CONSULTATION ON UNIVERSAL OUTDOOR MOBILE OBLIGATION (UOMO) DRAFT LEGISLATION

Telecommunications Legislation Amendment (UOMO) Bill October 2025

Cover Image Supplied by: BIRRR, All rights reserved
Submission date: 18th October, 2025
Prepared by: ████████████████████
This submission was prepared in good faith by a voluntary team. Please address any queries to BIRRR at birrraus@gmail.com

B.I.R.R.R.
BETTER
INTERNET FOR
RURAL,
REGIONAL &
REMOTE AUSTRALIA

Executive Summary

Better Internet for Rural, Regional and Remote Australia (BIRRR) strongly supports the intent of the Universal Outdoor Mobile Obligation (UOMO) as a critical reform to extend mobile voice and Short Message Service (SMS) coverage across all of Australia. The UOMO represents a landmark opportunity to improve safety, equity and productivity for regional, rural and remote (RRR) communities.

However, the success of the UOMO will depend on how it is implemented. To achieve genuine universality, the framework must not only deliver coverage but also ensure affordability, accessibility, transparency and enforceability. Reliable mobile connectivity is no longer optional, it underpins daily life, emergency response, economic activity and community wellbeing. BIRRR urges the Government to ensure that the UOMO framework:

- Defines clear, measurable service standards so "reasonably available" means usable and verifiable coverage;
- Includes robust oversight and enforcement mechanisms, with independent auditing, transparent reporting and clear consumer redress pathways;
- Supports Connectivity Literacy through consistent public education and a single source of truth to prevent misinformation and build consumer confidence;
- Addresses affordability and competition, ensuring all consumers, including low-income, prepaid and Mobile Virtual Network Operators (MVNOs) users, can access UOMO services without penalty;
- Maintains and enhances terrestrial mobile investment, ensuring satellite technologies complement, not replace, ground networks;
- Aligns universal service reform, integrating the UOMO with the Universal Service Obligation (USO) and Statutory Infrastructure Provider (SIP) framework for consistency and accountability;
- Ensures access to 000 voice emergency access and public safety messaging, including the introduction of Text-to-000 and interoperability across all networks; and
- Safeguards Australia's data sovereignty and national interests, ensuring foreign-owned satellite operators comply fully with Australian laws, privacy and continuity standards.

BIRRR's recommendations outline a clear and practical pathway to make the UOMO transparent, enforceable and consumer-focused, ensuring that all Australians, no matter where they live or what device or provider they use, can access safe, reliable and affordable mobile services. If the UOMO is to be truly universal, it must be accessible not only in coverage, but in cost, capability and confidence. With strong oversight, meaningful consumer protections and continued investment in regional connectivity, the UOMO can deliver a lasting legacy of digital equity and safety for RRR Australia.

𝕋𝕒𝕓𝕝𝕖 𝕠𝕗 ℂ𝕠𝕟𝕥𝕖𝕟𝕥𝕤

BIRRR BACKGROUND

Better Internet for Rural, Regional and Remote Australia (BIRRR) is a grassroots not-for-profit volunteer group which advocates for viable and sustainable solutions to a wide range of RRR telecommunication issues. BIRRR is independent, apolitical and technologically agnostic. Since 2014 we have provided information, practical support and advice, primarily through our Facebook platform, website and extensive consumer engagement in RRR areas. The organisation boasts a membership of over 16,200 individuals across Australia giving BIRRR a unique appreciation, insight and understanding of the issues and impacts of the connectivity challenges and barriers to access facing regional consumers. Over the past decade, BIRRR has made significant strides in advocating for improved connectivity and services in underserved areas. We have successfully raised awareness of the unique challenges faced by rural and remote consumers, influencing policy changes and encouraging more effective government and industry responses. BIRRR has also provided crucial support to its members through guidance on navigating service issues, advocating for better service standards, and highlighting gaps in coverage and service quality. These efforts have helped drive improvements in telecommunications infrastructure and service delivery, fostering greater equity in access to RRR consumers across Australia. In addition, BIRRR has developed and promoted the concept of Connectivity Literacy[1] , which empowers individuals, communities and industry to better understand and navigate telecommunications services and infrastructure. BIRRR is a founding member of the Rural, Regional and Remote Communications Coalition (RRRCC).

---

[1] *https://birrraus.com/connectivity-literacy-2/*

RECOMMENDATIONS

1. Review legislation to ensure UOMO definitions include minimum functional expectations, that coverage and service limitations are explicitly referenced, and that enforceable standards and benchmarks are developed.

2. Strengthen accountability, oversight, mapping transparency and enforcement of the UOMO framework to ensure accuracy, compliance and consumer protection.

3. Strengthen consumer information, education and Connectivity Literacy by establishing a single, authoritative source of truth to ensure all Australians understand how UOMO technologies work, where they are effective, and where their limitations lie.

