



Public

nbn's submission to ACMA: Satellite direct-to-mobile services: regulatory issues

30 January 2024

Final



Thank you for the opportunity to comment on the regulatory environment for satellite direct-to-mobile (**D2M**) services.¹ Specifically, regulatory and spectrum management issues concerning: satellite D2M services; and other satellite uses of bands without an existing satellite allocation.

nbn was established in 2009 as a Government Business Enterprise to provide fast, reliable and affordable connectivity and to enable Australia to seize the economic opportunities before it and service the best interests of consumers. It remains the principal responsibility of **nbn** to operate, and continue to build and upgrade, the **nbn** network in accordance with the expectations of the Government, as set by the Shareholder Ministers' Statement of Expectations (**SoE**) and its obligations as the default Statutory Infrastructure Provider.

With the nascency of the D2M satellite industry, **nbn** would like to ensure that the regulatory framework for D2M satellite technology where it appropriately plays a role in a modern telecommunications framework is fit for purpose. For example, the regulatory framework does not inappropriately hinder the supply of D2M services to end users.

- The Federal Government's Department of Infrastructure, Transport, Regional Development, Communications and the Arts (**DITRDCA**) in its recent discussion paper 'Better delivery of universal services' observed that direct-to-device satellite technology has emerged as a potential future alternative or complementary service to existing Universal Service Obligation (**USO**) services in certain parts of Australia.
- DITRDCA also observed that direct-to-device technology can provide mobile solutions by communicating directly to an end-user's mobile phone or device. Further, that while purpose-specific satellite phones have been commercially available for decades, supported by geostationary or other satellites, they involved specific plans and the purchase of dedicated satellite handsets or other equipment (such as satellite sleeves that can be used with existing smartphones). As a result of these factors, satellite phones have not been widely taken up.² We note that plans for satellite phones generally are also relatively expensive compared to plans for mobile phones using terrestrial networks noting the limited capacity available.
- The Federal Government's Low Earth Orbit (**LEO**) Working Group identified the use of satellites to deliver telecommunication services as a key issue requiring further consideration. We note that the scale of LEO D2M is limited in terms of capacity when compared to terrestrial fixed or mobile networks.³

nbn has an interest in the design, and implementation, of a modern universal service framework which reflects the existing, and emerging, market dynamics and consumer usage patterns. The telecommunications market has changed markedly since the introduction of the USO warranting a fresh approach to universal service policy that better reflects technological advances, market structure, and consumer behaviour.

In regards to the spectrum regulatory framework, D2M technology can be delivered using MNO-held terrestrial spectrum or mobile satellite services (**MSS**) spectrum in conjunction with a standard smartphone with no additional satellite communications capability or smartphone that incorporates functionality for satellite communications and uses frequency bands allocated to MSS respectively.

¹ Direct-to-mobile and direct-to-device are intended to refer to the same type of service as relevant.

² See <https://www.infrastructure.gov.au/sites/default/files/documents/better-delivery-of-universal-services-discussion-paper.pdf>, page 9.

³ <https://minister.infrastructure.gov.au/rowland/media-release/new-satellite-working-group-charts-way-forward-telco-industry>



Accordingly from a consumer perspective, we understand that the spectrum used could be relevant to their choice of service provider, the compatibility of their existing handset and / or the need to purchase a new device with more advanced technical features to access more functionality / capabilities. We consider that the end user accessibility and industry capability / competition issues that result from spectrum access are relevant to the potential role of D2M services as part of a new universal service framework. We recommend that the ACMA consider, and work with, the DCITRDA in its consideration of the modern universal service framework.

It is also essential that the use of spectrum to offer D2M technology does not compromise or negatively affect **nbn**'s ability to use existing spectrum and acquire new spectrum to meet the Federal Government's SoE and to enable **nbn** to achieve its mission of bridging the digital divide. The current, and planned, use of spectrum by **nbn** as part of its fixed wireless and satellite network should not be compromised / negatively affected. This includes by way of example unacceptable interference, including at the point of handover where relevant.