Australian
Competition &
Consumer
Commission

Mobile Services Review
Mobile Originating Access Service

Draft Decision **on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile originating access service**

May 2004

1. Introduction

In March 2003, the Australian Competition and Consumer Commission (the Commission) announced that it would conduct a wide ranging review of a number of issues associated with the regulation of the mobile services industry.

One aspect of this inquiry concerns whether or not the Commission should extend the expiry date for the declaration of the Domestic GSM and CDMA originating access service, or allow this declaration to expire. The expiry date for this declaration is 30 June 2004. This aspect of the inquiry also concerns whether or not this declaration should be varied or revoked or replaced by new declarations. The Commission is conducting this aspect of the inquiry pursuant to section 152ALA of the *Trade Practices Act 1974* (the Act) and Part 25 of the *Telecommunications Act 1997* (the Telecommunications Act).

Further, the Commission indicated that the review would also consider what form of regulation – and, in particular, what form of pricing principle – would be most appropriate for this service should it find that continued or varied declaration of a mobile originating access service (MOAS) was appropriate.

In order to advance and inform this and other aspects of the Mobile Services Review, and in accordance with Division 3 of Part 25 of the *Telecommunications Act 1997*, the Commission released a discussion paper (the Discussion Paper) on 24 April 2003.

In response to the broad Mobile Services Review Discussion Paper, the Commission received 27 submissions from interested parties. A list of these parties is contained in Appendix B of this report. Of these, however, only five parties – Vodafone, Frontier Economics (on behalf of Vodafone), Telstra, the Competitive Carriers Coalition (the CCC) and PowerTel – provided specific comments on the MOAS.

As part of this process, the Commission also held two public forums to aid consideration of the central issues in this review. These were held in Melbourne on 29 August 2003 and in Sydney on 11 September 2003.

Based on the limited information provided in relation to the MOAS by interested parties during the course of this review, the Commission has reached a Draft Decision that it would not be in the long-term-interests of end-users (LTIE) to continue declaration of a MOAS. Accordingly, the Commission's Draft Decision is that the MOAS declaration should be allowed to expire on 30 June 2004.

That said, the Commission notes this is only a draft view at this stage, and were it to be presented with compelling evidence in submissions to the Draft Decision, it may be inclined to change its view on this matter.

1.1 Background

The mobile originating access service (MOAS)

When a mobile call is made between consumers (or end-users), it will involve *inter alia* 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 (POI) between these two networks will exist. Origination, termination and the POI are illustrated in Figure 1.1 below in the context of a call between a Telstra mobile phone subscriber and an AAPT fixed-line consumer.

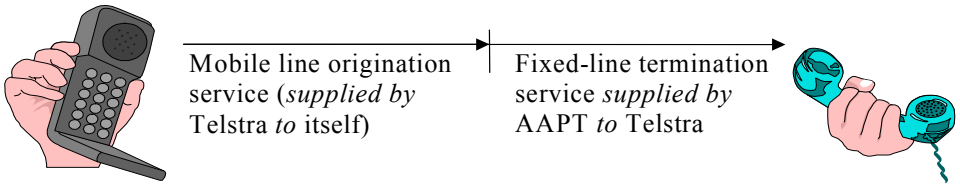

Figure 1.1 - Use of the mobile origination service to supply a mobile-to-fixed call

Under current commercial arrangements between network owners, the network owner that originates the call will, in the usual case, purchase termination from the network owner that completes 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 making the call. This commercial arrangement is sometimes referred to as the 'calling party pays' (CPP) model or the 'termination' model.

In certain circumstances, however, the termination model may not be chosen by interconnecting networks. Rather, it may be that interconnection payment arrangements are altered such that the terminating network carrier makes a payment to the originating network carrier. This is more likely to occur in circumstances where the originating network carrier is restricted with regard to the charge it can set for its directly-connected subscribers who initiate calls on its network and where the terminating network operator charges a fee to its subscribers for enabling the termination of calls made to the subscribers.

Regardless of the payment model used, mobile origination, like mobile termination, is an essential input into the provision of end-to-end calls from mobile phone users where the mobile phone user is on a separate network to the individual who receives the call. This is the case irrespective of whether the call originates on a second

generation (2G) GSM or CDMA network. It is also a key element in the making of calls that originate on 2.5G and third generation (3G) mobile networks.[1]

Under the *Telecommunications Numbering Plan 1997* (the Numbering Plan), calls made from a fixed-line phone to a 13/1300 number cannot be charged at a rate of greater than the maximum amount permitted for untimed local calls.[2] Calls made from a fixed-line phone to a 1800 number must be made available for no charge.

While calls made from a mobile phone to a 13/1300 or 1800 service are not subject to the same retail price restrictions as those made from a fixed-line phone, a MOAS has been deemed to be declared in Australia since the introduction of the telecommunications-specific access regime in July 1997. However, unlike the GSM termination service which declared GSM termination irrespective of where the call originated, the GSM origination service was far more limited in its scope. In particular, the declared GSM originating access service only applies to calls made to numbers such as 13/1300 and 1800 call services.

In March 2002, as a consequence of the Commission's examination of a proposed variation to make the domestic GSM origination and termination services declaration technology-neutral, the service description was varied to include origination on CDMA networks for the purpose of connecting to 13/1300 and 1800 services. For example, if a Vodafone mobile subscriber wanted to book a taxi service using a 1300 number, and Primus provided the network ability for the taxi company to run the 1300 number service, Primus would be able to seek access to a MOAS from Vodafone in order for the end-to-end call to be made. This is shown in Figure 1.2 below.

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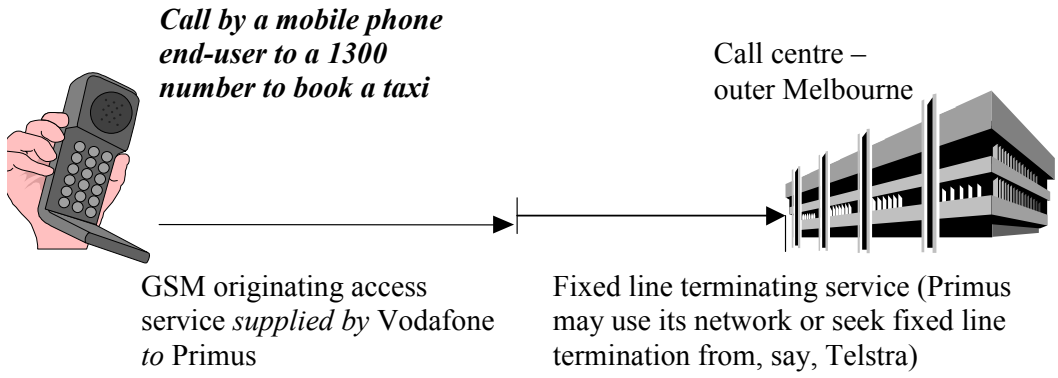
1 2G protocols use digital encoding and include GSM and CDMA. 2G networks support high bit rate voice and limited data communications. They are capable of offering auxiliary services such as data, fax and the short messaging service (SMS). 2.5G protocols extend 2G systems to provide additional features, such as packet-switched connection and enhanced data rates. 3G protocols support much higher data rates, measured in megabits per second, intended for applications such as full-motion video, video conferencing and full Internet access.

2 Numbers designated as having a low call charge in the Numbering Plan must be charged at no more than the highest call charge permitted for an eligible local call made using a standard telephone service, other than a public mobile telephone service, as set out under price control arrangements determined by the Minister for Communications, Information Technology and the Arts under Part 4 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

Figure 1.2 – The GSM originating access service: use of the GSM/CDMA originating access service to supply a 13/1300 or 1800 call



Declaration

Under the Act, declaration of a service creates a requirement for those carriers supplying the service (known as 'access providers' to provide the service, upon request, to other service providers (known as 'access seekers').[3] In doing so, the access provider must take all reasonable steps to ensure that the technical and operational quality of the service is equivalent to that which the access provider provides to itself.[4]

Declaration ensures service providers have access to the inputs they need to supply competitive communications services to end-users. The terms and conditions of supply for a declared service can be agreed through commercial negotiations. If the access provider or access seeker cannot agree on the terms and conditions of supply, either party can seek Commission arbitration of disputes over access terms and conditions for the service. Where a relevant access undertaking (approved by the Commission) exists, an arbitration determination made by the Commission must not be inconsistent with that undertaking.

As with the mobile termination service, declaration of a MOAS has not been subject to a full review since it was deemed to be declared on 1 July 1997, and is therefore due for review.

Separately, following changes made to the Act in December 2002, the MOAS declaration is due to expire at the end of June 2004. This Draft Report fulfils the Commission's obligation under section 152ALA of the Act to consider:

- whether to extend or further extend the expiry date of the declaration;
- whether to revoke the declaration;
- whether to vary the declaration;

[3] Paragraph 152AR(3)(a) of the Act.
[4] Paragraph 152AR(3)(b) of the Act.

- whether to allow the declaration to expire without making a new declaration under section 152AL; and

- whether to allow the declaration to expire and then to make a new declaration under section 152AL.

1.2 Structure of this report

The remainder of this report is structured as follows:

- Chapter Two of this report sets out the timetable and processes for the remainder of the public inquiry;

- Chapter Three discusses the relevant legislative framework for the inquiry;

- Chapter Four discusses the service description;

- Chapter Five discusses whether continued declaration would promote the LTIE;

- Appendix A provides a varied MOAS description that is defined to be the eligible service for the purposes of the inquiry; and

- Appendix B contains a list of those interested parties who have provided submissions to the Mobile Services Review Discussion Paper.

2. Timetable and process for the public inquiry

In accordance with Division 3 of Part 25 of the Telecommunications Act 1997, the Commission invites written submissions from interested parties on its Draft Decision by Wednesday 9 June 2004.

Following consideration of these issues, the Commission aims to publish a final report setting out its final decision in June 2004.

In the event that the Commission is satisfied that it would be in the LTIE to continue to declare a MOAS, the Commission would proceed to publish a notice in the Gazette to this effect.

As indicated in Chapter One of this report, the Commission's consideration of the MOAS is part of a broader Mobile Services Review. The Commission intends to release draft reports outlining its findings in relation to its consideration of other mobile services in separate reports. The Commission has already released its Draft Decision (and accompanying Draft Report) in relation to the mobile terminating access service on 26 March 2004.

Further details of the Commission's approach to declaration inquiries is outlined in its paper *Telecommunications services – Declaration provisions, July 1999.*

2.1 Making submissions to the public inquiry

The Commission seeks comment from all industry participants, other stakeholders and the public more generally. It encourages these groups to consider the key issues of this Draft Report, and make submissions to the Commission to further assist it in determining whether to continue to declare a MOAS.

To foster an informed and robust consultative process, the Commission proposes to treat all submissions as non-confidential, unless the submissions indicate otherwise. Unless the author of a submission requests that the submission be kept confidential, written submissions given to the Commission will be made available to interested parties upon request. If submissions contain confidential information, then the author of the submission should provide the Commission with a copy that is marked confidential and a masked copy of the submission. This masked copy may be made available to interested parties upon request.

