



Domestic Mobile Terminating Access Service Declaration Inquiry

Draft Report

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1. Executive summary

The Australian Competition and Consumer Commission (ACCC) is of the draft position that the declaration of mobile voice termination remains in the long-term interests of end-users (LTIE). However, there is less evidence that this remains the case with regard to short message service (SMS) termination.

The ACCC considers that, while mobile network operators (MNOs) continue to have a monopoly over the provision of mobile voice and SMS termination services on their own networks, there have been significant changes in relevant retail markets since the 2013-14 inquiry. The most notable for the purposes of this inquiry is the increased use of over-the-top (OTT) messaging and voice services by Australian consumers. A key question in this declaration inquiry is whether OTT services are now effective retail substitutes for mobile voice and/or SMS services such that regulatory intervention in the wholesale market is no longer required to promote the LTIE.

Mobile terminating access service (MTAS) voice termination

The ACCC has come to the draft position that there are no effective substitutes for voice calls for which voice MTAS is an essential input. While OTT voice calls are increasingly used by end-users, their effectiveness as a substitute is limited due to both functionality and consumer behaviour. Therefore, in the absence of regulation, MNOs have the ability and potentially an incentive to exercise their market power in the wholesale markets to deny the provision of this input on reasonable terms, or to set the price of access to inefficiently high levels. As such, the ACCC's draft position is that extending the declaration of mobile voice termination is likely to promote the LTIE as it would:

- promote competition in the retail markets for mobile services and fixed voice services by ensuring, along with regulated prices in the MTAS Final Access Determination, that wholesale mobile voice termination charges are aligned with the efficient cost of the service,
- promote the achievement of any-to-any connectivity by ensuring that MNOs are not able to set unreasonable terms or conditions of access to mobile voice termination services, and
- promote the efficient use of, and investment in telecommunications infrastructure, as in the absence of declaration, MNOs have incentives to set above cost pricing.

MTAS SMS termination

On the other hand, the ACCC is of the draft position that OTT messaging services are now effective substitutes for SMS services for which SMS termination is required to supply.

The ACCC has examined the need for declaration in regards to both person-to-person (P2P) SMS and application-to-person (A2P) SMS services.

Unlike OTT voice services, there are few limitations to substitution between P2P SMS and OTT messaging. Therefore, in the absence of declaration, there is less incentive for MNOs to exercise their market power to deny supplying SMS termination on reasonable terms, or to set the price of access to inefficiently high levels. This also means that the removal of declaration is unlikely to materially affect the state of competition in the provision of A2P SMS services for which SMS termination serves as a possible input.

As such, the ACCC's draft position is that extending the declaration of SMS termination is not necessary to promote the LTIE because it is no longer required to:

- align wholesale prices more closely with efficient cost of the service to promote competition in the downstream markets,
- achieve any-to-any connectivity by ensuring that no MNOs are able to set unreasonable terms of conditions of access to SMS termination services, and
- promote the efficient use of, and investment in, telecommunications infrastructure as, in the absence of declaration, MNOs have limited incentives to set above cost prices for SMS termination.

2. Introduction

This report forms part of the ACCC inquiry into the MTAS declaration. In August 2018, the ACCC commenced a public inquiry in accordance with section 152ALA of the *Competition and Consumer Act 2010* (CCA) and Part 25 of the Telecommunications Act 1997 into whether the MTAS declaration should be remade, extended, revoked, varied or allowed to expire

The current MTAS declaration will expire on 30 June 2019. The ACCC is required to conduct a public inquiry into the declaration of the MTAS in the 18-month period prior to the expiry of a declaration.

This draft report explains the reasons for the ACCC's draft position in the inquiry.

The MTAS declaration inquiry is relevant to the separate MTAS access determination inquiry when the ACCC will make a final access determination (FAD). The MTAS FAD sets out the regulated price of the MTAS and the non-price terms of access to the MTAS. It is also due to expire on 30 June 2019.

The ACCC is seeking comments from interested parties on matters raised in this draft decision and other relevant issues to the inquiry. The ACCC will take submissions into account in preparing the FAD.

2.1. Consultation process

On 7 August 2018, the ACCC released the *Public inquiry into the declaration of the domestic Mobile Terminating Access Service - Discussion paper* (the Discussion Paper) commencing the MTAS declaration inquiry. The Discussion Paper invited submissions on whether services in the MTAS should continue to be declared, and whether developments in telecommunication such as 5G and NBN have, or will, impact the MTAS. The ACCC received submissions from twelve stakeholders in response to the Discussion Paper. Public submissions are available on the [ACCC's website](#).

In this report, the ACCC presents its draft positions on which services should remain in the MTAS declaration, whether the service description should be amended to apply to other mobile termination services, and whether any other changes to the service description are necessary.

The ACCC invites submissions on the matters raised in this report and any other issue stakeholders consider relevant. The ACCC will take submissions into account in preparing its final report setting out its findings as a result of the MTAS declaration inquiry. The ACCC expects to issue a final inquiry report and the MTAS declaration in early 2019. Submissions will be accepted until **5pm on Friday, 31 May 2019**. Submissions received after this time may not be considered.

To foster an informed and consultative process, all submissions will be considered as public submissions and will be posted on the ACCC's website. Any confidential material must be included in a separate commercial-in-confidence version of the submission. Confidential materials must be identified in the public version of the submission by replacing them with an appropriate symbol or 'c-i-c'. Stakeholders submitting a commercial-in-confidence version of their submission must also provide details of the contact person to whom enquiries can be directed.

The ACCC has published a guideline on the process that parties should follow when submitting confidential information to communications inquiries by the ACCC. The ACCC-*AER information policy: the collection, use and disclosure of information* also sets out the

general policy of the ACCC and the Australian Energy Regulator (AER) on the collection, use and disclosure of information. Both policies are available on the ACCC website.

The ACCC prefers to receive electronic copies of the submissions in either Adobe PDF or Microsoft Word format. Please send submissions by email to MTASInquiry@accc.gov.au and copied to tara.morice@accc.gov.au and alison.sheehan@accc.gov.au.

2.2. The ACCC's approach to declaring services

There is no general right to access telecommunications services in Australia. If a service is regulated as a declared service, an access seeker can seek access to that service and the access provider (the owner of the service or facility) must provide access in accordance with the access obligations set out in the *Competition and Consumer Act 2010* (Cth)(CCA).

The ACCC may declare a telecommunications service if (among other things) if it is satisfied that doing so will be in the long-term interests of end-users (LTIE).

Once declared, the ACCC may also make an access determination for that service. An access determination can set out both price and non-price terms in relation to access to the service. Parties can rely on the terms and conditions set out in an access determination, or they can negotiate commercial terms and conditions. An access determination usually serves as a fall back that parties can rely on if they are unable to otherwise reach agreement about access.

In deciding whether declaration will promote the LTIE, we must consider the extent to which declaration is likely to result in the achievement of the following three objectives:

- promoting competition in markets for telecommunications services,
- achieving any-to-any connectivity, and
- encouraging the economically efficient use of, and economically efficient investment in, telecommunications infrastructure.

The ACCC is required to consider only the above objectives when determining whether declaration would be in the LTIE. These objectives are discussed in more detail below.

Our approach to declaration inquiries and legislative background is also set out in the ACCC's *Guideline on Declaration Inquiries* (published on the ACCC website). We encourage stakeholders to review the Guideline before making a submission.

3. Background

3.1. What is the MTAS?

The MTAS is a wholesale service provided by a mobile network operator (MNO) to fixed line operators and other MNOs to connect or 'terminate' a call on its mobile network. It is an essential wholesale interconnection service, connecting subscribers from different mobile networks, and for calls and SMS to be made or sent by an end-user on one network to an end-user on another mobile network.

When a person (the A-Party) makes a call or sends an SMS to another person's mobile number (the B-Party), the A-Party's network provider completes the call by purchasing MTAS from the B-Party's network provider. The A-Party's network provider will recover those costs, and the costs it incurs from originating the call, from the A-Party in the form of the retail price it charges its customers for providing the call or SMS. This commercial arrangement is known as the 'calling party pays' or 'termination' model.

In 2014, the ACCC amended the MTAS service description to include short message service (SMS) termination. It was found that each MNO had a monopoly over SMS termination services and, at that time, that there were no available substitutes. The ACCC concluded that SMS termination markets were not competitive and that declaring SMS termination services would be in the long-term interests of end-users. Specifically, declaration would ensure that access is provided on reasonable terms and conditions and that, together with regulated pricing, the prices for these services would be more closely aligned with the costs of providing them. More information on the declaration of SMS is provided at section 3.3.

The current MTAS service description is set out in Appendix 1.

3.2. Why has the ACCC regulated the MTAS?

Issues of access in telecommunications markets generally arise when one or more operators control wholesale facilities that provide a service or other input that is necessary for the provision of retail services. Operators seeking to enter the retail market must either purchase the wholesale input from an operator who provides the good or service, or produce the retail input themselves, in order to be able to offer retail services to end-users. However, regulatory intervention to require access to an essential input will only be required if it is unlikely that competition will develop in the wholesale market, as is the case with MTAS or if substitutes for the services do not develop in retail markets. A key question for this inquiry is whether retail substitutes for voice calls and SMS have developed sufficiently to constrain the behaviour of MNOs.

The MTAS is regulated because each network has a monopoly in controlling access to its subscribers for the purposes of connecting voice calls and delivering SMS. In the absence of regulation, a network operator could restrict access to its own customers by imposing unreasonable terms or very high prices to terminate calls or SMS on its network. This could limit the services available to consumers and distort competition in downstream markets.

The ACCC has historically viewed the MTAS as a bottleneck to any-to-any connectivity for mobile network end-users. The MTAS was regulated to ensure that termination rates are not a barrier to entry or competition, and that consumers on different networks can call each other.

However, the introduction and take-up of over-the-top (OTT) communication services brings a new service into the retail market, which could be considered a retail substitute for mobile voice calls and SMS. OTT communication services enable end-users to contact each other

using the internet, irrespective of the underlying network and do not require MTAS. OTT communication services are discussed further in this report.

Network effects or economies

We note that the existence of effective retail substitutes does not necessarily mean that regulation is no longer necessary.

Network effects or economies are also relevant to the ACCC's consideration of MTAS regulation. These arise when there are lower costs, or benefits to consumers, from being part of a larger customer base. Telecommunications networks are often characterised by network externalities because a network with a large customer base allows customers to make and receive calls from more people on the same network. If there are barriers to interconnection between networks, end-users will tend to prefer networks with larger customer bases because the costs of communicating with others will be lower when the communicating parties are on the same network.

In the context of mobile networks, network effects can have implications for competition in downstream retail markets as they operate to the advantage of large dominant networks, potentially to the point that a natural monopoly may be established. Declaration of the MTAS seeks, in part, to counter this potential effect.

Declaration of MTAS also seeks to mitigate the MNOs' incentives to deny interconnection, or to set unreasonable terms for providing interconnection, particularly to smaller networks or providers with less bargaining power, such as new MNO entrants.

3.3. Previous MTAS declaration inquiries

The ACCC deemed the MTAS to be a declared service in 1997, shortly after the introduction of the Part XIC telecommunications access provisions of the then *Trade Practices Act 1974*.

In 2002, the ACCC varied the declaration and redefined the service description to make it effectively technology-neutral, resulting in the definition of the service being varied to include terminating access on CDMA mobile networks.

In 2004, the ACCC re-declared the MTAS following the Mobile Services Review. The ACCC found that competition, any-to-any connectivity and efficient investment (particularly in fixed-to-mobile (FTM) calls) would be promoted by declaration. At the same time, the service description was made technology neutral to include termination of voice calls on 2.5G and 3G networks.

In 2009, the ACCC re-declared the MTAS as it was found to continue to be a mobile termination bottleneck. The ACCC considered whether to include SMS, MMS and data services termination, and whether to declare FTM termination but not mobile-to-mobile (MTM) termination, but decided against these measures.

In 2014, the ACCC re-declared the MTAS as it was considered to be in the LTIE, and amended the service description to include SMS termination services, including application-to-person (A2P) SMS.

During the 2014 inquiry, industry participants expressed different views about the proposal to declare SMS termination services. The mobiles sector was generally perceived to be competitive, with each operator actively competing to gain customers. However, there was significant evidence to suggest that SMS termination markets were not competitive. The ACCC found that SMS termination rates were priced well above cost, and had remained constant for ten years despite a steep increase in SMS use by consumers. In the downstream retail market for mobile services, the ACCC also considered that price

competition was subdued, and that most SMS offers, particularly to low spend consumers, were priced well above cost.

The ACCC also considered that declaration of SMS MTAS would promote competition in the wholesale market for application-to-person (A2P) SMS and that this would, in turn, promote greater pricing competition in the downstream A2P SMS services markets. A2P SMS are messages sent by enterprises or government departments to end-users and include appointment reminders, identity verification and advertising.

4. Mobile market sector developments – an overview

The dynamism of the mobile sector is enabling the adoption of new ways of communication which in turn is disrupting traditional bottlenecks in mobile termination services. While the trends affecting consumer use of mobile voice and SMS services are not new, their impact on the rationale for declaration of the MTAS have now arguably reached the threshold of challenging whether continued declaration is necessary and in the LTIE.

In this section of the report, we consider mobile market sector developments and in particular: the impact of changing consumer preferences; the prevalence of unlimited voice and SMS offers; as well as significant network investment by the MNOs to support data-centric consumers.

Changing consumer preferences

To assist in our review of mobile market sector developments we have relied on the Australian Communications and Media Authority's (ACMA) [*Communications report 2017-2018*](#). The Communications Report provides an in depth and wide ranging review of developments and consumer behaviours and trends that are relevant to the mobile market sector and this inquiry and includes comparisons that span the last four years.

Some of the most notable changes in relation to mobile consumer preferences include:

- An increasing majority of Australians accessing the internet using their mobile phones (87 per cent) compared to 76 per cent in 2014.
- The volume of data downloaded over mobile networks rising dramatically, increasing five-fold from 2014 to 2018.
- An increased adoption of OTT services, social networking and messaging/calling apps being used by most Australians (90 per cent) aged 18-34 and by just over a quarter of those aged 65 and over.¹

All of these developments point to an increasing proportion of Australian consumers electing to use OTT services, particularly for messaging apps, over the traditional SMS option.

Unlimited calls and SMS

Unlimited calls and SMS are a common feature of current mobile plan offers for both prepaid and postpaid mobile offers. The number of plans with unlimited calls or SMS has continued to increase over the last five years, with the proportion of post-paid plans offering unlimited calls or SMS increasing from 63 per cent in 2013–14 to 84 per cent in 2017–18 (figure 2.31).

