

MOBILE TERMINATING ACCESS SERVICE

An ACCC *Draft Report* on reviewing the declaration of the mobile terminating access service

March 2009



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1 Introduction

In December 2008, the Australian Competition and Consumer Commission (ACCC) commenced a public inquiry under section 152ALA of the *Trade Practices Act 1974* (Act) into the declaration of the mobile terminating access service (MTAS). The purpose of the inquiry is to determine whether the declaration for the MTAS should be remade, extended, revoked, varied or allowed to expire. The current MTAS declaration is due to expire on 30 June 2009.

In accordance with Division 3 of Part 25 of the *Telecommunications Act 1997*, the ACCC released a discussion paper¹ on 18 December 2008 to assist the declaration inquiry (2008 Discussion Paper). In response to the 2008 Discussion Paper, the ACCC received and reviewed submissions from seven interested parties. The submissions are available from the ACCC's website: www.accc.gov.au and a list of all submissions received as at 11 February 2009 is provided in Appendix B of this report.

Division 3 of Part 25 also requires the ACCC to prepare a report setting out its findings as a result of the inquiry. At this stage, and as part of the inquiry process, the ACCC has decided to release a Draft Report for public comment. The Draft Report proposes to extend the current MTAS declaration for a period of five years. The Draft Report sets out the ACCC's preliminary views. These views may change once the ACCC has had the opportunity to receive and consider further the submissions discussed below.

1.1 Timetable and inquiry process

1.1.1 Timetable for the inquiry

The ACCC requests written submissions on its draft report by **5:00pm on 16 April 2009**.

1.1.2 Making submissions

The ACCC encourages industry participants, other stakeholders and the public to consider the matters set out in this Draft Report and provide written submissions.

All submissions will be considered as public submissions and will be posted on the ACCC's website. If submitters wish to submit commercial-in-confidence material as part of their submission to the ACCC, submitters should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or 'c-i-c'. Interested parties submitting a commercial-in-confidence version of their submission must also provide details of a contact person to whom enquiries regarding the commercial-in-confidence material can be directed. Submitters should be aware that all submissions

¹ ACCC, Domestic Mobile Terminating Access Service — An ACCC Discussion Paper reviewing the declaration for the domestic mobile terminating access service, December 2008.

may be used by the ACCC in conducting its work. This includes work that does not involve or relates to this particular declaration inquiry.

Submissions are to be sent by email, in Microsoft Word or other text readable document form to:

Contact Officer:

Elsbeth Philpott Communications Group Australian Competition and Consumer Commission GPO Box 3648 Sydney NSW 2001 Phone: (02) 9230 9168 Facsimile: (02) 9231 5652 Email: elsbeth.philpott@accc.gov.au

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2 Background

2.1 The MTAS

The MTAS is a wholesale input, used by providers of calls from fixed line and mobile networks, in order to complete calls to mobile subscribers connected to other networks. Making a call between customers (or end–users) involves two essential elements — origination and termination. Origination refers to the carriage of a call from the end-user who makes, or originates, the call over the network to which this end-user is connected. Termination refers to the carriage of the call to the person receiving the call over the network on which the person receiving the call is connected. Where the person making the call and the person receiving the call are on different networks, a point of interconnection between these two networks will exist.

The main network elements of providing the MTAS are illustrated in Figure 1 below.

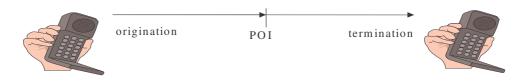


Figure 1 – Termination, origination and the POI

The MTAS is also an input for the carriage of fixed to mobile calls as illustrated in Figure 2.

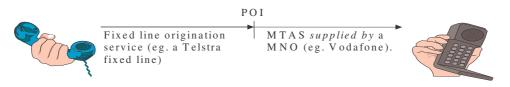


Figure 2 - Use of the MTAS to supply a FTM call

Under current commercial arrangements between network owners, the network owner that originates a call to a mobile network will, generally, purchase the MTAS from the network owner that completes (terminates) the call. The originating network owner will recover these costs, and the costs it incurs from originating the call, through the retail price it charges its directly connected end–user for providing the call. This commercial arrangement is typically referred to as the 'calling party pays' model.

The MTAS is therefore an essential input into the provision of calls to mobile phone users where the mobile phone user is on a different network to the individual who originates the call. This is the case irrespective of whether the call terminates on a 2G or 3G mobile network.

2.2 The ACCC's approach to regulating this service to date

The domestic global systems for mobiles (GSM) terminating access service was deemed to be declared under section 39 of the *Telecommunications Act 1997* and Part XIC of the Act in 1997.² The ACCC varied the GSM terminating access service declaration in March 2002 to include terminating access on code division multiple access (CDMA) mobile networks. The GSM and CDMA termination access service description was replaced in June 2004 with a new declaration which also included termination of voice calls on 3G mobile networks (2004 MTAS Declaration). The 2004 MTAS Declaration is due to expire on 30 June 2009.

2.3 MTAS pricing principles

Since declaring the MTAS in June 2004, the ACCC has released three sets of pricing principles for the MTAS.³ The ACCC's latest public inquiry into MTAS pricing commenced on 14 November 2008. As a result of this inquiry, the ACCC released the *MTAS Pricing Principles Determination for the period 1 January 2009 to 31 December 2011* (2009 Pricing Principles) following a public consultation and the consideration of submissions from interested parties. A copy of the 2009 Pricing Principles and the submissions from interested parties are available on the ACCC website at www.accc.gov.au.

2.4 Legislative Framework for declaration

Section 152AL(3) empowers the ACCC to declare a specified eligible service is a declared service if, inter alia, the ACCC is satisfied that the making of the declaration will promote the long-term interests of end–users of carriage services or of services provided by means of carriage services (LTIE).

For the purpose of determining whether a particular thing promotes the LTIE of end users, the ACCC must have regard to the extent to which the thing is likely to result in the achievement of a number of objectives. These objectives and the ACCC's analysis are set out in Chapters Four to Seven of this Draft Report. The legislative background and the ACCC's approach to assessment are also discussed in more detail in Appendix C.

² ACCC, *Deeming of Telecommunications Services*, 30 June 1997, p. 19.

³ ACCC, MTAS Pricing Principles Determination for the period 1 July 2004 to 30 June 2007, MTAS Pricing Principles Determination for the period 1 July 2007 to 31 December 2008 and MTAS Pricing Principles Determination for the period 1 January 2009 to 31 December 2011.

3 MTAS service description

As a result of the 2003 Mobile Services Review the ACCC concluded that the service description for MTAS should include fixed to mobile (FTM) and mobile to mobile (MTM) voice termination services regardless of the network technology, but would not include data termination services.⁴ The ACCC also clarified that it did not intend the service description to include services supplied pursuant to international or domestic roaming agreements.⁵

In the 2008 Discussion Paper, the ACCC sought comments from interested parties on the adequacy of the current MTAS service description and specifically, whether data, short message services (SMS), multimedia messaging services (MMS) and mobile network services deployed in aircraft operating within Australia should be included in the service description.

3.1 View of interested parties

Australian Telecommunications Users Group (ATUG)

ATUG submits the increasing use by end–users of SMS, MMS and data services warrants their inclusion in the MTAS service definition. ATUG also sees a need to include international MTAS in the definition given the excess charges for international roaming services.⁶

ATUG points out that the GSM Association's SMS Interworking Agreement (for bilateral use) may be used to facilitate interconnection of SMS services but may lead to increased prices for SMS.⁷

In relation to mobile network services deployed in aircraft operating within Australia, ATUG submits that all mobile services available to end–users need to be included in the MTAS service definition as the same market power problem arises.⁸

Hutchison 3G Australia

Hutchison submits that separate service descriptions for the MTAS in respect of MTM and FTM calls would provide the ACCC with the necessary flexibility to determine whether different pricing principles should apply in respect of each service.⁹

Hutchison submits that SMS and MMS both exhibit the same bottleneck characteristics as MTM calls and should be declared.¹⁰ Hutchison further submits that

⁴ ibid., p. 28.

⁵ ibid.

⁶ ATUG, Submission in response to the Discussion Paper, February 2009, p. 2.

⁷ ibid.

⁸ ibid., p. 3.

⁹ Hutchison 3G Australia Pty Limited, Submission in response to the Discussion Paper, February 2009, p. 14.

¹⁰ ibid., p. 15.

there is no need for data services to be declared because there is no data termination between carrier networks; and even if there were data termination between carrier networks, it would not meet the criteria for declaration given the many potential substitutes, such as the internet.¹¹

Hutchison proposes the ACCC include SMS and MMS in the MTM service description or, alternatively, develop a third service description which covers SMS and MMS only. Hutchison favours the latter approach.¹²

Hutchison also submits that mobile network services deployed in aircraft operating within Australia should, and currently do, fall within the MTAS service definition, as the MTAS rate does not differ on the basis of the B-Party's location.¹³

Singtel Optus

Optus submits that the current MTAS service description should remain technology neutral and that the ACCC should continue to monitor technological developments in alternate networks and future upgrades of current networks, such as WiMax and LTE.¹⁴

In relation to data services, Optus submits that:

- although SMS services remain the most popular non-voice service, the SMS market is still sustaining continued growth and it cannot be determined if the service has yet reached full maturity at this point in time
- uptake of other data services such as MMS, which became available with the commencement of operation of 2.5G and 3G services, will only continue to grow.¹⁵

Optus also submits that given SMS and MMS are generally MTM services and are in any event highly competitive, the issue of mobile network operators (MNOs) and integrated operators discriminating against fixed line only operators and impairing their ability to compete effectively does not arise.¹⁶

In relation to mobile network services deployed in aircraft operating within Australia, Optus submits that it should remain outside the MTAS service description because the current market for mobile network services operating on aircraft is still in its infancy.¹⁷ Optus considers it appropriate for airlines fitted with the service to arrange individual commercial agreements with telecommunications carriers, as well as regulatory approval from national regulatory agencies across their flight paths.¹⁸

¹⁵ ibid., p. 32.

¹¹ ibid.

¹² ibid., p. 15.

¹³ ibid., p. 16.

¹⁴ Singtel Optus Limited, *Submission in response to the Discussion Paper*, January 2009, pp. 31–32.

¹⁶ ibid.

¹⁷ ibid., p. 34.