Submissions can be addressed to:

Richard York
Director – Regulatory
Telecommunications
Australian Competition and Consumer Commission
GPO Box 520J
Melbourne VIC 3001

In addition to a hard copy, people making submissions are encouraged to provide an electronic copy of the submission to richard.york@accc.gov.au.

Enquiries can be made to Richard York on (03) 9290 1883 or Adrian Trantino on (03) 9290 1987.

3. Legislative background

3.1 The access regime

Part XIC of the Act sets out a telecommunications access regime. The Commission may determine that particular carriage services and related services are declared services. Once a service is declared, carriage service providers (CSPs) are required to comply with standard access obligations in relation to any such service that they supply. The standard access obligations facilitate the provision of access to declared services by service providers in order that service providers can provide carriage services and/or content services. In addition to its standard access obligations, a carrier, CSP or related body must not prevent or hinder access to a declared service.

3.2 Maintaining, varying or revoking an existing declaration

Section 152ALA of the *Trade Practices Act 1974* ('the Act') requires the Commission to review each declaration within the year preceding its expiry date.

The purpose of the review, as set out in section 152ALA(7) of the Act, is to determine whether or not the expiry date for the declaration should be extended, whether the declaration should be allowed to expire, whether or not a declaration should be varied or revoked, or if a new declaration should be made. An extension to an expiry date, or the expiry date for a new declaration, may not be for a period exceeding five years.

Pursuant to section 152ALA of the Act, the Commission must:

- hold a public inquiry in accordance with Part 25 of the *Telecommunications Act 1997* on whether to extend the expiry date for the declaration, vary or revoke the declaration, or allow the declaration to expire (with or without a new declaration being made); and
- prepare and publish a report setting out the Commission's findings.

The Commission's powers to extend the expiry date for a declaration, vary or revoke a declaration, or allow a declaration to expire (with or without a new declaration being made), are set out in sections 152AL, 152ALA and 152AO of the Act. In exercising these powers, the Commission is required to consider the effect on the LTIE of carriage services and services provided by means of carriage services.

3.3 The Commission's approach to the LTIE test

The Commission must decide whether declaring the service would promote the LTIE of carriage services, or of services supplied using carriage services ('listed services'). Section 152AB of the Act provides that, in determining whether declaration promotes the LTIE, regard must be had only to the extent to which declaration is likely to result in the achievement of the following objectives.

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

Section 152AB also provides further guidance in interpreting these objectives. The three objectives are discussed below.

Promoting competition

Subsections 152AB(4) and (5) provide that, in interpreting this objective, 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 listed 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.[5]

Any-to-any connectivity

Subsection 152AB(8) provides that the objective 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 other end-users whether or not they are connected to the same network.

Efficient use of, and investment in, infrastructure

Subsections 152AB(6) and (7) provide that, in interpreting this objective, regard must be had to, but 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;

[5] *Trade Practices Amendment (Telecommunications) Act 1997* (Cth) explanatory memorandum.

- whether the costs that would be involved in supplying, and charging for, the services are reasonable; and

- 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; and

- the incentives for investment in the infrastructure by which the 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 of the criteria, and the Commission will need to weigh up the different effects to determine whether declaration promotes the LTIE. In this regard, the Commission will interpret long-term to mean the period of time necessary for the substantive effects of declaration to unfold.

3.3.1 Promoting competition

The first criterion requires the Commission to make an assessment of whether or not declaration would be likely to promote competition in the markets for listed services. 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) 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.[6]

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 profitably 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.

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[6] *Re Queensland Co-operative Milling Association Ltd; Re Defiance Holdings Ltd* (1976) ATPR 40-012, 17,245.

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 addresses the *structure* of a market, 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 anti-competitive behavior. To assist in determining the impact of potential declaration on downstream markets, the Commission will first need to identify the relevant market(s) and assess the likely effect of declaration 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 Commission's approach to market definition is discussed in its *Merger Guidelines*, June 1999 and is also canvassed in its information paper, *Anti-competitive conduct in telecommunications markets,* August 1999.

The second step is to assess the likely effect of declaration on competition in each relevant market. As noted above, subsection 152AB(4) requires that regard must be had to the extent to which declaration will remove obstacles to end-users gaining access to listed services.

The Commission considers that denial to service providers of access to necessary upstream services on reasonable terms is a significant obstacle to end users gaining access to services. In this regard, declaration can remove such obstacles by facilitating entry by service providers, thereby providing end users with additional services from which to choose. For example, access to a mobile origination service may enable more service providers to provide mobile to fixed-line calls to end-users. This gives end-users more choice of service providers.

Where existing market conditions already provide for the competitive supply of services, the access regime should not impose regulated access.[7] This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulation will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users that outweigh any costs of regulation.

In the context of considering whether declaration will promote competition, it is therefore appropriate to examine the impact of the proposed service description on each relevant market, and compare the state of competition in that market with and without declaration. In examining the market structure, the Commission 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

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[7] *Trade Practices Amendment (Telecommunications) Act 1997* (Cth) explanatory memorandum.

constrain the pricing of the incumbents) or because the ability of firms to raise rivals' costs is restricted.

3.3.2 Any-to-any connectivity

The objective of 'any-to-any' connectivity is achieved if, and only if, each end-user of a service that involves communication between end-users is able to communicate, by means of that service or a similar service, with every other end-user even where they are connected to different telecommunications networks.[8] The reference to 'similar' services in the Act enables this objective 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 requirement is particularly relevant when considering services that involve communications between end-users.[9] When considering other types of services (such as carriage services that are inputs to an end-to-end service or distribution services such as the carriage of pay television), the Commission considers that this criterion will be given less weight compared to the other two criteria.

3.3.3 Efficient use of, and investment in, infrastructure

The third objective under section 152AB is to encourage the economically efficient use of, and economically efficient investment in, the infrastructure used for the supply of carriage services.

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 Commission will need to ensure that the access regime does not discourage investment in networks or network elements where such investment is efficient. However, where it is inefficient to duplicate investment in existing networks or

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8 Paragraph 152AB(8) of the Act.

9 *Trade Practices (Telecommunications) Amendment Act 1997* (Cth) explanatory memorandum.

network elements, the access regime may play an important role in ensuring that existing infrastructure is used efficiently.

Paragraph 152AB(6)(a) requires the Commission to have regard to a number of specific matters in examining whether declaration will lead to achievement of this objective. Some of these are considered below.

The technical feasibility of supplying and charging for particular services

This 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 Commission will look to an access provider to demonstrate that supply is not technically feasible.

Most of the issues under this criterion are discussed in Chapter Four, which considers the service description and technical feasibility of providing access to a mobile origination service.

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 normal commercial return on the investment in infrastructure. The Commission considers that allowing for a normal commercial return on investment will provide an appropriate incentive for the access provider to maintain, improve and invest in the efficient provision of the service.

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.

Paragraph 152AB(6)(b) also requires the Commission 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 Commission 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 efficiency 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 ensures that investment is efficient and reduces the barriers to entry for other (competing) businesses or the barriers to expansion by competing businesses.

There is also a need to consider the effects of any expected disincentive to investment with any anticipated increases in competition to determine the overall effect of declaration on the LTIE. The Commission 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.

3.4 Pricing principles for declared services

As a result of changes to the telecommunications provisions of the Act in September 2001, the Commission is now obliged to determine pricing principles (PP) relating to services that it declares.[10] The PPs must be in writing and must be made at the same time as, or as soon as practicable after, the Commission declares a service or varies a declared service.

The PPs may also contain price-related terms and conditions relating to access to the declared service. 'Price related terms and conditions' is defined to mean terms and conditions relating to price or a method of ascertaining price.

Before developing PPs, the Commission must publish a draft version, invite public submissions on the draft, and consider any submissions received. The Commission must then publish the PPs (in such manner it thinks appropriate). The Commission must have regard to the PPs if there is an arbitration in respect of the declared service.

The practical effect of these changes for the Commission is that the Commission should either call for submissions on PPs as part of a public discussion paper on a proposed declared service or conduct a separate public consultation on PPs as soon as possible after a service is declared. Although the Commission is not bound to follow the PPs in any arbitration, in practice it would unless there was good reason not to.

[10] Section 152AQA of the Act.

4. Service description

A fundamental step in determining whether a given service should be declared is to establish how the service in question should be described. This gives interested parties a basis point from which to discuss whether the service should be declared, and gives parties a firm idea of the service that access providers would be required to supply were the service to be declared. It also assists the Commission by giving it a field within which it can meaningfully analyse whether declaration of the service, so defined, would promote the LTIE.

As the note to sub-section 152AL(3) states:

> Eligible services may be specified by name, by inclusion in a specified class or in any other way.[11]

The Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996 adds:

> In making a declaration of an eligible service, the ACCC will have a high level of flexibility to describe the service, whether it be in functional or any other terms. This will enable, where appropriate, the ACCC to target the access obligations (which are triggered by a declaration) to specific areas of bottleneck market power by describing the service in some detail, or to more broadly describe a service which is generally important (such as services necessary for any-to-any connectivity).[12]

4.1 Principles for developing a service description

When developing the description of an eligible service, the Commission is guided by the object of Part XIC of the Act, which is to promote the LTIE. To this end, the Commission utilises the following principles:

- In most cases, some degree of technical specification is required. However, the Commission's preference is to describe the service in terms which are as functional as possible. In such a situation, the declaration will leave the access provider with flexibility to determine the most efficient way of supplying the service. This also provides more flexibility to the access seeker in the type of service that can be provided within the ambit of the declared service and avoid distorting technological or innovative developments. Technical terms may, however, be appropriate where a functional description would provide scope for ambiguity which could be exploited by the access provider in a manner that hinders access.

- The eligible service should be described in a manner which provides sufficient clarity for application of the standard access obligations.

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[11] See *Acts Interpretation Act 1901* (Cth) s. 33(3A).

[12] Trade Practices (Telecommunications) Amendment Bill (1996) explanatory memorandum, item 6, proposed s. 152AL.

- The service should be one for which it is technically feasible to supply and charge. In addition, the service should be one that a potential access provider is supplying to itself or others.

4.2 Background

When the GSM origination service was deemed to be declared in 1997, it was described as:

> …an Access Service for the carriage of telephone calls (i.e. voice, data over the voice frequency band) to a POI from end-customers assigned numbers from the GSM number ranges of the Australian Numbering Plan and directly connected to the AP's (Access Provider's) GSM network.[13]

As a result of the Commission's inquiry into making GSM service declarations technology neutral, in March 2002 the service description was broadened to include CDMA. The declared GSM and CDMA originating access service is now described as:

> …an Access Service for the carriage of telephone calls (i.e.. voice, data over the voice band) to a POI from end-customers assigned numbers from the GSM or CDMA mobile service number ranges of the Telecommunications Numbering Plan 1997 and directly connected to the AP's GSM or CDMA network.[14]

The Commission noted in its 2003 Mobile Services Review Discussion Paper that it would assess whether the service description should be varied in any way. In particular, it indicated it is important to consider whether the service description should be expanded to include origination of services on 3G mobile networks. It also asked interested parties to comment on whether the service description should be broadened to include calls to special number services other than 13/1300 and 1800 services.