Most notably, the proportion of prepaid plans with unlimited calls and SMS increased from 31 per cent in 2013–14 to 91 per cent in 2017–18.²

We consider that the availability of free OTT services are putting pressure on MNOs to provide similar services. Generous call inclusions are a likely response to free OTT services. Included data allowances (for both carriage service providers and consumers) are now the key focus of perceived value for, and differentiation of mobile offers. It is also a necessary response to support increased data consumption.

¹ ACMA, *Communications report 2017- 18*, pp.1, 55.

² ACCC, *Communications Market Report 2017-2018*, p.33.

Continued investment in network capacity

MNOs are responding to growing demand for connectivity and increased appetite for data consumption. Since 2014 there has been substantial investment by the telecommunications sector in data centric networks and technologies with MNOs upgrading their mobile networks to 4G/LTE and 5G standards, while Australian homes continue to be connected to NBN infrastructure.

In addition to infrastructure rollout and upgrade costs, telecommunications carriers have spent around \$5 billion on spectrum licences.³ These investments are driven by network operators competing to differentiate their services and meet user demands.

What does this mean for the regulation of voice and SMS termination?

In the following two sections of the report we consider the impact of these market developments on the future of regulation for voice and SMS termination. Importantly we consider whether continued declaration remains in the long term interests of consumers, first for voice termination and then second, for SMS termination.

³ ACMA, Communications Report 2017-18, p.1.

5. Should mobile voice termination services continue to be declared?

The ACCC has formed the draft position that voice termination on a mobile network, whether originating from another mobile network or a fixed-line network, should continue to be a declared service.

MNOs continue to have a monopoly over the provision of voice termination services on their networks and, importantly, there are currently no effective substitutes for the retail voice services that these voice termination services are used to supply. While consumers' use of OTT voice applications such as Skype and WhatsApp has increased, voice applications are unlikely to be an effective substitute for mobile termination at this point in time for a number of reasons, which are outlined below. This means that it is difficult for end-users to substitute away to another service and, in the absence of regulation, there are limited constraints to MNOs raising retail prices.

At the wholesale level, voice traffic can be originated on fixed networks, some of which are relatively small. Smaller networks are likely to have more outgoing voice traffic than incoming. Given this asymmetry in traffic, it is likely that they will be impacted more than the larger networks if they are unable to interconnect. We also consider that they will be at a disadvantage when negotiating voice MTAS terms and conditions. The ACCC therefore considers that extending declaration of mobile voice termination is likely to be in the LTIE because it:

- is required to align wholesale prices with the efficient cost of the service to promote competition in the downstream retail market for mobile services,
- is required to achieve any-to-any connectivity by ensuring that MNOs are not able to set unreasonable terms or conditions of access to mobile voice termination services, and
- will promote the efficient use of, and investment in, infrastructure, as in the absence of declaration, MNOs have incentives to set above cost pricing.

The ACCC's reasoning for this draft position is provided below.

5.1. Will declaration promote competition in relevant markets?

The CCA requires the ACCC to consider whether declaring a service is likely to promote competition in markets for listed services.⁴ This involves identifying the markets in which the eligible service is supplied and in which declaration is likely to promote competition. To define the market, the ACCC considers the service in question and any substitutes for that service.

Importantly, market definition is a purposive exercise. The CCA does not require the ACCC to take a definitive stance on market definition and it should be seen in the context of shedding light on how a declaration may promote competition rather than in the context of developing 'all-purpose' market definitions.

5.1.1. Markets relevant to voice MTAS

In the MTAS discussion paper, the ACCC proposed that the markets relevant to mobile voice termination were the same as those identified in the 2014 MTAS declaration inquiry:

⁴ Subsection 152AB(2) of the CCA.

- the wholesale market for mobile voice termination services,
- the retail market for mobile services, and
- the retail market for fixed voice services.

Wholesale markets for mobile voice termination

Most stakeholders agree that the relevant wholesale market is the same as those identified in 2014. In particular, stakeholders continue to consider that the relevant wholesale market for voice MTAS is the market for voice termination on each MNO's network.⁵

Draft position

The ACCC's draft position is that the wholesale market for voice termination is a relevant market. Within this market, each MNO continues to have exclusive access to end-users on their own networks and control the termination of voice calls to that end-user. There are no effective substitutes for wholesale voice termination services or the voice services that require termination. Consequently, service providers must acquire voice termination from MNOs to enable their customers to make calls to a mobile phone on that operator's network. We note that most submissions agree with this view.⁶

Retail markets for mobile voice termination

With regard to the relevant retail markets, there is less consensus among submissions. This is largely because submissions differ on the extent of substitution to OTT communications services. In the discussion paper, the ACCC proposed that the relevant retail markets are:

- the retail market for fixed voice services, and
- the retail market for mobile services.

Generally, submissions agreed broadly with the market segments identified. Telstra, Commpete and MNF also submitted that OTT communications should be considered.⁷

Optus noted that the extent of substitution from traditional voice services to OTT services is limited, and that OTT cannot yet be considered a full substitute. However, Optus did note that mobile voice termination is becoming less of a bottleneck as delivery of OTT communications do not rely on mobile termination services. That is, OTT communication services (like Skype) do not rely on voice interconnection with an MNO to deliver the service. This is because OTT communication services are delivered over the internet, and as such, are delivered to an MNO's end-users through that MNO's connection to the internet.⁸

TPG submitted that while there is some level of substitutability between MTM calls, SMS and OTT services, call quality and any-to-any connectivity issues mean that OTT services are

⁵ Macquarie Telecom, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.14 (Macquarie Submission). Pivotel, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.18 (Pivotel Submission). VHA, *Submission to the MTAS declaration discussion paper – Part B*, public version, September 2018, p.6 (VHA Submission B). MNF, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.8 (MNF Submission). Commpete, *Submission to the MTAS discussion paper*, p.5 (Commpete Submission). ACCAN, *Submission to the MTAS declaration discussion paper*, September 2018, p.3 (ACCAN Submission). Telstra, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.18 (Telstra Submission).

⁶ See for example, Telstra Submission, p.13. VHA, *Submission to the MTAS declaration discussion paper – Part A*, public version, September 2018 (VHA Submission), p.24. Macquarie Telecom Submission, p.13. Pivotel Submission, p.16. MNF Submission, p.8. ACCAN Submission, p.3.

⁷ See for example, Macquarie Submission, p.14. Pivotel Submission, p.18. VHA Submission, p.10. MNF Submission, p.8. Commpete Submission, p.5. ACCAN Submission p.3. Telstra Submission, pp.11 and 13.

⁸ Optus Submission, p.8.

not yet full substitutes. Moreover, TPG submitted that there are no real substitutes for fixed-to-mobile (FTM) services.⁹

However, some stakeholders argued that OTT communication services should be considered as part of the retail market for mobile services because of the increasing relevance of OTT voice services.

Commpete and MNF argued that the market for OTT communication services should be considered as a relevant market for both voice and/or messaging termination services. They argue that rather than being separate services, OTT services have a significant intersection with MTAS services. This is because OTT operators rely on MTAS to connect with end-users who have not subscribed to the OTT service and as a means of ensuring secure access to essential features of their web services.¹⁰

Telstra submitted that retail markets for mobile, fixed and OTT voice services have converged and so should be considered as a single retail market. It reasons that changes in technology and consumer behaviour, notably the convergence between fixed and mobile services, and the availability of alternative communications such as VoIP and Voice over WiFi, mean that defining separate, non-technology neutral markets is outdated.

Telstra argued that FTM and MTM calls are fully substitutable for one another given high rates of mobile ownership (95 per cent) and the move towards unlimited call inclusions in mobile plans.¹¹ Telstra considers that OTT voice services place significant competitive pressure on the supply of traditional voice services in the retail market which is reflected in price and service offerings. Further, Telstra notes that consumers can easily switch between MTM and OTT or VoIP calls such that they appear to place an effective competitive constraint on MNOs.¹²

However, Telstra noted that the substitutability of OTT voice for traditional voice services is currently limited by differences in functionality and consumer behaviour. Further, it questions whether there is a sufficient chain of substitution from FTM calls to MTM calls to OTT calls that would prevent an MNO from raising voice MTAS prices to service providers originating FTM calls.¹³

Draft position

The ACCC's draft position remains that the relevant retail markets are:

- the retail market for fixed voice services, and
- the retail market for mobile services.

Mobile voice termination is an essential input to voice calls made from an end-user on either a fixed or a mobile network to an end-user on a mobile network. Because the network that originates the call purchases the MTAS from the terminating network, the originating network recovers these costs from its own customers in the prices it charges for making the call. Therefore, the retail markets in which MTM calls and FTM calls are made are affected by voice MTAS.

Importantly, these calls are not purchased by consumers together. Rather, MTM calls are typically purchased within a bundle that includes mobile-to-fixed calls, SMS and data

⁹ TPG, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.1 (TPG Submission).

¹⁰ MNF, *Submission to the MTAS declaration discussion paper*, public version, September 2018, pp.8-9 (MNF Submission), Commpete Submission, p.9

¹¹ Telstra Submission, p.11.

¹² Telstra Submission, p.11.

¹³ Telstra Submission, p. 3.

allowances. FTM calls are purchased in a fixed voice bundle that includes complementary services such as fixed-to-fixed calls and calls to special numbers. Given this, the ACCC considers that the effect of declaration is best examined within these separate product markets, regardless of whether there is increased usage substitution between them.

As noted in submissions, a further issue is whether OTT voice services have developed sufficiently as a substitute service for MTM calls. The ACCC's draft position is that they have not and that it is therefore not necessary for the ACCC to consider whether declaration will promote the LTIE in these markets.

OTT voice services, while growing strongly, have features that prevent them from being used by consumers as full substitutes for MTM voice calls. OTT communication services require both the sender and receiver to have a smartphone with data services enabled and the same OTT application installed. Submissions noted a lack of convenience with OTT voice calls, problems with interoperability between OTT applications and issues with call quality, practicality and reliability.¹⁴ Further, OTT voice services do not offer a dedicated voice channel, which can affect call quality and are subject to the reliability of the underlying data service. Currently, OTT services are not compatible with essential services, such as access to triple zero services.

While we consider that OTT communication services may have applied some competitive pressure on the supply of voice services in the retail markets, we consider that these services are complements to MTM calls and we do not consider them as either a separate retail market or as part of a converged single retail market as submitted by Telstra.

5.1.2. State of competition in relevant markets

The second part of the ACCC's analysis of whether declaration will promote competition is to make an assessment of the current state of competition in relevant markets. In undertaking this assessment the ACCC will generally consider the concept of effective competition, rather than perfect competition.

Wholesale market for mobile voice termination

Stakeholders generally agreed that access to mobile voice termination services on each mobile network remains in the exclusive control of the respective MNO. Telstra submitted that voice MTAS continues to be an essential upstream input into the supply of MTM and FTM calls.¹⁵ It argues that retail OTT and MTM voice services are substitutes, but considered downstream substitutability to not yet be strong enough to compete away attempts by MNOs to raise voice MTAS prices.¹⁶

TPG, Commpete and Macquarie Telecom also submitted that each MNO continues to have exclusive control of access to customers on their respective networks and as such there remains the risk that MNOs could refuse or set anti-competitive terms of access.¹⁷ TPG submitted that the continued monopoly of MNOs is a result of there being no effective substitutes for mobile voice termination.¹⁸

¹⁴ See for example, Telstra Submission, p. 12. TPG Submission, p.1. Macquarie Submission, pp. 9-10. Pivotel Submission, pp. 9-10, 17. Commpete Submission, p.5, ACCAN Submission, pp. 4-5.

¹⁵ Telstra Submission, p 14.

¹⁶ Telstra Submission, p 15.

¹⁷ TPG Submission, p. 1, Macquarie Submission p. 8, Commpete Submission p. 12.

¹⁸ TPG Submission, p. 1.

In contrast, Optus submitted that strong competition in the national mobile services market, and the ease of switching, means MNOs are no longer able to exploit any monopoly power over the termination of voice calls on their mobile network.¹⁹

Draft position

The ACCC finds that the three MNOs continue to have exclusive control over access to subscribers on their networks. We have observed that termination rates provided to access seekers have declined in line with rates set out in the 2014 MTAS Access Determination for each respective regulatory period. The ACCC considers this steady reduction in wholesale MTAS rates to be a result of continued regulation over the past two decades.

The ACCC does not consider there to be any substitutes for wholesale mobile voice termination services on different mobile networks. We do not consider OTT voice services in the downstream retail market to be an effective substitute for MTM voice services. As a result, mobile voice termination remains essential for the provision of retail mobile voice services.

The ACCC considers the market for wholesale mobile voice termination services continues to require regulation as each MNO continues to have a monopoly over voice termination services and there are no effective substitutes for these services.

Retail market for mobile services

Stakeholders provided mixed views about the current state of competition in the retail market for mobile services. Telstra and VHA submitted that the market is highly competitive both citing the annual decline in prices for mobile phone services and the ability of mobile phone service providers to vigorously compete on a range of price and non-price factors as evidence of this competition.²⁰

The Australian Communications Consumers' Action Network (ACCAN) submitted that the current state of competition in the Australian retail market is considerably weaker than levels ordinarily present in competitive market places.²¹ However, ACCAN considered the level of competition attained at the retail level to have materially increased as a result of the declaration of MTAS.²² It noted that there was evidence of stronger competition in the pricing of voice and SMS services and that the overall price of mobile phone services is decreasing as a consequence.²³

Optus submitted that the increasing demand for internet over mobile handsets is illustrative of the shift in the industry from a voice-driven network to a data-driven network.²⁴ It contended that data subscriber and revenue growth has underpinned mobile industry performance, offsetting declining performance of non-data services.²⁵

Draft position

The retail mobiles market has changed significantly since 2014, due mostly to changes in the way that consumers use their mobile phones. While mobile phone penetration has always been high, there are an increased number of users, particularly with smartphones.

¹⁹ Optus Submission, p. 5.

²⁰ Telstra Submission, p. 5; VHA Submission, p. 7.

²¹ ACCAN Submission, p. 3.

²² ACCAN Submission, p. 3.

²³ ACCAN Submission, pp. 1-2.

²⁴ Optus Submission, pp. 5-6.