¹⁸ ibid., p. 35.

In addition, Optus proposes the ACCC amend the MTAS service description so that the declaration is restricted to termination of FTM calls from fixed only operators and MTM calls from new entrant MNOs.¹⁹ In support of its proposal, Optus submits that the market power of MNOs is less significant than the ACCC's 2004 assessment, particularly with respect to termination of calls from other MNOs and integrated operators, and that MNOs and integrated operators have countervailing powers and retaliatory options.²⁰

Telstra

Telstra submits that the mobile services market is intensely competitive, with a sufficient level of commercial agreements in relation to the provision of SMS, MMS or data services more generally.²¹ Telstra submits that the current MTAS service description is adequate and extending regulation to those services would likely harm competition and not be in the LTIE.²²

In relation to mobile network services deployed in aircraft operating within Australia, Telstra submits that the termination of a voice telephony call made from an aircraft on a mobile service in Australia would already be caught by the definition of the declared MTAS.²³

Vodafone Australia

Vodafone submits that retaining the current MTAS service description is the most appropriate option to promote the LTIE. Specifically, Vodafone submits that the current service description should not be varied to include data, SMS, MMS or mobile services deployed in aircraft.²⁴

Vodafone submits that voice termination and termination of messaging services comprise two separate and distinct wholesale markets and that there is no clear *a priori* reason that extending the MTAS service description to include SMS and MMS would be in the LTIE. Vodafone therefore submits that it would be inappropriate for the ACCC to extend regulation to SMS and MMS termination without a standalone inquiry.²⁵

In relation to mobile network services deployed in aircraft operating within Australia, Vodafone points out that this service has yet to be deployed in Australia.²⁶ Vodafone submits that it is counter to economic and regulatory best practice principles to regulate a service which is immature and not yet deployed, and that there are jurisdictional and technical problems with regulating the service.²⁷ However,

¹⁹ ibid., p. 32.

²⁰ ibid., p. 26.

Telstra Corporation Limited, Submission in response to the Discussion Paper, February 2009, Schedule 1, p. 1.

²² ibid.

²³ ibid., p. 2.

²⁴ Vodafone Australia Limited, *Submission in response to the Discussion Paper*, January 2009, p. 5.

²⁵ ibid., pp. 5–6.

²⁶ ibid., p. 6.

²⁷ ibid.

Vodafone does not take a definitive stance on these issues and submits that a detailed and separate review is required.²⁸

3.2 The ACCC's view

The ACCC has identified the following main issues arising out of the submissions in response to the 2008 Discussion Paper:

- whether MTM termination should be included in the service description and if so, whether FTM and MTM termination should be separately described
- whether termination of SMS, MMS and other data services should be included in the service description
- whether mobile network services deployed in aircraft operating within Australia should be included in the service description.

Each of these issues is addressed in turn below.

3.2.1 Differences between FTM and MTM termination services

In the *Mobile Services Review* — *Mobile Terminating Access Service, Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service* (2004 MTAS Final Report), the ACCC formed the view that the service description should include both FTM and MTM termination.²⁹ The ACCC's reasons included call traffic asymmetry, the difference between the public switched telephone network (PSTN) termination and mobile termination rates, the fundamentally similar nature of calls originating on fixed lines and calls originating on mobiles, and the promotion of any-to-any connectivity.³⁰ The ACCC considers the rationale outlined in the 2004 MTAS Final Report remains largely valid today.

The ACCC is concerned that call traffic flows even among MNOs may not be sufficiently symmetrical to realise the 'cancelling out' referred to above. The ACCC observes that subscribers of different MNOs exhibit different calling patterns and subscription preferences. For example, some MNOs have a stronger presence in the prepaid market, while others offer plans which primarily attract business customers. Information regarding call traffic symmetry and interconnection arrangements are not in the public domain and the ACCC welcomes submissions from interested parties on this issue.

The ACCC also notes its preliminary view that call traffic symmetry is unlikely to be the case for FTM services where fixed only and integrated network operators interconnect with MNOs. In this situation, it is unlikely that traffic flows between each operator will be equal, due to differing market shares of the various operators and differing levels of demand for FTM and mobile to fixed (MTF) services. The differences in the retail prices of FTM and MTF calls are also likely to contribute to different demand elasticities and therefore traffic flows.

²⁸ ibid., pp. 6–7.

²⁹ ACCC, 2004 MTAS Final Report, p. 28.

³⁰ ibid., pp. 26–28.

Even if traffic flows between fixed and mobile networks were symmetrical, settlement arrangements would still not cancel each other out, as PSTN termination rates are regulated at a little over 1 cent per minute (cpm), whereas the indicative price for the MTAS is currently 9 cpm. Under these conditions, call minutes from a fixed network operator to a MNO would need to be about one ninth of the call minutes from a MNO to a fixed network operator before the fixed operator could recover its mobile termination costs.

The ACCC believes the presence of asymmetric traffic flows among fixed only, mobile only and integrated network operators creates an incentive for MNOs to raise the MTAS price above its underlying cost of production irrespective of the origin of calls.

Further, the ACCC reiterates that it currently considers the supply of MTAS for calls originating on fixed lines to be fundamentally the same as the supply of MTAS for calls originating on mobiles. Therefore, if the ACCC finds the supply of either mobile termination service to be an essential input with potential bottleneck characteristics, it follows that the supply of the other is also an essential input with potential bottleneck characteristics. To specify a service description for the MTAS which depends on the nature of the line on which a call originates would be to ignore the structure of the market for this service and the nature of its supply.

Finally, for reasons outlined in Chapter Five below, inclusion of MTM calls and FTM calls from integrated operators is, in the ACCC's view, likely to promote any-to-any connectivity. While concerns regarding any-to-any connectivity may be overcome by the presence of transit arrangements, such arrangements are unlikely to be in the LTIE as they lead to an inefficient use of network infrastructure and raise the costs of providing these services.

3.2.2 SMS, MMS and other data services

In the 2004 MTAS Final Report, the ACCC stated that it was unclear whether SMS was fully mature at that time and that it

... favours a light-handed regulatory approach with respect to the regulation of immature services. Accordingly, the Commission considers that declaration of a MTAS that includes the termination of SMS services is unlikely to result in a benefit that is in the LTIE at this time.³¹

The ACCC also regarded MMS and other data services such as videoconferencing as immature services and signalled its intention to observe market developments in relation to the supply of data services.³²

Since the *Mobile Services Review*, the ACCC has observed a trend of growing volumes and falling retail prices in mobile messaging.³³ For example, revenue per SMS and MMS message sent fell 40.6 per cent, from 14.6 cents in 2006–07 to 8.7 cents in 2007–08.³⁴

³¹ ibid., p. 24.

³² ibid., pp. 24–25.

³³ See ACMA, *Communications Report*, 2005–06, 2006–07 and 2007–08.

³⁴ ACMA, *Communications Report*, 2007–08, p. 171.

The ACCC has also observed the continued growth in infrastructure investment by MNOs, particularly in upgrading and their expanding 3G networks. The ACCC noted in 2008³⁵ that 3G networks were reported to cover 99 per cent of Australians and that all 3G networks were either upgraded to, or in the process of being upgraded to, the high speed packet access (HSPA) protocol.

The launch of HSPA has stimulated a growth in data usage, both on mobile handsets and on mobile broadband devices connected to computers. This trend is reflected in the latest Annual Reports of Telstra, Optus and Hutchison, which indicate that although voice and termination revenues are declining due to increasingly competitive pricing, surging data usage is supporting stable or increasing average revenue per user (ARPU).

As consumers progressively migrate from 2G networks to 3G networks, the ACCC anticipates further growth in data services such as MMS and videoconferencing.

In light of the above, the ACCC is of the view that it is not necessary, at this stage, to include SMS, MMS and other data services in the MTAS service description as they are still exhibiting significant growth and cannot be considered fully mature markets. The ACCC will continue to monitor market developments in relation to the supply of messaging and data services and, if necessary, conduct a separate inquiry into whether regulation of messaging and data services is in the LTIE.

3.2.3 Mobile network services deployed in aircraft operating within Australia

Mobile network services onboard aircraft work, for example, by connecting passengers' own mobile handsets to an onboard base transceiver station (BTS). If a call is made from a mobile on the ground (the caller) to a mobile on an aircraft equipped with an onboard base station (the receiver), the call is first routed to the receiver's home network, and then through a number of international transit links to a mobile switching centre (MSC) belonging to the onboard mobile service provider. The MSC locates the aircraft that the receiver is in and proceeds to set up the call through a ground station and satellite backhaul link to the BTS onboard the aircraft, and then to the receiver's handset.

The ACCC notes that mobile network services onboard aircraft have yet to be deployed in Australia. It is the ACCC's understanding that elsewhere in the world where such services are deployed have dealt with these services under international roaming arrangements. The onboard mobile service provider does not charge the user directly, but instead sends its billing records to the user's home network operator. The home network operator then recovers this international roaming tariff from the user via international roaming charges.

In the 2004 MTAS Final Report, the ACCC stated:

For the sake of clarity, the Commission notes that it does not intend the service description of the domestic MTAS to include services that are supplied pursuant to international or domestic roaming agreements. The service description ... applies to voice calls that are received by end–

³⁵ ACCC, Communications Infrastructure and Services Availability in Australia 2008, p. 19.

users (B-parties) that are directly connected to the digital mobile network of an Australian terminating carrier (the access provider).³⁶

The decision not to extend the MTAS declaration to international or domestic roaming services was made as part of the *Mobile Services Review*.³⁷

The ACCC considers that mobile network services onboard aircraft which are supplied in the manner described above fall within the nature of services facilitated by international roaming agreements (even if the receiver is flying within Australia) and therefore, are not subject to the MTAS declaration. Further the ACCC acknowledges that mobile network services onboard aircraft have been trialled in Australia but no commercial services are currently offered.

3.3 Conclusion

The ACCC has formed that view that the current MTAS service description should not be altered to:

- exclude MTM termination or separately describe FTM and MTM voice termination
- include termination of SMS, MMS and other data services
- include mobile network services deployed in aircraft operating within Australia.

The full text of the service description is set out in Appendix A.

³⁶ ACCC, 2004 MTAS Final Report, p. 28.