4. Review legislation and implementation to ensure affordability, fairness and competition for all consumers, including low-income, prepaid and MVNO customers.

5. Enhance connectivity resilience, competition and investment to ensure STM/D2D technologies complement, not replace, terrestrial mobile networks.

6. Modernise and integrate Australia's universal service framework to align the USO, SIP and UOMO under a single, coordinated structure.

7. Ensures access to 000 voice services and public safety messaging under the UOMO through clear communication, interoperability and the introduction of SMS-to-000 access.

8. Safeguard sovereign and data security within the UOMO framework, to ensure Australian consumers' data, privacy and national interests are protected under foreign-owned satellite networks.

INTRODUCTION

Regional, rural and remote (RRR) Australia is home to almost nine million people and contributes around one-third of the nation's Gross Domestic Product[2]. Reliable mobile connectivity underpins not only safety and social connection, but also the productivity and resilience that drive regional Australia's economy. Across sectors such as agriculture, mining, transport, tourism, health, education and small business, dependable connectivity enables efficiency, innovation and competitiveness. Conversely, inadequate mobile coverage undermines safety during bushfires, floods and daily operations, constraining growth and limiting opportunity. Ensuring equitable mobile connectivity is therefore fundamental to Australia's national prosperity, community wellbeing and public safety.

BIRRR welcomes the Universal Outdoor Mobile Obligation (UOMO) as a landmark policy to extend mobile voice and Short Message Service (SMS) coverage to areas that have never had access to reliable mobile services. The combination of the UOMO and emerging Low-Earth-Orbit (LEO) Satellite-to-Mobile (STM) / Direct-to-Device (D2D) technologies has the potential to transform regional connectivity, but only if implemented with clear performance expectations, transparent consumer information, and enforceable protections.

BIRRR is committed to working collaboratively with the Australian Government, regulators, Primary Universal Outdoor Mobile Providers (PUOMPs) and industry partners to ensure the UOMO delivers practical, measurable benefits for RRR communities. It is essential that all parties, government, regulators, industry and consumer advocates, ensure Australians clearly understand how these technologies work, where they are effective, and where their limitations lie, particularly in real-world rural conditions such as extreme weather, rugged terrain, satellite–terrestrial handovers and network outages.

Additionally, universal service reform must not stop with the UOMO. There is an urgent need to modernise and integrate the Universal Service Obligation (USO) and Statutory Infrastructure Provider (SIP) regimes to reflect contemporary technologies, consumer needs and service expectations across RRR Australia.

---

[2] *Australian Bureau of Statistics (ABS), Regional Population 2024; Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA), Regions Matter – The Economic Contribution of Regional Australia (2023).*

Key Concepts

BIRRR understands that the Telecommunications Legislation Amendment (UOMO) Bill 2025 establishes an obligation on Australia's three national mobile carriers (Telstra, Optus and TPG), identified as Primary Universal Outdoor Mobile Providers (PUOMPs), to provide baseline mobile voice and SMS services.

The UOMO will sit within the existing universal services framework, complementing current obligations that ensure reasonable and equitable access to broadband services, standard telephone services and payphones. Rather than prescribing detailed technical standards upfront, the Bill establishes a flexible regulatory framework, empowering the Minister for Communications, or, by delegation, the Australian Communications and Media Authority (ACMA), to make standards, rules and benchmarks as technology and market conditions evolve.

PUOMPs will be required to ensure that baseline outdoor mobile coverage, including voice and SMS, is reasonably available across Australia on an equitable basis. Data services are not yet included under the obligation; however, the Bill enables the Minister to extend UOMO coverage to data services through a legislative instrument once technical capability allows. The draft Bill provides a default commencement date of 1 December 2028, with the option to bring this forward depending on industry readiness and technological progress.

Submission

BIRRR acknowledges that no mobile service can be universally available at all times; however, the Bill's definitions of "*designated mobile telecommunications service*" and "*reasonably available*" provide excessive discretion to Government and carriers, without clear accountability, timelines or consumer safeguards.

While it is reasonable to recognise technical and environmental limitations such as terrain, vegetation, weather and device compatibility, the current wording of *"reasonably available"* is overly subjective. Without clearer parameters, it risks allowing PUOMPs to attribute service failures to "*unreasonable circumstances*," undermining consumer confidence and limiting recourse.

The Bill also lacks requirements for independent verification or public reporting of these exceptions, and the Minister's broad power to define exclusions after passage could result in overly flexible exemptions that disadvantage consumers through cost, device or location barriers. The Bill should clearly define "on an equitable basis" to ensure that universal access is interpreted as both equitable in terms of geographic distribution and affordability of access, preventing the creation of service tiers or pricing disparities that disadvantage RRR consumers.