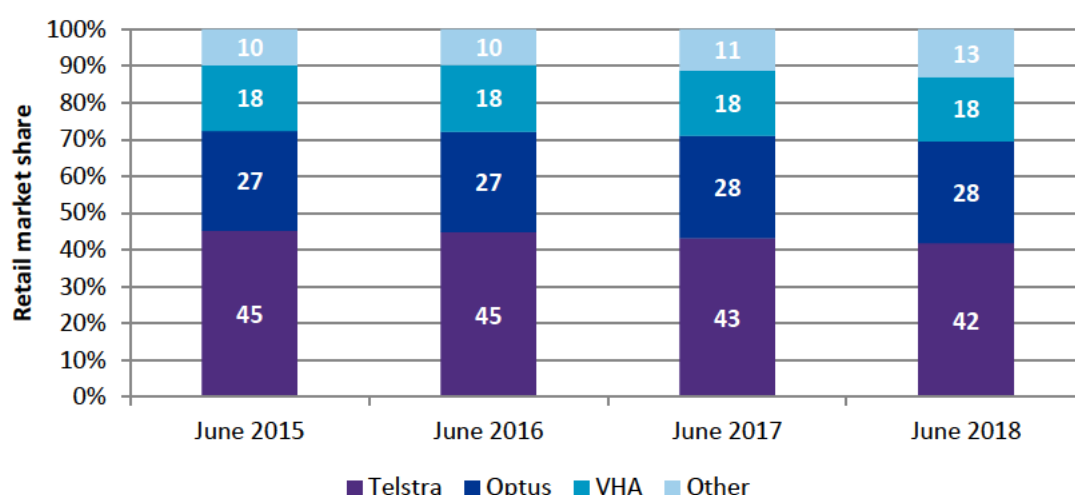
²⁵ Optus Submission, pp. 5-6.

Market concentration

The three MNOs (Telstra, Optus and VHA) continue to dominate the retail market for mobile phone services. However, there has been some movement in market shares since the previous MTAS inquiry in 2014, as shown in Figure 1.

Over the last four years, Telstra's market share of services in operation (SIOs) fell from 45 per cent to 42 per cent, while Optus' increased slightly from 27 per cent to 28 per cent. VHA's market share remained stable at 18 per cent, while the combined market share of MVNOs increased from 10 per cent to 13 per cent.

Figure 1 Changes in market share since 2014 are minor but show a 30 per cent increase in MVNO market share since June 2016



Source: ACCC Division 12 RKR data 2017-18

While the MVNOs gained an additional three per cent market share since 2016, we consider that they are only able to exert marginal competitive pressure on the MNOs. In part, this is due to the MVNOs' limited control over the quality of their services and limited ability to differentiate their products. MVNOs also tend to be able to offer less geographic coverage than the MNOs, and have lower brand awareness amongst consumers.

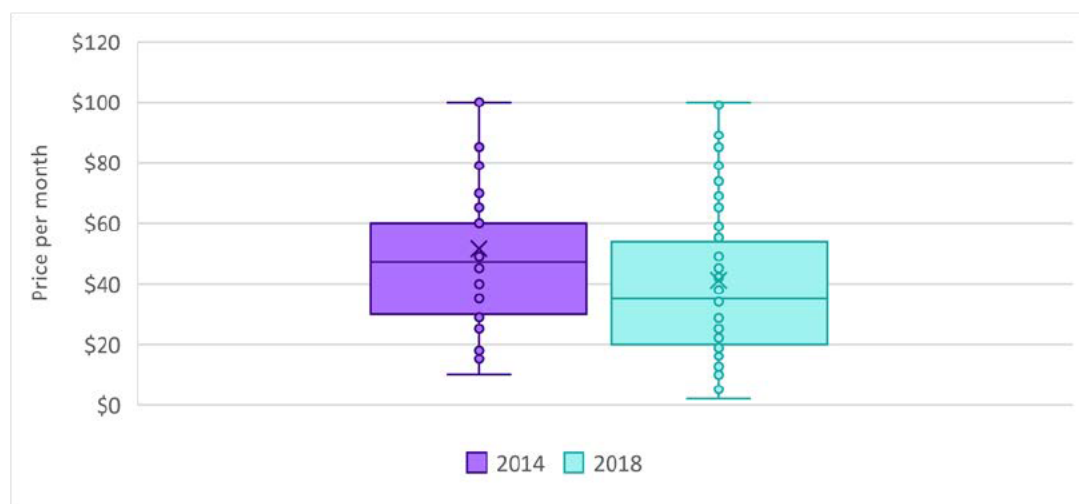
We estimate there are currently around 90 MVNOs, accounting for 13 per cent of the mobile phone market. This compares to an estimated 50 MVNOs that accounted for 8 per cent of the market in 2014.²⁶ However, we observe that the majority of MVNOs have a very small number of subscribers, with around one quarter of the MVNOs combined customer base being supplied by one MVNO (amaysim).

²⁶ MTAS declaration inquiry final decision report 2014, p 18.

Price competition

Price competition in the retail mobile services market is fairly robust, and has intensified since the previous MTAS declaration inquiry in 2014. As shown in Figure 2, there is significantly more concentration at lower price points in 2018, compared to 2014. There are also more plans in 2018 that are concentrated around the median price (which is also lower than the 2014 median price), as shown in the 2018 box in Figure 2.

Figure 2 Compared with 2014, there is now significant concentration of mobile plans at lower price points²⁷



We have observed a downward trend in retail prices of mobile services, which have fallen by an average of eight per cent over the period 2014-18.²⁸

Of the retail plans surveyed by the ACCC, the average price was around \$42 per month, with approximately 60 per cent of plans surveyed offered for \$40 or less per month. In contrast, the average price of mobile phone plans surveyed in the 2014 MTAS declaration inquiry was around \$54 per month.

However, despite average price declines overall, for consumers on pay-as-you-go (PAYG) pre-paid plans, the price of calls and SMS remains high.

Around 13 per cent of retail mobile phone plans surveyed were PAYG pre-paid plans, with the majority of these offered by the MNOs. These plans charge customers for calls and SMS, rather than offering inclusions. Recharge options for PAYG services ranged from \$10 to \$100, with credit expiry ranging from 45 to 365 days. Table 1 summarises the different call and SMS rates offered for the PAYG plans surveyed.

Although PAYG plans now represent a much smaller portion of the retail offerings in the market (13 per cent compared to 48 per cent in 2014) they remain an important product for some consumer segments, particularly lower-income consumers or those who rarely use their mobile phone.

²⁷ We note there were approximately 40 per cent more data points collected in 2018 than 2014 and the outliers have been removed from the chart.

²⁸ ACCC, *Telecommunications Report 2017-18*, p vi.

Table 1 PAYG call and SMS rates remain stubbornly high

Service Provider	Number of PAYG plans offered	Call rate (per minute)	Flagfall (per call)	Price per SMS
Telstra	5	30c	0c	30c
Optus	9	25c	0c	25c
Vodafone	3	20c	0c	20c
amaysim	1	15c	0c	15c
ALDImobile	2	12c	0c	12c
Lycamobile	1	12c (to landlines)	29c	15c
		19c (to mobiles)		

Source: Mobile service provider websites. October 2018.

Non-price competition

There is a significant level of non-price competition in the retail mobile phone market with service providers competing to differentiate their products.

We consider that data inclusions are currently the focal point of non-price competition for mobile service providers. Data is important as, among other things, it enables voice and SMS substitution to OTT communications services. In 2014, non-price competition focused primarily on call and SMS inclusions and, to a lesser extent, data allowances.

This is in part a consequence of the growth in smartphone ownership since 2014. Most Australian adults now own a smartphone (83 per cent at June 2018, up from 67 per cent of adults four years ago).²⁹ This coincides with mobile phones becoming the most used device for accessing the internet. In 2018, around 81 per cent of online Australians were using a mobile phone to access the internet at least once a day.³⁰

In contrast to 2014, unlimited calls and SMS inclusions are now relatively common (approximately 81 per cent of surveyed plans). This is a significant shift from 2014 when only 48 per cent of plans surveyed included unlimited SMS, the majority of which were post-paid.

Of the plans that did not include unlimited calls and SMS, the majority were offered for less than \$20 a month. These plans typically offered unlimited SMS and a call value inclusion (dollar or minutes), rather than unlimited calls.³¹

In addition to data, competition has also shifted focus to international inclusions, for example, around 50 per cent of the retail mobile phone plans surveyed included international call minutes and/or international SMS. For post-paid services, these international inclusions were often generous, for example, unlimited international SMS and between 1000 to 3000 minutes of calls to selected countries.

²⁹ ACMA, *Communications Report 2017-18*, p 33.

³⁰ ACMA, *Communications Report 2017-18*, p 58.

³¹ For example, Exetel offered a \$9.99/month SIM only option, which included unlimited SMS and 300 minutes of standard national calls (charged at 10c per minute).

Data inclusions

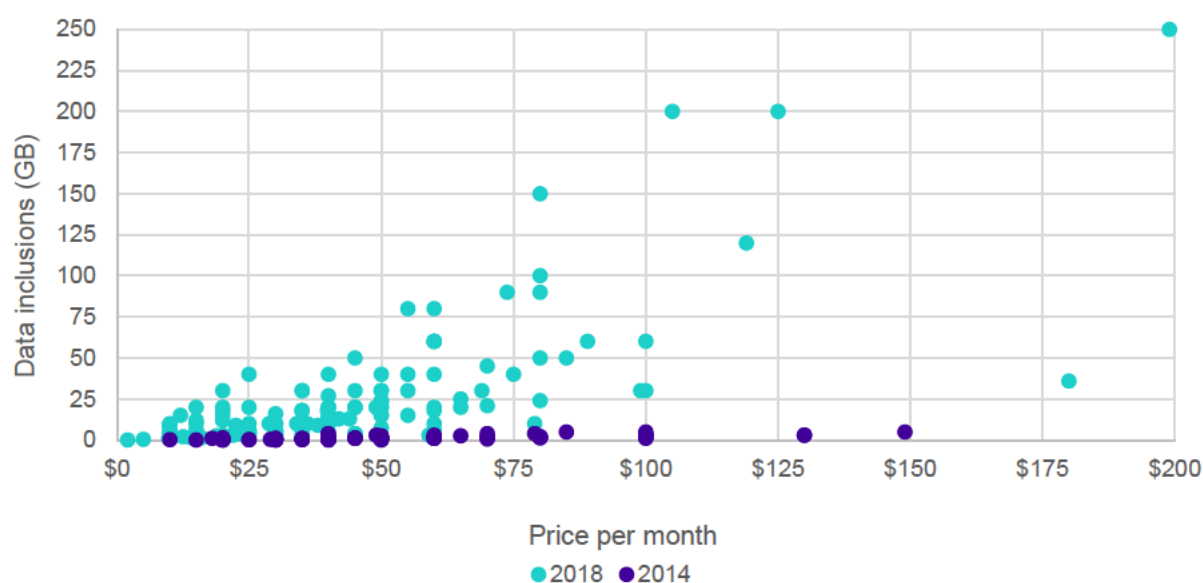
For the post-paid plans surveyed, the range of data inclusions was much larger, ranging from 1GB to unlimited data. However, it was only higher price post-paid plans (\$80 and above) that were offering data allowances of over 100GB. The largest data inclusions were also typically offered on post-paid plans with lock-in contracts (12 or 24 months).

In contrast, the data inclusions for pre-paid plans surveyed were less than 100GB, ranging from 0.5GB to 90GB.

Since the 2014 MTAS declaration inquiry, we have observed significant growth in mobile phone data inclusions. This growth has likely occurred because of consumer demand for data for applications such as video, 4G connectivity and continued investment by MNOs in their networks. For example, in 2014, the average data inclusions for pre-paid and post-paid mobile phone services were around 1.4GB and 1.7GB respectively.³² In contrast, of the pre-paid plans surveyed in 2018, we found the average data inclusion was 13.8GB, while for post-paid services it was 33GB.

The increase in pre-paid and post-paid plan data inclusions from 2014 to 2018 is evident across various price points, as shown in Figure 4.

Figure 3 Data inclusions in pre-paid and post-paid plans have increased significantly and consumers have a wide range of offers to choose from



Source: Mobile service provider websites, October 2018.

Figure 4 shows that lower priced plans (\$40 and under) now have data inclusions that range from around 0.5GB to 45GB. This is a significantly greater range than was available to the lowest spend consumers in 2014.

The largest growth in data inclusion can be seen in higher priced plans (\$60 and above), which now offer between 1GB and unlimited data, compared to a maximum of 5GB in 2014.³³ This reflects the shift in non-price competition to focus on data inclusions rather than call and SMS inclusions.

³² ACCC, *Telecommunications Report 2016-17*, p 27.

³³ The ACCC has used a value of 250 to represent unlimited data offerings.

Retail market for fixed voice services

The ACCC has also considered the state of competition in the downstream retail market for fixed voice services given the market for fixed voice services includes FTM calls which require voice MTAS.

The fixed voice retail market is highly concentrated with Telstra having 59 per cent of market share in 2018, although its market share has declined in recent years.³⁴ TPG had the second largest market share with 20 per cent, largely as a result of its merger with iiNet in 2016, with Optus on 18 per cent.³⁵

There are few standalone fixed voice services currently available in the market (18 per cent retail services in 2016), with fixed voice services now commonly bundled with a fixed broadband service.³⁶ Most standalone fixed voice services offer PAYG calls on the entry-level product, with additional charges for a mix of call inclusions such as local, national, calls to mobile and international calls. While the ACCC no longer reports on prices paid for fixed voice services in its annual Telecommunications Report, ACCC retail price surveys indicate that, in some cases, the price of standalone fixed voice services is similar to the cheapest fixed voice and broadband bundle price.³⁷

For PAYG FTM calls, each call incurs a connection charge (between 45 to 55 cents per call) and a call charge (between 20 and 36 cents per minute). Some plans also provide a cap to the cost of calls (\$3 for the first 20 minutes (Telstra) or \$2 for calls for up to an hour (Optus) after which calls are charged per minute. The more expensive fixed voice plans (between \$40 and \$59 per month) provide unlimited calls to mobile numbers. We note that prices for PAYG or unlimited call fixed voice plans are comparable to entry-level bundled plans (fixed voice and broadband).³⁸

5.1.3. Will declaration promote competition in relevant markets?

Wholesale market for mobile voice termination

Stakeholders agreed that the continued declaration of mobile voice termination would ensure the effective operation of the wholesale market. Telstra submitted that the enduring bottleneck that exists in the supply of FTM and MTM calls necessitates the continued declaration of mobile voice termination for the time being.³⁹

VHA submitted that the ACCC's 2014 decision to re-declare MTAS for voice services had the effect of maintaining the 'status quo' in relevant markets, by safeguarding access to voice termination services in circumstances where each MNO retains monopoly control over the calls that terminate on its respective network. VHA submitted that declaration of the MTAS for voice will continue to promote competition in the relevant markets and would be in the LTIE.⁴⁰

Macquarie Telecom also submitted that continued declaration will promote competition because MNOs continue to have a monopoly over the termination on their networks and as such, could refuse access (or set unreasonable terms of access) and thereby damage competition.⁴¹

³⁴ ACCC, *Telecommunications Report 2017-18*, p. 37.