 ³⁷ ACCC, Mobile Services Review — Mobile Inter-carrier roaming service, Final report on whether or not the Commission should declare mobile domestic inter-carrier roaming service, December 2004.

4 Will declaration promote competition in telecommunications markets?

4.1 The ACCC's approach to determining whether declaration will promote competition in telecommunications markets

The ACCC believes that declaration can help promote competition in telecommunications markets under a range of different circumstances. A commonly recognised way is where specific market characteristics mean it is more efficient for there to be only one provider of a given telecommunications service. In these circumstances, however, it may be that there is scope for competition to occur in downstream and/or vertically related markets. Without access to the vertically related service, however, carriers in vertically related markets will be unable to provide a final service to end–users. Further, to the extent that access seekers will compete with vertically integrated access providers in downstream markets, the terms and conditions of such access can impact on the ability of access seekers to compete in these markets. In these circumstances, declaration can help promote competition in relevant markets by ensuring service providers in these markets can gain access at appropriate prices to essential 'natural monopoly' inputs.

The ACCC notes, however, that declaration can also help promote competition in situations where there may be a number of potential access providers. This can be the case for interconnected telecommunications networks where consumers choose to be directly connected to the network of a given access provider. In these circumstances, service providers may have no choice but to seek access to the networks whose subscribers their customers choose to call. Hence, even though there may be a number of networks that provide access to their own networks, a given access provider may still have control over access to an essential facility.

Where access providers have control over access to essential facilities, a key question for the ACCC is whether unregulated market forces would generate outcomes that would be likely to promote competition. This is particularly an issue in vertically related markets where the ability to acquire access, and the terms and conditions under which this access is provided, can have marked effects on the state of competition in downstream markets.

Declaration of a service under the Act can promote competition for the provision of listed services by mandating access to those services that are supplied in vertically related markets. Further, in certain circumstances, the Act enables the ACCC to set terms and conditions for access to these services. In turn, this can help ensure that outcomes in one market (the market in which the 'eligible service' is supplied) do not prevent the development of competition in related markets.

In most cases, the markets most likely to be affected by declaration are the market(s) for downstream services rather than the market in which the eligible service is supplied (where these markets are separate). This reflects a key rationale for access to essential infrastructure — that of promoting more competitive downstream markets by achieving a supply of essential inputs at reasonable terms and conditions of access.

In this regard, the aim of promoting the LTIE guides the ACCC to be particularly mindful of the impact of declaration on the supply of services at the retail level.

In order to determine whether or not declaration is likely to promote competition in telecommunications markets, it is important for the ACCC to first understand the existing state of competition in the market within which the eligible service is provided and all other related markets. To assess this, it is necessary in the first instance to assess the boundaries of the markets in which the eligible service and other related services are supplied.

Once the boundaries of the relevant markets have been identified, the ACCC can then consider whether the state of competition in these markets will be enhanced by declaration of the eligible service. In this regard, a useful tool in assessing whether declaration will promote each of the LTIE objectives is the 'future with or without test'. Under this approach, the ACCC considers whether competition in identified markets would be likely to be further promoted with declaration than without. Only by understanding market dynamics and the current state of competition in these markets can a meaningful vision of the likely future state of competition be understood.

In assessing whether declaration of the MTAS is likely to promote competition, therefore, the ACCC undertakes a three–stage analysis:

- first, the markets relevant to determining whether declaration will promote competition are identified
- second, the current state of competition and the dynamics that operate within these markets are assessed
- third, if the current state of competition in any of these markets is found to be less than effective, an assessment is made regarding the extent to which competition would be promoted or likely be promoted in the future by declaration of the MTAS.

Each of these stages is examined below.

4.2 What are the relevant markets?

4.2.1 Defining the market in which the eligible service is supplied

In the *Mobile Services Review*, interested parties were divided on the definition of the relevant product. While some parties subscribed to the idea that the MTAS was the relevant product, others argued that the MTAS was either an element of a mobile call or part of a broader bundle (or cluster) of services which included retail mobile services.³⁸ The ACCC's view in the 2004 MTAS Final Report was that while retail level mobile operators sold bundled services to end–users, including the ability to make outgoing calls, the bundle (or cluster) of mobile telephony services was not the relevant product because the MTAS (as opposed to the ability to receive calls) was

³⁸ ACCC, 2004 MTAS Final Report, pp. 32–33.

sold as a national wholesale service to network operators and not as part of the same bundle as other mobile services at the retail level.³⁹

The ACCC further found that the MTAS had no supply side substitutes as fixed line network, e-mail, SMS, voice over Internet Protocol (VoIP) and call back arrangements were not sufficiently substitutable for calls to mobile networks.⁴⁰ In relation to mobile termination services there is also no possibility of substitution because MNOs, irrespective of size, had control over access to terminate calls to endusers subscribed to their network. Substitution between different mobile networks was considered unlikely from the perspective of the A-party making a call to the B-party when the B-party was solely responsible for choosing the network it would use to receive mobile calls.⁴¹ Also, mobile users lacked the incentive or awareness of differences in mobile termination rates to enable them to select MNOs on the basis of the MTAS rates charged.⁴²

4.2.2 Views of interested parties

AAPT

AAPT submits that the MTAS has a direct and significant impact on the ability of AAPT and other competitive carriers to compete in the provision of services such as FTM calls in the downstream markets. AAPT considers that MNOs have bottleneck control over access to an essential input in the provision of those services.⁴³ AAPT submits that nothing has changed since the *Mobile Services Review* in 2004 and the observations made by the ACCC at that time still hold true.⁴⁴

ATUG

ATUG submits that the MTAS is a monopoly market for each operator. ATUG argues that the prices charged by operators for termination indicate the extent of market power enjoyed by operators and endured by end–users and that the current MTAS prices provided to international carriers are an indication of this market power.⁴⁵

ATUG agrees with the ACCC's 2004 market definition which places MTAS in a separate market from retail mobile services,⁴⁶ and submits that fixed line services, e-mail messaging, SMS, fixed wireless voice services such as VoIP or Skype are not sufficiently substitutable for calls to mobile networks from the end–user's perspective.⁴⁷

Competitive Carriers Coalition (CCC)

The CCC submits that the MTAS continues to be an essential input for the provision of calls to mobile end–users, and continues to exhibit bottleneck characteristics.⁴⁸ The

³⁹ ibid., p. 46.

⁴⁰ ibid., pp. 48–49.

⁴¹ ibid., p. 50.

⁴² ibid., p. 54.

⁴³ AAPT, Submission in response to the Discussion Paper, February 2009, p. 2.

⁴⁴ ibid., p. 3.

⁴⁵ ATUG, Submission in response to the Discussion Paper, February 2009, p. 2.

⁴⁶ ibid.,

⁴⁷ ibid.

⁴⁸ CCC, *Submission in response to the Discussion Paper*, January 2009. p. 2.

CCC also submits that the bottleneck conditions that the ACCC found warranted regulation in 2004 persist today.⁴⁹

Hutchison

Hutchison considers that the MTAS continues to display bottleneck service features.⁵⁰ Hutchison submits that the MTAS market definition is not relevant to the ACCC's consideration of whether to maintain or vary the declaration, of greater importance are the affected downstream retail markets.⁵¹ Hutchison is not aware of any technological change with the potential to change the ACCC's previous findings in relation to the nature of the MTAS market, and does not consider that there are any demand or supply side substitutes for the MTAS.⁵²

Optus

Optus submits that a number of market developments, such as the emergence of mobile VoIP and dual mode handsets, are increasingly eroding MNOs' control of the mobile termination bottleneck, and providing demand and supply side substitutes for the MTAS.⁵³

Optus submits that because MNOs and integrated operators have countervailing and retaliatory powers, the key bottleneck in mobile is in FTM termination from fixed only operators and potentially MTM termination from new entrant MNOs.⁵⁴

Optus also submits that the MTAS is provided as part of a bundle of mobile services and cannot be separated from the overall service of a mobile phone call.⁵⁵

Telstra

Telstra submits that the declared MTAS remains a bottleneck service and that its nature has not changed since 2004. Telstra agrees with the conclusion the ACCC reached in 2004 that the MTAS is in a separate market to other mobile services and submits that this view is consistent with the views expressed by the Australian Competition Tribunal (Tribunal) in *Re Optus Mobile Pty Limited and Optus Networks Pty Limited* [2006] ACompT 8.⁵⁶

4.2.3 The ACCC's view

After considering all the submissions regarding the market definition for the MTAS, the ACCC is of the preliminary view that the findings of the 2004 MTAS Final Report remain appropriate today.

In general, mobile call termination is a separate market and is unlikely to be substitutable with other services because each provider of call termination has

⁴⁹ ibid.

⁵⁰ Hutchison, *Submission in response to the Discussion Paper*, February 2009, p. 16.

⁵¹ ibid. 52 ibid

⁵² ibid.

⁵³ Optus, *Submission in response to the Discussion Paper*, January 2009, pp. 33–34.

⁵⁴ ibid., p. 33.

⁵⁵ ibid., p. 34.

⁵⁶ Telstra, *Submission in response to the Discussion Paper*, February 2009, Schedule 1, p. 1.

exclusive control of the access to end–users on its own network. Call termination is therefore considered by most regulators as an essential bottleneck facility. Armstrong and Wright (2008)⁵⁷ and Hurkens and Jeon (2008)⁵⁸ have recently reaffirmed the bottleneck features of call termination on mobile networks and that, in the absence of regulation, termination charges could be set inefficiently high.

The ACCC disagrees with Optus's submission that technologies such as mobile VoIP, dual mode handsets and WiMax provide effective demand and supply side substitutes for the MTAS as these technologies have not achieved widespread adoption and/or do not presently offer the quality of service (such as coverage, service response time, signal-to-noise ratio, echo and so on) equivalent to that of mobile phone calls.

The ACCC also maintains the view that the MTAS is in a separate market to that of retail mobile services on the basis that it is not constrained by the retail stage of production and that the MTAS is an input used by telecommunication service providers to provide retail FTM and MTM services.

4.2.4 Defining other markets in which declaration may promote competition

In 2004 MTAS Final Report, the ACCC identified the following downstream markets in which competition is likely to be promoted as a result of declaration:

- the market for retail mobile services
- the market within which FTM services are provided.