4.3 Views of interested parties

The Commission notes that it did not receive comments from interested parties on the specific wording of the service declaration, with the possible exception of the CCC's comments that the current service description remains appropriate for all GSM and CDMA 2G, 2.5G and 3G technologies.[15] Rather, interested parties seemed more concerned with identifying whether or not a MOAS was supplied during calls from mobile phones to 13/1300 and 1800 numbers, and what was the true nature of interconnection arrangements between carriers that underpinned the provision of these calls. Some of the views of interested parties on these issues are set out in turn below.

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[13] ACCC, *Deeming of Telecommunication Services*, 30 June 1997, p. 42.
[14] ACCC, *Variation to make the GSM Service Declarations Technology-Neutral*, March 2002, p. 54.
[15] Competitive Carriers Coalition, *Submission to the ACCC Mobile Services Review 2003*, June 2003, p. 37.

4.3.1 Is a MOAS 'supplied'?

In its submission to the Mobiles Services Review Discussion Paper, Vodafone argued that a MOAS does not exist. More specifically, it argued that:

> …fixed line carriers providing 1800/1300 and 13 inbound services do not purchase GSM originating access services in order to provide these services to mobile subscribers.[16]

Instead, Vodafone argues that mobile carriers bill their subscribers directly for calls made on their mobile phone to 13/1300 and 1800 numbers. Implicit in this argument seems to be a view that given it provides retail end-to-end service to mobile subscribers (and bills them for it), it should not be seen as providing an input (i.e. access) service to 13/1300 and 1800 service providers. It would appear that Vodafone would only consider it to be providing an input to providers of 13/1300 and 1800 services if these service providers had a direct billing relationship with the mobile subscriber. Given providers of 13/1300 and 1800 services do not bill mobile subscribers, Vodafone argues they are not purchasing a MOAS.

Rather, Vodafone argues that the mobile network provider and the fixed line network provider of 13/1300 and 1800 services are dependant on each other to provide calls from mobile phone users to 13/1300 and 1800 numbers.

Similarly, Frontier Economics' submission (provided on behalf of Vodafone) argues it is not clear that mobile operators supply an input into the provision of calls from mobile phones to 13/1300 and 1800 numbers. With regard to calls to 13/1300 numbers, Frontier Economics notes that:

> … in the ACCC's 2002 review, Telstra argued that the mobile carriers acquire a termination service from the 13 service provider rather than the terminating 13 service provider acquiring an origination service from the mobile network carrier. If this is so, the terminating 13 service provider should be looked upon as supplying an input to the business of the originating mobile carrier. This is the standard use of the term 'supplier' in analysis of a value chain.[17]

When determining which carrier is supplying an input to whom, Frontier Economics further argues that one should 'follow the money'.

> If money flows from the mobile network carrier providing the originating service to the firm providing the terminating service for the 13 number, then the terminating service provider is supplying an input to the mobile network carrier.[18]

4.3.2 What is the nature of interconnection arrangements underpinning the provision of calls from mobile phones to 13/1300 and 1800 numbers?

In a related fashion, a number of submitters commented on what they considered to be the true nature of interconnection and retail billing arrangements underpinning the provision of calls from mobile phone users to 13/1300 and 1800 numbers. Market

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[16] Vodafone, *Supplementary Submission to the ACCC Mobile Services Review 2003 Discussion Paper*, 2 July 2003, pp.23-24.

[17] Frontier Economics, *Market Definition Issues in the ACCC's Mobile Services Review 2003*, June 2003, p.3.

[18] *Ibid.*

inquiries and submissions reveal, however, that there is no clear consensus as to the true nature of interconnection arrangements that underpin the provision of these services.

In its submission to the Mobile Services Review, Telstra indicated that it is aware of two different models that currently govern the provision of mobile calls to 1800 and 13/1300 numbers.[19] For 1800 services, Telstra stated that the network provider of calls to 13/1300 and 1800 numbers (the 'special service provider') purchases mobile origination services. This differs from Telstra's arrangements for calls to 13/1300 numbers from mobile subscribers, where Telstra effectively purchases a termination service when it pays 'a Special Service Contribution Fee to special service providers'.[20]

Similarly, market inquiries with Vodafone reveal that it too believes it makes a payment to network providers of 13/1300 services in order to provide an end-to-end service for its subscribers that seek to make calls to 13/1300 numbers. In contrast, when its mobile subscribers seek to make calls to 1800 numbers, Vodafone indicates that it charges a fee to the network provider of 1800 services for originating the call on Vodafone's mobile network. As indicated above, however, Vodafone does not believe it provides a MOAS in this instance, as the 1800 service provider does not bill the mobile phone user for these calls. Hence, it appears to be arguing that it remains the prime service deliverer of this service to mobile phone users. This is evidenced by the fact it bills the mobile phone user for calls to the 1800 number.

Frontier Economics, on Vodafone's behalf, states that the originating caller's mobile network carrier sets the retail prices for calls to 1800 and 13/1300 numbers and bills its customers who originate calls to numbers in these ranges. Frontier Economics then states that the mobile carrier and the terminating network providing access to these numbers negotiate an interconnection payment for carrying the call based on the complementary nature of the originating and terminating services they provide. As such, it argues that interconnection revenue may flow in both directions. Alternatively, it indicates a net revenue payment can be agreed that recognises the complementary nature of the services but results in interconnection payments flowing in only one direction.[21]

Market inquiries with a network provider of 13/1300 and 1800 services reveal that it believes a 'net' payment arrangement tends to work in practice with regard to the interconnection arrangements underpinning the provision of calls from mobile phones to 13/1300 and 1800 numbers. In this regard, it indicates that four payments are made in the provision of calls from 13/1300 and 1800 services. At the retail level, it believes that mobile operators charge their subscribers for calls they make to 13/1300 and 1800 services. Further, network providers of 13/1300 and 1800 services charge their consumers for the ability to receive calls to their allocated number. At the wholesale level, this party believes two additional fees are negotiated for origination and termination services. That is, the mobile operator will charge the network provider of 13/1300 and 1800 services a fee for originating calls on its network. Similarly, the network provider of 13/1300 and 1800 services charges a fee to the

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[19] Telstra, *Telstra's Supplementary Response to the Discussion Paper of the ACCC*, July 2003, p. 2.
[20] *Ibid.*
[21] Frontier Economics, *op. cit*., p.3-4.

mobile operator for termination of calls on its network. In practice, these two interconnection charges are then 'netted-off', with a net payment flowing in only one direction. This network provider of calls to 13/1300 and 1800 numbers indicates that, in general, it makes a net payment to the mobile operator – irrespective of whether the call is to a 13/1300 or 1800 number. This view implies that both a mobile origination and 13/1300 and 1800 termination service is supplied in order to ensure calls can be made from mobile subscribers to 13/1300 and 1800 numbers.

In contrast, however, the CCC indicates in its submission that the preferred form of interconnection arrangement for calls to 13/1300 and 1800 services is one where the mobile network operator (MNO) seeks connectivity with a 1800 or 13/1300 service provider via a PSTN termination service. In this case, the CCC explains that the MNO is the primary service deliverer who sets all charges and bills the mobile end-user.[22] This would imply that a MOAS is not acquired by 13/1300 and 1800 service providers. If this is the case, the CCC argues that the requirement for declaration of a MOAS is diminished. However, as indicated in section 5.2 below, the CCC considers that declaration of such a service may be needed in circumstances where an MNO refuses to buy termination from the relevant provider and the service provider has no option but to acquire a MOAS.[23]

4.4 Commission's View

Based on the issues raised by interested parties during this inquiry, the Commission considers that there are three key issues that must be resolved in relation to the service description for the MOAS:

1. Is a MOAS supplied when calls are made from mobile phone subscribers to 13/1300 and 1800 numbers;

2. What is the nature of commercial arrangements that underpin the provision of calls from mobile phone subscribers to 13/1300 and 1800 numbers; and

3. Should the MOAS service description be varied to include calls originating on 2.5G and 3G mobile networks?

Each of these issues is considered in turn below.

[22] CCC, *op. cit.*, p. 37.
[23] *Ibid.*

4.4.1 Is a MOAS supplied when calls are made from mobile phone subscribers to 13/1300 and 1800 numbers?

As it is currently declared, the MOAS is described as:

> …an Access Service for the carriage of telephone calls (i.e.. voice, data over the voice band) to a POI from end-customers assigned numbers from the GSM or CDMA mobile service number ranges of the Telecommunications Numbering Plan 1997 and directly connected to the AP's GSM or CDMA network.[24]

As noted in Chapter 1 of this report, the mobile origination service is used to originate calls from mobile phones to 13/1300 and 1800 numbers. It is supplied by mobile carriers to themselves and other carriers to enable mobile subscribers to make calls to 13/1300 and 1800 services.

In the Numbering Plan, 13/300 and 1800 services are categorised as 'special services numbers'. Carriage services such as freephone, digital mobile, satellite, operator, internal and testing services are all special service numbers.[25] The prefix indicates the type of services but does not contain geographic information in the number. For example, the prefix 04 is used for digital mobile numbers. Special services numbers can vary in length from four to fifteen digits.

For certain types of calls to special services numbers, the Numbering Plan limits the call charge that can be levied for calls to these services.[26] For instance, calls to 1800 numbers are referred to, under the Numbering Plan, as being 'freephone' services. This is because calls made from fixed-line consumers to these numbers are provided to the A-party making the call at no charge. Instead, under the Numbering Plan, the price of these calls can be charged to the called party, rather than the caller.

Similarly, calls to 13/1300 numbers are referred to, under the Numbering Plan, as local rate services. This is because, under the Numbering Plan, calls to these numbers using a standard telephone service must be charged at equal to or less than the maximum amount permitted for untimed local calls (currently 22 cents).[27]

Special services numbers can only be used with the carriage service specified in the Numbering Plan. In general, freephone and local rate services are used by businesses to provide call centre services where a single phone number is promoted nationwide.

It is noteworthy, however, that these call charge restrictions do not apply when calls to 13/1300 and 1800 numbers are made from a mobile phone. Hence, the price of a call to a 13/1300 or 1800 number could be greater than 22 cents for a customer calling

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[24] *Variation to make the GSM Service Declarations Technology-Neutral*, ACCC, March 2002, p. 54.

[25] Special services numbers are specified in schedule 4 of the Numbering Plan. The schedule provides information on the form that special services numbers take and how they are used. It lists the number prefixes and number structure used for freephone and local rate services.

[26] Column 2 of schedule 4 of the Numbering Plan specifies which numbers are limited to low call charges.

[27] Numbers designated as having a low call charge in the Numbering Plan must be charged at no more than the highest call charge permitted for an eligible local call made using a standard telephone service, other than a public mobile telephone service, as set out under price control arrangements determined by the Minister for Communications, Information Technology and the Arts under Part 4 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*.

from a mobile phone. Further, the price set for these calls need not be set on an untimed basis.