Strong enforcement, transparency and compliance mechanisms will be critical to maintaining consumer trust and preventing misinformation. Following the Optus Triple Zero outage and subsequent ACMA enforcement actions, there is clear public and government momentum for greater accountability across all networks.

BIRRR further notes that the draft Bill's proposed commencement date of 1 December 2028 represents a delay from the original 2027 timeframe announced by the Australian Government [3]. This change risks undermining the intent of the UOMO to deliver timely connectivity improvements, particularly as STM/D2D technologies are already being rolled out in Australia and commercialised internationally. BIRRR urges the Government to publish the criteria they will use to guide decisions affecting UOMO commencement delay or date changes, and to ensure the earliest possible rollout consistent with technical capability.

Standards, Rules and Benchmarks

BIRRR supports the inclusion of powers for the Minister for Communications or the ACMA to make regulatory standards, rules and benchmarks under the UOMO. These standards must be developed through

---

[3] *https://minister.infrastructure.gov.au/rowland/media-release/albanese-labor-government-building-australias-mobile-future*

genuine, collaborative consultation with Government, regulators, industry and consumers, particularly those in RRR areas, to ensure they are practical, transparent and equitable in their outcomes. Benchmarks must be established and verified prior to commencement of UOMO.

A flexible framework is essential to allow the legislation to adapt to emerging technologies, including the eventual expansion of the UOMO to cover mobile data services. Given that most Australians now rely on mobile data in their day-to-day lives, the framework should be explicitly future-ready, enabling data to be designated as a UOMO service when technical capability permits. This approach will ensure the framework remains relevant, responsive and aligned with evolving consumer behaviour and connectivity needs.

BIRRR also supports the Minister's power under section 12J to designate additional providers as technologies and market entrants evolve. For instance, if other operators began offering direct-to-consumer mobile services, they should be brought within the scope of the UOMO to ensure consistent standards, accountability and consumer protections across all service types. BIRRR also recommends that mobile data be incorporated into the UOMO framework as soon as it becomes operationally viable and technically reliable, supported by a clear staged roadmap, once service capability is established. This approach ensures that data services can be added promptly when available, without compromising performance standards or consumer confidence during the initial voice-focused rollout.

However, the current definition of outdoor coverage as "r*easonably available*", (if a consumer can use the service outdoors) is too subjective. Without measurable benchmarks, this may allow intermittent or marginal connectivity to satisfy the obligation. As seen under the USO and SIP regimes, vague performance language leaves consumers without clear recourse when services fail.

BIRRR emphasises that "available" must mean **usable**, not merely technically present, particularly in areas with weak or inconsistent terrestrial mobile coverage. The legislation should include clear, outcome-based definitions of functional outdoor service, such as:

- The ability to successfully send and receive a text-only SMS outdoors; and
- The ability to make and receive a standard voice call outdoors with clear, continuous audio.

Without such functional standards, coverage may be reported as "available" even where calls and messages routinely fail, a persistent and well-documented existing problem for RRR consumers.

Accountability, Oversight and Enforcement

Strong accountability and independent oversight are critical to ensure the UOMO delivers reliable, equitable and transparent mobile service access. Previous universal service frameworks have been weakened by inconsistent reporting, limited enforcement and a lack of real-world performance verification. To avoid repeating these shortcomings, the UOMO must include clear compliance mechanisms, independent auditing, and transparent public reporting of provider performance.

BIRRR supports ACMA-led oversight, including the publication of quarterly performance dashboards and independent audits of PUOMP compliance. These measures will strengthen consumer confidence and ensure obligations translate into measurable, enforceable outcomes, not just policy intent.

BIRRR also supports aligning UOMO enforcement with the Telecommunications Amendment (Enhancing Consumer Safeguards) Bill 2025, ensuring that ACMA is empowered to take direct enforcement action, impose substantial penalties, and maintain a national compliance register for PUOMPs.

Connectivity Literacy / Consumer Information

BIRRR strongly emphasises the importance of consumer awareness, transparency and education regarding the limitations, functionality and performance of STM/D2D technologies. While these technologies have significant potential to improve coverage across RRR Australia, they are not universal solutions and will not perform reliably under all conditions.

STM/D2D technologies require a clear, unobstructed line of sight to the sky for a handset to connect to a satellite. Consumers must be clearly informed that the UOMO obligation does not apply indoors, inside buildings, vehicles, aircraft, vessels or underground, and that coverage may be inconsistent, delayed or unavailable due to environmental factors such as tree cover, terrain, valleys, heavy rain, storms, smoke or dust.

The UOMO legislation and supporting instruments must explicitly reference any natural, technical or environmental limitations, ensuring that performance testing, coverage maps and consumer information reflect real-world conditions rather than desktop analysis.