The ACCC also identified the national market in which retail mobile services were supplied as a relevant market. Mobile services included SMS, MMS and other services supplied over 2G, 2.5G and 3G networks. Fixed line services were not considered to be in the same market as they were not considered an adequate substitute due to a lack of mobility. In the market for retail services, origination is substitutable but termination is not.⁵⁹

The ACCC found that FTM calls are provided in the same market as national long-distance (NLD) and international direct dialling (IDD) calls on the basis that they were part of the same single basket of preselected services offered nation-wide at a retail level. The ACCC did not include internet services in the same market as the preselected bundle of services because they were not usually offered in the same bundle. The ACCC also did not include fixed-to-fixed (FTF) calls, MTM calls and SMS because they were not considered as fully effective substitutes for FTM calls. The PSTN originating access and the MTAS, through which FTM calls are provided, were also identified as wholesale services operating in separate markets to that of FTM calls.

Armstrong, M and Wright, J, *Mobile Call Termination*, Economic Journal, forthcoming, October 2008, http://profile.nus.edu.sg/fass/ecsjkdw/ArmstrongWright.pdf>, accessed on 5 March 2009.

⁵⁸ Hurkens, S and Jeon, D, A Retail Benchmarking Approach to Efficient Two-Way Access Pricing: Termination–Based Price Discrimination with Elastic Subscription Demand, NET Institute, working paper 08-41, November 2008.

⁵⁹ ACCC, 2004 MTAS Final Report, pp. 59-61.

⁶⁰ ibid., p. 60.

4.2.5 Views of interested parties

All the parties who have submitted on this issue agree with the ACCC's 2004 assessment that the markets within which FTM and retail mobile services are provided are relevant downstream markets. ATUG submits that SMS, data and international roaming markets also need to be considered.⁶¹ Telstra submits that the ACCC should also include alternatives to voice telephony such as SMS and e-mail.⁶²

Telstra also submits that the ACCC's previous approach of isolating a market for calls made in the fixed network preselect basket is no longer sustainable, as it fails to recognise the increasing level of substitution of calls across different technologies, including mobile services, VoIP and e-mail.⁶³

In relation to bundling, the submissions suggest that mobile messaging and mobile data are normally offered in the same bundle as mobile voice services and internet services are offered separately.

4.2.6 The ACCC's preliminary view

The ACCC has formed the preliminary view that, consistent with its approach in 2004, the markets within which retail mobile services and FTM calls are provided are the most relevant downstream markets. The ACCC currently considers SMS and mobile data to be provided in the same market as other retail mobile services because they are generally sold as part of the same bundle. As was its position in 2004, and subject to any further submissions on the point, the ACCC does not intend to extend the MTAS declaration to services supplied pursuant to international roaming agreements, hence does not consider the international roaming market as a relevant downstream market.

The ACCC does not presently regard MTM, VoIP, SMS and e-mail messaging to be fully effective substitutes for FTM calls. The ACCC notes that although an estimated 83 per cent of the Australian adult population currently use a mobile phone service,⁶⁴ consumers largely see fixed line and mobile as complementary services.⁶⁵ The ACCC also notes that while VoIP to mobile calls may be a substitute for FTM calls at the margin, VoIP services have not attracted sufficiently widespread adoption.⁶⁶ Moreover, both SMS and e-mail are comparatively truncated forms of communication which do not allow end–users to communicate simultaneously.

⁶¹ ATUG, Submission in response to the Discussion Paper, February 2009, p. 3.

⁶² Telstra, *Submission in response to the Discussion Paper*, February 2009, Schedule 1, p. 4.

⁶³ ibid., p. 3.

⁶⁴ ACMA, *Convergence and Communications*, Report 1: Australian household consumers' take-up and use of voice communications services, March 2009, p. 12.

⁶⁵ ibid., p. 1

 ⁶⁶ ACMA estimates the take-up of VoIP services at 12 per cent of the Australian adult population.
See ibid., p. 15.

4.3 State of competition in the relevant markets

Analysis of the current state of competition in relevant markets provides an indication of the state of competition under current forms of regulation and an insight into the state of competition likely to exist in the absence of declaration of the MTAS.

4.3.1 Views of interested parties

Interested parties put forward a range of views on the current state of competition in the markets relevant to this inquiry. Most parties who have submitted on this issue agree (with the exception of Optus) that the MTAS market has not become more competitive since 2004. There is also a consensus that the retail mobile services market has become more competitive or is improving in its competitiveness. In relation to the FTM services market, ATUG, CCC, Hutchison and Optus submit that there has no been no structural or behavioural change in the market to make it more competitive than it was in 2004; whereas Telstra argues that substitutes for FTM calls such as VoIP have emerged since 2004 and that the FTM services market has become competitive in any event.⁶⁷

4.3.2 Mobile terminating access service market

The ACCC did not regard the wholesale MTAS market as competitive in the 2004 MTAS Final Report. The main reason was because MNOs were using their market power in their individual markets to extract monopoly rents from the provision of the wholesale MTAS.⁶⁸ In particular, the ACCC noted that there were:

- monopoly features in the provision of MTAS over a particular operator's network
- no practical substitutes available for termination services on a particular operator's network and therefore an absolute barrier for entry into the market
- a significant growth in number of call minutes on mobile networks and a less significant decrease in MTAS prices over the same period
- MTAS prices (on average) at levels almost double the upper end of the range of the reliable cost estimate.⁶⁹

Since 2004, regulated reductions in the MTAS rate have brought it in closer alignment with its estimated underlying cost of production. However, there has been no structural or behavioural change in the MTAS market and the monopoly features and the lack of practical substitutes remain prevalent. As discussed above, the ACCC's preliminary view is that alternative platforms such as mobile VoIP, dual mode handsets and WiMax are not effective substitutes for the MTAS. The ACCC has therefore determined that the wholesale MTAS market is not competitive due to the nature of the market definition.

4.3.3 Retail mobile services market

In 2004, the ACCC noted that the supply of new services on 2.5G and 3G networks and the level of product differentiation had the potential to drive further growth and

⁶⁷ Telstra, *Submission in response to the Discussion Paper*, February 2009, Schedule 1, p. 6.

⁶⁸ ACCC, 2004 MTAS Final Report, pp. 69–70.

⁶⁹ ibid., pp. 58–70.

have a competitive impact in the industry in future periods. Despite this, the relatively high level of market concentration in favour of the larger MNOs, the high barriers to effective entry into the market (associated with national geographic coverage and sunk costs), the apparent high levels of profitability of mobile carriers (particularly those with large market shares) combined with the relatively high penetration rate of mobile phones and decreasing (or stabilising) ARPU suggested caution.⁷⁰

The ACCC noted in the 2007 Pricing Principles, and reiterated in the 2009 Pricing Principles, that competition at the retail level appears strong with an increase in the availability of capped and uncapped plans and the emergence of bundled pricing packages (particularly with data services) evidence of (continued) competition at the retail level. The retail market is now characterised by numerous new services and features including data applications.

After reviewing interested parties' submissions, the ACCC makes a number of observations. First, in terms of market share Telstra remains the leading MNO. Over the last 30 months Telstra has lost subscriber market share (falling from 45 per cent to 42.2 per cent) although it has generally been able to maintain its 44 per cent market share in revenue terms. Whilst Optus has held its market share of about 33 per cent in terms of subscriber numbers, its market share in revenue terms has fallen from 32 per cent to 28.6 per cent over the same period. Vodafone has increased its revenue market share by 0.7 per cent to 16.8 per cent and marginally increased its subscriber market share by 0.5 per cent to 16.9 per cent. Hutchison in particular has made significant gains in market share. Hutchison increased subscriber market share from 5.4 per cent in December 2005 to 8.2 per cent in June 2008 and revenue market share from 7.1 per cent to 10.3 per cent over the same period. The ACCC notes that in February this year Hutchison and Vodafone announced an agreement to merge their Australian mobile operations.⁷¹ The ACCC also notes that two of the largest mobile virtual network operators (MVNOs) have recently been absorbed by two of the MNOs ---Virgin Mobile by Optus, and Crazy Johns by Vodafone.

Second, although the relative market shares of the four MNOs have not shifted significantly since 2004, the mobile market itself has experienced continued expansion in terms of both subscriber and revenue (see Table 1). Although mobile penetration is now over 100 per cent, the ACCC expects the take-up of 3G and particularly content services to maintain or boost this growth for some time.

	2005-06	2006-07	2007-08
Subscriber (millions)	19.5	20	21.8
Revenue (billions)	\$9.3	\$10.2	\$11.1

Table 1: ACMA estimates of mobile market subscribers and revenue⁷²

⁷⁰ ACCC, 2004 MTAS Final Report, p. 99.

⁷¹ 'Hutchison and Vodafone agree to merge Australian telecom operations to form a 50:50 joint venture Hutchison and Vodafone', Media Release, 9 February 2009, http://www.hutchison.com.au/hutchison2004/hutchison2004staging/object/attachment/docs/Press_Release_vFinal.pdf>, accessed on 10 March 2009.

⁷² ACMA, *Communications Report*, 2005–06, 2006–07 and 2007–08.

Third, the smallest MNO, Hutchison, has sustained consistent growth since 2004 (see Table 2).

	2004	2005	2006	2007
Total Revenue	\$773	\$915.9	\$1,058	\$1,318
Capex	\$307.4	\$207.1	\$203.8	\$268
EBITDA	-\$235.5	-\$180.1	\$30.2	\$114
Net Loss	-\$552	-\$547.3	-\$759.4	-\$285.1

Table 2: Hutchison's financial performance 2004 to 2007 (in AUD millions)⁷³

Finally, prices paid by consumers for mobile services have been on a downward trend. Since the *Mobile Services Review* the ACCC has released three annual reports on the changes in prices paid for telecommunications services in Australia which reveal an overall downward trend in average prices. The ACCC's reports estimate that the average price for mobile telephony services by consumers fell by 3.2 per cent in 2003–2004;⁷⁴ by 13 per cent in 2004–2005;⁷⁵ by 6.5 per cent in 2005-2006;⁷⁶ and by a further 2.3 per cent in 2006–2007.⁷⁷ However, these annual reports do not include 3G mobile services.