With regard to Vodafone's argument that it does not supply the currently declared MOAS because it bills mobile phone users that make calls to 13/1300 and 1800 services, the Commission does not believe this retail billing arrangement invalidates the existing declaration. Further, irrespective of the existing wholesale interconnection and retail billing arrangements, the Commission believes mobile carriers do, technically, provide a MOAS. The Commission notes the Australian Communications Industry Forum (ACIF) Interconnection Model which sets out how a MOAS is provided. In particular principles G15 and G16 outline that:

- the carrier providing the 1800 or 13/1300 services to the 'commissioning customer' (the customer who lists a 1800 or 13/1300 service) is the prime service deliverer; and

- the mobile carrier originating the A-party's call and any transit service deliverers are the supporting service deliverers to the carrier/prime service deliverer providing the 1800 or 13/1300 service.[28]

The model suggests that the carrier providing the 1800 or 13/1300 services, as the prime service deliverer (PSD), is responsible for the call and as such would purchase mobile origination from the mobile carrier originating the A-party's call.

Technically, therefore, even though mobile operators charge their subscribers for calls to 13/1300 and 1800 services, and may not in all cases charge a fee for originating calls on their networks, they are not the PSD under the ACIF Interconnection Model. The mobile operator is providing an input to the carrier providing the 13/1300 or 1800 service, and is therefore a supporting service deliverer.

Further, while 13/1300 and 1800 service providers do not appear to bill mobile subscribers for calls to these numbers, they do none-the-less provide a service to 'commissioning customers' who seek to take advantage of the benefits of these special services numbers. Providers of 13/1300 and 1800 services charge for these services, and the ability to receive origination of calls from mobile and other networks is an important input into the provision of these services.

4.4.2 What is the nature of commercial arrangements that underpin the provision of calls to 13/1300 and 1800 numbers from mobile phones?

In relation to the commercial interconnection arrangements that support calls from mobiles to 13/1300 and 1800 services, the Commission believes there are a number of approaches parties could adopt. Some of these models include the so-called 'termination', 'origination' and 'bill and keep models'.

Under a termination model, the carrier with whom the party initiating the use of a service is connected will bill the A-party consumer for the service. This revenue will then be used to pay other carriers involved in the provision of a service for their

[28] *ACIF, Interconnection Model* – G538, August 1999, p. 13, 18.

involvement in providing the service. It is referred to as the termination model because it is the terminating party that is paid by the originating carrier for its part in the provision of a service. The model was originally used to govern interconnection payments for the provision of international telephony services. Further, the model has traditionally been used by telecommunications carriers to govern inter-carrier payments when more than one network is needed to provide an end-to-end service to consumers. It is also the current model used to govern the provision of most PSTN services in Australia such as national long distance and fixed-to-mobile calls, and is also used to settle the provision of most standard mobile telephony services.

Under the origination model, the flow of payments is reversed such that the carrier providing termination services bills its directly connected consumer for the provision of a call. The terminating carrier then pays the originating carrier a portion of this fee to originate the call.

Finally, under a bill and keep approach, each party in the provision of a service 'bears its own costs'. Each party recovers these costs through the charges it sets for its directly connected consumers. This is the model that has traditionally been favoured by the Internet industry, and is also sometimes referred to as the 'Sender Keep All' model.

The Commission considers that, with regard to fixed-line calls to special services numbers, parties would be inclined to adopt an origination model for interconnection. This is because the Numbering Plan limits the call charge applicable to calls from a fixed-line telephone to a special service number which means that, in some cases, the fixed-line operator can not recoup the economic cost of originating calls on its network through charges it sets for the A-party making the call. Accordingly, it is likely to be appropriate that the carrier terminating calls to 13/1300 and 1800 services (who is charging the B-party consumer receiving these calls) makes a payment to the fixed-line carrier for originating these calls.

Where calls are made from a mobile phone to a 13/1300 or 1800 service, however, the Commission considers it is less clear which type of commercial interconnection arrangement is most appropriate. This is because the Numbering Plan does not limit the call charge applicable for special services numbers if the call is made from a mobile telephone. Mobile operators should, therefore, not be restricted in their ability to recover their own economic costs of providing origination on their networks via the charges they set for their A-party subscribers who call 13/1300 and 1800 services. In these circumstances, the need to charge a payment for originating calls on their networks is less clear.

Evidence provided in submissions and during market inquiries indicates that the commercial arrangements between carriers to support interconnection of mobile networks and networks providing termination of calls to 13/1300 and 1800 services are not uniform – either between participating carriers or between the provision of 13/1300 and 1800 numbers. While Telstra and Vodafone provide a consistent view that they charge a fee for origination of mobile calls to 1800 numbers and pay a termination fee to network providers of 13/1300 services, other parties to this inquiry indicate alternative commercial arrangements can apply. For instance, the CCC indicates mobile origination fees are less likely to apply for calls from mobile phones

to 13/1300 and 1800 services, and that mobile operators are more likely to pay a termination fee to the network provider of 13/1300 and 1800 services. Market inquiries with a provider of 13/1300 and 1800 services indicate it believes separate fees for origination and termination are negotiated, with a 'net off' payment tending to flow from the terminating carrier to the mobile originating carrier. Frontier Economics' submission also suggests this may occur.

Overall, therefore, it appears that a variety of commercial interconnection payment models underpin the provision of mobile phone calls to 13/1300 and 1800 numbers, and that the decision on which one to adopt depends on the interconnecting parties involved in the provision of the service.

4.4.3 Should the MOAS service description be varied to include origination of calls from 2.5G and 3G mobile networks?

In determining whether the current service description for the MOAS should be varied to include services that can be supplied on 2.5G and 3G mobile technologies, the Commission examines the following aspects of mobile services:

- the technical differences between 2G, 2.5G and 3G services;
- the extent of take-up of the different types of mobile services available using each technology and the scope for control over access in the supply of each type of service; and
- the delivery of voice and data services on each type of network.

Differences between 2G, 2.5G and 3G services

2G and 2.5G mobile services are provided on GSM and CDMA networks in Australia. Telstra provides services nationally on both types of networks, whilst Optus and Vodafone provide services nationally on their own GSM networks. Hutchison provides 2G services in Melbourne and Sydney using its CDMA network under the 'Orange' brand name, with a roaming agreement with Telstra allowing for Orange customers to roam onto Telstra's CDMA network in other areas in Australia.

Hutchison also provides mobile services on its 3G network, '3', in Sydney, Melbourne, Perth, Adelaide, Brisbane and the Gold Coast. It roams onto Vodafone's GSM network in all other areas.

2G mobile services are narrowband services which are typically regarded as providing voice services and basic data services such as SMS.

3G mobile services, by way of contrast, provide for wideband communications capable of conveying multimedia, video and other capacity-demanding applications.[29] This widening of the bandwidth enables greater volumes of data to flow to mobile receivers allowing full broadband services such as full-colour screens, video conferencing and Internet access.

[29] ACA, *Telecommunications Performance Report 2002-03,* December 2003, p. 86.

A key characteristic of 3G traffic is that it does not solely originate and terminate on traditional circuit-switched networks, but includes content sourced from the Internet and other packet-based networks. 3G devices are capable of transmitting text, digitised voice, video and multimedia.

3G network development has been based on the International Mobile Telecommunications 2000 Standard. This standard was developed by the International Telecommunications Union (ITU) to ensure interoperability with existing mobile technology standards including GSM and CDMA. As such, it has always been recognised that 3G networks will terminate 2G services and vice versa with respect to common services.

3G services are supplied using the CDMA 2000 technology (based on the original CDMA technology) and W-CDMA technology, which is based on GSM technology.

In between 2G and 3G technologies is what is referred to as 2.5G services. These services tend to provide greater functionality through higher data rates. These technologies use the same spectrum as 2G networks and therefore are considered to be upgrades to the 2G GSM and CDMA networks. The 2.5G technologies use 1×RTT, GPRS and EDGE technologies. Whilst these technologies allow for services similar to those supplied using 3G technologies to be provided on the '2G spectrum', services that require high data transmission rates, such as video calls, are not possible. For example, full Internet graphics may not be available to the end-user of 2.5G services but a simpler set of graphics may be possible.

Essentially, 2.5G and 3G networks allow for the introduction of new mobile services that, due to transmission capacity limitations, are not able to be offered using 2G GSM and CDMA networks. They are also, however, able to provide a range of existing mobile services that are provided on 2G networks, specifically, voice and SMS. Therefore, from a consumer's or end-user's point of view, 2.5G and 3G services are likely to appear as 'add-on' services to existing mobile services, rather than as entirely new communications services.

The extent of consumer take-up of the different types of services available for each technology and the scope for control over access

The level of consumer acceptance of the different services supplied using mobile technologies varies greatly between the services. For some services, such as voice calls, the market is relatively mature, whereas others such as video-calls are very much in their infancy.

The Commission believes that an examination of the:

- extent of take-up of each service; and
- scope for control over access in the supply of each of these services

will assist in determining the appropriate form any service description should take. This exercise may also assist in avoiding excessively broad regulation of mobile services.

These issues are considered for the voice service only as 13/1300 and 1800 services are predominantly voice-only services.

The provision of voice services appears to be relatively mature. Recent data show that average revenue per user (ARPU) for voice for each operator has been decreasing since 1998, suggesting that the provision of the services has already reached a level of maturity.[30] The minutes of use (MOU) per subscriber per month for Telstra, from the first quarter of the 2000/01 financial year to the third quarter of the 2002/03 financial year, also show a declining usage profile, prior to stabilising in the past financial year.[31] This too supports the conclusion that the voice market has largely matured. The high penetration rate for mobile subscriptions (71.9 – 73.0 per cent of the population),[32] coupled with the fact that voice services were the first major services provided on mobile networks, tends to suggest that there is a strong level of consumer acceptance of the services and that they cannot be considered to be in the developmental stages.

As Vodafone notes in its submission to the Mobile Services Review, voice calls made on 2.5G and 3G networks will not appear any different to consumers than those provided on 2G networks.[33]

Similarly, the Commission considers that, in the absence of evidence to the contrary, the nature of the supply of 3G voice services is largely the same as the supply of 2G voice services. In both cases, the CPP model underpins the provision of calls from mobile networks in the general case, where the network owner that originates the call will purchase termination from the network owner that completes the call. The originating network owner will recover these costs, and the costs it incurs from originating the call, through the price it charges its directly connected end-users for providing the call. For mobile phone calls to 13/1300 and 1800 services, a variety of commercial models may underpin the provision of these calls. However, the Commission is not aware that the commercial models that apply to the provision of these calls differ according to the generation of mobile network used in the carriage of the calls.

Accordingly, if the Commission a MOAS used in the provision of calls to 13/1300 and 1800 numbers is an essential service over which mobile operators have control over access, it follows that the same reasonably applies to voice calls made from 2.5G and 3G networks.

On the basis of the similarity in the consumption and supply of voice services on 2G, 2.5G and 3G networks, the Commission's preliminary view is that any service description of a MOAS under consideration during this inquiry should be varied to include the origination of voice calls on all mobile networks.

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30 ABN AMRO, *Australian Telecommunications Services (2004)*, p. 31.
31 JB Were, *Australian Telecommunications Sector Review 2003*, May 2003, p. 22.
32 ABN AMRO, *op. cit.,* p. 85.
33 Vodafone, *Submission to the ACCC Mobile Services Review 2003*, 13 July 2003, p. 11.

