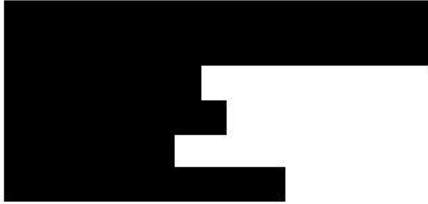Sean McQueen
Australian Communications and Media Authority
PO Box 13112
Law Courts
Melbourne VIC 8010
(03) 9963 6800
ESL@acma.gov.au

04 June 2024

RE: EXPIRING SPECTRUM LICENCES (STAGE 2)

Dear Sean

This letter provides Gilmour Space Technologies Pty Ltd (Gilmour Space) response to the ACMA Industry Consultation on Expiring Spectrum Licences.

Gilmour Space is keen to see the 2 GHz band between 2110-2200 MHz opened to improve accessibility for both satellite Telemetry, Tracking and Command (TT&C) and satellite telecommunication links in the S-Band. Currently, there is insufficient spectrum availability in the 2025-2110 MHz and 2200-2290 MHz range for this. One key underpinning requirement is TT&C uplinks, which is currently only provided by ground stations in the S-Band, both in Australia and internationally.

It is acknowledged that this is an issue globally, but there is an opportunity for Australia to lead the way. Additionally, as per the Australian Radiofrequency Spectrum Plan 2021, allocations are considered for space research (Earth-to-space), space operation (Earth-to-space) and mobile-satellite communications (space-to-Earth).

The geographical area of interest is Australia wide. However, for TT&C, key geographical areas include, but are not limited to, satellite ground station locations in Dubbo, NSW; Mingenew, WA; and Bowen, QLD. Typical bandwidth requirements for satellite TT&C are 1 MHz uplink and 5 MHz downlinks.

The public benefit from opening the 2110-2200 MHz range for satellite TT&C communication links is increased satellites in orbit providing:

1. expanded satellite communications for data in other bands (e.g. X-Band and Ka-Band).
2. satellite-based weather and natural disaster warning/monitoring services.
3. satellite-based telecommunications links.
4. increased connectivity for First Nations Australia's digital inclusion in remote and regional areas across Australia, via point 1 above.

Yours sincerely
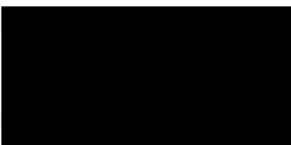
Senior Avionics Engineer
Gilmour Space Technologies