4.3.4 Fixed to mobile services market

The ACCC did not regard the market within which FTM services were provided to be effectively competitive in 2004.⁷⁸ The ACCC found the level of market concentration to be close to that of two equal sized duopolists.⁷⁹ The high sunk costs associated with installing PSTN and mobile infrastructure were considered to be a significant barrier to entry into the market even though the barriers were substantially mitigated by declarations of the essential input services.⁸⁰ The ACCC found it unlikely that the market for the preselect basket of NLD, IDD and FTM services would be effectively competitive as prices were too high.⁸¹ The ACCC was also of the view that the FTM and MTAS market structures provided vertically integrated operators with the scope and incentive to use their control over access to the MTAS to engage in anti-competitive price squeeze behaviour.⁸²

The ACCC notes interested parties' views that the fixed line market is still dominated by Telstra and Optus and that this has held back competition by reducing the ability of smaller competitors to influence pricing in the retail market.⁸³ The ACCC itself

⁷³ Hutchison, *Submission in response to the Discussion Paper*, February 2009, p. 19.

⁷⁴ ACCC, *Changes in prices paid for telecommunications services in Australia* 2003-2004, March 2005, p. 98.

⁷⁵ ACCC, *Changes in prices paid for telecommunications services in Australia 2004-2005*, April 2006, p. 72.

⁷⁶ ACCC, Changes in prices paid for telecommunications services in Australia 2005-2006, May 2007, p. 98.

 ⁷⁷ ACCC, *Changes in prices paid for telecommunications services in Australia 2006-2007*, May 2008, p. 95
Note the report does not include 3G services.
⁷⁸ ACCC, 2004 MTAG E: 100

⁷⁸ ACCC, 2004 MTAS Final Report, p. 109.

⁷⁹ ibid., p. 100.

⁸⁰ The domestic PSTN originating service was deemed to be declared on 30 June 1997, and the mobile termination declaration, which encompasses termination on both GSM and CDMA networks, was varied in March 2002.

⁸¹ ACCC, 2004 MTAS Final Report, pp. 107–108.

⁸² ibid., p. 107.

⁸³ See, for example, CCC, *Submission in response to the Discussion Paper*, January 2009, p. 3.

voiced concerns that substantial reductions in the MTAS rate since 2004 have failed to be passed through fully to end–users of FTM services.⁸⁴ Between 2004 and 2006 the MTAS indicative price declined from 21 cpm to 15 cpm. In 2007, the ACCC found that FTM prices had fallen between 2003 and 2006 by 12 per cent and that there was still room for prices to fall further, particularly for residential end–users.⁸⁵ In November 2008, the ACCC noted that there had been no significant reduction in FTM prices in 2007 and 2008 despite a decline in MTAS indicative prices from 12 cpm to 9 cpm. The ACCC was of the view that the degree of pass through was lower than expected.⁸⁶

The ACCC acknowledges that prices for the whole bundle of PSTN voice products have shown consistent declines. The total bundle of fixed voice products for both business and residential customers for the September 2008 quarter was reported as \$164.97 compared to \$176.10 in the same quarter of 2005.⁸⁷ ACMA reports that local, NLD, IDD and FTM call costs consistently declined in the three years from 2005–06 to 2007–08.⁸⁸

However, the ACCC is of the view that cost to consumers for the preselect bundle of NLD, IDD and FTM calls remain high and reductions in retail prices since 2004 have been slow compared to the regulated reductions in the MTAS price.

In addition, for reasons stated in section 4.2.6 above, the ACCC does not consider the services suggested by Telstra⁸⁹ to be fully effective substitutes for FTM calls.

Accordingly, the ACCC maintains its views expressed in 2004 that the FTM services market is not effectively competitive.

4.4 The extent to which competition would be promoted by declaration

Once the ACCC has formed a view about the effectiveness of competition in relevant markets, it is then able to compare this to how it believes the future state of competition in these markets will look with declaration.

In forming a view about the likely impact of declaration on competition, the ACCC must consider not only whether declaration would be likely to promote competition but also the extent to which this would be likely to occur.⁹⁰

ACCC, *Draft MTAS Pricing Principles Determination for the period 1 January 2009 to 30 June 2011* (Draft 2009 Pricing Principles), November 2008, pp. 18–19.

 ⁸⁵ ACCC, *MTAS Pricing Principles Determination 1 July 2007 to 31 December 2008 Report*, November 2007, pp. 16–17.
⁸⁶ ACCC Distribution 10

⁸⁶ ACCC, *Draft 2009 Pricing Principles*, p. 19.

⁸⁷ ACCC, Imputation testing and non-price terms and conditions report relating to the accounting separation of Telstra for the September quarter 2008, December 2008, Table 2.1; ACCC, Imputation testing and non-price terms and conditions report relating to the accounting separation of Telstra for the September quarter 2005; December 2005, Table 2.1.

⁸⁸ ACMA, *Communications Report*, 2005–06, 2006–07 and 2007–08.

⁸⁹ Telstra, *Submission in response to the Discussion Paper*, February 2009, Schedule 1, p. 3.

 ⁹⁰ Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996
— item 6, proposed s. 152AB.

4.4.1 Views of interested parties

The majority of submitters on this issue agree that MTAS prices are likely to be above the underlying cost of production if the service is not regulated. Optus submits that this will not be the case for established MNOs and integrated operators because competition in retail mobile services and negotiations over the MTAS rate among established MNOs and integrated operators appropriately constrain pricing and monopoly profits.⁹¹

Hutchison, Optus and Telstra found declaration of the MTAS to have positively impacted competition in the retail mobile services market since 2004. Optus and Telstra state that the retail mobile services market is effectively competitive today,⁹² while Hutchison considers the competitiveness of the market to be improving but effectively competitive.⁹³ On the other hand, ATUG points out that according to the 2007 OECD Report, Australian mobile users were paying higher prices than those from usual comparator countries such as Canada.⁹⁴

There is some contention among submitters with respect to the impact of regulation on competition in the FTM services market. Telstra submits that declaration of the MTAS has promoted competition for other services, including the services provided in the market within which FTM services are provided.⁹⁵ Other interested parties who have submitted on this issue respond less positively. In particular, the CCC submits that the dominance of Telstra and Optus in the fixed market means there is little prospect of a third party being able to influence the retail market and little incentive on the dominant two operators to aggressively lead retail price reductions.⁹⁶ The CCC also submits that problems in the fixed market would only increase if the ACCC were to withdraw the MTAS declaration.⁹⁷

4.4.2 The impact of declaration on competition in the market within which the eligible service is provided

In general the declaration of a service can serve the LTIE by ensuring access to essential inputs are on reasonable terms. The ACCC predicted in the 2004 MTAS Final Report that MNOs would continue to set MTAS prices above their underlying costs of production if the service were not regulated. The ACCC also expressed concern that established MNOs might refuse access to termination on their networks (or provide it on unfavourable terms and conditions) to new entrants to the retail mobile services market. Furthermore, a closer association of prices with the underlying cost of the MTAS was considered possible if the service continued to be declared and an appropriate pricing principle set.⁹⁸

⁹¹ Optus, Submission in response to the Discussion Paper, January 2009, p. 38.

 ⁹² ibid., p. 39; Telstra, Submission in response to the Discussion Paper, February 2009, Schedule 1, p. 9.

⁹³ Hutchison, *Submission in response to the Discussion Paper*, February 2009, p. 18.

⁹⁴ ATUG, Submission in response to the Discussion Paper, February 2009, p. 7.

⁹⁵ Telstra, *Submission in response to the Discussion Paper*, February 2009, Schedule 1, p. 7.

⁹⁶ CCC, Submission in response to the Discussion Paper, January 2009, p. 3.

⁹⁷ ibid.

⁹⁸ ACCC, 2004 MTAS Final Report, p.118.

As discussed above, the ACCC believes that MNOs have control over access to termination services provided on their networks and are largely unconstrained by competitive forces when setting the price of termination services on their networks. In the absence of continued regulation of the MTAS, the ACCC believes that MNOs would set the price of this service above its underlying cost of production. Further, to the extent that existing regulation of the MTAS has led to it being priced below the profit maximising level for MNOs, the ACCC believes MNOs may have an incentive to increase the price of the MTAS even further in excess of cost if the existing declaration were to be revoked. The ACCC is also concerned that established MNOs may have an incentive to refuse access to termination on their networks (or provide it on unfavourable terms and conditions) to new entrants to the retail mobile services market.

Even in the cases of established MNOs and integrated operators with countervailing bargaining powers, the ACCC believes that the existence of asymmetric traffic flows warrants the continued declaration of the MTAS.

The ACCC is of the preliminary view that the continued declaration of a MTAS will, when coupled with an appropriate pricing principle, generate a closer association of prices with the underlying cost of the MTAS than would exist in the absence of declaration. While this is unlikely to generate greater competition in the markets within which the MTAS is provided, the ACCC expects this will generate a greater level of competition in related markets. This is considered in more detail below.

4.4.3 The impact of declaration on competition in the market within which retail mobile services are provided

Although in 2004 the ACCC expected the greatest competitive benefit from continued declaration of the MTAS to occur in the market within which FTM services are provided, the ACCC believes the continued declaration to be a major contributor to the increased competitiveness of the retail mobile services market achieved since 2004. Withdrawing regulation at this point in time risks eroding the significant gains in competitiveness achieved through declaration.

The ACCC notes that during 2004 to 2008, the MTAS rate fell from 21 cpm to 9 cpm, thereby substantially reducing MNOs' termination revenues. However, the mobile sector achieved sustained growth in both the number of subscribers and revenue. The ACCC expects the increased take-up of 3G and particularly data service will add further impetus to that growth. Therefore, the ACCC does not consider continued declaration of the MTAS would disproportionately affect MNOs.

4.4.4 The impact of declaration on competition in the market within which FTM services are provided

In 2004, the ACCC was of the view that declaration, combined with an appropriate pricing principle, would likely promote competition in the FTM services market. Similarly, revocation of the MTAS declaration was considered as likely to maintain the influences which led to above cost pricing for the MTAS and the consequent lack of competition in the market within which FTM services were provided. The ACCC expected partial pass through of reductions in the MTAS price in the short term and a

closer association of FTM prices with their underlying cost of production over the longer term.⁹⁹

Since 2004, FTM pass through has occurred to a certain extent but has been lower than expected. However, the ACCC agrees with the CCC that the absence of pass through is not in itself a reason against continued declaration.¹⁰⁰

The MTAS is an essential input into the provision of FTM calls. Vertically integrated operators face the actual costs for FTM calls terminating on their own networks, but are able to set above cost prices for rival fixed only operators. The result is that fixed only operators must pay above cost prices to terminate all FTM calls whereas vertically integrated operators only pay above cost prices for calls terminating on other MNOs' networks. Above cost MTAS rates therefore tend to act as a barrier to providers considering entry into the FTM market and have resulted in high retail prices for FTM calls.