Connectivity Literacy (the awareness and knowledge needed to understand, choose and manage telecommunications services) is essential to the success of the UOMO. Managing consumer expectations is critical, particularly given the technical and environmental constraints of satellite-based mobile services.

The introduction of the UOMO also risks adding another layer of complexity to an already confusing telecommunications landscape alongside the USO and SIP frameworks. Without clear, coordinated communication and defined accountability, consumers may not know where to seek help when services fail or what rights and recourse they have when UOMO services underperform. Ambiguous definitions such as *"reasonably available outdoors"* will make complaint handling and enforcement more difficult.

Consumers must be clearly informed that "*outdoor coverage*" applies only under open-sky conditions, and all coverage representations should be transparent, independently verified and evidence-based. To ensure this, consumer information must be consistent, accurate and accessible, developed jointly by the Government, regulators and trusted independent partners. There must be a single, authoritative source of truth, maintained by the Government and regulators, providing clear, up-to-date information on UOMO coverage, device compatibility, emergency access and consumer rights. This is essential to prevent misinformation, ensure consistency across providers and maintain public confidence in the new framework.

Improving connectivity outcomes depends not only on new technology, but on ensuring Australians understand how, when and where it will work, and when it will not. Building this understanding through clear, independent consumer education and Connectivity Literacy is vital to maintaining public trust, safety and confidence in the delivery of the UOMO.

Universal Services Reform

BIRRR remains deeply concerned that Government action on Universal Services reform has been far too slow. Despite more than a decade of reviews, trials and consultations, including five Regional Telecommunications Reviews (2012, 2015, 2018, 2021, 2024), the 2017 Productivity Commission Telecommunications Universal Service Obligation (TUSO) Report, the 2022 Alternative Voice Services Trials (AVST), the 2024 Universal Services Framework Consultation, the 2024 Funding of Universal Services Consultation, and the 2024–25 USO Voice Trials, there has been little tangible progress toward modernising the framework.

This prolonged inaction has left consumers, particularly in RRR areas, vulnerable to misinformation, misselling and inconsistent service standards. The existing USO, framed around an era of copper landlines and a single monopoly provider, no longer reflects modern technologies, delivery models or consumer expectations.

The current USO provider, Telstra, has repeatedly engaged in poor communication and misinformation regarding service eligibility and consumer rights. Transition processes, such as the migration from NextG

Wireless Local Loop (NGWL) to 4G Fixed Wireless or Starlink Voice, have been plagued by poor coordination and inadequate support, leaving some consumers without reliable voice access for extended periods. Research and BIRRR members' evidence confirm these failures have eroded trust and exposed significant gaps in service continuity and consumer protection. These issues are compounded by widespread misunderstanding and inconsistent compliance with the Copper Continuity Obligation (CCO), which requires Telstra to maintain existing copper connections outside the NBN fixed line footprint, except in a limited circumstances. In practice, many consumers report being incorrectly advised that their copper service will be disconnected or phased out and that no replacement service is available, undermining the intent of the CCO and further eroding public confidence.

Telstra's monopolistic position under the existing USO contract, combined with the absence of competitive tension, transparent performance reporting and independent oversight, has produced poorer outcomes for rural and remote consumers. Without meaningful reform, this model will continue to entrench inequality, limit innovation and undermine consumer confidence in universal service delivery.

BIRRR emphasises that urgent reform of the USO must occur in parallel with UOMO implementation. Introducing a new legislative obligation without first modernising the outdated USO risks compounding existing systemic problems, creating overlap, confusion and fragmented accountability across the USO, SIP and UOMO frameworks..

Triple Zero (000) Access

BIRRR notes that the draft UOMO Bill does not reference Triple Zero (000) services, as obligations to provide emergency access are already established under the Emergency Call Service Determination 2019. While this regulatory separation is understood, BIRRR is concerned that consumers are unlikely to distinguish between legislative frameworks and may incorrectly assume the UOMO guarantees universal Triple Zero access.

This misunderstanding risks creating unrealistic expectations, particularly where STM/D2D services are promoted as providing wide-area coverage but do not yet fully support emergency call functionality. Current limitations include issues with call routing, location accuracy and network prioritisation, especially in fringe coverage areas or during outages when both terrestrial and satellite networks may be unreliable.

BIRRR emphasises that consumers must have confidence that Triple Zero functions reliably and predictably, regardless of their location, network or technology. The recent Optus Triple Zero outage exposed serious weaknesses in Australia's emergency call resilience and public communication systems. Many consumers assume D2D or satellite-enabled handsets can always connect to 000 or send emergency messages;

however, SMS-to-000 is not yet supported, and significant limitations remain in coverage, call routing and prioritisation. Such misconceptions create serious safety risks and erode confidence in emerging technologies.