4.5 Conclusion

Following market inquiries and after considering the submissions from interested parties, the Commission has formed the preliminary view that when a call is made from a mobile phone to a 13/1300 or 1800 number, the network provider of the 13/1300 or 1800 service is the prime service deliverer (the PSD). The PSD will need access to a MOAS from the mobile carrier to whom the A-party making the call is subscribed, in order to provide a 13/1300 or 1800 number service to its commissioning customer. Accordingly, a MOAS is provided in the course of ensuring calls from mobile phones are made to 13/1300 and 1800 numbers.

It is not clear, however, that the commercial arrangements that support this interconnection arrangement are uniform. In particular, it is not clear that an origination fee is always paid for the carriage of calls to 13/1300 and 1800 numbers on mobile phone networks. Rather, the form of commercial model underpinning this interconnection arrangement can vary. In general, the Commission believes that the payment models associated with a call from a mobile end-user to a 1800 or 13/1300 number can, depending on the nature of particular arrangements, consist of various combinations of the following four elements:

- The mobile network operator charging the mobile subscriber a call charge for calling the 1800 or 13/1300 number;
- The mobile network operator charging the provider of the 1800 or 13/1300 service a fee for originating the call on its mobile network. However, this is more likely to be the case for calls to 1800 numbers than it is for calls to 13/1300 numbers;
- The provider of the 1800 or 13/1300 service charging the mobile network operator a fee for terminating the call on its network. However, this is more likely to be the case for calls to 13/1300 numbers than it is for calls to 1800 numbers; and
- The provider of the 1800 or 13/1300 service charging the company or individual who receives the call a fee for the provision of the service.

What seems clear in all cases, however, is that both the mobile operator providing origination and the network provider of termination to 13/1300 and 1800 numbers both bill their directly-connected customers for these calls. That is, mobile operators will charge A-party consumers making these calls for the service; while network providers of 13/1300 and 1800 services will bill the B-party consumer receiving these calls.

The Commission also understands that where commercial arrangements involve negotiation over both an origination and termination fee, the mobile network operator and the provider of the 1800 or 13/1300 service are likely to agree to only the net difference being paid in one payment, rather than making separate termination and origination payments. The Commission also understands that the party which pays

this net amount (and the size of this net amount) is likely to vary depending on individual agreements reached between the parties.

In relation to the issue of whether the service description of the MOAS should be varied to include calls made from 2.5G and 3G mobile networks, the Commission's preliminary view is that any service description under consideration during this inquiry should be technology neutral with respect to 2G, 2.5G and 3G mobile technologies.

A full description of the eligible service can be found at Attachment A to this report.

5. Will declaration promote the LTIE?

As indicated in Chapter Three, section 152AB of the Act provides that, in determining whether declaration promotes the LTIE, regard must be had only to the extent to which declaration is likely to result in the achievement of the following objectives:

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

This chapter addresses each of these objectives in turn.

5.1 Promotion of competition

5.1.1 The Commission's approach to determining whether declaration will promote competition in telecommunications markets

The Commission 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 inputs.

The Commission 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 network(s) of the end-users to allow their customers to receive calls. Hence, even though there may be a number of carriers that provide access to their own networks, a given access provider may still have control over access to an essential facility. This can be the case if an access provider's customers seek to make or receive calls to or from end-users subscribed to other providers' networks.

Where access providers have control over access to essential facilities, a key question for the Commission is whether or not 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 upon which this access is provided, can have marked effects on the state of competition in downstream markets.

Under the Act, declaration of a service can promote competition for the provision of listed services by mandating access to those services that are supplied in vertically related markets. Further, under certain circumstances, the Act enables the Commission 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 other 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 Commission 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 Commission 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, and state of competition within, the markets in which the eligible service and other related services are supplied.

Once the boundaries of the relevant markets have been identified, the Commission 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 for the Commission to use when assessing whether declaration will promote each of the LTIE objectives is the future 'with or without test'. Under this approach, the Commission considers whether competition in identified markets would be likely to be further promoted with declaration as opposed to a situation where the service was not declared. 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 reached.

In assessing whether declaration of a MOAS is likely to promote competition, therefore, the Commission undertakes a three-stage analysis:

- first, those markets relevant to determining whether declaration will promote competition are identified;
- secondly, the current state of competition and the dynamics that operate within these markets is assessed; and
- thirdly, 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 be likely to be promoted, in the future by declaration of the eligible service.

Each of these stages is undertaken in turn below for the market(s) in which the eligible service and related services are provided.

5.1.2 What are the relevant markets?

The Commission's approach to defining relevant markets

The process of market definition involves identifying the sellers and buyers that effectively constrain the price and output decisions of firms supplying the service(s) under consideration.[34]

To begin the process of market definition for the eligible service, the Commission defines the service under consideration and the firm(s) supplying that service. In general, this involves identifying the access provider(s) and their supply of the eligible service. For related markets, the market definition process starts with the access seekers and providers and the related services that they would supply using the eligible service.

Once the relevant service and source(s) of supply have been identified, the market boundaries are then extended to include all other sources and potential sources of close substitutes with which the firm supplying the service would compete. In terms of section 4E of the Act:

> ... 'market' means a market in Australia and, when used in relation to any goods or services, includes a market for those goods or services and other goods or services that are substitutable for, or otherwise competitive with, the first-mentioned goods or services.

As noted by the High Court:

> This process of defining a market by substitution involves both including products which compete with the defendant's and excluding those which because of differentiating characteristics do not compete.[35]

The availability of close substitutes (on both the demand and supply sides) constrains the ability of suppliers to profitably divert prices or quality of service from competitive levels.

As the Tribunal commented in *QCMA*:

> A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them ....Within the bounds of a market there is substitution – substitution between one product and another, and between one source of supply and another,

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[34] See ACCC, *Anti-competitive Conduct in Telecommunications Markets – an Information Paper*, and ACCC, *Mergers Guidelines,* June 1999*,* for more detail on how the Commission undertakes the process of market definition.

[35] *Queensland Wire Industries Pty Ltd v. BHP Ltd* [1989] ATPR 40-925, 50008 (Mason CJ and Wilson J).

> in response to changing prices .... it is the possibilities of such substitution which set the limits upon a firm's ability to 'give less and charge more'.[36]

Generally, a greater range of substitutes points to a broader market in which individual firms have less power, and consequently competition is more effective. Substitutability may be thought of in terms of a price elevation test: what would be the response on the demand side and the supply side to a relatively small percentage increase in the price of a firm's product?

> …in determining the outer boundaries of the market we ask a quite simple but fundamental question: if the firm were to 'give less and charge more' would there be, to put the matter colloquially, much of a reaction?[37]

Where the relevant market should be delineated is a question of degree. The Tribunal stated in *Tooth & Tooheys*:

> ... all competition or substitution does not cease at the outer boundaries of the market; the economy as a whole is a network of substitution possibilities in consumption and production; competition is a matter of degree.[38]

Markets can be delineated in terms of their product, geographic, functional and temporal boundaries.

In identifying relevant markets, Part XIC of the Act does not require the Commission to take a definitive or determinative stance on market definition as may be the case in a Part IV or Part XIB case.[39] The Federal Court also endorsed this approach in its decision to uphold the validity of certain broadcasting access declarations by the Commission.[40]

Furthermore, over time, declaration itself might affect the dimensions of these markets, particularly in relation to the functional dimension. Accordingly, market analysis under Part XIC should be seen in the context of providing an analytical framework to examine how declaration would promote competition rather than in the context of developing 'all purpose' market definitions.

Defining the market in which the eligible service is supplied

Views of interested parties

The CCC and Frontier Economics both submitted views on the market in which the eligible service is supplied.

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36 *Re Queensland Co-operative Milling Association Ltd; Re Defiance Holdings Ltd (1976)* ATPR 40-012, 17,247.
37 *Ibid.,* 17,247.
38 *Re Tooth & Co. Ltd.; re Tooheys Ltd.* (1979) ATPR 40–113, 18,196–18,197.
39 See ACCC, *Telecommunications Services – Declaration Provisions*, July 1999.
40 *Foxtel Management Pty Ltd v Australian Competition & Consumer Commission* [2000] FCA 589.

The CCC defines the market in which the MOAS is provided as the 'mobile originating service market'. It considers this market to be a wholesale market. The CCC considers the '13/1300 and 1800 markets' to be the downstream markets.[41]

Frontier Economics, on the other hand, considers that the MOAS is provided in a broader national market which includes mobile access, outgoing call services and mobile termination services.

> Frontier Economics considers that the market in which the mobile termination and origination services are supplied is best defined as the market for mobile telephony services. It is a national market, with both wholesale and retail functional components that at present, includes the following services:
>
> - mobile access (including access to a handset, connection to a network, and usage of that network);
> - outgoing call services to other networks (including on-net and off-net calls to mobile networks and fixed line PSTN networks);
> - mobile termination services; and
> - mobile origination services.[42]

Frontier Economics argues that the various elements of the mobile telephony service are jointly produced and consumed. It argues that complementarities in production and demand mean it is inappropriate to define the market in which the MOAS is provided as a wholesale market for mobile originating services alone.

> The various elements of the mobile telephony service are jointly produced and consumed. The revenue streams are interdependent and, subject to regulatory restrictions and competitive pressures, firms would be expected to charge a set of prices that maximises profits across this set of services.
>
> The mobile termination service and the mobile origination service are two of a number of services which taken together comprise mobile telephony services. Complementarities in production and demand mean it is inappropriate to define the relevant market as the wholesale market for either mobile termination services, or mobile origination services alone.[43]

Frontier Economics considers, however, that there are different functional levels within the market for mobile telephony services.

> We do consider, however, that within the mobile telephony services business, wholesale and retail services are distinct functional levels. This distinction is evidenced by the existence of carrier service providers that purchase wholesale services from the mobile network carriers and offer retail services to the public. [44]

In relation to downstream markets for the MOAS, Frontier Economics comments that:

> It is not clear that there is a distinct downstream (or otherwise dependent) market that is affected by the level of competition in the provision of the mobile origination service.

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41 CCC, *op. cit*., p. 37.
42 Frontier Economics, *Market Definition Issues in the ACCC's Mobile Service Review 2003*, June 2003, p. 10.
43 *Ibid.*
44 *Ibid.*, pp. 10-11.

> The downstream users of the mobile originating service are end-users originating the mobile call to the 13/1300 and 1800 numbers. It is unlikely therefore that there is downstream market in which competition is affected by the level of competition in the provision of the originating service. (sic)[45]

Commission view

As indicated above, the process of market definition for the eligible service begins by defining the service in question and the firm(s) supplying the service. With regard to defining the relevant service, this process has already been discussed in Chapter Four.

With regard to who are the potential suppliers of this service, the Commission understands that within Australia, there are four providers of the MOAS on six mobile networks. More specifically, Optus and Vodafone both operate 2G GSM networks; Hutchison Telecommunications operates a 2G CDMA network and a 3G W-CDMA network; and Telstra operates a 2G GSM and a 2G CDMA network.

What is the relevant product?