Declaration, combined with an appropriate pricing principle, will eliminate the ability of vertically integrated carriers to raise the costs of their rivals. This is likely to promote competition to provide FTM services by creating a situation where any provider of FTM services, either a market incumbent or a new entrant, will be in a position where they can obtain access to origination, transmission and termination services at cost reflective prices. This should provide the opportunity for resellers of FTM services, as well as existing (and potentially new) carriers, to provide FTM services at well below prevailing prices. This would represent an improvement in the necessary preconditions for competition.

Further, actual improvements in competition may emerge in a range of other ways, including price reductions in limited segments of the FTM services market. Alternatively, price reductions may be passed through in the form of lower prices for other services provided in the market within which FTM services are provided (for example, prices for NLD or IDD call services). Finally, rather than 100 per cent pass through of price reductions, improved competition may manifest itself in the form of improved quality of service.

For these reasons, the ACCC has taken the preliminary view that continued declaration of the MTAS will improve competition in the market within with FTM services are provided.

4.5 Conclusion

The ACCC has formed the preliminary view that continued declaration of the MTAS, combined with an appropriate pricing principle, will:

- facilitate access to the MTAS on reasonable terms
- contribute to increased competition in the retail mobile services market
- improve competition in the FTM services market,

⁹⁹ ACCC, 2004 MTAS Final Report, pp. 119–123.

¹⁰⁰ CCC, *Submission in response to the Discussion Paper*, January 2009, p. 3.

and thereby promote competition telecommunications markets.

The ACCC seeks submissions on this issue and its preliminary view.

5 Will declaration achieve any-to-any connectivity?

Any-to-any connectivity enables end-users to communicate with each other, irrespective of the network to which they are connected. In 2004 the ACCC determined that the object of any-to-any connectivity was promoted by declaration of the MTAS on the basis that it prevented new entrants and small operators from being refused access to the mobile termination services of other operators.¹⁰¹ In the current inquiry, the ACCC has assessed whether circumstances have changed since 2004 such that any-to-any connectivity would now be likely to be achieved in the absence of declaration.

5.1 Views of interested parties

5.1.1 Continued declaration is necessary for any-to-any connectivity

Telstra, AAPT and Hutchison share the view that any-to-any connectivity is promoted through the continued declaration of the MTAS.¹⁰² Optus agrees with respect to MTM calls originating on networks established by new entrant MNOs, or carriers without their own mobile network (such as the fixed networks of AAPT, iiNet and Macquarie), and fixed-only operators in the market in which FTM services are provided.¹⁰³

5.1.2 Circumstances where continued declaration is not necessary for any-to-any connectivity

Vodafone submits that any-to-any connectivity is promoted through the continued declaration of the MTAS except where MNOs have countervailing bargaining power such as with SMS and MTM voice termination. Vodafone considers regulation of FTM voice termination as an appropriate response to potential connectivity breakdowns caused by abuse of each MNOs' monopoly power over its FTM MTAS.¹⁰⁴

Optus does not consider it necessary to regulate the MTAS for MTM calls between established players (Telstra, Optus, Vodafone and Hutchison). Optus submits that any-to-any connectivity is likely to be achieved irrespective of whether the MTAS is regulated because:

- MTAS rates are rarely negotiated in isolation and the occurrence of a trade-off between the MTM MTAS price and other prices negotiated at the same time is likely
- MTM MTAS prices will be reflected in retail charges. This may, depending on the relative market positions of the mobile operators, influence the setting of MTM MTAS rates

¹⁰¹ ACCC, 2004 MTAS Final Report, p. 134.

 ¹⁰² Telstra, Submission in response to the Discussion Paper, p. 9; AAPT, Submission in response to the Discussion Paper, p. 4; Hutchison, Submission in response to the Discussion Paper, p. 11.
¹⁰³ Octuar Schwinzing Paper, p. 40

¹⁰³ Optus, *Submissions in response to the Discussion Paper*, p. 40.

¹⁰⁴ Vodafone, Submission in response to the Discussion Paper, p. 9.

 Connection will happen through transit arrangements with other operators even if an operator refuses to interconnect.¹⁰⁵

5.1.3 Other submissions

ATUG expressed concern over the suggestion that GSMA agreement templates for SMS Service interworking could be used to deny access for operators who were not 'signed up' for these agreements. ATUG is also concerned at suggestions that the introduction of such agreements could lead to price increases for SMS services. ATUG suggests that the ACCC review SMS pricing for domestic and international services separately from mobile voice services.¹⁰⁶

5.2 The ACCC's preliminary view

The ACCC notes Vodafone and Optus's submissions on restricting regulation of the MTAS to mobile calls on particular networks. The ACCC considers that the potential for connectivity breakdowns continues to exist in MTM calls or calls terminating on 'established' networks due to the bottleneck feature inherent in the MTAS service even though particular carriers may have a certain degree of countervailing bargaining power in relation to particular MTAS markets. The ACCC also questions whether Hutchison and Vodafone can be regarded as established players with similar bargaining power as vertically integrated MNOs such as Telstra and Optus.

In relation to ATUG's submissions, the ACCC considers that GSMA agreement templates for SMS services and SMS pricing are not relevant to the issue of any-to-any connectivity whilst noting that the definition of the MTAS (see Section Four) does not incorporate SMS services.

5.3 Conclusion

The ACCC is of the preliminary view that the continued declaration of the MTAS prevents any possibility of a carrier, and in particular a new entrant, being refused access to the mobile termination services of other operators. The ACCC, therefore, considers that the achievement of the object of any-to-any connectivity is promoted by declaration.

The ACCC seeks submissions on this issue and its preliminary view.

¹⁰⁵ Optus, Submissions in response to the Discussion Paper, pp. 39–41.

¹⁰⁶ ATUG, Submission in response to the Discussion Paper, p. 8.

6 Will declaration encourage economically efficient use of infrastructure?

The ACCC, when deciding whether the declaration of a service is in the LTIE, is required to consider whether declaration is likely to encourage the economically efficient use of infrastructure if it were continued or varied.

6.1 Views of interested parties

6.1.1 Continued declaration is necessary to encourage economically efficient use of infrastructure

Telstra, AAPT and Hutchison submit that the continued declaration of the MTAS is necessary to encourage the efficient use of telecommunications infrastructure as long as MTAS prices reflect their costs of supply.¹⁰⁷ Hutchison further notes that while lower MTAS prices have been passed through to consumers of MTM calls, this has not occurred in the FTM market and this in turn has led to under-use of FTM services.¹⁰⁸

6.1.2 Continued declaration is not necessary to encourage economically efficient use of infrastructure

Optus disputes the conclusions drawn by the ACCC in the 2004 Mobile Services Review where it stated that, in the absence of regulation, mobile operators would have the ability and incentive to set above cost MTAS prices. Optus submits that the ACCC did not take the demand elasticities of mobile subscribers into account when it came to this view.¹⁰⁹

6.1.3 Other submissions

ATUG is of the view that infrastructure sharing arrangements for the deployment of 3G services should be reflected in more efficient prices for end–users but that the bottleneck feature of the MTAS seems to preventing the flow through.¹¹⁰

6.2 The ACCC's preliminary view

The ACCC agrees with ATUG's submission that infrastructure sharing arrangements might lead to more efficient use of infrastructure, however it is unclear whether it is the bottleneck that is preventing the flow through to consumer prices.

The ACCC also notes the submissions from Telstra, AAPT and Hutchison and agrees that MTAS prices which are closely associated to their costs and which are passed on to end-users encourages efficient use of telecommunications infrastructure.

¹⁰⁷ Telstra, Submission in response to the Discussion Paper, p. 10; AAPT, Submission in response to the Discussion Paper, p. 4. Hutchison, Submission in response to the Discussion Paper, p. 11.

¹⁰⁸ Hutchison, *Submission in response to the Discussion Paper*, p. 13.

¹⁰⁹ Optus, Submission in response to the Discussion Paper, p. 41.

¹¹⁰ ATUG, Submission in response to the Discussion Paper, p. 9.

The ACCC however disagrees with the views put forward by Optus on the basis that it does not consider that the MTAS can be described as an elastic service given the lack of adequate substitutes for mobile calls in the market and the bottleneck feature of the MTAS. The ACCC also does not consider that the market will set cost based MTAS prices in the absence of regulation when regard is had to the high number of access disputes in relation to the MTAS since 2004.

Since the 2004 declaration of the MTAS, the ACCC has presided over a number of access disputes in relation to the price of access to the MTAS. The access disputes have been resolved in line with the pricing principles and indicative prices in operation during the period in which parties sought resolution. Over the past 18 months, four disputes have been resolved with prices set at 9 cpm while eight were withdrawn as a result of successful commercial negotiations between the parties. The ACCC has currently five access disputes before it.

6.3 Conclusion

The ACCC is of the preliminary view that regulation of the MTAS has encouraged economically efficient use of the infrastructure used to provide telecommunication services since 2004 by bringing MTAS prices down closer towards their costs. The ACCC continues to be of the view that without regulation, mobile operators have the ability and incentive to set above cost MTAS prices which in turn will discourage economically efficient use of mobile telephony infrastructure.

The ACCC seeks submissions on this issue.

7 Will declaration encourage economically efficient investment in infrastructure?

The ACCC, in examining the likely impacts of declaration on economically efficient investment and extent of such investment, has regard to the infrastructure by which the eligible service is supplied and by which other communications carriage services in related markets are supplied. The ACCC aims to ensure that the declaration does not prevent efficient investment by existing or potential service providers or, encourage inefficient investment such as excessive investment in related markets or inefficient duplication of network infrastructure. The ACCC acknowledges, to a large extent, that creating the right incentive for service providers to make an efficient build/buy choice is a matter of determining the appropriate pricing principles for a declared service. In this inquiry, the ACCC is concerned with the level and type of investment in mobile telephony infrastructure since 2004 and whether it has been efficiently incurred.

