



Microsoft Submission to the Productivity Commission Inquiry on the Telecommunications Universal Service Obligation

Microsoft commends the Australian Government on its commitment to providing universal broadband infrastructure. The importance of widespread and affordable access to broadband service will only increase as more Australians' daily activities move to the cloud. Drafting and collaborating on documents and presentations; applying and interviewing for a job; communicating with family, friends, and colleagues; watching movies and television (or creating and editing them); listening to or composing music; involving oneself in civic participation; or editing, sharing, and saving cherished photographs and home movies is all moving into broadband-enabled cloud-based services. Universal connectivity to broadband infrastructure therefore provides increasingly important tools and benefits across the range of Australian social and economic activity.

In other countries, such as the United States, universal service support provides funds for the construction and maintenance of traditional fixed-line and broadband networks. In Australia, however, the broadband network is not funded and maintained through the USO. Accordingly, considerations about the USO are limited to the continued role of the services provided over a fixed line telephone network in a country where the government already has committed to deploying a ubiquitous broadband network.

Australians will continue to engage in voice communications but they are changing the networks they use for that purpose. The data suggests that demand for originating voice services on traditional telephone networks remains constant but the use of mobile networks for that purpose has overtaken the use of fixed-line networks and the disparity is widening.¹ Fixed-line phone calls and public payphones are the only forms of communication that decreased in utilisation among Australian adults from 2012 to 2015, according to the ACMA-commissioned survey.² Decreased use of USO-supported services and increased use of mobile and broadband networks for voice communications (among other purposes) suggests an empirical basis to consider eventual adjustments in the allocation of resources that are currently devoted to supporting the fixed-line telephone network through the USO.³

¹ Productivity Commission, Australian Government, "Telecommunications Universal Service Obligation: Productivity Commission Issues Paper" at Fig. 2 (June 2016) ("Issues Paper").

² *Id.* at Fig. 3

³ Other countries are re-focusing limited resources away from traditional fixed-line services to provide more support for affordable broadband service. For example, the United States Federal Communications Commission oversees a program that subsidizes certain communications services and equipment purchased by qualifying schools and libraries. Approximately two years ago, the FCC decided to phase-

Of course, the fixed-line telephone network is not obsolete, it remains widely used and it continues to offer unique strengths and features such as its ubiquity, traditionally high service quality, and geolocation capabilities. Whether the NBN offers a reasonable substitute for the traditional fixed-line telephone network will depend upon the purpose for which it is being used and the strengths and features one is seeking. In the near term, continued communications across and between broadband, fixed wireline, and mobile networks will remain important.

Just as fixed, mobile, and broadband networks may not always be perfect substitutes for one another, neither are the services and applications that run over them. The Commission observes a number of trends, including a reduction in fixed-line originating voice services and an increase in the use of “over-the-top” voice services and applications.⁴ It is true that both Internet-based voice offerings and traditional telephone services offer voice communication capability. The two types of offerings differ, however, in their technical features, business models and in the way that consumers view and use them – suggesting that they are not properly considered as full substitutes for one another at this time.

Specifically, VoIP apps like Skype have created new ways for people to communicate that are not available through traditional telephone services. For example, traditional telephone services do not provide the capability for video chats, instantaneous language translation for people speaking different languages (as Skype does),⁵ instant messaging during a multi-person call, live sharing of documents and files that permit collaboration and discussion, among other things. On the other hand, traditional telephone services offer a breadth of reach that is not available through VoIP apps. Specifically, VoIP apps do not enable inbound and outbound live voice conversations with any other person on the planet that has a telephone number – regardless of which provider supplies that telephone number – a valuable capability for some consumers. In addition, existing geolocation capabilities used for emergency calling were designed and optimised for use on traditional telephone networks, not the internet.

Whether the differences in over-the-top and traditional voice offerings are germane to a USO analysis warrants greater consideration. Broad public interest considerations are likely to stay the same, in one form or another, notwithstanding changes in technology, and those public interest considerations should guide USO policy-making. Consumers can readily use over-the-top offerings if they have access to broadband service, which the laudable investment in the NBN will make generally available. It may be worth further investigation to determine which qualities of traditional fixed-line services were considered most important to have warranted

down the program’s support for voice service and eliminate support for other legacy services to better focus limited funding on high-speed broadband service. See *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, [Report and Order and Further Notice of Proposed Rulemaking](#), 29 [FCC Rcd 8870](#) at ¶¶ 144-149 (2014).

⁴ *Issues Paper* at pp. 7-8.

⁵ Skype Translator also holds the potential to empower people with hearing loss by providing an innovative way for them to communicate in their personal and professional lives. See video demonstrating this use of Skype Translator at <https://www.youtube.com/watch?v=QH3zpsQma9c>.

their support through the USO – and whether they continue to be important. Then, the Commission may be able to verify whether generally available over-the-top offerings do or do not offer the same features. After that analysis is performed, a better determination may be made as to whether Internet-based offerings would provide a reasonable alternative for Australians with access to broadband service via the NBN, thus obviating the need for continued USO support.