In determining the relevant product for the purposes of this inquiry, the Commission believes that, at the retail level, mobile operators sell a bundle of services to end-users that includes a range of subscription services and the ability to make outgoing calls. Included within these retail services is the ability to make calls to 13/1300 and 1800 numbers. Accordingly, the Commission believes it is appropriate to consider these retail services as being supplied within the same 'cluster' market.

It is not clear to the Commission, however, that the MOAS should be considered as being supplied as part of the same cluster of retail mobile services. While the Commission agrees there are some complementarities in demand and supply with regard to mobile originating access, terminating access and retail services, the Commission is not convinced at this point in time that these forms of complementarity mean that the provision of access to wholesale MOASs (as opposed to the ability to make calls to 13/1300 and 1800 numbers) should be considered as being *sold* in the same bundle as other mobile services sold at the retail level to mobile subscribers. This is because standard cluster market analysis is usually applied in cases where the bundle is *sold* to a single consumer. The distinguishing feature between normal cluster market analysis and the scenario that exists with regard to calls to 13/1300 and 1800 numbers from mobile phones where the MOAS is sold is that, for calls to 13/1300 and 1800 numbers, different elements of the proposed bundle (or cluster) of services are *paid* for by different consumers. That is, while the mobile subscriber pays for outgoing calls and subscription, the mobile subscriber does not pay for MOAS (where fees are charged for this service). Where interconnection payment models involve the levying of a charge for MOASs, these charges are paid for by the network provider of 13/1300 and 1800 services. In turn, any such payments for MOASs are likely to be passed-on to purchasers of 13/1300 and 1800 numbers in the form of higher prices for these services. Whilst mobile subscribers may pay a charge for making calls to 13/1300 and 1800 numbers from their mobile

[45] *Ibid.*, p. 14.

phone, this charge is separate to that which may be charged to network providers of 13/1300 and 1800 services.

Accordingly, the Commission's preliminary view is that it has not been provided with sufficient reason during the inquiry to conclude that the relevant product for the purposes of market definition analysis in this inquiry should be defined more broadly than the MOAS for calls to 13/1300 and 1800 services. This is not to say, however, that this service has no complementarities in demand and supply with other retail mobile services sold separately to mobile subscribers. As indicated below, it also should not be taken to imply that other forces are not able to constrain mobile operators in their pricing decisions for the MOAS.

What are the product dimensions of the market?

In considering the product dimensions of the market, the Commission asks whether there are any substitute services that might constrain mobile operators' pricing of the MOAS for calls to 13/1300 and 1800 numbers.

In answering this question, the Commission notes that a key feature of 13/1300 and 1800 services is that purchasers of these numbers are able to receive calls from anywhere in the country knowing that people making these calls will be charged the same fee irrespective of the geographical location from which the call is made. As indicated above, services that provide these numbers tend to be purchased by businesses so that they can promote a single number nationwide.

In considering what substitute services may be available for the MOAS, the Commission has considered this from the perspective of access seekers who are network providers of 13/1300 and 1800 services. In particular, the Commission has considered what substitution alternatives are available to network providers of 13/1300 and 1800 services if a mobile network operator were to increase the price it charges for the MOAS. In this regard, the Commission has considered two main types of substitutable service:

1. Origination services offered by other mobile network operators; and

2. Other substitutable means for communicating with a customer with a 13/1300 or 1800 number.

With regard to the first consideration, the Commission does not believe origination services offered by different mobile network operators are substitutable with each other. Once an individual has chosen to subscribe to a particular mobile network, no other mobile network operator can originate calls on its network for this particular subscriber. Hence, if a purchaser of a 13/1300 or 1800 number service would like to be able to receive calls from consumers subscribing to all mobile networks, the access seeker will have no option but to seek access to the MOAS of all mobile network operators. The access seeker will not be able to receive mobile originating access from a given mobile phone user from any other mobile network operator other than the network operator to whom the mobile phone user subscribes.

The Commission also believes there are no other alternative services available to access seekers that might constrain mobile operators' pricing decisions with regard to the MOAS. While A-party consumers may be able to make contact with business (or other consumers) that purchase a 13/1300 or 1800 number service via other alternate means (such as through making calls to these numbers from their fixed-line phone, sending SMS or e-mail messages etc), there would appear to be no mechanism available to access seekers that could influence consumption decisions by A-party consumers. This is because the network provider of 13/1300 and 1800 services does not have a direct billing relationship with mobile phone users making calls to 13/1300 and 1800 numbers, and therefore is not able to encourage the mobile phone user to contact the purchaser of a special number service via alternative means.

Further, as discussed in the Mobile Termination Draft Report, the extent to which fixed-line, SMS and e-mail services (as well as other services such as those provided over voice over Internet protocol (VoIP) technology) can act as a substitute for mobile telephony services is limited. This is because these alternatives do not replicate the mobility characteristic that is key to the convenience of using a mobile phone and/or do not provide for sufficient real time communications.[46]

In summary, and as indicated above, the Commission does not need to be as determinative in its choice of product market definition (or any other aspect of market definition) for the purposes of a declaration inquiry under Part XIC of the Act as it needs to be for a matter considered under Part IV or Part XIB of the Act. That said, an understanding of relevant market boundaries and the forces that constrain the pricing of the eligible service are important for the Commission's consideration of whether declaration will promote competition in telecommunications markets.

In this regard, the Commission believes mobile originating access for calls to 13/1300 and 1800 services on each mobile network is likely to represent a product market of its own. As indicated in section 5.1.3 below, however, the Commission does not believe this implies mobile operators are unlikely to be constrained in the pricing decisions for origination of calls to 13/1300 and 1800 services.

What are the functional dimensions of the market?

Delineation of the relevant functional market requires identification of the vertical stages of production and/or distribution which comprise the relevant arena of competition. Given the MOAS involves an access provider selling access to an access seeker, and not directly to an end-user, the service is considered to operate at the wholesale stage of production. The service is an input, used by telecommunications service providers, to provide retail calls from mobile operators to 13/1300 and 1800 service consumers.

[46] See, for example, ACCC, *Mobile Services Review – Mobile Terminating Access Service, Draft Report*, March 2004, pp. 40 – 41.

What are the geographic dimensions of the market?

In delineating the geographic dimensions of telecommunications markets, factors such as the area over which major suppliers operate are considered to ensure that the relevant arena of competition is described.

In its March 2004 Draft Report on the mobile termination service, the Commission considered the geographic market in which mobile termination services are supplied to be a national one. The Commission's current analysis of the geographic dimension of the relevant market leads it to the same conclusion. That is, the Commission continues to believe that the geographic boundary of the relevant market is national.

Although Hutchison's network only operates in distinct geographical locations, the Commission understands that it provides a national mobile service. This is made possible through roaming agreements with other mobile carriers.

What are the temporal dimensions of the market?

The temporal dimension of the market refers to the timeframe over which substitute services could potentially exert a competitive constraint on the pricing and output behavior of a provider of the eligible service. A timeframe that is too short may exclude alternatives on the demand or supply side that are constraining conduct in the market in question. Conversely, one that is too long risks including those services which are not effectively constraining behavior currently or for the foreseeable future.

At this stage, the Commission does not foresee any developments in mobile telecommunications technology, or in other communications technology, that will produce any substitute services for the MOAS in the short-to-medium term other than those considered under the product market discussion above.

Defining other markets in which declaration may promote competition

Often the markets in which competition is likely to be promoted as a result of declaration of the eligible service are downstream markets. In general, the Commission will be interested in identifying only those markets in which declaration of the eligible service is likely to have a material effect. Where there are several markets that could be affected by declaration, it may be sufficient for the Commission to focus its attention only on the main or major markets in which declaration may promote competition.

For the purposes of this inquiry, the Commission considers two key downstream markets to be relevant:

1. The retail mobile services market; and

2. The market for the provision of special number services.

Each of these is discussed in turn below.

The market for retail mobile services

Given mobile network operators supply and charge for calls to 13/1300 and 1800 numbers, MOAS for calls to 13/1300 and 1800 numbers are clearly key inputs into the provision of retail mobile services. Hence, the Commission believes the retail mobile services market is a downstream market relevant to this inquiry. In this regard, the Commission believes that mobile operators provide origination of calls to 13/1300 and 1800 numbers to themselves on their own network in order that they can provide retail calls to these numbers to their retail consumers.

In the March 2004 Mobile Termination Draft Report, the Commission defined this market as a national market operating at a retail functional level. It includes retail mobile services (such as subscription services and the ability to make outgoing calls) provided on 2G, 2.5G and 3G mobile networks and SMS services, but does not include fixed-line services.

Further details regarding this market definition can be found at section 5.2.3 of the March 2004 Mobile Termination Draft Report.[47]

The market for the provision of 13/1300 and 1800 services

As indicated above, the Commission understands that mobile origination is an essential input for providers of 13/1300 and 1800 services. To the extent that 13/1300 and 1800 service providers are considered prime service deliverers of this service, the ability to acquire interconnection with all types of networks capable of providing calls to 13/1300 and 1800 numbers is an essential input into the provision of services to their consumers. For their part, it is important they are able to interconnect with as many networks providers (fixed or mobile) of calls to these numbers as possible.

The key feature of these services, therefore, is that purchasers of these numbers are able to receive calls from anywhere in the country knowing that people making these calls will be charged the same fee (depending on the type of network from which the call is made) irrespective of the geographical location from which the call is made. Services that provide these numbers tend to be purchased by businesses so that they can promote a single number nationwide.

In considering the product dimensions of this market, the Commission believes that alternative services such as a geographic number are not directly substitutable for these services, as geographic specific numbers negate the key 'non-geographic' feature of 13/1300 and 1800 services. The Commission also believes that premium rate 1900 number services, which are often used to promote competition lines, warranty, adult, financial, psychic and meteorological information services, are not directly substitutable with 13/1300 and 1800 number services. While 1900 numbers retain the non-geographic feature of 13/1300 and 1800 services, the charging arrangements associated with these numbers in the Numbering Plan imply these services are more appropriate for business (or other consumers) wanting to provide 'premium' services for which consumers are willing to pay higher prices for calls to these numbers.

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[47] ACCC, *op. cit.*, pp. 51–52.

The Commission believes the market for 13/1300 and 1800 number services is a national market that operates at the retail level.

5.1.3 The State of Competition in the relevant markets

Having established the relevant markets for consideration, this section now seeks to determine the state of competition in these markets. This gives the Commission an insight into the likely effectiveness of competition in the future if the service ceased to be declared. Further, it can also provide some insights into the likely impact of declaration of the eligible service. That is, if competition in the relevant markets is already effective, then declaration of the eligible service may not significantly promote further competition. That said, consideration of the likely state of competition in relevant markets is complicated in this instance, as the MOAS is already a declared service. Accordingly, analysing the current state of competition in relevant markets provides an indication of the state of competition under current forms of regulation as much as it provides an insight into the state of competition that would be likely to exist in the absence of declaration of the eligible service.

It is important to also note that assessing the effectiveness of competition is not a static analysis limited to a description of current conditions and behaviour. Rather, it is a dynamic analysis concerned with features affecting the competitive supply of services in the future. Nevertheless, current conditions will, in general, provide a solid starting point from which to consider the future effectiveness of competition.