To prevent confusion and ensure public safety, BIRRR recommends that PUOMPs, the Australian Government, regulators and the Triple Zero Custodian provide clear, consistent and accessible public information explaining how emergency access will operate under the UOMO, including:

- Whether D2D and satellite-enabled handsets will support voice-based Triple Zero connectivity;
- If technically possible, how roaming or interoperability between different satellite systems could be achieved;
- Any limitations during network outages, adverse weather or in fringe coverage zones; and
- How caller location and emergency data will be transmitted from non-terrestrial networks.

Until STM/D2D technologies can reliably support voice-based emergency calls, a text-to-000 service should be introduced to ensure equitable access for all Australians, particularly those in RRR communities.

Clear, proactive communication, coordinated by the Triple Zero Custodian, is essential so consumers understand where and how they can reliably reach emergency services, and to ensure the UOMO framework enhances, rather than confuses, public safety outcomes in RRR Australia.

It is also critical that public safety systems, including national emergency alert SMS and location-based warning services, are fully compatible with STM/D2D technologies to guarantee these life-saving messages reach all Australians, regardless of location or network type.

Coverage Areas

BIRRR supports the intent for the UOMO to apply Australia-wide, ensuring equitable access to mobile voice and SMS services across all eligible territories, including Christmas Island and the Cocos (Keeling) Islands. This national approach reflects the universal objectives of the legislation and recognises that safety, connectivity and communication are essential for all Australians, regardless of location.

However, greater clarity is needed on how excluded or non-eligible external territories will be treated, and whether residents or travellers in these areas will have access to equivalent mobile and emergency services. Under the Bill, the UOMO relies on the definition of "Australia" in the Telecommunications Act, which currently includes the eligible territories of Christmas Island and the Cocos (Keeling) Islands, while allowing the Minister to prescribe others if required. BIRRR recommends that the UOMO enable consideration of

extension to other inhabited external territories, including Norfolk Island, to ensure parity of access to mobile and emergency services for Australians living in these communities. Inclusion across all territories is essential to uphold the principles of equity, safety and universality that underpin the UOMO framework.

BIRRR also supports the continued exclusion of the Australian Radio Quiet Zone, provided this does not inadvertently restrict nearby towns, communities or major transport routes from receiving improved mobile or STM/D2D coverage. Coverage improvements should be prioritised in surrounding areas to ensure the boundaries of the Quiet Zone do not create unintended "connectivity black holes".

BIRRR also recommends that the Government consider how mobile coverage maps will be impacted by the introduction of the UOMO, including:

- How UOMO coverage boundaries will be defined and represented alongside existing terrestrial network maps;
- How STM/D2D coverage will be verified and displayed, distinguishing between nominal and reliable outdoor coverage; and
- How future mapping tools can be made transparent, consistent and consumer-friendly to support informed decision-making.

Clear mapping, coverage transparency and consistent geographic definitions (including a list of locations not covered by UOMO) will be critical to ensure the UOMO is implemented fairly, monitored effectively and understood by consumers, carriers and regulators alike.

Compatible Handsets, Plans, Affordability and MVNO Access

BIRRR notes that the success of the UOMO will depend not only on network capability but also on consumers' ability to access compatible handsets and service plans. The explanatory materials acknowledge that many consumers may not currently own devices or plans capable of connecting to STM/D2D services. This risks creating a new digital divide, where only those who can afford premium devices or plans benefit from UOMO coverage. BIRRR reiterates that costs must not be shifted onto rural and remote consumers through levies, device upgrades or higher plan pricing.

Affordability remains one of the greatest barriers to digital inclusion in RRR Australia, particularly for First Nations communities, where between 90–99% of mobile users rely on prepaid services due to low or

irregular income[4]. Across the broader population, prepaid services continue to grow faster than postpaid, with Australians increasingly valuing affordability and flexibility over long-term contracts[5].

The principle of price parity, long established under the USO, should extend to UOMO services, ensuring that RRR consumers pay no more than their metropolitan counterparts for equivalent services. Equity must include affordability as a core measure of universality.

Mobile Virtual Network Operators (MVNOs) now represent approximately 19% of all mobile services in Australia[6] (about 4.3 million connections), reflecting strong demand for lower-cost alternatives and market diversity. However, many STM/D2D-compatible handsets and plans remain premium-priced or restricted to major carriers, effectively excluding prepaid and MVNO users from accessing UOMO services. The UOMO framework should clearly define the roles of Mobile Network Operators (MNOs)/ PUOMPs and MVNOs.

To avoid deepening the digital divide, the UOMO should include targeted affordability measures, such as a Low-Income Connectivity Support Program or device subsidy scheme, ensuring equitable access to compatible devices and plans for low-income, remote and vulnerable consumers.

Finally, a pro-competitive environment is essential to deliver affordability, innovation and consumer choice. Regulatory settings must guarantee fair and non-discriminatory access for all carriers and resellers to UOMO-enabled technologies and infrastructure. This will help prevent monopolistic control and ensure that Australians in RRR areas are not excluded from the benefits of modern mobile simply because of where they live or which provider they choose.

