



April 8, 2026

To the Senate Environment and Communications Legislation Committee:

Space Exploration Technologies Corp. (SpaceX) appreciates the opportunity to provide input as Parliament considers legislation to ensure mobile connectivity throughout Australia. SpaceX strongly supports the objectives of the Telecommunications Legislation Amendment (Universal Outdoor Mobile Obligation) Bill 2025 (the Bill). Ensuring that basic mobile coverage is reasonably and equitably available outdoors to all Australians is a goal we share, and satellite direct-to-device (D2D) technology is the most viable path to achieving it at scale. The need to ensure connectivity for regional Australians, especially for emergency situations, requires forward-thinking policies that allow next-generation technologies to reach their full potential. In short, our primary objective in Australia is to provide service to as many people as possible no matter where they live. To that end, we respectfully submit these comments for consideration.

SpaceX's Role in Australian Connectivity

As of April 2026, SpaceX has deployed more than 10,000 satellites into Low Earth Orbit (LEO) as part of our Starlink network. Starlink provides high-speed internet to more than 10 million people globally, including more than [REDACTED] households in Australia. With average speeds exceeding 200 Mbps, Starlink now provides the means to connect the unconnected anywhere in the world.

Separately from our Starlink broadband service, SpaceX has also deployed the first generation of our direct-to-device service, Starlink Mobile. This service relies on a subset of 650 LEO satellites for its first generation and provides connectivity directly to unmodified cellular phones. Via this first-generation service, Starlink has now connected more than [REDACTED] people globally with announced partnerships in more than 40 countries. The direct to device capability has provided lifesaving connectivity for natural disaster response, from wildfires in California to hurricanes in the Caribbean. By operating as “cell towers in space”, the Starlink Mobile network eliminates deadzones and extends mobile coverage to rural areas and provides maritime connectivity.



How D2D Technology Supports the UOMO

In Australia, SpaceX partnered with Telstra - one of the three designated universal outdoor mobile providers under the Bill - to connect LTE-enabled phones with Starlink when users are outside of range of terrestrial infrastructure. This service launched in June 2025 and is currently compatible with a wide range of modern smartphones

The Telstra-SpaceX D2D partnership demonstrates that satellite-to-mobile technology can deliver on the Bill's core objective today. Because SpaceX does not have exclusive spectrum rights, the service under our first-generation system is limited, as we rely on leased spectrum from our mobile partner in every market where we operate. To realise the full potential of D2D technology - and to ensure designated providers can meet their UOMO obligations - it is critical that the regulatory environment supports continued investment and spectrum access for satellite operators.

Next-Generation Capabilities

The second-generation Starlink Mobile network (Gen2) is similar in concept to the first-generation network, but will be comprised of more powerful satellites in more dense orbital shells. SpaceX will begin deploying the Starlink Mobile Gen2 satellites in 2026, completing an initial deployment of 1,000 satellites by the end of 2027 with the ultimate goal of deploying 5,000 Starlink Mobile satellites for the second-generation system. These satellites will provide users with more than 10x the throughput of the current system, enabling broadband (over 100 Mbps), voice, text, and IoT capabilities.

A key feature of our second generation Starlink Mobile network will be dedicated spectrum for the service. In 2025 SpaceX acquired spectrum in the global S-band (2 GHz) from EchoStar, as well as priority filings in that band filed at the International Telecommunication Union (ITU). By acquiring this spectrum and the underlying ITU filings, SpaceX now has priority rights to use this globally harmonized spectrum band, which we will use to provide global Mobile Satellite Service (MSS) beginning in 2027. The 2 GHz spectrum will allow SpaceX to partner with multiple cellular carriers and increase the bandwidth to deliver services to consumers. Critically, by using our own dedicated MSS spectrum SpaceX will be able to operate more effectively using common frequencies, intended for satellite to mobile service, to support all carriers in a country, including its smallest and least-resourced carriers.



Spectrum Access Is Essential to Delivering the UOMO's Objectives

For several years, SpaceX has been engaging with the Australian government, including the Australian Communications and Media Authority (ACMA) to license our services and provide updates as to our future plans for network deployment in Australia. In the past year, ACMA announced that they intend to move forward with a price-based allocation (i.e., an auction) of the 2 GHz MSS spectrum. As a globally harmonized MSS band, the 2 GHz S-band is specifically reserved for satellite services, with priority going to entities with relevant filings with the ITU. If Australia proceeds with an auction of this dedicated MSS spectrum it will be a major deviation from the international treatment of satellite spectrum and will open the door to other countries following suit, effectively rendering the ITU harmonization and priority process null and void.

