Kinéis Response to ACMA's Five-Year Spectrum Outlook 2026–31 (Draft) and Annual Work Program 2026–27 (Draft)

Executive Summary

Kinéis welcomes the opportunity to provide comments on the Australian Communications and Media Authority's *Five-Year Spectrum Outlook 2026–31 – Draft for Consultation* and the *Annual Work Program 2026–27 – Draft for Consultation*. As an MSS operator in the UHF band and pursuing the Argos program for Data Collection Platforms in the 401–403 MHz band, Kinéis is providing and developing solutions that support Australian users IoT connectivity needs thanks to its newly launched 25-satellite constellation.

Kinéis is now entering a new phase of development with the expansion of its MSS capabilities into higher frequency bands to enable direct-to-device for IoT connectivity. This evolution aligns closely with ACMA's forward-looking focus on emerging satellite services, spectrum modernization, and the integration of satellite and terrestrial ecosystems.

Our submission addresses areas most relevant to our current and future operations: long-term spectrum availability, the development of the D2D-IoT regulatory framework, the future allocation of the 2 GHz MSS band, preparations for WRC-27, and broader improvements to satellite regulatory frameworks.

Kinéis supports ACMA's objectives and offers constructive recommendations to ensure that Australia continues to benefit from a resilient, innovative, and competitive satellite communications environment.

1. The role of Satellite-based services in Australia's connectivity needs

ACMA's *FYSO draft* highlights the persistent challenges Australia faces in delivering reliable connectivity across its vast geography. These challenges extend beyond traditional broadband access and encompass the need for continuous environmental monitoring, support for critical industries, and robust communications during emergencies. Kinéis fully shares this assessment and believes that emerging satellite services are uniquely positioned to complement terrestrial networks in addressing these national priorities.

Satellite connectivity plays a decisive role in ensuring the safety of workers operating in remote environments. In industries such as agriculture, mining, energy, and surveying, individuals frequently operate far beyond the reach of terrestrial mobile networks or need reliable back-up services. The ability to send and receive important messages, share location information, or trigger alerts via satellite can significantly reduce risks and improve response times in decisive situations. D2D services, which allow devices to communicate directly with satellites, further enhance this capability by making IoT-type communication more accessible.

- In the **agricultural sector**, satellite IoT connectivity supports a new level of operational efficiency and environmental sustainability. Large farms and pastoral operations often span areas where terrestrial coverage is inconsistent or absent. Satellite-connected sensors enable farmers to monitor soil moisture, crop conditions, livestock movements, and water resources

in real time. This supports more precise use of inputs, reduces waste, and helps manage climate-related risks such as droughts or heatwaves.

- **Environmental and wildlife monitoring** is another domain where satellite services deliver substantial public value. Much of Australia's biodiversity, protected areas, and marine environments lie in regions with limited terrestrial infrastructure. Satellite-connected sensors and tracking devices allow researchers and authorities to continuously monitor endangered species, migration patterns, and ecological indicators. They also support the detection of illegal activities such as poaching or unlicensed fishing. By ensuring that these devices remain connected regardless of location, satellite IoT services help build a continuous, data-rich understanding of Australia's natural environment, supporting evidence-based conservation and policy decisions.
- **Maritime and logistics operations** also rely deeply on satellite connectivity. Australia's economy depends on maritime trade, offshore activities, and long-distance transport corridors that traverse sparsely populated regions. Satellite IoT services enable the tracking of vessels, vehicles, and high-value assets, as well as the monitoring of cargo conditions such as temperature or fuel levels. This improves supply-chain visibility, reduces losses, and enhances safety for crews and drivers operating in remote or offshore environments.
- Finally, satellite IoT services are essential components of Australia's **disaster resilience and redundancy strategy**. As ACMA notes, Australia is exposed to a range of natural hazards, including bushfires, floods, cyclones, and severe storms. During such events, terrestrial networks can be damaged, congested, or temporarily unavailable. Satellite connectivity provides an independent layer of communication that supports emergency services, government agencies, critical infrastructure operators, and affected communities. Satellite IoT services further enhance this resilience by enabling individuals to send and receive essential messages directly via satellite when other options are unavailable. This redundancy is a core component of a modern, resilient communications ecosystem.

The contributions of Satellite IoT services are central enablers of Australia's strategic objectives in remote worker safety, agricultural productivity, environmental stewardship, efficient logistics, and disaster resilience. Kinéis' current operations and planned expansion into higher frequency bands are designed precisely to support these national priorities in a way that complements and strengthens existing terrestrial networks.

Additional note: In 2020 Kinéis has informed ACMA regarding its Argos operations for environmental monitoring in the 401 - 403 MHz band and has been actively engaging with the ACMA to enable solutions in Australia that will benefit from the newly launched 25-satellite constellation. We therefore encourage the ACMA to enable appropriate licensing scheme in this band for Argos services.