When assessing the effectiveness of competition in a particular market, the Commission examines a range of both structural and behavioural characteristics. From a structural perspective, the Commission considers the linkage between supply of the eligible service and the supply of related services, barriers to entry, concentration levels, and the bargaining power of suppliers and buyers of the relevant services. From a behavioural perspective, the Commission may consider a range of market outcomes, including the level of price competition in the provision of a given service, the price-cost margins available to suppliers of a service, price changes over time, service differentiation, and comparisons with similar services provided in overseas jurisdictions.

Other features the Commission may consider include the regulatory environment and dynamic characteristics of the market (including growth, innovation and product differentiation).

The Commission's assessment of the state of competition in relevant markets begins by outlining the views of interested parties to this inquiry. It then considers the state of competition in each of the three market types outlined in section 5.1.2 above – the individual markets for the MOAS; the retail mobile services market and the retail market within which 13/1300 and 1800 number services are provided.

Views of interested parties

During the course of the Mobile Services Review, a number of parties have commented on the current state of competition in the retail services market.

However, very little information was provided to the Commission in submissions in relation to the current state of competition in the markets for the MOAS and the retail market within which 13/1300 and 1800 number services are provided.

With regard to the MOAS markets, Vodafone argues in its submission that:

> …in the current competitive market, an organisation making a commercial decision not to enable connectivity between mobile origination and inbound services, or mobile to mobile, would be punished through customer churn. This is fuelled by customers seeking substitute mechanisms for making the call, and competitive service offerings provided by competitors. [48]

Whilst arguing in favour of continued declaration of a MOAS, the CCC and PowerTel did not comment on the current state of competition in the markets for MOASs.

No party commented in submissions on the state of competition in the retail market for 13/1300 and 1800 services.

During the course of market inquiries, however, the Commission was advised by one provider of 13/1300 and 1800 services that:

- Telstra has the largest market (likely to be in the order of c-i-c to c-i-c per cent); Optus has the second largest market share (likely to be in the order of c-i-c and c-i-c per cent); with other providers in the market competing for the remainder of the market. However, no data were provided to support these assertions;

- It had a market share of around c-i-c per cent of the market, and that it was earning $c-i-c million in revenue per annum from the provision of this service. This would make the size of the market (in revenue terms) around $c-i-c million;

- Some providers of these services entered into resale agreements with network providers of 13/1300 and 1800 services; and

- Network providers of 13/1300 and 1800 services would need to invest in voice switching capability and intelligent network infrastructure to provide these services. Such investment would be likely to cost somewhere in the region of $c-i-c to $c-i-c million. Most of the other infrastructure needed to provide these services was the same as that needed to provide other fixed-line network services. Due to the need to provide high volumes of calls to particular consumers of a 13/1300 and 1800 service, however it was indicated that network providers of these services may need to 'scale-up' their networks.

With regard to the state of competition in the retail mobile services market, Telstra, Optus and Vodafone submit that the mobile services market (which they define to include the mobile termination, originating access and the retail mobile services) is highly competitive. In contrast, however, AAPT, Hutchison, the CCC and SETEL commented in their submissions to the Mobile Services Review that the level of competition in the retail mobile services market was not as effective.

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[48] Vodafone, *Submission to the ACCC Mobile Services Review*, 13 June 2003, p. 24.

Telstra argues that the mobile services market is highly competitive. Telstra contends that this assessment accords with the views expressed by the Commission in earlier inquiries into mobiles services and that competition has probably intensified since these views were expressed by the Commission.[49]

Likewise, Optus considers the mobile services market is 'subject to fierce competition' at both the wholesale and retail levels, and that this is a demonstrated by:

- the number of mobile networks and the number of mobile service providers in the market;
- the fact that, in its view, there is no dominant player with the ability to raise prices above cost without losing market share;
- mobile-to-mobile (MTM) call pricing that is subject to 'intense competition'; and
- product differentiation which is occurring in the mobiles market.[50]

Vodafone argues that the mobile services market is 'effectively competitive' and that it delivers cost-reflective prices. It argues that there are a large number of mobile service providers competing to provide mobile services and notes that since 1997 market penetration has increased and there has been a substantial increase in call volumes on mobile networks.[51]

Contrary to some of these views, AAPT considers that recent increases in prices for retail mobile services would suggest that the retail mobile services market is 'not effectively competitive'.[52]

Hutchison argues that competition in the mobile services market has been adversely affected by the introduction of the retail benchmarking pricing principles for the mobile termination service. Hutchison believes that:

> … retail charges for mobile services have to some extent increased by reason of the retail benchmarking pricing principles adopted by the Commission. It is difficult however to be precise due to the variety of call plans available. Other examples of reduced competition are Vodafone's removal of handset subsidies, and Telstra's reduction in the level of its handset subsidies.[53]

The CCC expresses concern about the size of Telstra's and Optus' combined market share and argues that the behaviour of Telstra, Optus and Vodafone in commercial negotiations on mobile terminating access is 'inconsistent with what ought to apply in a competitive market'. The CCC considers that the scarcity of mobile spectrum means that there are high barriers to entry to the market.[54]

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49 Telstra, *op. cit*., p. 3.
50 Optus, *Optus Submission to ACCC on Mobile Services*, June 2003, pp. 9-13.
51 Vodafone, *op. cit*., pp. 5-9.
52 AAPT, *Submission by AAPT Limited*, 13 June 2003, p. 27.
53 Hutchison, *Submission to the ACCC Mobile Services Review Discussion Paper 2003*, 13 June 2003, p. 16.
54 CCC, *op. cit.*, pp. 4-5.

SETEL considers that competition in the mobile services market has 'developed over the past few years' but that there is still 'scope for further improvements' in relation to call charges and the 'transparency of differential pricing offerings'. SETEL argues that competition in relation to 'long distance mobile services' is not well developed and is unlikely to develop further in the foreseeable future.[55]

The mobile originating access services markets

Where mobile operators provide originating access to calls made by their subscribers as an input for providers of calls to 13/1300 and 1800 numbers, it would appear mobile network operators have control over access to all subscribers making such calls from their networks. Accordingly, from a market structure sense, each mobile network operator could be thought of as a monopolist with regard to the provision of originating access of calls made by its subscribers.

Such control over access might, therefore, be thought to give mobile operators the ability to raise the price of access to this service above its underlying cost of provision. However, there may be other factors which could limit the extent to which a mobile operator could take advantage of its control over access to calls originating on its network to 13/1300 and 1800 numbers to either deny access or set unreasonable terms and conditions of access.

During the course of this inquiry, no evidence has been provided to the Commission that would suggest mobile operators are denying access to origination of calls to 13/1300 and 1800 numbers on their networks, or setting excessively high prices for these services, in practice. Rather, the evidence provided throughout the course of this inquiry indicates that the interconnection payment models supporting the provision of calls to 13/1300 and 1800 numbers from mobile phones are far from uniform.

In particular, Vodafone and Telstra have indicated they do not charge an origination fee for calls to 13/1300 numbers, and instead pay a termination fee to network providers of 13/1300 services terminating these calls. The CCC has indicated it believes this is the preferred form of interconnection model for the provision of calls to both 13/1300 and 1800 number services, and only one provider in the course of market inquiries has indicated it makes 'net' payments to mobile operators for calls originating on mobile networks. While Vodafone and Telstra indicate they do charge a fee for originating calls on their mobile networks when these calls are made to 1800 numbers, no details of the size of these fees has been provided to date during this inquiry.

Further, given the retail prices mobile operators can charge their subscribers for calls from mobile networks to 13/1300 and 1800 numbers are not rate restricted under the Numbering Plan, it is not entirely clear to the Commission why there is a need for an originating access payment to be made to mobile network operators for originating calls on their networks. It appears to the Commission that both the mobile operator whose subscriber makes these calls and the network providers of 13/1300 and 1800

[55] SETEL, *Submission by the Small Enterprise Telecommunications Centre Limited*, June 2003, p. 3.

number services have the ability to recover their costs of production through the retail charges they separately set for their directly-connected consumers. Both parties would, at present, also appear to be charging their directly-connected consumers for making and receiving these calls. The evidence available to the Commission with regard to the wide variety of interconnection payment models being used to underpin the provision of these services implies network operators themselves have agreed a pure 'origination' interconnection model is not necessary for the provision of these services.

Further, to the extent that mobile operators are not always charging fees for originating calls to 13/1300 services on their mobile networks, it would appear that mobile operators are not presently taking advantage of any control over access they may have with regard to the provision of MOAS.

The Commission believes there are a number of possible explanations for why mobile operators do not appear to be taking, or are unable to take, advantage of their control over access to the MOAS. For instance, it might be argued that mobile operators are constrained in their ability to deny, or set unreasonable terms and conditions for, access to the MOAS for calls to 13/1300 and 1800 services on their networks by the need to provide a retail end-to-end service to their subscribers. That is, if mobile operators denied, or set unreasonable terms and conditions for, access to the MOAS on their network such that providers of 13/1300 and 1800 services refused to interconnect with them, then mobile operators may fear they would be unable to provide calls to 13/1300 and 1800 numbers from their network. This would inhibit their ability to compete in the retail mobile services market, and might imply a lack of market power in these circumstances.

Alternatively, it may be that mobile operators are constrained in their ability to take advantage of their control over access to origination on their networks in the provision of calls to 13/1300 and 1800 services by network providers of 13/1300 and 1800 services having countervailing market power in the form of control over access to calls terminating on their networks. That is, just as mobile operators have control over access to subscribers originating calls on their networks, providers of 13/1300 and 1800 services have similar control over access to customers who subscribe to their 13/1300 and 1800 service offerings. Given that termination of calls to 13/1300 and 1800 services is not a declared service under Part XIC of the Act, it may be that network providers of termination to 13/1300 and 1800 services have 'countervailing' bargaining power of their own when it comes to negotiating arrangements that would govern the provision of calls from mobile phones to 13/1300 and 1800 services. Such 'bi-lateral' bargaining power may help to mitigate the control over access mobile operators may have with regard to the provision of the MOAS.

At this point, however, the Commission has not been provided with any compelling evidence to support the merit (or significance) of either of these (or any other) possible explanations in assessing why mobile operators are unable to take advantage of their control over access to the MOAS on their networks. What is clear, however, is that the evidence provided to the Commission during the course of this inquiry indicates that mobile operators are not denying access to the MOAS, or setting unreasonable terms and conditions for access to this service.

Retail Mobile Services Market

In the 2004 MTAS Draft Report, the Commission assessed the current state of competition in the retail mobile services market. The key conclusions from this analysis were that, while the retail mobile services market is exhibiting more encouraging market outcomes than the markets for fixed-line telecommunications services, it is unlikely to be effectively competitive as yet. The relatively high level of market concentration at the carrier network level; the high barriers to full entry into the market (associated with national geographic coverage and sunk costs); the apparently high levels of profitability of mobile carriers (particularly those with large market shares); and the relatively high penetration rate of mobile phones and decreasing average revenue per user (ARPU), suggest the Commission should be cautious when assessing the effectiveness of competition in the market for retail mobile services.

On balance, the Commission considered that the structural and behavioural measures of competition do not clearly indicate that the retail mobile services market is effectively competitive at this point in time.