SpaceX respectfully submits that this approach is inconsistent with the policy objectives of the UOMO Bill. If the 2 GHz band is allocated via a price-based mechanism, the cost and availability of next-generation Starlink Mobile services in Australia will be materially impacted, which in turn undermines the ability of designated providers -including Telstra - to meet their UOMO obligations using satellite D2D technology. The end result could be severely limited or no availability of Starlink Mobile Gen2 service in Australia, at the very time Parliament is seeking to guarantee universal outdoor mobile coverage.

Importantly, ACMA has stated their intent to treat other MSS bands in a different manner. While ACMA continues to believe that other satellite operators should have access to MSS bands via administrative allocations, they have singled out the 2 GHz band as requiring special treatment. SpaceX in fact sought access to other ITU MSS bands in Australia and was denied because we lacked ITU priority rights in those bands. Yet after acquiring priority rights in 2 GHz band, we are now being told those rights are irrelevant and the spectrum can be auctioned. SpaceX is merely asking to be treated the same as other satellite operators and to be given the opportunity to provide our next-generation mobile service to as many Australians as possible. We raise this matter not as a grievance with ACMA, but as a policy inconsistency that Parliament is well placed to address in the context of this legislation.



There are several advantages to an administrative allocation of Mobile Satellite Spectrum in the 2 GHz band:

- Under an administrative allocation, ACMA can, and should, place service delivery requirements on operators who are granted the spectrum. SpaceX in fact encourages this policy requirement for all MSS and satellite bands, as operators should be required to actually deploy systems that result in consumers in Australia receiving the services that companies say they will provide.
- ACMA can, and should, periodically review spectrum allocations to ensure consumers are benefitting from the highest and best use of this public resource. If a company fails to deliver services using allocated spectrum, ACMA should take action to award that spectrum to other users who are more likely to provide benefits to Australian consumers. SpaceX is *not* asking for exclusive rights to the 2 GHz MSS spectrum for an indefinite period, rather we are seeking access to demonstrate our ability to serve millions of users with next-generation MSS connectivity in the next two years. By contrast, under an auction process, there is no ability for ACMA to require delivery of services to consumers, as the spectrum will be the exclusive property of various bidders. This means there is no guarantee that Australians will ever receive actual service from entities using the spectrum.
- An administrative allocation is consistent with international law and the harmonization of spectrum by the International Telecommunication Union. By preserving the international system for spectrum coordination Australia would ensure continued investment and deployment of next-generation satellite technologies that serve the Australian people.

The Case for Satellite Resilience: Lessons from Recent Emergency Outages

In light of recent 000 outages and other network challenges in Australia, it is particularly critical that multiple satellite providers be given the opportunity to build and launch MSS systems that can serve Australian consumers. On 18 September 2025, an Optus technical fault prevented customers from reaching Triple Zero (000) for approximately 13 hours—an outage linked to four deaths. On 18 November 2025, a TPG Telecom outage caused by outdated software was linked to at least one further death. These incidents demonstrate that terrestrial networks alone cannot guarantee the reliability that Australians need,



particularly in regional and remote areas. Satellite D2D technology provides an independent, resilient layer of emergency connectivity that operates regardless of terrestrial infrastructure failures. More specifically, regional Australians deserve the same options for connectivity as those living in more urban settings. As Parliament and the government have recognized, the only realistic way to deploy those services to more sparsely populated regions is by utilizing satellite technology. Satellite D2D should be explicitly contemplated under the Bill as a qualifying technology for meeting the UOMO.

Recommendations

SpaceX respectfully recommends that the Committee consider the following:

1. That the Bill explicitly recognise satellite direct-to-device technology as a qualifying means by which designated providers may meet their Universal Outdoor Mobile Obligation.
2. That the Committee recommend the Australian Government ensure that spectrum allocation processes -for all mobile-satellite bands, including but not limited to the 2 GHz MS, L- and extended L-band - are aligned with and supportive of the UOMO's objectives, and that administrative allocation be the preferred approach for globally harmonised MSS spectrum consistent with ITU frameworks and past Australian precedent.
3. That the Bill include provisions for periodic review of designated providers' progress in meeting the UOMO, including assessment of the satellite technologies and partnerships being deployed.
4. That the government consider how satellite D2D technology can serve as a complementary or alternative mechanism to mandatory terrestrial roaming to extend coverage to underserved areas.

We greatly appreciate the continued work of Parliament and the entire government to ensure every Australian has access to critical communications technologies. Thank you for the opportunity to comment and we stand ready to continue our collaborative efforts to achieve our shared goals.