2. Development of a Regulatory Framework for Direct-to-Device (D2D)

ACMA's recognition of direct-to-device (D2D) communications as a key emerging issue, as outlined in the *FYSO draft* and the *Work Program 2026–27,* is both timely and forward-looking. D2D represents a significant evolution in satellite communications, enabling standard devices to connect directly to satellites, particularly relevant for dedicated low data rate services.

A well-designed D2D framework must balance technologies that focus either on consumer mobile broadband or industry-oriented connectivity.

- Consumer mobile broadband will naturally flourish in IMT-bands that represent a natural reservoir in locations where terrestrial deployments do not make sense and satellites will play an important complement.
- Industry-oriented connectivity is developed within D2D-IoT solutions in MSS bands, **which remain key across various sectors to ensure continuous data collection and monitoring of remote assets and resources.** No other spectrum alternative is technically and economically feasible. Prioritizing those industrial needs in the future D2D framework will enable Australia to benefit from global innovation while ensuring that spectrum is used efficiently and responsibly.

Kinéis is committed to working collaboratively with ACMA to help shape a regulatory environment that supports safe coexistence, fosters competition, and delivers meaningful connectivity benefits to Australian communities.

3. Future Allocation of the 2 GHz MSS Band

ACMA's intention to examine the future use of the 2 GHz MSS band is an important step in supporting the growth of satellite services. Kinéis expresses interest in this band for its future D2D-IoT expansion.

We appreciate the ACMA's consideration of allocating dedicated spectrum for satellite Internet of Things (IoT) and other narrowband services. We encourage ACMA to adopt a transparent and competitive allocation process that ensures equitable access for MSS operators and aligns with global harmonization trends.

4. Preparations for WRC-27

ACMA's international planning priorities are essential to ensuring that Australia's interests are effectively represented in global spectrum discussions. Kinéis strongly supports ACMA's continued engagement in ITU-R activities and preparations for WRC-27.

Kinéis is particularly interested in agenda items related to the protection and evolution of MSS and the development of regulatory frameworks for direct-to-device (D2D) communications. In this context, WRC-27 Agenda Item 1.12—studies on possible new MSS allocations to support low data rate satellite communications—is of primary importance to our mission.

We stand ready to contribute technical data, share European regulatory experience, and support Australia's participation in relevant ITU-R working groups. A coordinated national approach to WRC-27 will help ensure that Australia's regulatory framework remains aligned with global developments and that satellite services continue to operate effectively within a harmonized international environment.

5. Modernization of Satellite Regulatory Frameworks

ACMA's focus on regulatory reform reflects the need to adapt existing frameworks to the rapid evolution of satellite technologies.

A well-designed D2D regulatory framework is critical to enabling Australia to benefit from global innovation while ensuring efficient and responsible spectrum use. For Kinéis, such a framework is essential to advancing D2D-IoT capabilities and delivering reliable satellite connectivity to Australian users.

Kinéis is committed to contributing technical expertise, sharing international regulatory experience, and working closely with ACMA to help shape a balanced approach that supports safe spectrum

coexistence, encourages competition, and expands connectivity options for remote and underserved communities.

7. Public Value and Societal Impact

ACMA's emphasis on public interest considerations aligns closely with Kinéis' mission. Our services support a wide range of societal benefits across various sectors.

- In wildlife and environmental monitoring, satellite-connected sensors and tracking devices provide essential data for conservation efforts, enabling researchers and authorities to monitor endangered species, track migration patterns, and assess ecological conditions in remote areas. These capabilities support evidence-based policy and help protect Australia's unique biodiversity.
- In agriculture, satellite connectivity enables precision farming practices that improve productivity and sustainability. Farmers can monitor soil conditions, crop health, livestock movements, and water resources in real time, allowing them to make informed decisions that reduce waste and mitigate climate-related risks.
- In logistics and maritime operations, satellite services enhance supply-chain visibility, improve safety, and support efficient operations across vast and remote regions. The ability to track assets and monitor cargo conditions contributes to economic resilience and operational reliability.
- In disaster resilience, satellite services provide an independent layer of communication that remains operational when terrestrial networks are disrupted. This capability supports emergency services, government agencies, and affected communities during bushfires, floods, cyclones, and other natural hazards.

These contributions demonstrate that satellite services are not peripheral technologies but essential components of Australia's broader connectivity and resilience strategy.

Conclusions

Kinéis welcomes ACMA's forward-looking approach in the *Five-Year Spectrum Outlook 2026–31 – Draft* and the *Annual Work Program 2026–27 – Draft*. We support ACMA's efforts to modernize satellite regulations, enable D2D innovation, and ensure long-term certainty for satellite services.

Kinéis stands ready to collaborate with ACMA, government agencies, and industry stakeholders to deliver resilient, affordable, and innovative satellite connectivity that supports Australia's economic, environmental, and societal objectives.