Investment in infrastructure since 2004

Investment in infrastructure has continued to grow strongly since the 2004 review. Infrastructure investment has primarily been on upgrading and expanding 3G networks. The ACCC noted in 2008¹¹¹ that 3G networks were reported to cover 99 per cent of Australians and that all 3G networks are upgraded or in the process of being upgraded to the high speed downlink packet access (HSPA) protocol.

Hutchison was the first service provider to offer a 3G service in Australia in 2003, in a 50/50 network ownership arrangement with Telstra. Hutchison upgraded its network to the HSPA protocol in March 2007 and has announced plans to provide 3G services to 96 per cent of the population.

Optus launched its 3G network in October 2005 in a joint infrastructure-sharing arrangement with Vodafone. The joint network covers metropolitan areas in Adelaide, Brisbane, Canberra, the Gold Coast, Melbourne, Perth and Sydney. In January 2007, Optus announced plans to build a new 3G mobile network to extend coverage into rural areas, replicating the coverage of Optus's existing GSM (2G) mobile network, with reported coverage of 96 per cent of the population. In May 2008, Optus announced a further expansion of its 3G network to cover 98 per cent of the population by December 2009. Further, Optus is aiming to upgrade speeds with a view to reaching 42Mbps by mid 2010.

Telstra operates two separate 3G networks; the network jointly owned with Hutchison and its Next G network. The Next G network was launched in October 2006 and Telstra reported that the network reached 99 per cent population coverage by June 2008.

Vodafone launched its 3G network in October 2005, in a joint infrastructure-sharing agreement with Optus. Vodafone activated HSPA on the network in October 2006. In

¹¹¹ ACCC, Communications Infrastructure and Services Availability in Australia 2008, p. 19.

December 2007, Vodafone announced plans to upgrade its 2G network to 3G HSPA by the end of 2008 to provide high-speed coverage to 95 per cent of the Australian population.

The investment activity described above is reflected in the levels of investment expenditure recently recorded by the ACCC. In the *Telecommunications competitive safeguards for 2006-2007* report,¹¹² the ACCC notes that 2006-07 saw the highest level of investment in telecommunications since the sector was opened to competition in 1997, amounting to \$8.7bn, up from \$7.1bn in 2005-06.¹¹³ Telstra alone invested \$1.036bn in its mobile telecommunications network in the year ending 30 June 2007.¹¹⁴

7.1 Views of interested parties

7.1.1 Investment in mobile telephony infrastructure

Telstra submits that investment in the mobile industry since 2004 has been intense, with investment by Telstra, Optus and Hutchison in their 3G networks.¹¹⁵ Similarly Optus submits that since 2004 all four MNOs have entered into network sharing arrangements to build and deploy 3G networks, particularly in forward-looking 3G networks.¹¹⁶ Optus also maintains its network rollout costs were incurred efficiently.¹¹⁷

Hutchison submits that it has invested \$3.3 billion in the development of its Australian 3G business since 2003. Hutchison has sought to ensure that its investment is efficient by for example, avoiding duplication through an infrastructure sharing agreement with Telstra.¹¹⁸

7.1.2 Continued declaration will promote the efficient investment in infrastructure

Telstra, AAPT and Hutchison submit that an extension of the declaration will promote the efficient investment in infrastructure if there are pricing principles which peg the MTAS price to its underlying cost of production.¹¹⁹

Telstra and AAPT note that an MTAS price higher than the underlying cost of production leads to inefficient over investment in mobile infrastructure and a corresponding inefficient under investment in fixed line infrastructure.¹²⁰ Telstra states that MTAS pricing has been above cost and that this has discouraged

¹¹² ACCC, *Telecommunications Competitive safeguards for 2006-2007*.

¹¹³ ACCC, *Telecommunications Competitive safeguards for 2006-2007*, p. 6 & 11.

¹¹⁴ Telstra, *Telstra Corporation Limited and controlled entities results and operations review – Year ended 30 June 2007*, 9 August 2007, p.54.

¹¹⁵ Telstra, Submission in response to the Discussion Paper, pp. 3–5 & 10.

¹¹⁶ Optus, *Submission in response to the Discussion Paper*, p.43.

¹¹⁷ Optus, Submission in response to the Discussion Paper, p. 44.

¹¹⁸ Hutchison, Submission in response to the Discussion Paper, pp. 21–22.

¹¹⁹ Telstra, Submission in response to the Discussion Paper, pp. 1–2, 7–8; AAPT, *Submission in response to the Discussion Paper*, p. 4; Hutchison, Submission in response to the Discussion Paper, p. 13.

¹²⁰ AAPT, Submission in response to the Discussion Paper, p. 4.

investment in networks such as the PSTN and WiMax and encouraged investment in mobile technologies.¹²¹

Optus submits that the declaration of the MTAS for FTM calls and MTM calls from new entrant mobile operators will promote certainty which is likely to encourage investment in new networks and investment by new entrants.¹²²

7.1.3 Circumstances where continued declaration will not promote the efficient investment in infrastructure

Optus notes that there is a risk of investment being discouraged by regulation where MTAS prices exceed the outcome expected in a competitive market. Optus submits that MTAS prices should (but so far have not) take some account of the Ramsey-Boiteux pricing for the allocation of common costs and the presence of network externalities.¹²³ Optus considers it likely that the existence of the MTAS declaration slowed the rate of investment by MNOs even though the investment to date has been significant. In particular, Optus notes that the first 3G mobile network was launched in Australia in March 2002, access to a 3G service from all four carriers was achieved in late 2005 while 3G network coverage only recently reached equivalence with 2G networks (i.e. coverage of outer metropolitan and regional areas). Optus describes current MTAS regulation as heavy handed and suggests that it has handicapped the migration from 2G to 3G networks.¹²⁴

7.1.4 Other submissions

Vodafone does not address the issue of whether continued declaration of the MTAS will promote investment in infrastructure except to note that there is a need for business certainty regarding the ongoing declaration and pricing of the MTAS in light of current and ongoing investment in 3G infrastructure and the uncertain economic outlook.¹²⁵

ATUG suggests that the ACCC should review infrastructure for data services such as domestic and international backhaul capacity in addition to mobile telephony infrastructure.¹²⁶

7.2 The ACCC's preliminary view

The ACCC notes the submissions in relation to whether MTAS prices are appropriately aligned with their costs and the effect on investment in mobile telephony infrastructure if they are not aligned. The ACCC agrees with submitters that MTAS prices which reflect efficient costs encourage efficient investment. The ACCC however considers that the debate as to what should be taken into account when setting the MTAS price or whether MTAS prices are above cost or heavy

¹²¹ Telstra, *Submission in response to the Discussion Paper*, pp. 1–2, 7–8.

¹²² Optus, Submission in response to the Discussion Paper, p. 41.

¹²³ Optus, Submission in response to the Discussion Paper, pp. 41–42 and Appendix D.

¹²⁴ Optus, *Submission in response to the Discussion Paper*, p. 44.

¹²⁵ Vodafone, *Submission in response to the Discussion Paper*, p. 10.

¹²⁶ ATUG, Submission in response to the Discussion Paper, p. 9.

handed is one which is more relevant to the recently conducted public inquiry on MTAS pricing principles and indicative prices referred to in section 2.3 above.

7.3 Conclusion

The ACCC is of the preliminary view that regulation of the MTAS has lead to a closer association of its price and cost, which in turn has promoted increased competition in the market and as a result, promoted a high level of efficient investment in mobile telephony infrastructure and new technology. The ACCC notes that each mobile operator has control over access to a bottleneck facility in the form of the MTAS and that in the absence of declaration, mobile operators will have the ability and incentive to raise the price of the MTAS above its underlying cost of production. Continued declaration of the MTAS is therefore likely to be necessary in order to further provide incentives for providers of services in this market to innovate and invest efficiently in ways that will help them compete and develop new ways of differentiating their product from that of their competitors in this market.

The ACCC seeks submissions on this issue and its preliminary view.

Appendix A — Service description

Domestic mobile terminating access service

The domestic mobile terminating access service is an access service for the carriage of voice calls 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 *Trade Practices* Act 1974 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.

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.

Appendix B — Submissions in response to the 2008 Discussion Paper

AAPT Limited (one public submission)

Australian Telecommunications Users Group (ATUG) (one public submission with attachment)

Competitive Carriers Coalition (CCC) (one public submission)

Hutchison Telecommunications (Australia) Limited (one public submission with a c-i-c version)

SingTel Optus Limited (one public submission with a c-i-c version, and Appendices A–E) $\,$

Telstra Corporation Limited (one public submission with a c-i-c version)

Vodafone Australia Limited (one public submission and one attachment)

Appendix C — Legislative background

Part XIC of the Act sets out a telecommunications access regime. This section of the report outlines the provisions of the access regime that are relevant to the declaration review.

A.1 Declaration and the SAOs

The Commission may determine that particular carriage services and related services are declared services under section 152AL of the Act. A carrier or carriage service provider that provides a declared service to itself or other persons is known as an access provider. Once a service is declared, access providers are subject to a number of SAOs pursuant to section 152AR of the Act. Terms of access can be governed by the terms of an undertaking or, in the absence of an accepted undertaking, by Commission determination in an access dispute.

In summary, the SAOs require that an access provider, if requested by a service provider, must:

- supply the declared service
- take all reasonable steps to ensure that the technical and operational quality of the service supplied to the service provider is equivalent to that which the access provider is supplying to itself
- take all reasonable steps to ensure that the fault detection, handling and rectification which the service provider receives in relation to the declared service is of equivalent technical and operational quality and timing as that provided by the access provider to itself
- permit interconnection of its facilities with the facilities of the service provider
- take all reasonable steps to ensure that the technical and operational quality and timing of the interconnection is equivalent to that which the access provider provides to itself
- take all reasonable steps to ensure that the service provider receives interconnection fault detection, handling and rectification of a technical and operational quality and timing that is equivalent to that which the access provider provides to itself
- if a standard is in force under section 384 of the Telecommunications Act, take all reasonable steps to ensure that the interconnection complies with the standard

- if requested by the service provider, provide billing information in connection with matters associated with, or incidental to, the supply of the declared service
- if an access provider supplies an active declared service by means of conditional-access customer equipment, the access provider must, if requested to do so by a service provider, supply any service that is necessary to enable the service provider to supply carriage services and/or content services by means of the declared service and using the equipment.