Network Resilience and Interoperability

BIRRR strongly supports the intent of the UOMO to improve mobile accessibility but stresses that STM/D2D technologies must complement, not replace, terrestrial mobile networks. Continued investment in terrestrial infrastructure remains essential, as STM/D2D cannot substitute for ground-based coverage, particularly in rugged, vegetated, high-demand or disaster-prone regions where satellite performance is limited by terrain, capacity and environmental conditions.

---

[4] *House of Representatives Standing Committee on Communications and the Arts, The Next Wave of Mobile Telecommunications in Australia, Chapter 5 – Mobile Access and Functionality in Remote Australia, Parliament of Australia (2020)*

[5] *Australian Communications and Media Authority (ACMA), Trends and Developments in Telecommunications 2023–24 (December 2024), noting an 8 % growth in prepaid services compared with 1 % in postpaid between 2022 and 2023.*

[6] *Roy Morgan, Growth of Mobile Virtual Network Operators in Australia – June 2025, published 4 June 2025; ACMA, Trends and Developments in Telecommunications 2023–24, p. 9 (MVNO market share rising from 10.8 % in 2022 to 11.3 % in 2023, or approximately 4.3 million services).*

The UOMO legislation must explicitly prevent PUOMPs/MNOs from withdrawing, downgrading, or deprioritising terrestrial coverage in RRR areas based on the assumption that satellite-delivered outdoor service satisfies the obligation. Terrestrial networks remain the backbone of mobile connectivity, providing superior capacity, reliability and performance, when properly maintained and upgraded.

BIRRR reiterates that the ongoing delay in implementing a national Emergency Roaming framework is unacceptable. Despite repeated recommendations from the 2021 and 2024 Regional Telecommunications Independent Review Committees (RTIRC) and the 2023 Australian Competition and Consumer Commission (ACCC) inquiry, regional communities continue to experience extended outages and disasters without a mechanism for carriers to share infrastructure or capacity when one network fails. Emergency Roaming should be legislated as a national priority, applying across both terrestrial and satellite networks (where technically and commercially possible) to ensure continuity of service during outages, maintenance or emergencies.

BIRRR raises concerns regarding handover performance between terrestrial and STM/D2D networks. Without clearly defined protocols, these transitions risk creating "dead zones" at the fringes of terrestrial coverage, the very areas already most affected by unreliable connectivity. In such zones, devices may display partial signal strength, "SOS only," or a satellite icon, yet calls and SMS cannot be sent or received. The UOMO must therefore include defined handover protocols, prioritisation rules and clear consumer communication standards to ensure service continuity, prevent confusion, and maintain reliability during network transitions.

BIRRR supports the development of automatic, seamless switching between terrestrial and satellite networks as technology evolves. However, this capability is not yet universally feasible and should not be assumed during early UOMO implementation. In marginal terrestrial coverage areas, it is not yet guaranteed that devices will automatically switch to satellite service. In BIRRR's experience, in some cases, devices may fail to connect at all.

Additionally, consumers must be informed that STM/D2D connectivity may experience short delays or temporary unavailability when no satellite is directly overhead. Although satellite density and coverage will improve over time with further Low Earth Orbit (LEO) launches, these gaps currently represent a practical limitation that must be communicated transparently. It is important that consumers understand, plan for and adapt to these coverage characteristics to ensure their safety, awareness and realistic expectations.

BIRRR seeks clarity on interoperability between satellite systems and terrestrial networks. Without open standards and common technical protocols, coverage may depend on each carrier's chosen satellite partner,

undermining the goal of universal access. The UOMO should therefore require technical and operational interoperability across all networks to deliver a truly seamless and equitable outdoor mobile service for all Australians.

Competition, Regional Strategy and Market Structure

BIRRR is concerned that if one or two LEO satellite providers dominate the market, competition, innovation and consumer choice will be severely constrained. The UOMO framework must therefore promote diversity of supply and prevent over-reliance on any single satellite operator or carrier partnership. A competitive, multi-operator environment is essential to ensure affordability, resilience and long-term sustainability.

Consistent with BIRRR's *Regional, Rural and Remote Access and Mobile Performance (RRAMP)* submission[7], BIRRR strongly supports the 2024 RTIRC recommendation for the ACCC to investigate mandated domestic regional roaming. Such an inquiry is critical to identify competition barriers, assess the public-interest benefits of shared network access, and ensure market settings support resilient, interoperable and equitable mobile services across Australia.