³⁵ ACCC, *Telecommunications Report 2017-18*, p.37.

³⁶ ACCC, Communications sector market study report, p.30. Roy Morgan Single Source (Australia), January to December 2016, n=17,489 and January to December 2013, n=11,178, Australian Households

³⁷ ACCC, Communications sector market study report, p.30.

³⁸ Bundled plans providing PAYG calls range between \$50 and \$70 per month while those with unlimited calls cost \$70 per month.

³⁹ Telstra Submission, pp. 13 & 15.

⁴⁰ VHA Submission B, p 6.

⁴¹ Macquarie Submission, pp. 14-15.

Draft position

The ACCC agrees that the continued declaration of mobile voice termination will ensure MNOs provide access to mobile voice termination services on reasonable terms and at prices reflective of cost. In section 5.1.2 the ACCC recognised that MNOs continue to have a monopoly over terminating calls on their respective networks and therefore retain the ability to exploit their market power.

If the existing declaration were revoked, the ACCC considers there would be incentives for MNOs to exert their market power. The ACCC has observed above that the substitutability of OTT voice services for MTM calls is not yet strong and wholesale voice MTAS remains an essential upstream input to mobile services. This lack of available retail substitutes means MNOs would be largely unconstrained by competitive forces when setting the price of mobile voice termination services on their networks.

In the 2014 MTAS inquiry the ACCC also identified that there was a risk that established MNOs may refuse access to mobile voice termination on their networks (or provide it on unfavourable terms and prices) to new market entrants. The ACCC considers this risk remains. This view was supported by TPG, which submitted that as a prospective new entrant to the mobile market, it considered the MNOs would have an incentive to increase the costs to carry and terminate a TPG mobile call on an existing mobile network.⁴²

The continued declaration of mobile voice termination services will constrain the ability of MNOs to set unreasonable terms of access and inefficiently high prices. While this is unlikely to generate greater competition in the wholesale market within which the MTAS is provided, the ACCC expects this will promote competition in the downstream retail markets.

Retail market for fixed voice services

Stakeholders generally found that extending the declaration of voice MTAS would promote competition in relevant markets, including in respect of fixed to mobile services.

Over the Wire submitted that the MTAS declaration had resulted in a continued increase in competition since the 2014 declaration, evidenced by an increase in service offerings and lowering of prices. It considered that the MTAS is an essential input to the FTM service and the removal of the MTAS declaration may result in FTM termination prices rising in response to customers moving to OTT services.⁴³

TPG, Telstra and Macquarie Telecom made similar submissions. TPG considered that there was a significant risk that a large MNO would increase the rates for terminating calls onto its mobile network, whether from a fixed line provider or another smaller MNO, if the MTAS declaration were to cease.⁴⁴ Telstra reasoned that even though retail OTT and MTM voice services are substitutable, it is not yet clear whether the strength of that substitutability is sufficient to compete away an attempt by a mobile carrier to raise voice MTAS prices. As a result, voice MTAS continues to be an essential upstream input in the supply of MTM and FTM calls and the case for removing the declaration cannot be fully established at this time in its view.⁴⁵ Similarly Macquarie Telecom submitted that the MTAS was an essential input in the MTM and FTM services and that continued declaration of the MTAS would promote competition in the provision of these services because MNOs continue to have a monopoly

⁴² TPG Submission, p 1.

⁴³ Over the Wire, *Submission to the MTAS declaration discussion paper*, September 2018, p. 5 (Over the Wire Submission).

⁴⁴ TPG Submission, p. 1.

⁴⁵ Telstra Submission, p. 15.

over the termination of voice calls on their network and as such MNOs could refuse access or set unreasonable terms of access thereby damaging competition.⁴⁶

Draft position

The ACCC considers that continuing to declare voice MTAS will also promote competition in the retail market for fixed voice services. While this is a concentrated market, access to voice MTAS ensures that fixed-only operators do not pay above-cost prices to terminate calls on mobile networks. If the voice MTAS were not declared, integrated operators would have incentives to set FTM termination rates above cost leading to higher prices for fixed line operators.

Retail market for mobile services

All submissions agreed that the continued declaration of mobile voice termination services would have a positive impact on competition in the retail mobile services market. Telstra submitted that the case for removing the declaration of voice MTAS could not be fully established at this point in time. It submitted that currently retail OTT voice services only partially substitute for traditional voice services and MTAS remains an essential input for providers to compete in the downstream retail market.⁴⁷

VHA submitted that declaration of the MTAS for voice will continue to promote competition by safeguarding access to voice termination services in circumstances where each MNO retains monopoly control over the calls that terminate on its respective network, and is an essential input to the two downstream markets.⁴⁸ TPG also submitted that without the continued regulation of MTAS the current favourable state of competition would not be possible.⁴⁹

Draft position

The ACCC considers that declaration of mobile voice termination services will ensure the price of the service is kept close to the cost of supply and continue to promote competition in the retail mobile services market. In the 2014 MTAS inquiry the ACCC observed that the declaration of mobile voice termination services has been a significant contributor to improving competition in the mobile retail services market, and that if mobile voice termination services were no longer declared many of the competitive gains observed in the market may be lost.⁵⁰ The ACCC continues to hold this view.

Without declaration, the ACCC considers MNOs will have the ability and incentive to increase voice termination rates. As discussed in section 5.1.1, stakeholders consider there are significant barriers to OTT voice services being a substitute for MTM voice calls. This lack of competitive pressure from substitutability in the retail market would mean MNOs are unconstrained from exploiting their market power over wholesale voice inputs. The resulting increase in termination rates, and potential for access to be provided on unreasonable terms, would likely be passed on to consumers in the downstream retail market through less competitive retail offerings and a reduction in mobile providers operating in the market.

Therefore, the ACCC agrees with submissions that extending the declaration of the mobile termination access service will promote competition in the market for mobile retail services and be in the LTIE.

⁴⁶ Macquarie Submission, pp. 14-15.

⁴⁷ Telstra Submission, p 15.

⁴⁸ VHA Submission B, p.6

⁴⁹ TPG Submission, p 1.

⁵⁰ ACCC, *2014 MTAS declaration draft decision*, December 2013, p 28.

5.2. Any-to-any connectivity

Under the CCA, declaration of the mobile voice termination service should ensure voice termination enables each end-user to communicate with any other end-user, whether or not that are on the same network.⁵¹

Few submissions commented explicitly on any-to-any connectivity. Those that did comment, agreed that MTAS is a bottleneck to any-to-any connectivity and consequently needs to be declared.⁵²

The ACCC's draft position is that declaration of voice termination will promote any-to-any connectivity as in the absence of declaration, MNOs could exert monopoly power over access to end-users on their networks by imposing unreasonable terms of access or inefficiently high prices. In particular, smaller fixed networks and new entrants are at risk of disadvantage.

5.3. Encouraging efficient use of, and investment in, infrastructure

The CCA requires the ACCC to have regard to the extent to which declaration is likely to encourage the economically efficient use of, and the economically efficient investment in, infrastructure.

There was consensus among submissions that declaration, combined with cost-based pricing, would be adequate to promote efficient investment in infrastructure. Few submissions elaborated or addressed this issue directly, with most submissions noting the 2014 MTAS declaration as adequate for this declaration.

Optus, MNF, Commpete, and ACCAN⁵³ argued that declaration of the MTAS would promote the efficient use of and investment in infrastructure.

Commpete argued that, should the MTAS not be re-declared, the efficient use of, and investment in, infrastructure will be undermined.⁵⁴ Similarly, ACCAN added that the MTAS declaration has provided greater certainty. The reduction in the costs of forming wholesale agreements and the elimination of the potential for strategic behaviour has also provided each MNO greater confidence to invest in their own networks.⁵⁵

Draft position

The ACCC seeks to ensure that regulation encourages investment in networks or network elements where such investment is efficient.

Paragraph 152AB(6)(a) of the CCA requires the ACCC to have regard to specific matters in examining whether declaration will lead to the achievement of this objective. These matters include the technical feasibility of supplying and charging for particular services, the legitimate commercial interests of the supplier(s) and the incentives for investment in infrastructure.

As the MTAS is currently supplied and charged for, it is clear that it is technically feasible to do so. With regard to a supplier's legitimate commercial interests, the ACCC recognises this encompasses a supplier's obligations to its owners, including the need to recover the cost of

⁵¹ Subsection 152AB(2) of the CCA.

⁵² Commpete Submission, p. 6; ACCAN Submission, p. 4; Macquarie Submission, pp. 14-15.

⁵³ Optus Submission, p.3; MNF Submission, p.9.

⁵⁴ Commpete Submission, pp. 6-7

⁵⁵ ACCAN submission, p. 5.

providing services and to earn a normal commercial return on the investment in infrastructure.

Allowing for a normal commercial return on investment will provide an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service. The ACCC considers that this objective can be met for the MTAS by setting the price terms in an access determination at a level that reflects costs plus a nominal commercial return. This will be considered further in the upcoming FAD inquiry.

The ACCC considers carriers should have the incentive to invest efficiently in the infrastructure by which the MTAS is supplied. Declaration allows the ACCC to regulate the price of access to the declared service through the associated access determination. It is through declaration and regulated prices that access providers are constrained from charging monopoly rents for access to the infrastructure used to provide the MTAS. In this way, declaration and regulated pricing provides a framework for access providers to recover the efficient costs of investing in infrastructure and a normal commercial rate of return. This framework provides an incentive to invest efficiently.

The ACCC considers that MNOs' exclusive control over terminating services on their own networks effectively gives them monopoly power over access to end-users on their networks. This gives MNOs the ability and incentive to charge access seekers – who may be fixed network operators or other MNOs – above-cost prices for terminating calls on their networks. However, the ACCC notes that the MTAS declaration has led to a decline in the MTAS price which is more closely aligned with its underlying costs. This has led to cost savings for access seekers which they can re-direct to invest in other products and innovations that are valued by the market.

6. Should SMS termination services continue to be declared?

The ACCC has formed the draft position that SMS termination on a mobile network should not continue to be a declared service.

The key reason for this position is the growth in the use of OTT messaging services that we consider have emerged as substitutes for SMS services in the retail market. Because OTT messaging services do not rely on MTAS to connect with end-users on other networks, SMS termination no longer represents a bottleneck to accessing the end-user.

Further, A2P messaging services do not rely solely on MTAS to deliver services to the customers of end-users. The majority of A2P SMS currently sent are on-net messages delivered to customers on each MNO's network rather than being sent between MNOs' networks.

The markets have changed considerably since SMS termination was declared in 2014. In particular, smartphone penetration and the use of non-SMS messaging services have increased significantly. For example, OTT services such as Facebook Messenger, iMessage, WeChat and WhatsApp are widely used and do not rely on MTAS to access other end-users.

SMS on the other hand, still depends on MTAS and an MNO can control access to its end-users. However, if the cost of contacting another end-user via SMS is too high (for instance, if wholesale prices increase), then an end-user can choose to use a messaging service not dependent on MTAS. Competition from these OTT services operates to constrain MNOs from raising retail prices.

SMS is used between end-users (person-to-person or P2P) and for mobile SMS marketing via an application (application-to-person or A2P). A2P SMS services in the retail market include appointment reminders, password verification, marketing and advertising to customers with consent and also unsolicited commercial messages (spam).

The interaction between A2P messaging services in retail markets and MTAS is more complex than P2P SMS. As noted above, MTAS is not required if A2P messages are sent by an MNO on behalf of an A2P provider to end-users on its network. However, MTAS is required if A2P messages are sent by an MNO on behalf of an A2P provider to end-users on another MNO's network. Further, A2P SMS is not the only means by which businesses conduct mobile marketing. They also use alternative services such as email, MMS, social media and OTT services.

For both P2P and A2P SMS, we have found that MTAS no longer represents a bottleneck to accessing an end-user for messaging purposes. Regulation may be required if an essential wholesale service represents a bottleneck to downstream retail services.

Given this, the ACCC is of the draft position that extending declaration of SMS termination services would not be in the LTIE because:

- it is not required to align wholesale prices more closely with efficient cost of the service in order to promote competition in the downstream retail market for mobile services,
- it is not needed to achieve any-to-any connectivity as MNOs are not able to set unreasonable terms or conditions of access to SMS termination services, and

- MNOs have limited incentive to set above-cost prices of providing SMS termination and it is not needed to promote the efficient use of, and investment in, telecommunications infrastructure.

The ACCC's draft position is not to extend declaration of SMS termination services and to vary the MTAS service description such that it no longer covers termination of SMS messages. The proposed amended service description is at Appendix 1.

The ACCC's reasoning for this draft position is provided below. First, we consider P2P SMS, including the relevant markets, against the statutory criteria. Second, we turn to A2P SMS and consider the relevant markets as well as the statutory criteria in the A2P context.

6.1. P2P SMS services

In this section we examine person-to-person SMS services against the statutory criteria and set out the ACCC's draft position.

6.1.1. Will declaration promote competition?

Markets relevant to SMS MTAS

As noted in section 5.1 above, the CCA requires the ACCC to consider whether declaring a service is likely to promote competition in markets for listed services.⁵⁶ This involves identifying the markets in which the eligible service is supplied and in which declaration is likely to promote competition and then examining the state of competition in those markets.

In the 2014 MTAS declaration inquiry, the ACCC considered the market in which SMS MTAS is supplied as the wholesale market for SMS termination services. We also identified the retail mobile services market as the relevant downstream market.

The ACCC has undertaken an assessment of the relevant markets for this inquiry having regard to submissions from stakeholders and developments since 2014. Our draft position is that there is a wholesale market for SMS termination services. Within that market, each MNO continues to have exclusive access to end-users on its network and control the termination of SMS messages to those end-users.

In addition, the ACCC's draft position in this inquiry is that a broader retail market for messaging services, including retail SMS and OTT messaging services, is relevant to SMS termination.

