

Access Partnership Response to Australian Communications and Media Authority “Consultation on Satellite Direct-to-Mobile Services: Regulatory Issues”

Contact Details

The Tower, Buckingham Green, Buckingham Gate, London, SW1E 6AS

[REDACTED]
[REDACTED]
[REDACTED]

Date 6 February 2024

Introductory Remarks

Access Partnership welcomes the opportunity to submit a comment on the abovementioned Consultation. Particularly, Access Partnership appreciates the Australian Communications and Media Authority’s (ACMA) commitment to studying satellite direct-to-mobile services, noting its potential to improve the state of connectivity globally.

Access Partnership is a leading global consultancy specialising in satellite communications, including satellite direct-to-mobile services. Access Partnership has followed the technology closely since its inception in the market and has published a whitepaper on [the Future of Smartphones](#). To this end, Access Partnership submits this contribution to the ACMA on its own behalf as an interested party to the development of a fair regulatory framework for satellite direct-to-mobile services.

Comment

1) Is the current spectrum management framework fit-for-purpose to manage these new satellite services? This includes spectrum-licensed bands and other bands covered by the LIPD class licence.

Access Partnership acknowledges the five-year spectrum outlook released by ACMA in October 2023 and notes the ACMA’s position that MSS direct-to-mobile service operates functionally the same as any other MSS ground terminal. While extensive and thoughtful regulatory action is necessary to enable the implementation of satellite direct-to-mobile in *terrestrially allocated spectrum*, Access Partnership agrees that no amendments to the present rules are needed for *MSS satellite direct-to-mobile service providers* to continue operating.

For regulatory purposes, there is no material difference between an MSS licensee’s service to smartphones and its service to satellite-only devices. As such, there is no reason for the ACMA to depart from the existing MSS regulatory framework, which has worked effectively during the last few years.

In stark contrast, a number of significant issues should be addressed before allowing satellite direct-to-mobile service through terrestrial bands. While Access Partnership does not oppose the development of any such regulatory framework, the ACMA must ensure that any new satellite direct-to-mobile services in terrestrial bands do not cause harmful interference to existing services domestically or abroad and can be authorized within the existing international ITU regulatory structure long respected by Member States globally, including Australia.

Outside the ambit of this consultation, Access Partnership acknowledges that the nature of some satellite direct-to-mobile services may attach additional obligations or licencing requirements, such as emergency service, service quality, and lawful intercept obligations when providing communication services. Regulators around the world are weighing these issues in order to develop their own comprehensive frameworks. One such example is in the United States, where the FCC is currently examining this issue under its Supplementary Coverage from Space Rulemaking. Satellite and mobile operators have raised these and other important issues therein that are needed to be addressed before authorizing this service.

2) If not considered fit-for-purpose: What are your concerns? What is your proposed solution? What next steps should be taken?

As a result of the World Radiocommunication Conference 2023, the ITU-R is undertaking studies on the use of IMT bands for satellite direct-to-mobile services under Agenda Item 1.13 of the WRC-27 preliminary agenda. Access Partnership therefore recommends that the ACMA first reviews the outcome of the forthcoming technical studies and take regulatory action after the completion of such studies.

Alongside the pending studies from the ITU-R, Access Partnership notes additional considerations for satellite direct-to-mobile services in terrestrial bands:

- **Spectrum management and interference** – Pending the outcome of the ITU-R studies on the use of IMT bands for satellite direct-to-mobile service, Access Partnership notes that any adoption of a regulatory framework on the service is premature. However, if the ACMA does seek to develop such an interim framework, the interim use of IMT bands for satellite direct-to-mobile should only be on a secondary, non-protected, non-interference basis. This is to ensure the protection of incumbent and existing services operating within existing regulatory frameworks until the ITU-R has completed the necessary studies.
- **Coordination Issues** – At present, the deployment of satellite direct-to-mobile services on terrestrial frequency bands is not wholly compliant with the ITU-R's Radio Regulations. Deployments under Article 4.4 are not sustainable for long-term commercial use on a non-protected basis. These deployments are counter to the Table of Frequency Allocations and could present significant and as yet unstudied risks to existing services.
- **Consumer rights and quality of service** – The first potential concern is whether users will know that their mobile phone is operating on a satellite or a terrestrial network. If service could be expected to be the same, this concern would be mitigated. However, it is unknown whether a user can expect the same level of emergency service, emergency broadcast, or position location capability on Direct-to-Mobile networks. Additionally, the connectivity provided by satellite networks does not have the requisite latency nor power levels to fully utilize the full capacity of a mobile phone. Users are unlikely to be able to utilize most commercial applications, video, and even phone services. Such uncertainty could have potentially severe consequences for user trust in their network provider – with significant implications for mobile operators.
- **End user equipment implications** – Access Partnership notes that implementation of a direct-to-mobile service requires close cooperation with handset manufacturers to ensure reliable, robust communications. This is very important for consumers who have a level of service quality and functionality based on their experience using terrestrial networks. If satellite networks differ significantly from this expectation, there could be serious implications for the

consumer. The ACMA should consider the impact of any action on this issue on mobile standards bodies such as 3GPP, as well as on device manufacturers that will have to implement direct-to-mobile services before final authorization of any service.

3) Are there any other commercial, regulatory, or public-benefit implications we should take into account?

The satellite direct-to-mobile sector is an emerging one and at present multiple technological developments and business models are discussed in the industry. The sector does represent a possibility of new business models and value chains which could be enabled by this innovative technology and might differ from a conventional understanding of the telecom markets. Access Partnership therefore encourages ACMA to note the early stages of the market but also its potential for expanding connectivity services.

Access Partnership wishes to reiterate that there are significant public benefits presented by the adoption of satellite direct-to-mobile services. These services can provide life-saving connectivity when either Wi-Fi or terrestrial services are unavailable, such as in rural outback regions or in the event of natural disasters destroying terrestrial infrastructure. The use of satellite direct-to-mobile services for the provision of emergency communication has already assisted in life-saving operations globally and will continue to be an important fallback service connecting those in need of help when no other solution is available.

The technology underpinning satellite direct-to-mobile represents a leap in disaster preparedness and planning, with the potential to enhance the resilience of individuals and communities against disasters that may cause blackouts in terrestrial networks.

Direct-to-mobile connectivity holds the potential for tremendous public interest benefits. However, several issues remain to be addressed in order to provide sufficient technical and regulatory certainty for this service to be a success, as well as to provide transparency to users. We encourage the ACMA, therefore, to solicit additional comment on the issues outlined above.

Access Partnership would like to thank the ACMA for the opportunity to allow us to provide comments that may contribute to the development of the satellite direct-to-mobile application in Australia. We remain at your disposal for any questions or clarifications.