The 2024 RTIRC report recommended that the Government request the ACCC to reconsider direct mobile roaming in regional areas in light of emerging satellite technologies, which may shift market dynamics and strengthen the case for a mandated roaming service. In practice, the UOMO will effectively operate as a form of "satellite outdoor mobile roaming," allowing handsets to connect via satellite when terrestrial infrastructure is unavailable. This represents a logical and necessary step toward a broader regional mobile roaming framework that promotes competition, resilience and universal access.

The RTIRC also endorsed the First Nations Digital Inclusion Advisory Group (FNDIAG) Roadmap, which supports shared mobile network coverage in RRR areas and, at a minimum, guarantees emergency roaming for safety and disaster resilience.

BIRRR acknowledges that industry resistance to mandated roaming or MVNO access may arise, particularly from major carriers seeking commercial differentiation. However, these reforms can be implemented through a consultative, staged approach and public-interest testing, aligning with the ACCC's existing competition and resilience objectives while avoiding disincentives for investment.

---

[7] *https://birrraus.com/wp-content/uploads/2025/06/birrr-rramp-submission-2025-1.pdf*

BIRRR further recommends that UOMO implementation align with broader RTIRC recommendations, including:

- Establishing independent oversight for technology transitions;
- Developing a Regional Connectivity Strategy to guide long-term investment and regulatory coordination; and
- Appointing a Regional Telecommunications Commissioner or Advisory Panel, with consumer representation, to ensure accountability, continuity and regional representation.

The Government should strengthen Australia's mobile ecosystem by ensuring STM/D2D technologies complement terrestrial networks, maintaining investment in regional infrastructure, and embedding fair, transparent and pro-competitive regulatory settings. This includes prioritising emergency and domestic roaming arrangements, promoting market diversity, and ensuring all Australians benefit from reliable, interoperable mobile connectivity, regardless of provider or location.

Foreign Owned Entities and Sovereign Risk

BIRRR emphasises that sovereign risk must be explicitly addressed within the UOMO framework. Australia's growing reliance on foreign-owned satellite constellations, such as Starlink and other LEO operators, introduces significant data sovereignty, privacy, security and enforcement challenges. While these networks will play an important role in extending mobile coverage, their ownership, control and jurisdiction largely remain outside Australia's regulatory reach.

BIRRR acknowledges that some LEO operators maintain Australian-based ground infrastructure and that certain STM/D2D services will require access to Australian-licensed spectrum to operate. However, this does not remove the commercial, operational and governance risks associated with offshore ownership and decision-making. Even when local gateways exist, service continuity, data handling and enforcement may depend on decisions made beyond Australia's jurisdiction.

The UOMO legislation must therefore clearly define how compliance, enforcement and consumer protections will apply to offshore entities and how government and regulators will safeguard national security, data integrity and service reliability. Particularly if foreign entities begin offering direct-to consumer STM/D2D services under UOMO, at a later date. Without such provisions, Australians risk dependence on services subject to foreign laws, commercial priorities or geopolitical pressures beyond domestic oversight.

BIRRR recommends that all PUOMPs (current and any additional future) be required to:

- Disclose all data handling, routing and storage locations, including where customer data, telemetry and service information are processed or stored offshore;

- Demonstrate compliance with Australian consumer, privacy and telecommunications security laws, including data retention, continuity and emergency access obligations;

- Provide enforceable guarantees for service continuity, data protection and regulatory cooperation with Australian authorities; and

- Align oversight with the *Privacy Act 1988* and the *Data Availability and Transparency Act 2022*, ensuring consistent and transparent governance of sovereign data risks across all PUOMPs.

These safeguards should be embedded within the ACMA's compliance, monitoring and audit functions under the UOMO framework to ensure accountability and public confidence in the resilience and security of Australia's telecommunications infrastructure.

OUTLINE OF KEY RECOMMENDATIONS

The following recommendations will require close collaboration between Governments, regulators, industry and consumer representatives to ensure coordinated, transparent and effective implementation of the UOMO framework.

1. Review legislation to ensure UOMO definitions include minimum functional expectations, that coverage and service limitations are explicitly referenced, and that enforceable standards and benchmarks are developed.

- Define "basic mobile services" (voice, SMS and Triple Zero) and "reasonably available" within legislation, with measurable reliability standards and minimum functional expectation.

- Develop and publish UOMO standards and benchmarks (e.g. service availability, call success rates, SMS delivery, and fault response times) through consultation with industry, regulators and RRR consumer groups, with periodic review cycles.

- Explicitly reference coverage and service limitations (environmental, geographic, technical, excluded areas, device or plan-based) within legislation and supporting instruments.

- Designate mobile data for inclusion once operational and reliable.

- Mandate that PUOMPs include all limitations in marketing and consumer materials to support Connectivity Literacy, transparency and informed decision-making.

- That consideration of UOMO coverage is extended to other inhabited external territories, including Norfolk Island, to ensure parity of access to mobile and emergency services for Australians living in these communities.