Wholesale market for SMS termination

Each MNO has exclusive control over its network and therefore monopoly over the supply of SMS termination on its network. SMS termination services are an essential input to the provision of SMS services downstream, regardless of whether the SMS is a P2P SMS or A2P SMS. Importantly, there is no alternative service allowing an MNO to send an SMS to an end-user on another MNO's network.

In the current inquiry, non-MNO stakeholders generally agree with the wholesale market identified.⁵⁷ However, Telstra suggests that there are potentially two definitions for wholesale markets: the narrow definition identified above in which MNOs terminate SMS on their own networks, and a broader 'wholesale message termination market' in which OTT and SMS

⁵⁶ Subsection 152AB(2) of the CCA.

⁵⁷ Macquarie Submission, p.14; MessageMedia Submission pp. 23-24, 52; Commpete Submission, p. 7; Pivotel Submission, p.18; ACCAN Submission, p. 3.

providers compete to provide messaging services.⁵⁸ This is also raised in NERA's report for VHA which notes that the ACCC should consider whether the upstream termination bottleneck is actually bypassed by OTT services. It cites Apple iMessage bypassing the mobile network by using WiFi or data connections when available to send as an OTT message but which reverts back to SMS protocol when a data network is not available.⁵⁹

Submissions agree that there are currently no wholesale substitutes for SMS termination.⁶⁰

Draft position

The ACCC's draft position is that the relevant wholesale market is the market for SMS termination services. This is because:

- SMS termination services are sold to MNOs separately from other mobile services and not in a bundle with other mobile services,
- SMS termination services are required for an MNO to provide SMS to end-users on another MNO's network, and each MNO has a monopoly over such services, and
- there are no alternative services which would allow an MNO to send an SMS to an end-user on another MNO's network.

As discussed further below, we also consider that this wholesale market is also the relevant wholesale market for A2P SMS.

Retail market for messaging services

In 2014, the ACCC considered that SMS termination was an essential input in the market for retail mobile services as it allowed a mobile subscriber to send an SMS (either P2P or A2P) to an end-user connected to another mobile network. This was the same market in which other mobile services, including voice and data services, are provided. The ACCC did not consider that there were any effective substitutes for SMS services. Although functionally similar, OTT messaging services usage was limited to consumers with a connection to a data service and a smartphone at a time when 30 per cent of mobile subscribers did not use one. The ACCC was also concerned by the requirement that both the sender and receiver of OTT text messages must use the same application.⁶¹

Submissions are mixed on the relevant retail market and the extent to which retail substitutes are available for SMS.

Some submitters argue that OTT messaging services are neither a practical nor viable substitute for the same reasons OTT voice services are not a viable substitute for mobile voice services. They also question the degree to which OTT messaging services have in fact eroded the monopoly of SMS termination. They point to data which shows that SMS is either equivalent or more popular than OTT instant messaging services.⁶²

However, Sinch (a wholesale SMS aggregator, formerly known as CLX and who submitted under that name⁶³) and the large MNOs disagree, considering instead that OTT messaging services are an effective substitute. They argue that increased smartphone adoption and

⁵⁸ Telstra Submission, pp.8, 10.

⁵⁹ VHA, *Submission to the MTAS declaration discussion paper – Attachment D*, pp.10-11.

⁶⁰ Telstra Submission, p. 18. Macquarie Submission, p. 13. MessageMedia Submission, p.52. Commpete Submission, pp.15-16.

⁶¹ ACCC, MTAS declaration final decision, June 2014, pp.36-39.

⁶² MessageMedia Submission pp.20, 24,-26, 28. Commpete Submission p.16., MNF Submission p.10. Pivotel Submission p.10.

⁶³ We will refer to Sinch in this report but refer to CLX's submission.

usage of OTT messaging services in Australia since 2014, including the increased usage of multiple applications, shows that previous barriers to OTT applications have now been addressed. They note that SMS usage is either stagnating, or in decline, while overall instant messaging volumes have increased and that this is indicative of consumers substituting away from SMS to OTT messaging services. Further, the mere existence (and prevalence) of OTT messaging services in the market provides opportunities to bypass the upstream wholesale market for SMS termination services on each MNO's network. In this way, competition in the retail market has, in their view, provided a constraint in the SMS MTAS wholesale market.⁶⁴

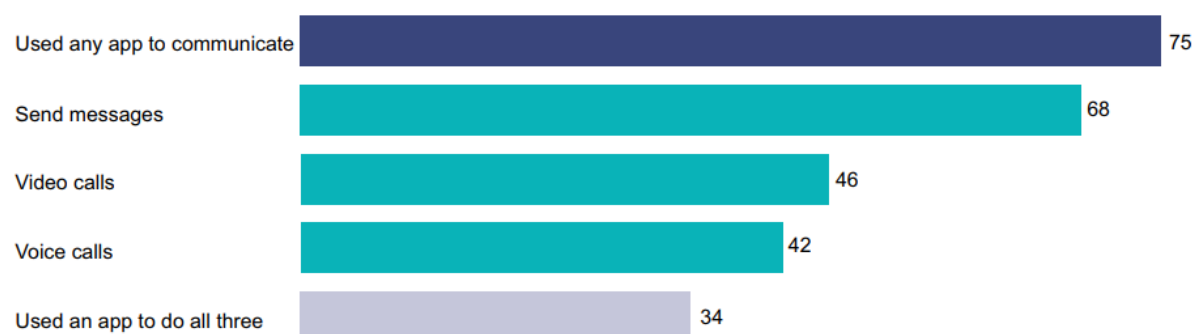
Draft position

The ACCC considers that the growth in smartphone ownership and increase in data allowances for retail mobile phone plans, have been accompanied by greater use of OTT voice and messaging services.

The popularity of OTT communication apps, such as Skype, Facebook Messenger and Whatsapp, has risen significantly since the previous MTAS declaration inquiry in 2014. As at May 2018, 75 per cent of Australian internet users used an app to communicate via either messages or voice/video calls.⁶⁵

While the overall use of OTT apps is on the rise, popularity varies depending on whether the apps are being used for messaging or voice/video calls. Figure 4 shows that sending messages is the most popular use of OTT apps, with 68 per cent of Australians having used an app to send a message at May 2018. However, when it comes to voice calls, the use of apps is noticeably less popular, with 42 per cent of Australians using an app to make a voice call over the same period.

Figure 4 Percentage use of communications apps by activity⁶⁶



Base: Australians aged 18 and over who accessed the internet.

Note: 'Don't know' and 'Prefer not to say' responses are excluded from analysis.

Source: ACMA-commissioned survey, May 2018.

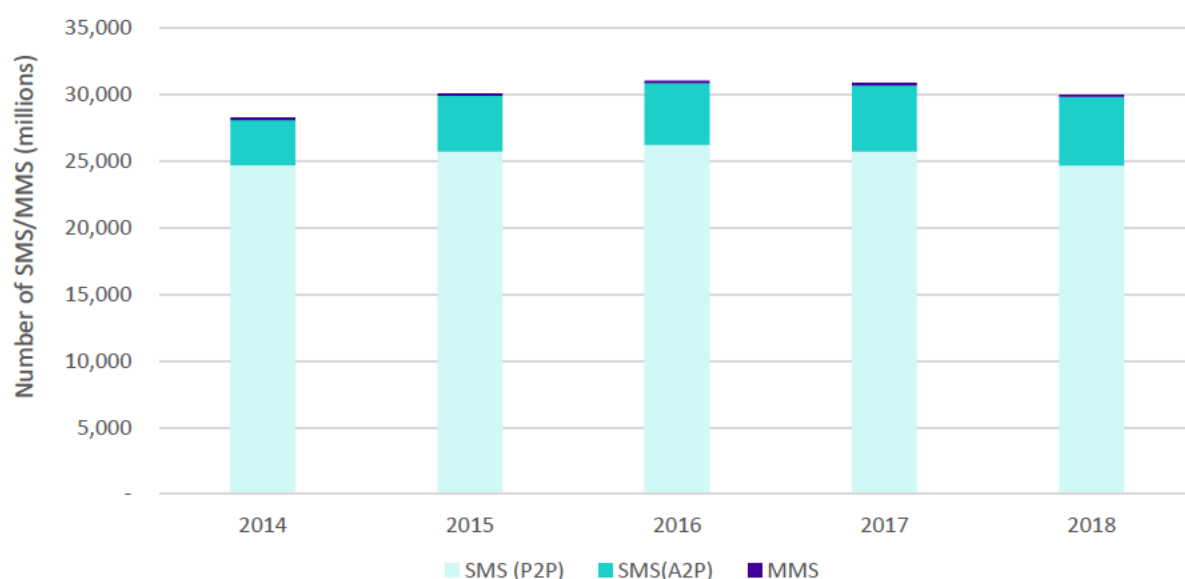
The use of SMS has also stagnated since the previous declaration inquiry, as shown in Figure 5.

⁶⁴ Telstra, Submission p.9. Optus Submission pp.13, 15. CLX, *Submission to the MTAS discussion paper*, September 2018, p.3 (CLX Submission). VHA Submission, p.2.

⁶⁵ ACMA, *Communications Report 2017-18*, p.68.

⁶⁶ ACMA, *Communications Report 1017-18*, p. 68.

Figure 5 Use of SMS has stagnated since the previous declaration inquiry



Source: Ovum, *OTT Messaging Forecast: 2016–20, September 2016*

Ovum, *Mobile Messaging Traffic and Revenue Forecast: 2017–22, February 2018*

Figure 5 shows that in the period 2015 to 2018 the use of SMS has fallen slightly, decreasing by around 1.8 per cent overall. This decline has occurred despite the majority of retail mobile services plans now offering unlimited SMS.

Further, as discussed in section 5, the ACCC's assessment of mobile phone plans shows that price competition is strong and most service providers have moved to offering unlimited SMS. The ACCC considers this to indicate that SMS termination rates are now closely enough associated with the cost of supply as to enable MVNOs to obtain lower wholesale rates from MNOs and therefore offer competitive retail services.

Finally, the ACCC has identified a shift in the focus of competition in the retail mobile phone services market, which now centres on data and price. As data allowances continue to increase and smartphone penetration proliferates, the ACCC considers there will continue to be reciprocal growth in the popularity of OTT messaging, and therefore its substitutability for SMS. The effects of this substitutability are already being seen in the retail market. As the ACCC has observed, SMS levels have stagnated, despite the significant fall in the cost of sending an SMS. Thus, the ACCC considers SMS offerings to be less of a consideration in consumer decision making and therefore not a key source of competition in the retail mobile services market.

The ACCC's draft position is that P2P SMS and OTT messaging services are now effective substitute services that should be considered as part of a broader retail messaging market. We note that this is consistent with the views of a number of other international regulatory authorities. Unlike OTT voice services, there are few limitations to substitution between P2P SMS and OTT messaging as the quality and reach is either similar or the same. Smartphone penetration is at 83 per cent in Australia and likely to continue to grow. The ACMA reports

that social networking and messaging/calling apps were used by most Australians aged 18-34 (90 per cent) and by just over a quarter of Australians aged 65 and over.⁶⁷

State of competition in the relevant markets

Wholesale market for SMS termination

Telstra does not consider there are wholesale substitutes for SMS termination. With OTT messaging and SMS considered to be fully substitutable, Telstra sees the wholesale market as constrained by strong competition in the retail messaging market. It emphasised that MNOs are prevented from leveraging any form of monopoly power by the high level of competition within the broader messaging market arising from multiple OTT service providers.⁶⁸ Coupling this with evidence of “sustained increase in the number of OTT messages sent globally, with nine times more OTT messages now sent than SMS”, Telstra considers SMS termination should be removed from MTAS.⁶⁹

Optus similarly highlighted that SMS termination is no longer a bottleneck to the delivery of messages to B-party end-users. Consumers are moving away from SMS and consequently, Optus considers that OTT messaging service is an effective substitute. Also, consumers now have access to unlimited SMS on almost all retail plans. Even with the effective retail price to send SMS being low, SMS use is falling and consumers are increasingly using OTT services.⁷⁰

On the other hand, Macquarie Telecom submits that “nothing has changed in the ACCC’s rationale and that accordingly, there is no logical basis on which the ACCC could decide to exclude SMS from the MTAS service description in the continuation of the MTAS declaration.”⁷¹ Further, Macquarie said that [c-i-c starts]

[redacted] [c-i-c ends].⁷² Macquarie is concerned that in the absence of SMS regulation, there is a risk that MNOs could set unreasonable terms of access to such services.

ACCAN likewise supports consideration of the potential to include A2P SMS services in the wholesale market definition, as bulk messaging services begin to evolve and add value to consumers through targeted reminders (to pay bills or avoid late repayment fees) and for emergency communications.⁷³

Draft position

The ACCC acknowledges that MNOs continue to have a monopoly over SMS termination services and termination services, per se, do not have any substitutes.⁷⁴ This means that competition in the wholesale market for SMS termination may not be feasible. However, we consider that the competitive pressure of OTT messaging services in the broader retail market for messaging services restricts the ability of MNOs to exploit their monopoly power by refusing SMS interconnection or raising the termination rates of SMS. This is because OTT is generally offered free-of-charge directly, and it is difficult for MNOs to charge a

⁶⁷ ACMA, *Communications Report 2017-18*, p.55.

⁶⁸ Telstra Submission, p. 3.

⁶⁹ Telstra Submission, p. 9.

⁷⁰ Optus Submission, pp. 12-14.

⁷¹ Macquarie Submission, p.10.

⁷² Macquarie Submission (Confidential), p. 11.

⁷³ ACCAN Submission, p. 3.

⁷⁴ SMS can only be terminated legally on an MNO’s network.

positive price for SMS in the retail market, which is a constraint to any price increase in the SMS wholesale termination market.

