The Manager, Spectrum Planning Section

Spectrum Planning and Engineering Branch

Communications Infrastructure Division

PO Box 78, Belconnen, ACT 2616

Australia

13 September 2019

**Planning of the 3700-4200 MHz band – Discussion Paper**

Dear Sir / Madam,

SES S.A., on behalf of its Australian subsidiaries New Skies Satellites Australia Pty Ltd and O3b Teleports (Australia) Pty Ltd (together, “SES”), hereby submits its comments on the Discussion Paper on Planning of the 3700-4200 MHz Band (the “Discussion Paper”), issued by the Australian Communications and Media Authority (the “ACMA”).

SES is a leading global provider of fixed satellite services with a fleet of over 50 satellites in geostationary Earth orbit (GEO) and 20 satellites in medium Earth orbit (MEO). The FSS applications supported by SES satellites include broadcasting, high-speed broadband services, internet access, terrestrial backhaul, public protection and disaster relief, tele-health and tele-education, as well as connectivity services to aircraft, vessels and land vehicles.

Two of SES’s geostationary satellites have coverage of Australia in the 3700-4200 MHz band, providing connectivity within Australia and between Australia and the rest of the world. SES is thus vitally interested in the ACMA’s future planning for this band. Users of SES satellite capacity in this band or adjacent bands in Australia s include broadcasters, international programmers and government institutions.

In SES’s view, the ACMA should not be too quick to consider the 3700-4200 MHz band for 5G or Wide-area Wireless Broadband (WWB). It has only just auctioned the 3.6 GHz band for the same service (at the expense of the satellite industry), and there is nothing to suggest that the recently released spectrum (along with other mid-band spectrum) will not be enough to meet terrestrial mobile requirements. After all, only 400 or so point-to-multipoint systems (which can be considered a species of WWB) were licensed in the 3.6 GHz band between 2009 and 2017, mostly to resource companies, even as new FSS deployments were precluded from that band for the entire period (and longer). While the advent of 5G technologies may lead to more intensive use of the 3.6 GHz (and other mid-band spectrum) for WWB, it is too early to say that there will not be enough mid-band spectrum to meet WWB requirements or that the 3700-4200 MHz should be earmarked for this purpose.

SES recognizes that the number of licensed earth stations in the 3700-4200 MHz band is relatively modest. Nevertheless, C-band earth stations in Australia continue to provide important services, and their concentration around Sydney and Perth reflect their use by, for example, broadcasters to carry live news, sporting events and entertainment from abroad and across Australia. In addition, as the ACMA notes, there are also approximately 200,000 TVRO systems operating in the 3700-4200 MHz band around Australia. While TVRO systems are not entitled to interference protection unless licensed, it is clear that a significant portion of the public enjoy the benefits of these services today.

Finally, in SES’s view, there have been no significant international developments since 2015 that would warrant taking precipitous action on the 3700-4200 MHz band in Australia. At WRC-15, the vast majority of countries in the Asia Pacific Telecommunity (APT) supported the continued use of the 3700-4200 MHz for satellite rather than for International Mobile Telecommunications (IMT). While a few countries are examining portions of the 3700-4200 MHz for terrestrial mobile, most reflect country positions taken before WRC-15 (e.g. Europe and Japan) or are limited to only a portion of the band.

Please contact the undersigned if you have any questions.

Yours Sincerely,

/s/

Daniel C.H. Mah

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