2. Strengthen accountability, oversight, mapping transparency and enforcement of the UOMO framework to ensure accuracy, compliance and consumer protection.

- Require the ACMA (or an independent appointed auditor) to verify coverage, quality and compliance through independent audits.
- Establish public dashboards with quarterly reporting on coverage, outages, rectification times and compliance metrics.
- Ensure coverage maps and performance testing reflect real-world conditions, clearly distinguishing expected from actual on-the-ground outdoor coverage.
- Create a clear consumer complaints pathway, allowing challenges to misleading coverage, marketing or performance claims.
- Fund and implement RTIRC Recommendations 7, 11 and 14, establishing a Regional Telecommunications Strategy, independent oversight of major technology transitions, and a permanent Regional Telecommunications Commissioner or Advisory Panel to provide ongoing accountability and vision.

3. Strengthen consumer information, education and Connectivity Literacy by establishing a single, authoritative source of truth to ensure all Australians understand how UOMO technologies work, where they are effective, and where their limitations lie.

- Mandate transparent disclosure of UOMO functionality and limitations with consistent terminology across all providers and communication channels.
- Require the ACMA and the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA) to jointly develop and maintain a single, authoritative public information source (fact sheets, web content and FAQs) explaining how STM/D2D works and its limitations.
- Fund independent outreach and education via trusted intermediaries (e.g. Regional Tech Hub, First Nations Digital Mentors, local governments, libraries and community resource centres) to build Connectivity Literacy in RRR areas.
- Develop a public device compatibility checker and consumer tools (coverage checklists, comparison guides) to help users identify UOMO-ready handsets and plans.

4. Review legislation and implementation to ensure affordability, fairness and competition for all consumers, including low-income, prepaid and MVNO customers.

- Ensure equitable and non-discriminatory wholesale access for MVNOs and prepaid services to foster competition and affordability and consumer choice, where technically possible and commercially reasonable. Ideally all mobile plans, including MVNO and prepaid, should be UOMO-compliant by default, without additional cost or premium pricing.

- If access to MVNO plans and prepaid plans is deemed not commercially or technically possible and low cost devices are not widely available, establish targeted affordability measures such as a Low-Income Connectivity Support Program for remote low-income, prepaid and vulnerable consumers.

- Clarify the respective roles and accountability of MNOs and MVNOs under the UOMO to ensure consistent protections and service outcomes.

5. Enhance connectivity resilience, competition and investment to ensure STM/D2D technologies complement, not replace, terrestrial mobile networks.

- Explicitly prohibit any net reduction in terrestrial coverage, quality or investment where UOMO applies.

- Continue and expand Government and industry investment in terrestrial mobile capacity upgrades in RRR areas, prioritising resilience and capacity upgrades.

- Immediately legislate Emergency Roaming as a national priority to ensure continuity during outages and disasters.

- Implement the 2024 RTIRC recommendation for an ACCC inquiry into regional domestic roaming, evaluating public-interest, safety and competition benefits.

6. Modernise and integrate Australia's universal service framework to align the USO, SIP and UOMO under a single, coordinated structure.

- Undertake urgent reform and modernisation of the USO in parallel with UOMO implementation, creating a single, coordinated framework that integrates the USO, SIP and UOMO, with subsidised redundancy (back-up service) options for those without access to terrestrial mobile coverage.

- Establish independent oversight, transparent performance reporting and outcome-based consumer standards to ensure all obligations are met in practice, not just policy, ensuring all Australians, regardless of location or provider, have access to reliable, usable and affordable telecommunications services.

7. Ensures access to 000 voice services and public safety messaging under the UOMO through clear communication, interoperability and the introduction of SMS-to-000 access.

- Align UOMO implementation with Triple Zero (000) obligations to ensure technical and operational consistency.
- Expedite rollout of a national Text-to-000 service to provide equitable access to emergency services while STM/D2D voice capability remains limited.
- Establish a single authoritative guidance source (the Triple Zero Custodian) to explain how Triple Zero operates under STM/D2D, including functionality, limitations and handset or plan requirements. The Triple Zero Custodian should have authority to mandate clear consumer disclosure on emergency calling capabilities and limitations for all STM/D2D-compatible devices, plans and services.
- Ensure national emergency alert SMS and location-based warning systems are fully compatible with STM/D2D networks.

8. Safeguard sovereign and data security within the UOMO framework, to ensure Australian consumers' data, privacy and national interests are protected under foreign-owned satellite networks.

- Require PUOMPs to disclose all data handling, routing and storage locations, including offshore processing.
- Mandate PUOMPs compliance with Australian privacy, consumer and telecommunications security laws, including data retention and emergency access obligations.
- Require enforceable guarantees for PUOMPs for service continuity, data protection and cooperation with Australian regulators.
- Embed sovereign data oversight within ACMA's audit and compliance functions, ensuring transparency and accountability.