SMS is essentially a by-product of providing voice service, meaning the cost of provisioning is not zero but is negligible. With unlimited SMS offerings included in most mobile plans that now exist in the market, SMS rates are likely to be priced at cost-base. Finally, although text messages are a predominant means of communication, SMS message volume has stagnated as OTT services have proliferated.⁷⁵

Retail market for messaging services

In relation to SMS and OTT services, Optus and Telstra submitted that demand for SMS is falling as the popularity of OTT messaging services rises.⁷⁶ Telstra contended that MNOs have responded to the fall in SMS usage and competition from OTT voice and messaging services (traditionally available to customers for no direct charge) by reducing the price of traditional voice services (FTM and MTM) and SMS.⁷⁷

Optus and VHA submitted that they expect the number of consumers using OTT communication apps via mobile phones will continue to rise.⁷⁸

VHA also submitted that the deployment of 5G services will also likely lead to further growth in OTT messaging services. It noted that 5G will provide increased opportunities for innovation, which will enable end-users to better interconnect and use alternatives to traditional SMS services.⁷⁹

Telstra considers SMS and OTT messaging are effective retail substitutes for one another. As a result, submitters including Telstra and VHA both highlighted that retail SMS offers are very competitive. Telstra for example said that “unlimited SMS and voice calls are now widely available in the retail market, largely in response to OTT services which are generally supplied for no direct charge.”⁸⁰

Specifically, Telstra said that in May 2018, unlimited SMS was available on “84 per cent of pre-paid and post-paid plans offered by MNOs at an average price of \$45 per month. This is a significant shift from 2014 when only 48 per cent of in market offers included unlimited SMS at an average price of \$63.15. Further, unlike 2014 where unlimited SMS was generally confined to higher value plans, unlimited SMS is now offered more widely by both MNOs and MVNOs. For example, a number of MVNOs currently offer unlimited SMS as part of mobile plans priced as low as \$10 per month.”⁸¹

Most submitters said OTT messaging services are a highly effective retail substitute for SMS. As Telstra noted, “Both services allow mobile users to send a short message to another mobile user at an equivalent cost, and generally no direct charge.”⁸²

Telstra, Optus, VHA and Sinch consider competition in the retail mobile services market is a result of other factors, not regulation of SMS MTAS. Telstra and VHA submit that the decline in retail price is a response to the competitive pressure from OTT messaging services that

⁷⁵ Ovum, OTT Messaging Forecast: 2016–20, September 2016
Ovum, Mobile Messaging Traffic and Revenue Forecast: 2017–22, February 2018

⁷⁶ Optus Submission, p 13; Telstra Submission, pp 6-7.

⁷⁷ Telstra Submission, p 7.

⁷⁸ Optus Submission, pp 14-15, VHA Submission p 7.

⁷⁹ VHA Submission, p 7.

⁸⁰ Telstra Submission, p .3

⁸¹ Telstra Submission p. 7.

⁸² Telstra Submission, p.18.

are available to customers at no direct charge.⁸³ Sinch also finds that SMS MTAS has had no material impact other than to increase the level of SMS spam.⁸⁴

Draft position

Having reviewed the current SMS retail offers, the ACCC considers that the SMS offers available to consumers are, on the whole, very competitive. The ACCC's analysis of retail mobile plans in the market shows that the majority of plans offer consumers unlimited SMS for a monthly fee subscription.

The ACCC has reviewed the current price of SMS retail plans at low, medium and high spend plans, prepaid (PAYG) and postpaid products, and plans from all three of the MNOs and a selection of resellers. All but the lowest PAYG plans offer unlimited SMS.⁸⁵

This supports the ACCC's conclusion that competition for the provision of SMS services appears to be stronger today than at the last declaration review in 2013-2014. In particular, the ACCC considers that price competition for SMS is intense as submitters argued in their submissions.

However, this is not consistent across the market. Table 1 in section 5.1 above shows that the price of SMS under PAYG plans has not changed since 2014. The cost to send an SMS in these plans offered by MNOs is between 20 and 30 cents.⁸⁶ In the previous MTAS declaration inquiry, the ACCC observed that such a rate was very high when compared to the estimated cost of providing an SMS service and it is disappointing that in this section of the market, SMS remains expensive for consumers purchasing these PAYG plans.⁸⁷ However, MVNOs offer more competitive prices, which are almost half the cost charged by MNOs.

Nevertheless, the ACCC considers that the general benefits of competition between SMS and OTT messaging services (such as the trend of unlimited SMS inclusions) is flowing to consumers that use mobile messaging services, irrespective of whether they use an OTT messaging service or SMS.

Will declaration promote competition in relevant markets?

Wholesale market for SMS termination

Stakeholders' views diverge on whether continued declaration of SMS MTAS is necessary to promote competition in the wholesale SMS termination market. The MNOs agreed that extending declaration of SMS MTAS is not necessary.

VHA submitted that there is no incentive for an MNO to restrict access to its network given the prevalence of OTT messaging services. Essentially, the availability of OTT services means that there are opportunities to bypass the upstream wholesale market for SMS termination services on each MNO's network.

VHA also argued that because each of the MNOs both buy and sell SMS termination services, 'suppliers of SMS termination face countervailing buyer power when negotiating terms of access', and that this makes continued declaration of an SMS termination service unnecessary.

⁸³ Telstra Submission p. 11, VHA Submission, p. 2.

⁸⁴ CLX Submission, p. 3.

⁸⁵ Such as Aldi Mobile, at \$0.12/text and \$0.12/min for calls on their PAYG plan <https://www.aldimobile.com.au/plans/payg/> [last updated 11 January 2019] It appears to be the only PAYG plan that charges for call and text at the time of review.

⁸⁶ ACCC, *MTAS declaration inquiry final decision*, June 2014, p 44.

⁸⁷ ACCC, *MTAS declaration inquiry final decision*, June 2014, p 44.

Telstra also submitted that OTT messaging provides a highly effective substitute to SMS. Unlike SMS, however, the receipt of an OTT message is not contingent on access to termination services on a particular MNO's mobile network. That is, a highly effective substitute for SMS is readily accessible in the retail messaging market, at a comparable price, without dependency on a particular upstream wholesale input.

Draft position

As noted above, competition in the wholesale market for SMS termination is in itself not feasible as each MNO continues to have monopoly access to end-users on their networks. The key question is whether declaration is necessary to prevent the MNOs from exercising their market power. Based on the information currently available, the ACCC considers that extending the declaration of SMS termination services, coupled with price regulation in a FAD, is no longer necessary.

Current market information shows that there now exists a closer association between wholesale charges and the cost of providing the service. The widespread availability, and use, of OTT services in the retail messaging market which do not require SMS termination services, will continue to exert competitive pressure on MNOs. This means that the MNOs will likely be constrained from refusing SMS interconnection or providing SMS termination on unreasonable terms in the wholesale market even in the absence of declaration.

The ACCC considers that the possibility that each MNO's monopoly over SMS termination could mean that they may deny access to SMS termination services, or set unreasonable terms and conditions of access, to new entrants or smaller MNOs is low. With the dominance of OTT messaging services, if SMS costs were to rise, an end-user could bypass SMS and use OTT services instead.

Retail market for messaging services

Telstra and VHA submitted that declaration of SMS termination will not promote competition in the retail market. They argue that SMS offers are already very competitive, with a majority of unlimited SMS plans now in the market, and SMS traffic rates decreasing.⁸⁸

Optus also submitted that declaration of SMS termination services will not be required to promote competition in the downstream retail market, with retail pricing that has a closer association with the underlying costs and that this in turn, promotes a greater level of competition in related markets.⁸⁹

Draft position

Based on the information that is currently available, the ACCC considers that extending the declaration of SMS termination is not required to promote competition in the retail market for messaging services.

While the declaration of SMS MTAS in 2014 and the associated regulated pricing has seen wholesale rates fall significantly, the impact of the regulated prices on MNOs has been minimal. This is because SMS traffic between the MNOs is balanced. As such, there is no incentive on an MNO to raise their wholesale rates given that any wholesale termination rate would essentially be a transfer between MNOs.

It is clear that following declaration, MNOs have moved to reduce retail prices of SMS. However, declaration coincided with the growth in OTT messaging services, which also

⁸⁸ VHA Submission, pp. 14-15, Telstra Submission, p. 7.

⁸⁹ Optus Submission, pp.12-13.

placed considerable competitive pressure on MNOs to offer more attractive SMS plan packages. MNOs responded to both lower wholesale rates and competition by moving to reduce the price of SMS and now offer unlimited texts in most plans. While there remain some low cost PAYG plans that charge for SMS, there are alternative offers available in the market, including offers from MVNOs that are viable alternatives for consumers seeking a low cost plan with SMS inclusions.

We do not consider that extending the declaration of SMS MTAS is required to promote competition in the retail market.

6.1.2. Will declaration achieve any-to-any connectivity?

VHA submitted that extending the declaration of SMS termination services is unnecessary as SMS termination services are provided on a reciprocal basis and therefore any-to-any connectivity will continue to be achieved in the absence of declaration.⁹⁰

Draft position

Although SMS termination has the same bottleneck characteristics as MTM voice termination, and both services are also supplied on a reciprocal basis, the ACCC does not consider that extending the declaration of SMS termination is necessary to promote the achievement of any-to-any connectivity. As noted above, even in the absence of declaration, the MNOs do not have an incentive to refuse interconnection, thus adversely impacting any-to-any connectivity.

For the reasons outlined above the ACCC considers that extending the declaration of SMS MTAS is not necessary to promote any-to-any connectivity.

6.1.3. Will declaration encourage the efficient use of and investment in infrastructure?

The ACCC considers that allocative, productive and dynamic efficiency are promoted when the prices of a service reflect the costs of providing that service.

In the absence of declaration, the ACCC considers that competition in the retail market for messaging would incentivise MNOs to continue to price SMS services close to efficient cost. This would lead to the economically efficient use of and investment in infrastructure used to provide the services.

As a result, the ACCC is of the view that extending the declaration of SMS MTAS is not required to promote efficient investment in, and use of, telecommunications infrastructure.

⁹⁰ VHA Submission, p. 18.

6.2. A2P SMS services

In this section we examine application-to-person SMS services against the statutory criteria and set out the ACCC's draft position.

6.2.1. Will declaration promote competition in the relevant markets for A2P SMS?

Relevant markets for A2P SMS

Wholesale market for SMS termination

As discussed above, each MNO has exclusive control over its network and therefore monopoly over the supply of SMS termination on its network. As such, we consider that there is one wholesale market for SMS termination services. As with P2P SMS, SMS termination services are an essential input to the provision of SMS services downstream, and there is no alternative service allowing an MNO to send an SMS to an end-user on another MNO's network.

In order to send A2P SMS messages to mobile subscribers, an A2P SMS service provider must have agreements with MNOs. These take either of two forms: an aggregator negotiates separate agreements with each MNO for it to deliver SMS only to that MNO's own customers (on-net), or an A2P SMS service provider negotiates an agreement with a single MNO to deliver SMS to its own customers (on-net) but also to deliver SMS to customers on other MNOs' networks (off-net). SMS termination is required for off-net A2P SMS services only.

We note that within this market, MNOs also supply wholesale A2P SMS services to aggregators, such as Sinch, to deliver SMS to that MNO's customers (on-net). They also sell A2P SMS services to aggregators to deliver SMS to customers on another MNO's network (off-net).

Downstream A2P SMS markets

The downstream A2P SMS market has different supply layers and there are overlaps between suppliers and buyers. As such, it is difficult to precisely identify or define each layer of that market. For the purpose of this inquiry, the ACCC considers it sufficient to consider various downstream A2P SMS markets as a whole, although significance would be given to the retail segment where end-users purchase A2P SMS services when making assessment against the LTIE factors.

SMS termination is an input in the downstream market for A2P SMS services in which MNOs and aggregators supply services to A2P SMS service providers, and in which A2P SMS services are supplied to end-users. Importantly, termination is only an essential input where A2P SMS are sent off-net, that is messages sent from one MNO to another MNO's network, not all A2P SMS.

Suppliers in this market include A2P SMS service providers, such as MessageMedia and MNOs.⁹¹ End-users include businesses and enterprises (such as banks, utilities and government agencies) that acquire A2P SMS to send to their customers. Other important players are the aggregators (such as Sinch), who may not have direct relationships with end-

⁹¹ We received submissions from one aggregator, Sinch; one MNO-like operator that provides off-net services (Pivotel) but which I kely competes against aggregators; and two A2P SMS service providers – MessageMedia and Over The Wire in addition to the MNOs: Telstra, Optus and VHA.

users, but acquire wholesale A2P SMS services from the MNOs and then sell onto smaller A2P SMS service providers.

Draft position

As discussed, the ACCC is of the draft position that there are broadly two relevant markets for the purpose of assessing the impact of declaration on the provision of A2P SMS services:

- the wholesale market for SMS termination, which is the same relevant market for the provision of P2P SMS services, and
- the downstream A2P SMS market.

State of competition in the relevant markets

Wholesale market for SMS termination

As discussed above, MNOs continue to have a monopoly over SMS termination services and termination services, per se, do not have any substitutes.⁹² This means that competition in the wholesale market for SMS termination may not be feasible.

However, as with P2P SMS, the important question is whether, in the absence of competition in the wholesale market, MNOs are able to exploit their market power in the downstream market. There is evidence obtained during the inquiry that MTAS is not essential for A2P SMS to be delivered in the downstream market. A2P SMS service providers, including aggregators and MNOs, can deliver A2P SMS to customers on each MNO's network, rather than rely on SMS termination to interconnect between networks. This means that MNOs cannot use their market power over SMS MTAS to restrict access to their customers.

Downstream market for A2P messaging services

Submitters provided mixed views about the state of competition in the downstream A2P market and developments since declaration of SMS termination in 2014. Some submitters noted that competition in the A2P market had increased since declaration in 2014, but note that competition in the retail segment is a result of factors unrelated to declaration. There appears to be some basis for these arguments, given that the reduction in wholesale rates has not flowed through to retail prices, notwithstanding the growth of A2P SMS services and more competition in the wholesale segment. We have outlined the key developments below.

First, Pivotel entered the A2P SMS market. Pivotel had long-standing access agreements for SMS termination with the MNOs prior to the declaration of this service. However, Pivotel submits that declaration and consequent price regulation enabled it to enter the A2P SMS market. Pivotel estimates that it has [c-i-c begins] [REDACTED] [c-i-c ends].⁹³ However, in contrast, Optus estimates that Pivotel has [c-i-c begins] [REDACTED] [c-i-c ends] of the market.⁹⁴ Based on A2P SMS traffic figures obtained from Ovum depicted in Figure 8, we consider that Pivotel's likely market share of the A2P SMS services market is likely to be somewhere between these two figures.

⁹² SMS can only be terminated legally on an MNO's network.

⁹³ Pivotel, *Additional submission to the MTAS declaration discussion paper*, (Confidential), p.2 (Pivotel Submission (Confidential)).

⁹⁴ Optus, *Submission to the MTAS declaration discussion paper*, confidential version, September 2018, p. 17 (Optus Submission (Confidential)).

