

14 August 2020

The Manager  
Major Spectrum Allocations Section  
Australian Communications and Media Authority  
PO Box 78  
Belconnen ACT 2616

Online Submission

**Re: 26 GHz (25.1-27.5 GHz) Consultation (July 2020)**

Viasat appreciates the opportunity to provide comments on the ACMA's 26 GHz (25.1-27.5 GHz) consultation. Viasat recognises the effort of the ACMA to maximise the use of the 26 GHz and the adjacent 28 GHz (27.5-29.5 GHz) bands and the ability of current and future licensees and other stakeholders to provide services to users across Australia.

As discussed previously, Viasat is building the world's fastest and highest-capacity satellite broadband network, including for services to Australia and the rest of the Asia-Pacific region. Viasat intends to deploy a significant number of earth stations in urban and remote areas of Australia. These earth stations, along with user terminals, will extensively reuse the 28 GHz spectrum to communicate with the ViaSat-3 Asia-Pacific satellite. Increases in power radiated into the 28 GHz band by IMT/5G systems, either in-band or from outside of the band, will increase the interference environment and potentially impact the ability of the satellite to receive signals from the earth stations. Therefore, Viasat is concerned about the proposals in the consultation.

To provide the best possible level of service to all of Australia, access to spectrum throughout the Ka band, including the entirety of the 28 GHz band (27.5-29.5 GHz), is necessary. To this end, Viasat has supported the study and the development of reasonable operating parameters for IMT/5G in the 26 GHz band through the ITU WRC-19 process.

With regard to IMT/5G deployment in the 26 GHz band in Australia, the subject of the current consultation, Viasat supports the identification of the 26 GHz band for IMT/5G. This decision follows through on the WRC-19 identification of the 26 GHz band as a prime band for 5G. Viasat urges the ACMA to conform domestic implementation of IMT/5G to the operating parameters decided in Resolution 242 (WRC-19).

As Viasat has urged the ACMA previously, it is necessary to separate the 26 GHz and 28 GHz bands in the consultation process as each frequency band has very different user requirements and spectrum environments. Viasat urges the ACMA to avoid any appearance of connecting the 26 and 28 GHz bands. The current version of the 26 GHz consultation leaves open the possibility that there may be some connection between what is adopted in the 26 GHz band and what is ultimately authorised in the 28 GHz band for Fixed Wireless Access (FWA). Viasat urges the ACMA to recognise that the radio frequency environments are very different in these two frequency bands and not make any connection between them.

The key issue in the present consultation is the proposed increased Total Radiated Power (TRP) limits in the 25.1-27.5 GHz band beyond those defined in Article 21 (see Table 2). Significant discussion at WRC-19 on IMT/5G included both in-band and out-of-band emissions limits for IMT/5G equipment, considering mainly the protection of space science and exploration services below the IMT/5G identification. Beyond the impacts to users of the 26 GHz band, increasing TRP emission limits in the 25.1-27.5 GHz band will lead to out-of-band emissions that increase potential interference into FSS satellite receivers operating in the 28 GHz band.

By adopting the ITU limits for the 26 GHz band, the ACMA will be ensuring that there is a global deployment scenario for the band allowing users in and adjacent to the 26 GHz band to have a predictable spectrum environment. Adopting limits that exceed those adopted by the WRC-19 would mean that Australian IMT/5G equipment will be outside of the ITU standard, will become subject to Article 4.4 when used outside of Australia, and will not be as easily deployed globally.

Moreover, an increase in the TRP limits for the 26 GHz band may be seen as a willingness to increase TRP in the 28 GHz band as well. Viasat strongly urges the ACMA to reject any proposals to apply those higher limits to the 28 GHz band. The radio frequency environment in the 28 GHz band is very different than the 26 GHz band as it is heavily relied upon by satellite networks with extensive existing use and imminent plans for deployment by Viasat in Australia, as described above, and other satellite operators as well. Any increase in TRP above the Article 21 limits in the 28 GHz band cannot be permitted as the resulting interference could seriously impact FSS operations resulting in degraded service to Australian consumer and government users.

Viasat looks forward to continued engagement with the ACMA and other commenters on these important spectrum matters.

Sincerely,

A handwritten signature in dark ink, appearing to read "P. Girvan", is positioned above the printed name.

**Peter Girvan**

Vice President and General Manager,  
Viasat Asia-Pacific