The Commission must only declare a service if, following a public inquiry, it considers that declaration would promote the LTIE.

A.2 The ACCC's approach to the LTIE test

In the context of reviewing a declaration under 152ALA, section 152AB(2) of the Act provides that, in determining whether something promotes the LTIE, regard must be had to the extent to which maintaining, varying or revoking the existing service declaration is likely to achieve the following objectives:

- promoting competition in markets for listed (that is, telecommunications) services
- achieving any-to-any connectivity in relation to carriage services that involve communication between end-users
- encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied.

These matters are interrelated. In many cases, the LTIE may be promoted through the achievement of two or all of these criteria simultaneously. In other cases, the achievement of one of these criteria may involve some trade-off in terms of another criterion, and the ACCC will need to weigh up the different effects to determine whether maintaining, varying or revoking the declaration promotes the LTIE. In this regard, the ACCC will interpret 'long-term' to mean a balancing of the flow of costs and benefits to end–users over time in relation to the criteria. Thus, it may be in the LTIE to receive a benefit for even a short period of time if its effect is not outweighed by any longer term costs.

Promoting competition

The first criterion in assessing whether a thing promotes the LTIE requires the ACCC to make an assessment as to whether maintaining, varying or revoking the service declaration would likely to promote competition in the markets for telecommunications services.

Section 152AB(4) of the Act requires that, in interpreting this criterion, regard must be had to, but is not limited to, the extent to which the arrangements will remove obstacles to end users gaining access to carriage services. The Explanatory Memorandum to Part XIC of the Act states that: ...it is intended that particular regard be had to the extent to which the [declaration] would enable end users to gain access to an increased range or choice of services.¹²⁷

The concept of competition is of fundamental importance to the Act and has been discussed many times in connection with the operation of Part IIIA, Part IV, Part XIB and Part XIC of the Act.

In general terms, competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The Trade Practices Tribunal, now the Australian Competition Tribunal (Tribunal), stated that:

In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate.¹²⁸

Competition can provide benefits to end–users including lower prices, better quality and a better range of services over time. Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

The establishment of a right for third parties to negotiate access to certain services on reasonable terms and conditions can operate to constrain the use of market power that could be derived from the control of these services. Accordingly, an access regime such as Part IIIA or Part XIC attempts to *limit* or reduce the sources of market power and consequent anti-competitive *conduct*, rather than directly regulating conduct which may flow from its use, which is the role of Part IV and Part XIB of the Act. Nonetheless, in any given challenge to competition, both Parts XIB (or IV) and XIC may be necessary to address anticompetitive behaviour.

To assist in determining the impact of potential variation or revocation of the declaration on downstream markets, the ACCC will need to identify the relevant market(s) and assess the likely effect of the variation or revocation on competition in each market.

Section 4E of the Act provides that the term 'market' includes a market for the goods or services under consideration and any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The ACCC's approach to market definition is discussed in its *Merger guidelines 2008* which replaced the *Merger guidelines*, June 1999 in November 2008 and is canvassed in its information paper, *Anti-competitive conduct in telecommunications markets*, August 1999.

¹²⁷ *Trade Practices (Telecommunications) Amendment Act 1997*, Explanatory Memorandum, p. 41.

Re Queensland Co-operative Milling Association Ltd and Defiance Holdings Ltd (1976), Australian TradePractices Reporter 40-012, at 17,245.

Once the relevant market has been identified, the second step is to assess the likely effect of the proposal on competition in each relevant market. As noted above, section 152AB(4) requires that regard must be had to the extent to which the proposal will remove obstacles to end–users gaining access to carriage services. The term 'obstacles' is best read, in the ACCC's view, as a reference to barriers facing new entrants in the markets for services arising from the need to use the network infrastructure services to be able to compete.

Where existing market conditions already, or are likely to, provide for the competitive supply of services, regulated access is not necessary. This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulated provision of services will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users which outweigh any costs of regulation.

In the context of considering whether a variation to, or revocation of, a service declaration will promote competition, it is therefore appropriate to examine the impact of the (alternative) service description on each relevant market, and compare the state of competition in that market before and after the proposed variation or revocation. In examining the market structure, the ACCC considers that competition is promoted when market structures are altered such that the exercise of market power becomes more difficult; for example, because barriers to entry have been lowered (permitting more efficient competitors to enter a market and thereby constrain the pricing behaviour of the incumbents) or because the ability of firms to raise rival's costs is restricted.

Any-to-any connectivity

The second criterion requires the ACCC to make an assessment as to whether maintaining, varying or revoking the service declaration would be likely to achieve any-to-any connectivity in relation to carriage services that involve communication between end users.

Section 152AB(8) provides that the criterion of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, or a similar service, with each other whether or not they are connected to the same network.

The reference to 'similar' services in the Act enables this criterion to apply to services with analogous, but not identical, functional characteristics, such as fixed and mobile voice telephony services or internet services which may have differing characteristics.

The any-to-any connectivity criterion is particularly relevant when considering services that involve communications between end–users. When considering other types of services (such as carriage services which are inputs to an end-to-end service or distribution services such as the carriage of pay television), the ACCC considers that this criterion will be given less weight compared to the other two criteria.

Efficient use of, and investment in, infrastructure

The third criterion requires the ACCC to make an assessment as to whether maintaining, varying or revoking the service declaration would be likely to encourage the economically efficient use of, and economically efficient investment in, the infrastructure by which telecommunications services are supplied.

Economic efficiency has three components:

- *Productive efficiency* refers to the efficient use of resources within each firm such that all goods and services are produced using the least cost combination of inputs.
- Allocative efficiency refers to the efficient allocation of resources across the economy such that the goods and services that are produced in the economy are the ones most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs.
- Dynamic efficiency refers to the efficient deployment of resources between present and future uses such that the welfare of society is maximised over time. Dynamic efficiency incorporates efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques.

The ACCC will need to ensure that the access regime does not discourage investment in networks or network elements where it is efficient. Where it is inefficient to require investment in a number of networks or network elements, the access regime may play an important role in ensuring that existing infrastructure is used efficiently. For instance, even where a higher utilisation of a network may be more efficient, a network owner with market power may deny access, in the absence of an access regime.

Section 152AB(6) provides that, in interpreting this criterion, regard must be had to, but is not limited to, the following:

- whether it is technically feasible for the services to be supplied and charged for, having regard to:
 - the technology that is in use or available
 - whether the costs that would be involved in supplying, and charging for, the services are reasonable
 - the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks
- the legitimate commercial interests of the supplier or suppliers of the service, including the ability of the supplier or suppliers to exploit economies of scale and scope
- the incentives for investment in the infrastructure by which the services are supplied.

These matters are discussed in turn below.

The technical feasibility of supplying and charging for particular services

This criterion incorporates a number of elements, including the technology that is in use or available, the costs of supplying, and charging for, the services and the effects on the operation of telecommunications networks.

In many cases, the technical feasibility of supplying and charging for particular services given the current state of technology may be clear, particularly where there is a history of providing access. The question will be more difficult where there is no prior access, or where conditions have changed. Experience in other jurisdictions, taking account of relevant differences in technology or network configuration, will be helpful. Generally the onus will be on the potential access provider to demonstrate that supply is not technically feasible.

The costs of supplying and charging for the services, and potential spill over costs in terms of network integrity will also be considered by the ACCC. In identifying costs involved in supplying and charging for a service, however, the ACCC only needs to consider the direct costs.

The legitimate commercial interests of the supplier or suppliers, including the ability of the supplier to exploit economies of scale and scope

A supplier's legitimate commercial interests encompass its obligations to the owners of the firm, including the need to recover the cost of providing services and to earn a commercial return on the investment in infrastructure, commensurate with the risks of that investment. The ACCC will also consider the need for appropriate incentives for the access provider to maintain, improve and invest in the efficient provision of the service.

A significant issue relates to whether or not capacity should be made available to an access seeker. Where there is spare capacity within the network, not assigned to current or planned services, allocative efficiency would be promoted by obliging the owner to release capacity for competitors.

Section 152AB(6)(b) of the Act also requires the ACCC to have regard to whether the access arrangement may affect the owner's ability to realise economies of scale or scope. Economies of scale arise from a production process in which the average (or per unit) cost of production decreases as the firm's output increases. Economies of scope arise from a production process in which it is less costly in total for one firm to produce two (or more) products than it is for two (or more) firms to each separately produce each of the products.

Potential effects from access on economies of scope are likely to be greater than on economies of scale. A limit in the capacity available to the owner may constrain the number of services that the owner is able to provide using the infrastructure and thus prevent the realisation of economies of scope associated with the production of multiple services. In contrast, economies of scale may simply result from the use of the capacity of the network and be able to be realised regardless of whether that capacity is being used by the owner or by other carriers and service providers.

Nonetheless, the ACCC will assess the effects of the supplier's ability to exploit both economies of scale and scope on a case-by-case basis.

The impact on incentives for investment in infrastructure

Firms should have the incentive to invest efficiently in infrastructure. Various aspects of efficient investment have been discussed already. It is also important to note that while access regulation may have the potential to diminish incentives for some businesses to invest in infrastructure, it also can ensure that investment is efficient and can reduce the barriers to entry for other (competing) businesses, or barriers to expansion by competing businesses.

The above discussion suggests that determinations that services should be regulated (thus giving rise to the possibility that access prices will be determined through regulation) will impact on efficient build-or-buy decisions. The ACCC has sought to ensure that pricing for declared services generates incentives for efficient investment and does not distort investment decisions. In examining the pricing of declared services the ACCC has attempted to estimate the costs which would be incurred by an efficient operator using an efficient network configuration. Such a forward looking approach generates price signals consistent with those which would be generated in a contestable market, and is also consistent with international regulatory practice.

Having said this, the ACCC believes that there will be a need to consider the effects of any expected disincentive to investment with any anticipated increases in competition to determine the overall effect on the LTIE. The ACCC will be careful to ensure that services are not declared where there is a risk that incentives to invest may be dampened, such that there is little subsequent benefit to end–users from the access arrangements.