Pivotel competes against aggregators (noting that Sinch is the largest aggregator in the Australian market but itself is also an A2P SMS service provider). The wholesale costs that Pivotel and Sinch face are quite different. Pivotel acquires MTAS directly from MNOs at [c-i-c begins] [c-i-c ends].⁹⁵ However, an aggregator, such as Sinch, purchases A2P SMS services from each MNO and this appears to be at around the rate of [c-i-c begins] [c-i-c ends] per message.⁹⁶

Second, MNOs are now suppliers in the retail A2P SMS market as they directly supply services to large enterprises such as banks and utilities as part of a broader suite of communications services. In this way, they are likely to compete with A2P SMS service providers who previously would have served these large enterprise and government customers. Optus advises that [c-i-c begins] [c-i-c ends]

[c-i-c ends].⁹⁷ Optus submits that the reduction of the SMS termination rate has benefitted large enterprises with direct relationships with the MNOs.⁹⁸

Third, there has been consolidation in the aggregator layer when Sinch (CLX) acquired MBlox in 2016 and Dialogue in 2017. Sinch now appears to be one of only a few aggregators in the market, with Optus submitting that [c-i-c begins] [c-i-c ends]⁹⁹

Fourth, while the wholesale A2P SMS charges, that is, the prices MNOs charge aggregators and other buyers, have fallen there is little evidence that retail A2P SMS charges have fallen. It therefore appears that small to medium enterprises directly acquiring A2P SMS services from the MNOs have not benefited from lower wholesale prices.

Optus submits that while the reduction has been passed onto consumers, the reduction in the SMS interconnection rate is benefiting the large enterprises with direct relationships with the MNOs, not the enterprises acquiring services through aggregators (due to a lack of competition in the aggregator market). It advises that [c-i-c begins] [c-i-c ends]¹⁰⁰

Similarly, Sinch submits that the cost of A2P SMS end-to-end services has dropped marginally since 2014, but that the associated value has been almost exclusively captured by non-MNO providers that have entered the A2P SMS market, rather than being passed on to consumers.¹⁰¹ In contrast, Pivotel considers that it has [c-i-c begins] [c-i-c ends]

[c-i-c ends] but has not submitted on retail prices.¹⁰²

Finally, despite the entry of Pivotel, aggregators such as Sinch and large service providers still predominantly appear to purchase on-net services from each of the MNOs rather than purchasing on-net and off-net services from one MNO. For example, Pivotel notes that [c-i-c begins] [c-i-c ends]

⁹⁵ MNO Access Agreements.

⁹⁶ Optus Submission (Confidential), p. 17.

⁹⁷ Optus Submission (Confidential), p. 17.

⁹⁸ Optus Submission, p. 16.

⁹⁹ Optus Submission (Confidential), p. 17.

¹⁰⁰ Optus Submission (Confidential), p. 17.

¹⁰¹ CLX Submission, p. 3.

¹⁰² Pivotel submission (confidential), p. 3.

[redacted] [c-i-c ends].¹⁰³ Both Telstra and Optus submitted that [c-i-c begins] [redacted] [c-i-c ends].¹⁰⁴ while VHA notes that A2P SMS service providers and aggregators still largely contract separately with each MNO.¹⁰⁵

However, MessageMedia submits that the critical role of SMS MTAS declaration has been to constrain the off-net surcharge enabling each MNO to compete for A2P SMS service providers' business as a gateway to all networks which has resulted in a significant reduction to the cost of providing A2P SMS services.¹⁰⁶ In this way, the effect of regulation would be to constrain the off-net model as access to the regulated MTAS is not required for the on-net model.

A2P SMS is not the only way to send marketing messages. End-users can also contact customers through email, OTT, MTM, social media as well as through A2P SMS. MessageMedia argued that, for the purposes of A2P SMS, SMS is the only universal way to contact a customer as it only requires knowing an end-user's mobile phone number.¹⁰⁷ However, the ACCC considers that, given the *Spam Act 2003* requires businesses to gain consent (either express or inferred) from customers before sending a commercial electronic message, such as an SMS or email, it does not appear that businesses are limited to solely contacting customers by SMS. That is, it is open to businesses to obtain other contact details from a customer. In this way, not being able to contact a customer by SMS does not represent a barrier.

Based on these developments, we can make the following observations about the effect of the 2014 declaration on competition in the A2P SMS markets and the current state of competition:

- There appear to be some positive changes to the structure of the wholesale segment with the entry of Pivotal and the MNOs directly supplying retail A2P SMS services to downstream enterprise customers.
- Declaration did result in some reduction in some prices, namely the wholesale A2P SMS prices, and the retail prices that MNOs charge large enterprise end-users.
- However, there appear to be little evidence that the competitive benefit has been widespread, particularly in the retail segment.
 - There is no sign of significant increases in the purchase of off-net services. [c-i-c begins] [redacted] [c-i-c ends].¹⁰⁸ As such, MNOs still do not actively compete with each other for the business of aggregators which still buy on-net services from each MNO, but do compete for larger customers in the downstream markets.
 - There is no sign that retail prices for A2P SMS for most end-users (that is, businesses that acquire A2P SMS services) have decreased, despite the decrease in wholesale A2P SMS prices. Despite the MNOs' presence in the retail market, it appears that they only supply A2P SMS services directly to

¹⁰³ Pivotal submission (confidential), attachment 1; and Pivotal submission, (confidential), p. 1.

¹⁰⁴ Telstra, Supplementary Submission (Confidential), p. 2; Optus Submission (Confidential), p. 17.

¹⁰⁵ VHA, submission, p. 16.

¹⁰⁶ MessageMedia submission, p.10.

¹⁰⁷ MessageMedia Submission, p.8.

¹⁰⁸ Telstra Supplementary Submission (Confidential), p.2; Optus Submission (Confidential), p.17.

large enterprises on top of, or as part of their existing communications needs. The extent to which the MNOs compete with A2P SMS providers therefore appears limited.

- While Pivotal does supply off-net services, its market share appears to be relatively low, despite the advantages it has in very low costs, and there is no evidence that its entry has resulted in any material pro-competitive benefits for end-users in the retail market.

Overall, competition in the downstream market appears to have improved with the entry of Pivotal and MNOs providing A2P SMS services to downstream A2P SMS service providers. While the wholesale price now appears to be more closely aligned with efficient cost of the service, this does not appear to have resulted in lower retail prices which would otherwise benefit end-users. Importantly, the majority of A2P SMS delivered in the retail market is on-net SMS, and as such, MTAS is not required.

Will declaration promote competition in the relevant markets for A2P SMS?

As noted above, scope for competition in the wholesale market for SMS termination is limited as each MNO continues to have monopoly access to end-users on its network. The key question here is whether declaration is necessary to prevent the MNOs from exercising their market power and to promote competition in the downstream market for A2P SMS services.

As discussed earlier in relation to P2P SMS, the ACCC considers that extending declaration of SMS termination services is no longer necessary to constrain the MNOs from exercising market power by reason of having exclusive access to end-users on their network. This is because the MNOs are likely to be constrained from refusing SMS termination or setting unreasonably high SMS termination charges due to competition from OTT services in the retail market for messaging. In other words, the SMS termination arrangements between the MNOs are likely to remain even if declaration is removed.

By extension, this means that the downstream A2P SMS market would likely be *largely* unaffected should declaration be removed. Although MNOs have entered the market since 2014 to provide A2P SMS services to large enterprises, we consider that the current arrangements, in which aggregators and A2P SMS service providers negotiate with each MNO to deliver SMS to its customers, are likely to remain in place. As these agreements are not dependent on MTAS, and make up the major proportion of A2P SMS being delivered to customers, not continuing declaration of SMS MTAS will have no impact on these arrangements.

In any case, as the MNOs would likely continue to provide SMS termination to each other at an efficient price in the absence of declaration due to competition in the retail market for messaging, any effect declaration had in reducing the price of off-net A2P SMS would likely continue even if declaration is removed.

It is expected however, that removing declaration of SMS MTAS will have an impact more broadly on Pivotal's position in the wholesale market. While Pivotal provides P2P SMS for its own customers, it has much larger volumes of A2P SMS. Given the MNOs have now emerged as competitors against the A2P SMS aggregators, Pivotal is not the only competitor to the "international aggregator" (ie. Sinch). MessageMedia submits that the effect of deregulation would be that Pivotal is 'frozen out' by at least one (and most likely all)

MNOs by means of increased termination rates making its wholesale A2P SMS service unviable.¹⁰⁹

Pivotel submits that it cannot rely on reaching balanced commercial agreements with the MNOs in the absence of MTAS SMS declaration.¹¹⁰ It has provided evidence to support its submission that it would encounter difficulties in concluding commercial negotiations with the MNOs. However, that evidence suggests that these commercial difficulties relate chiefly to technical issues and, [c-i-c begins]

[c-i-c ends].¹¹¹

We consider that if declaration of SMS MTAS is not continued, it is likely that Pivotel, Sinch and MessageMedia will continue to compete in the A2P SMS market because:

- It is likely that each MNO will continue to provide SMS termination access agreements to Pivotel and aggregators and that is likely to remain the case even in the absence of declaration.
- While it is likely that Pivotel will face higher wholesale prices for SMS termination, the current retail prices it charges are significantly higher than the SMS termination rates (0.03 cents) and as such, may still provide a return, even if the margins reduce.
- Aggregators and A2P SMS providers (including MessageMedia) that do not directly interconnect with the MNOs have been able to acquire wholesale A2P SMS services and there is no evidence to suggest that this will change.

However, we note that in the absence of declaration, prices for SMS termination would be a matter for commercial negotiation. However, given the extremely low cost of SMS termination, any price increase that would effectively prevent any party (such as Pivotel) from competing in the A2P SMS market, may indicate anti-competitive conduct and warrant investigation under Part XIB of the CCA.

For the reasons above, the ACCC is of the draft position that continued declaration is not necessary to promote competition in the relevant markets for the provision of A2P SMS services.

6.2.2. Will declaration achieve any-to-any connectivity?

The ACCC does not consider that extending the declaration of SMS termination is necessary to promote the achievement of any-to-any connectivity with regard to A2P SMS.

Evidence provided to the ACCC during the inquiry suggests that A2P SMS is still largely sent on-net, with only a relatively small proportion of SMS being sent off-net. If declaration of SMS MTAS is not extended, it is unlikely that there will be any impact on the A2P SMS being sent through MNOs' networks.

For the reasons outlined above, the ACCC considers that extending the declaration of SMS MTAS is not necessary to promote any-to-any connectivity with regard to A2P SMS.

¹⁰⁹ MessageMedia submission, p. 35.

¹¹⁰ Pivotel Submission (Confidential), pp. 4-8.

¹¹¹ Pivotel Submission (Confidential), pp. 4-8, and access agreements between MTAS providers and access seekers.

6.2.3. Will declaration encourage the efficient use of and investment in infrastructure?

There is concern that declaration may result in inefficient use of infrastructure because of spam SMS. VHA submitted that declaration of SMS has incentivised the excessive use of mobile infrastructure for SMS messages to an extent that it has imposed serious external costs on MNOs and consumers through spam. VHA notes that since the 2014 Decision, the data shows a significant increase in the number of spam and scam SMS messages being sent to end-users, compared to pre-declaration. VHA argues that this has led to negative externalities of approximately [c-i-c begins [REDACTED] [c-i-c ends] annually that could be directly attributed to the ACCC's 2014 Decision.¹¹² VHA considers this to be a conservative estimate as it does not take into account the fact that victims underreport scams. This externalised cost is a direct result of the economically inefficient use of infrastructure. Optus submitted that there has been a material increase in fraudulent and phishing SMS scams to consumers due to SMS interconnection.¹¹³

The ACCC appreciates that the MNOs have strong incentives to ensure that their end-users are not subjected to fraudulent SMS and strongly supports their activities to prevent such messages getting through to end-users. Through our activities with ScamWatch, the ACCC is all too aware of the costs imposed on Australians through this kind of fraudulent activity.

Negative externalities, such as those imposed by spam and scam SMS, are relevant in considering whether declaration encourages economically efficient use of infrastructure. If the ACCC were of the view that declaration would promote competition, it would be necessary to undertake a further investigation into whether continuing declaration would result in an increase in externality costs being imposed on end-users through an increase in spam SMS. However, given the ACCC's draft position that extending declaration of SMS MTAS will not promote competition in relevant markets, it is not necessary to do this.

We note that declaration of SMS MTAS only affects off-net A2P SMS which likely consists of only a small proportion of all SMS traffic. Given this, declaration would have little impact in encouraging more efficient investment in infrastructure.

6.3. Conclusion

We have carefully considered the information provided during the inquiry about SMS termination services, including both P2P SMS and A2P SMS services. We have formed the draft position that continued declaration is unlikely to promote the LTIE because it:

- would not promote competition in relevant markets,
- is not necessary to achieve any-to-any connectivity, and
- will not encourage the efficient use of, and investment in, infrastructure.

In respect of P2P SMS, the continued growth and popularity of OTT messaging, declining use of SMS and widespread offers of unlimited SMS in retail plans mean that continuing declaration of SMS MTAS is not necessary to achieve the LTIE.

In respect of A2P SMS, while declaration in 2014 resulted in more competition in the downstream A2P SMS market with Pivotal's entry and the MNOs offering services in the retail segment, the benefits of competition do not appear to have flowed through to benefit most end-users. Further, we consider that the removal of declaration is unlikely to materially

¹¹² Vodafone submission, Part C, Frontier Economics report, p. 2.

¹¹³ Optus Submission, p. 17.

affect the current state of competition for A2P SMS services, and that the MNOs, Sinch, Pivotel and MessageMedia will continue to offer A2P SMS services.

As such, we have formed the draft position that it would not be in the LTIE to extend the declaration of SMS termination and it should be allowed to expire.

7. Scope of the declared service

In addition to submitting on whether voice and SMS MTAS should continue to be declared, stakeholders have also raised issues which go to the appropriate scope of any new MTAS declaration; that is, what should or should not be regulated. In particular the ACCC has been requested to consider:

- whether the service, as currently declared and defined, allows innovative services to develop. This proposal includes:
 - changing the way MTAS is defined so that it refers to termination on a mobile number rather than a mobile network.
 - introducing regulation of voice origination
 - changing the definition of the point of interconnection (POI) without requiring that the access provider itself operate a digital mobile network.
- excluding international originating calls from the scope of declaration (and thereby preventing international operators from availing themselves of regulated prices).

In this section of the report, the ACCC sets out its draft positions on these issues and whether changes to declared service are required.

7.1. Ability for innovative services to be developed

Stakeholders are divided over whether the declaration has encouraged the supply of innovative services.

