6 GHz frequency range. LMA asserted that “[if] the establishment of an exclusion zone, to supplement natural terrain shielding toward population centers and protect radio line of sight from MBB to Uralla, is workable today (along with case-by-case coordination), it should be workable for the intermediate and long terms. The increased interest in MBB spectrum in the 3.6 GHz range that ACMA cites is undoubtedly much more pressing in Areas 1 and 2 than it will be for the foreseeable future in Area 3 generally or near Uralla specifically.”³

In the ACMA Draft Recommendation, ACMA stated that it had completed its review of the issues surrounding future MBB use of the 3.6 GHz band, and consolidated its assessments into a draft recommendation that the Minister of Communications make a spectrum reallocation declaration or declarations for the 3.6 GHz band in specified metropolitan and regional areas.⁴ On the issue LMA raised regarding protection of the Uralla facility in its rural location over the long term, ACMA stated the following:

“The ACMA is considering four small areas to be excised from Area C. Three of these areas . . . are proposed sites for possible future earth satellite station protection zones. The fourth and smaller area near Uralla would support the ongoing use of Lockheed Martin’s earth station facility. . . . If one or more of these areas is determined suitable for a future earth satellite station protection zone, then the relevant area or areas would be defined and excised in the recommendation the ACMA makes to the minister. That is, the area or areas would not become subject to spectrum licensing if the minister accepted the ACMA’s recommendation.”⁵

LMA supports the ACMA Draft Recommendation, and in particular the inclusion of Cell No. NU7K4 under the Hierarchical Cell Identification Scheme (“HCIS”) as an “excise area”⁶ when the Minister of Communications issues the spectrum reallocation declaration for the 3.6 GHz frequency band. LMA understands that this recommendation regarding

³ *Id.*, at 5. LMA also observed that as the 3.6 GHz FSS range is a receive-only band subject to ITU power flux-density limits for the protection of terrestrial services, there is no need to consider protection of MBB from FSS earth stations. *Id.*

⁴ ACMA Draft Recommendation, at 1.

⁵ *Id.*, at 14. For other sites within the regional area that Uralla occupies – i.e., sites where spectrum in the 3575-3700 MHz band is used for FSS earth stations, point-to-point links and site-based wireless broadband services that are authorised under apparatus licences – the ACMA Draft Recommendation recommends a reallocation period of seven years. *Id.*, at 9.

⁶ ACMA Draft Recommendation, at Attachment D.

Uralla and the excise area comprised of Cell No. NU7K4 would be issued in tandem with an obligation that MBB operators in nearby areas would need to ensure, through suitable coordination criteria to be developed, that their operations do not cause harmful interference to the services operating at the Uralla facility.⁷ For this reason, LMA urges the inclusion of the need for coordination between the ultimate licensees of the HCIS cells near the excise area of HCIS Cell No. NU7K4 and LMA's Uralla facility as a condition of MBB licensing in those areas.

The ACMA Draft Recommendation's treatment of the Uralla facility is a testament to the importance of Australia's role in the worldwide commercial satellite services industry. LMA, in short, agrees with ACMA that the arrangements proposed in the draft recommendation – together with the requirement of adjacent-area MBB licensees to confirm compatibility through practicable coordination – meet the objective of the Radiocommunications Act 1992 “to ‘maximise, by ensuring the efficient allocation and use of the spectrum, the overall public benefit derived from using the radiofrequency spectrum’.”⁸

LMA remains prepared to address any questions or provide any additional information that your office or the Minister of Communications may have or need during the finalization and ultimate implementation of the ACMA Draft Reallocation Recommendation.

Respectfully submitted,

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Lockheed Martin Government Affairs
on behalf of Lockheed Martin – Australia Pty Ltd

⁷ LMA notes in this regard that ACMA stated in its options paper that an excise-area approach would mean that suitable coordination criteria would also have to be developed so spectrum licenses could manage interference into the earth station receivers operated at the Uralla site. ACMA Options Paper, *Future Use of the 3.6 GHz Band* (June 2017), at 52. In its Comments, LMA specifically observed that the existence of significant terrain shielding between the Uralla facility and the nearest major town, and its use of relatively large earth station antennas, would facilitate technical coordination with future terrestrial services. LMA Comments, at 4.

⁸ ACMA Draft Recommendation, at 9.