Telstra submitted that the strength of mobile competition encouraged the supply of innovative services. It noted that the introduction of numerous A2P message OTT service providers into the retail messaging market since 2009 is an example of innovative services succeeding in the marketplace. Such innovative services were underway prior to the declaration of SMS MTAS and are consistent with global trends.¹¹⁴

Similarly, Macquarie Telecom submitted that the MTAS service description is not a primary driver of service innovation, but neither did it constrain or inhibit service innovation (for example, that the service description withstood the transformation from analogue to digital technology). It considered service innovation to be more dependent on organisation culture and behaviour. New and better ways of terminating voice calls and SMS messages were not, in its view, high on the list of factors affecting customer buying decisions, with network coverage, service quality and service reliability being more highly valued.¹¹⁵

Macquarie Telecom added that **[CIC begins]**

[REDACTED]

ends]¹¹⁶

[CIC

However VHA considered that the current service description discourages MNOs from investing in innovative SMS services owing to the inclusion of SMS termination. It observed

¹¹⁴ Telstra Submission, p.17.

¹¹⁵ Macquarie Submission, p.8.

¹¹⁶ Macquarie Telecom, *Submission to the MTAS declaration discussion paper*, confidential version, September 2018, p.8 (Macquarie Submission (Confidential)).

that investments tend to be limited to service enhancements as opposed to the development of uniquely innovative services.¹¹⁷

MessageMedia submitted that innovations are being led by new entrants to the messaging market, not the MNOs. It noted that, as a result of the MTAS declaration and FAD, A2P SMS providers have grown in size and importance, and invested substantial amounts in innovation for end-user benefit.¹¹⁸ Similarly Pivotel considered that it had achieved productive efficiency in developing a purpose built in-house SMS platform for servicing the A2P SMS market. Its platform, for example, has a number of innovations in the way it handles different SMS signalling protocols, different message loads, and retry methodologies.¹¹⁹

Pivotel also argued that, in order to encourage innovative services, changes to the service description are required. In particular, the service description should:

- include Rich Content Service messaging to enable the messaging market to develop with the certainty that terminating access for these services will be provided on reasonable commercial terms to small MNOs¹²⁰
- be more specific with regards to the default network infrastructure or architecture for interconnection; clarify whether the access provider can determine the location of the point(s) of connection and whether the access provider must act reasonably in doing so; clarify whether SMS includes A2P SMS¹²¹
- specify termination on a mobile number, and not that the end-customer be 'directly connected to the access provider's network'; provide that the point of interconnection (POI) be a point of demarcation between the networks nominated by the access seeker and the access provider, without requiring that the access provider itself operate a digital mobile network and, clarify that the POI for the voice component of the MTAS definition is different from the POI for the SMS component of the MTAS definition.¹²²

Draft position

The ACCC's draft position is that competition in the mobiles sector is encouraging the supply of innovative services. Developments in SMS services, such as A2P SMS services and Rich Content Services, are signs that the MTAS service description is not inhibiting the supply of innovative SMS services. However the ACCC recognises that there has been a level of confusion with regard to the scope of the current service description, particularly with regards to how it applies to A2P SMS services. However, we have found that the downstream A2P SMS market remains competitive. The proliferation of OTT messaging and SMS shows that end-users are able to access innovative SMS services in the current regulatory environment. The ACCC also considers that investment in innovative messaging services is likely to continue given the current competitive environment and consumer demand.

¹¹⁷ VHA Submission B, p.4.

¹¹⁸ MessageMedia, *Submission to the MTAS declaration discussion paper*, public version, September 2018, pp.15-16, 21-22.

¹¹⁹ Pivotel Submission, p.9.

¹²⁰ Pivotel Submission, pp.14-15. MessageMedia, *Submission to the MTAS declaration discussion paper*, public version, September 2018, pp. 21-22, 34 & 51.

¹²¹ Over the Wire, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.4.

¹²² MNF, *Submission to the MTAS declaration discussion paper*, public version, September 2018, p.12. Compete, *Submission to the MTAS declaration discussion paper*, public version, September 2018, pp.2 and 14.

Voice MTAS

Voice MTAS is considered by most stakeholders to be functioning well in its present form.¹²³ Optus, Telstra and Macquarie Telecom support what they regard as a technology-neutral approach. Optus advised that there are no impediments to using different technologies when providing (or acquiring) interconnection services.¹²⁴ It noted that **[CIC begins]** [REDACTED] **[CIC ends]**¹²⁵ Telstra also warned that a technology-based service description reflecting potential ways to deliver a voice call to a mobile handset may have negative unintended consequences by limiting innovative service providers' access to the MTAS.¹²⁶

However, Commpete and MNF submit that the current service description does not describe voice MTAS in technology neutral terms (and as such is not fit for purpose). They submitted that there are many ways to terminate calls to mobile handsets that do not require the terminating party to operate a mobile network. They noted, for example, that the number of OTT services providing voice and messaging services was increasing while all MNOs are now offering Voice over Long Term Evolution (VoLTE) and Voice over WiFi (VoWiFi). Calls delivered by VoWiFi are not, for example, carried over the MNOs' radio access networks.¹²⁷

They also submitted that the MTAS service description should be technology neutral and should specify termination on a 'mobile number' rather than on the 'access provider's digital mobile network'. In addition, the point of interconnection (POI) should be changed to a point of demarcation between the networks nominated by the access seeker and the access provider, without requiring that the access provider itself operate a digital mobile network.¹²⁸

We also understand from MNF that its subsidiary, Symbio, has been unable to launch its virtualised mobile numbers product because MNOs have refused to provide interconnection. Symbio's virtual number product is essentially a smartphone app that makes and receives voice calls and SMS from a virtual number. Virtualised mobile numbers enable consumers to have a different cloud-based number for different online aliases – one for shopping, one for work, one for home - on the same mobile handset. The idea being that when a number gets compromised, it can be replaced by a new one without affecting the consumer's other numbers.¹²⁹

MNF advised that one reason provided by the MNOs was that there is no obligation to purchase a termination service to Symbio's allocated mobile numbers. This is because the CCA provides a right to acquire access to a service but does not expressly require or force another carrier or carriage service provider to acquire access. To overcome this problem MNF suggested a number of solutions including that the ACCC declare voice origination and termination to ensure interconnection.¹³⁰

Draft position

The ACCC is always concerned regarding claims that innovative services are unable to be offered. The ACCC understands that Symbio first developed its virtualised mobile numbers application in 2014 but since then has tried unsuccessfully to introduce a commercial service.

¹²³ TPG Submission, p.1. Pivotel Submission, p.13. Macquarie Submission, pp.5-6. Optus Submission, pp.3 and 11. Telstra Submission, pp. 15-16.

¹²⁴ Optus Submission, p.3.

¹²⁵ Optus Submission (Confidential), p.11.

¹²⁶ Telstra Submission, pp. 15-16.

¹²⁷ Commpete Submission, p.9. MNF Submission, p.6.

¹²⁸ MNF Submission, pp.2 & 7. Commpete Submission, p.9.

¹²⁹ MNF Submission, pp.4-5.

¹³⁰ MNF Submission, pp. 5, 7.

MNF has argued that it is necessary to vary the service description for it to be technology neutral (and thereby encourage delivery of innovative services) and in particular, to facilitate entry and provide any-to-any connectivity for Symbio's virtualised mobile numbers product.

A defining feature of the declared MTAS has been that termination must be provided on a mobile network. As explained by Optus, the use of the mobile access network justifies the MTAS-specific termination rate, differentiating it from fixed termination access services and other generic termination services.¹³¹ The ACCC considers that if the service description were varied in the manner proposed by MNF, differential pricing would likely be required in the access determination between services that terminate on a mobile network and, those that do not, in order to take account of the different costs involved.

However, Symbio would also need to overcome a number of other difficulties. As already acknowledged by MNF, carriers are not required under the CCA to acquire a declared service and as such, varying the MTAS service description would not necessarily assist MNF. As such, Symbio would require access to other remedies outside the scope of the current declaration inquiry.

Optus, in its submission, highlighted a further difficulty regarding whether non-mobile operators that use mobile numbers to provide voice services can terminate calls. It argued that they cannot because mobile numbers can only be used for the purpose of providing public mobile services. That is, under the relevant legislation¹³² mobile numbers (digital mobile number) can only be used with a digital mobile service, which is a public mobile telecommunications service supplied by a network using digital modulation techniques. Optus argued that public mobile telecommunications services cannot be provided over non-mobile networks and as such, non-mobile network operators should not be using mobile numbers to provide non-mobile voice services.¹³³

From a technical perspective, it appears that the virtual numbers application operates more like an OTT service than a mobile voice service given that it is initially provided on a best efforts data link. As such, it is only recognised as a voice service by the network once it is converted (at an application server outside the network), conditioned and registered on a mobile network. We understand that some MNOs may be refusing to condition and register the virtual numbers.

From an LTIE perspective, the essential rationale for regulating the MTAS is that it potentially represents an access bottleneck to reaching an end-user. Innovative OTT services are leading to a lessening in the market power of MNOs in controlling this bottleneck. This is illustrated by the development of OTT services that have become substitutes for SMS termination services. This may lead, or may have already lead to an increased ability for access seekers to negotiate commercial agreements. While submissions lay out a diverse range of experiences as to how access seekers access the MTAS, we are not persuaded that a strong case exists for a change to the service description along the lines submitted by MNF.

To better understand MNO concerns, we would welcome further submissions.

7.2. International originating calls

VHA raised concerns over the ability of foreign overseas carriers to obtain access to regulatory MTAS rates either directly (if they are a carrier or carriage service provider) or indirectly (via transit arrangements), creating a significant asymmetry of bargaining power in

¹³¹ Optus Submission, p.11.

¹³² *Telecommunications Act 1997*, section 32. *Numbering Plan 2015*, section 16.

¹³³ Optus Submission, pp.9-10.

favour of foreign carriers to the disadvantage of local Australian operators.¹³⁴ For example it noted that [CIC begins]

[CIC ends]¹³⁵

VHA submitted that the service description should exclude the termination of voice calls that originate from locations outside Australia. It argued that the principle of reciprocity would promote the LTIE as it would enable Australian mobile consumers to receive lower call charges in relation to outbound international calls by reducing the wholesale termination costs of those calls. It could also be implemented via the introduction of origin based commercial charging.¹³⁶

Draft position

The ACCC notes that Ofcom recently considered this issue in its review of mobile termination charges in 2018. When deciding that the same charge should apply for the termination of all calls to UK mobile numbers, regardless of origin, it noted that the most likely outcome of differential regulation was reciprocal high termination rates, to the detriment of consumers.¹³⁷ Ofcom formed its conclusions, in part, on the experience of 15 other national regulatory authorities in the European Economic Area (EEA) which have excluded calls originating outside the EEA from regulatory termination charges. Ofcom found that where mobile call termination providers responded, the termination rates increased in most cases.¹³⁸

The ACCC also considers that higher wholesale charges are a possible outcome of negotiations between carriers. Further, rather than simplify regulation of MTAS, the proposed change would introduce differential regulation and in doing so, provide for a more complex regulatory regime with higher implementation, compliance and monitoring costs for industry. The ACCC is nevertheless mindful that a number of regulatory authorities have adopted this approach. As the ACCC has only received one submission with regard to this issue, it would also be interested in receiving submissions from other stakeholders.

¹³⁴ VHA Submission, pp. 1, 3-4 & 25-26.

¹³⁵ VHA Submission, p.25.

¹³⁶ VHA Submission, pp.3-4, 26-26.

¹³⁷ Ofcom, *Final statement: Mobile Call Termination Market Review 2018-2021*, 28 March 2018, pp.2 & 5.
https://www.ofcom.org.uk/data/assets/pdf_file/0021/112458/Final-Statement-Mobile-Call-Termination-Market-Review-2018-2021.pdf

¹³⁸ Ofcom, *Final statement: Mobile Call Termination Market Review 2018-2021*, 28 March 2018, p.65.

8. Duration of MTAS declaration

When making a declaration under section 152AL of the Act, the ACCC must specify an expiry date for the declaration (s.152ALA(1)). In specifying an expiry date the Commission must have regard to:

- the principle that the expiry of the declaration should occur within three to five years of the declaration being made unless there are circumstances that warrant a shorter or longer period
- any other matters (if any) that the ACCC considers relevant (s. 152 ALA(2)).

Stakeholders anticipate significant developments in the telecommunications sector over the next five years, particularly with the introduction of 5G. Some cite this as a reason for a three year regulatory period.¹³⁹ However most support a five year regulatory period on the basis that it would provide a degree of certainty for investment decisions, enable stakeholders to enter into long term agreements and provide for reconsideration of the declaration after the developments have taken place. Pivotel also considers it unlikely that there would be a genuine substitute for voice MTAS available within the next five years while Macquarie Telecom adds that there are no evident concerns with the five-year duration of the current MTAS declaration.¹⁴⁰

Draft position

The ACCC's draft position is that the appropriate expiry date for the MTAS declaration is a period of five years. Whilst the mobiles sector is dynamic and subject to ongoing change and innovation, it is not clear that a period of three years would be an adequate amount of time to gauge whether circumstances had changed sufficiently to warrant changes to the declaration. The ACCC notes that should there be a notable change in circumstances it may commence an inquiry to amend the declaration at an earlier time prior to the proposed five year expiry date.

¹³⁹ Commpete Submission, p.9. MNF Submission, p.13. TPG Submission, p.1.

¹⁴⁰ Telstra Submission, p.19. VHA Submission, p.27. Optus Submission, p.3. ACCAN Submission, p.6. Pivotel Submission, p.19. Macquarie Submission, p.15. Over the Wire Submission, p.5.

Appendix 1 Proposed MTAS service description

Service description

Domestic Mobile Terminating Access Service

The domestic mobile terminating access service is an access service for the carriage of voice calls ~~and short message service (SMS) messages~~* from a point of interconnection, or potential point of interconnection, to a B-Party directly connected to the access provider's digital mobile network.

Definitions

Where words or phrases used in this Declaration are defined in the *Competition and Consumer Act 2010*, or the *Telecommunications Act 1997* or the *Telecommunications Numbering Plan 1997*, they have the meaning given in the relevant Act or instrument.

Other definitions

B-Party is the end-user to whom a telephone call is made ~~or an SMS message is sent~~.

Digital mobile network is a telecommunications network that is used to provide digital mobile telephony services.

Point of interconnection is a location which:

- (a) is a physical point of demarcation between the access seeker's network and the access provider's digital mobile network, and
- (b) is associated with (but not necessarily co-located with) one or more gateway exchanges of the access seeker's network and the access provider's digital mobile network.

~~**Short message service (SMS)** is the provision of messages up to 160 characters of text using capacity in the voice signalling channel of a mobile network.~~

* deleted words have a strikethrough