In making this conclusion, however, the Commission noted that the supply of new services on 2.5G and 3G networks may drive further growth and competitive impact in the industry in future periods. The Commission also noted the level of product differentiation in the market could also indicate a relatively competitive market.

Further, the Commission notes that its analysis of the retail mobile services market should not be taken as necessarily suggesting some form of regulation of the retail mobile services market is appropriate at this point in time.

Detailed discussion of the current state of competition in the retail mobile services market can be found in section 5.3.3 of the 2004 MTAS Draft Report.[56]

The retail market for 13/1300 and 1800 services

Based on the allocation of 13/1300 and 1800 numbers by the ACA, it appears there are currently 5 carriers and 7 carriage service providers (CSPs) supplying 13/1300 and 1800 number services to consumers. In this regard, the Commission notes the current allocation of 13/1300 and 1800 numbers (to CSPs) in Table 5.1 below.

[56] ACCC, *op. cit*., pp. 59-84.

Table 5.1 Number allocations and carriage service provider market shares for freephone and local rate services

	Numbers					
	1300		13		1800	
Carriage Service Provider	Quantity held	Percentage share	Quantity held	Percentage share	Quantity held	Percentage share
AAPT	3414	7.0%	129	7.1%	5448	4.6%
Flowcom	9	0.0%	0	0.0%	0	0.0%
Optus	12183	25.1%	566	31.0%	17807	14.9%
Primus	2021	4.2%	29	1.6%	2046	1.7%
RSL Com	2998	6.2%	25	1.4%	1809	1.5%
PowerTel	1131	2.3%	67	3.7%	2119	1.8%
Telstra	26743	55.1%	1011	55.3%	90259	75.5%
Total	48499	100.0%	1827	100.0%	119488	100.0%

Source: ACA.

It is noteworthy, however, that market shares by allocated numbers may not reflect market shares by revenue size, or number of minutes ,of 13/1300 and 1800 services provided by carriers. This is because numbers are allocated to carriage service providers, not carriers, and as such the market shares estimated above can be considered indicative at best. These market shares may also not be a good representation of market shares because some 13/1300 and 1800 numbers will generate more calls and revenue that others. For instance, large corporate customers such as QANTAS, Pizza Hut, Taxi Services, Banks etc) are likely to generate relatively more traffic and revenue than other smaller businesses. An accurate estimate of market share by revenue and minutes could, depending on which carriers have the largest corporate customers, be different to that implied by the data on allocated numbers in Table 5.1 above.

Based on the allocation of numbers outlined in Table 5.1 and other anecdotal evidence provided during market inquiries, however, the Commission believes there are strong reasons to believe Telstra has a substantial share of the market for 13/1300 and 1800 services, and that Optus has the second largest share of the market. In combination, the Commission believes Telstra and Optus are likely to have a combined market share of over 80 per cent of the market.

Information provided throughout the course of this inquiry indicates carriers would be required to make substantial investments in voice switching capability and intelligent network infrastructure to provide the special services supplied on 13/1300 and 1800 numbers. Such investment would be likely to cost somewhere in the region of $c-i-c to c-i-c million. While such investment requirements would be significant, the Commission believes these requirements indicate there is less of a barrier to entry into the provision of these services than some other fixed-line network services. The Commission also believes barriers to entry into this market have been reduced, to some extent, by the introduction of local rate and freephone number portability in November 2000 – this enables customers to change network provider of 13/1300 and 1800 services while still retaining their 13/1300 and 1800 number. Further, CSPs can choose to enter the market for the provision of 13/1300 and 1800 services by reselling services provided by the 5 carriers of 13/1300 and 1800 services.

The Commission also understands that, while Telstra retains a strong position in the market for 13/1300 and 1800 services, its share of the market has been declining in recent years. In this regard, Telstra notes in its 2003 Annual Report that:

> Revenue from inbound calling products has declined over the three-year period [to June 2003]. Volumes were up in fiscal 2001 as usage of our inbound calling products went through a period of growth prior to the introduction of INP [inbound number portability] on 30 November 2000 …This created a more competitive environment, having a negative impact on prices and volumes.
>
> While the impact of INP on volumes was minimal in fiscal 2001, we started reducing prices offered during this period in response to increased competition. INP and competition has continued to impact fiscal 2002 and 2003 revenues as we have continued price reductions and volumes have continued to decrease. We lost one of our major customers in fiscal 2002, which also impacted on our revenues and volumes.
>
> In fiscal 2003, INP had a large impact on revenue derived from Freecall™ 1800 and Priority® One3 and Priority® 1300 products, pushing our revenues and calling minutes down.[57]

Telstra's Annual Report also outlines information regarding the revenue it earns, and the minutes of use it carries, for inbound calling products. These are reproduced in Table 5.2 below.

Table 5.2 Telstra Revenue from Inbound Calling Products

	Year ended 30 June				
	2003	2002	2001	2003/2002	2002/2001
Inbound calling products revenue	A$494	A$562	A$657	-12.1 %	-14.5 %
Inbound calling product minutes	2,655m	3,345m	3,871m	-20.6 %	-13.6 %

Source: Telstra Annual Reports.

Telstra also notes in its Annual Report that inbound calling products revenue and minutes consist of both the revenue it receives from subscription and call charges for its inbound calling services (i.e. what it charges B-party consumers of calls to 13/1300 and 1800 numbers) and the revenue it receives from charges it sets for its customers that make calls to these numbers (i.e. what it charges its own directly-connected A-party consumers that make calls to these numbers). The Commission notes these revenue and minutes would include that derived from calls from fixed-line as well as mobile phone calls to 13/1300 and 1800 numbers.

This information supports Telstra's statements in its 2003 Annual Report that it is experiencing both reductions in the revenue it earns, and the minutes it carries, for calls to 13/1300 and 1800 services. This would tend to imply that, providing the overall size of the market is not in decline, competition is having some impact in reducing Telstra's share of this market.

Overall, therefore, the Commission has little information available to it to assess the state of competition in the market for 13/1300 and 1800 services. However, based on the information it has available to it, the Commission believes that Telstra is likely to retain some market power in this market. It would appear, however, that Telstra's share in this market is showing some signs of decline. This could be partly due to the

[57] Telstra Corporation Limited and controlled entities, *2003 Annual Report*, page 81.

introduction of freephone and local call rate number portability which has reduced barriers to entry into this market.

5.1.4 The extent to which competition would be promoted by declaration

Once the Commission 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 and without declaration.

In section 5.1.3, the Commission concluded that downstream markets of the eligible services are not likely to be effectively competitive at this point in time. The next question, therefore, is whether or not declaration of a MOAS would effect the state of competition in these markets.

In forming a view about the likely impact of declaration on competition, the Commission must consider not only whether declaration would be likely to promote competition but also the *extent* to which this would be likely to occur.[58] This suggests that greater weight ought to be given to a situation where the likely effect of declaration on competition is substantial than to one where the effect is minor.

Competition is a process of rivalry and accordingly it may be difficult to describe (in qualitative terms) the extent to which declaration would be likely to promote competition through simply examining its impact on that process. In many cases, it will be more instructive to examine the extent to which declaration promotes competition from the perspective of end-users; i.e. to have regard to the likely results from increased competition in terms of price, quality and service diversity. The impact on end-users may depend on the price of the service being considered. Also, the nature of the service being considered in this inquiry may have an important impact on end-users' interests. For instance, if access to an end-to-end service is only likely to lead to an increase in the number of suppliers with all suppliers essentially offering the same service at the same price, then competition is unlikely to be promoted to a significant extent. Where, however, declaration is likely to facilitate the development of new services and the provision of better quality services, competition is likely to be promoted to a greater extent.

On the other hand, declaration may have little impact on the terms and conditions upon which the eligible service is supplied. This would be the case if suppliers of the eligible service would be constrained in their price and output decisions, in which case declaration would be unlikely to generate increased competition in downstream markets. For example, if the Commission could be confident that mobile originating access services would, in the absence of continued declaration, be likely to be provided on similar terms and conditions as those that would arise in a competitive environment for this service, there would be less scope for declaration to promote competition in telecommunications markets.

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[58] Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996 – item 6, proposed s. 152AB.

Views of interested parties

Throughout the course of this inquiry, only the CCC commented on the extent to which continued declaration of a MOAS could improve the state of competition in telecommunications markets. In this regard, the CCC stated that:

> As with the mobile terminating service, there are no competitive forces present in the wholesale market and hence an efficient price for the service will only be achieved through regulation. This in turn will promote competition in the downstream 13/1300 and 1800 markets.[59]

In contrast, Telstra argued that:

> …there is already very strong retail competition provided by resellers and strong competition in the provision of mobile network services. Telstra submits therefore, that the declaration of originating access is highly unlikely to promote the long-term interests of end users (LTIE).[60]

Commission view

In general, declaration of a service can serve the LTIE in two ways. Firstly, it can ensure access to essential inputs is granted where it would otherwise be denied by potential access providers. Secondly, even where access is offered, declaration can better ensure that access is given on reasonable terms by, amongst other things, providing a right to arbitration of access disputes.

As indicated in section 5.1.2, the Commission believes that mobile network operators have control over access to MOASs provided on their networks. In the normal case, the Commission might be concerned that such control over access would give mobile operators the ability to raise the price of the MOASs above its underlying cost of production. In turn, the Commission might be concerned that this could have the potential to undermine the effectiveness of competition in downstream markets – such as the market for 13/1300 and 1800 services. This would especially be the case if vertically-integrated providers of mobile and fixed-line services were competing over the provision of 13/1300 and 1800 services.

In section 5.1.3, however, the Commission considered the state of competition in the markets for the eligible service and concluded that no substantial evidence has been provided to it that would indicate mobile operators are taking advantage of the control over access they have with regard to the provision of MOASs. Indeed, submissions provided by Telstra, Vodafone and the CCC all indicate that mobile operators often pay a fee to terminate calls on the networks of 13/1300 and 1800 service providers terminating calls from mobile networks rather than charge a mobile originating access fee. Further, PowerTel indicates in its submission that the prices charged by mobile operators for MOASs are below those charged for mobile termination services. None of this behaviour would seem to be consistent with an operator taking advantage of control over access to an essential input in the provision of a telecommunications service.

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[59] CCC, *op. cit.,* pp. 37-38
[60] Telstra, *op. cit.,* p. 3

Further, the Commission observed that while the retail market for 13/1300 and 1800 services is not effectively competitive as yet, there are signs that greater competitive influences are starting to emerge in this market. This is illustrated by Telstra's declining market share and revenue earned from (and minutes carried in the provision of) 13/1300 and 1800 services.

Hence, in the absence of any evidence that mobile operators are taking advantage of their control over access to subscribers originating calls on their networks, it is unclear to the Commission that continued declaration of a MOAS would promote competition in the provision of telecommunications services.

5.2 Achievement of 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.

When the MOAS used for calls to 1800 and 13/1300 numbers was deemed to be declared in 1997, the Commission specified in its deeming statement that this service should be deemed to be declared as it was likely to help promote the achievement of any-to-any connectivity.[61]

A key issue in this inquiry is whether or not parties have incentives to interconnect in the absence of regulation, such that any-to-any connectivity would no longer be promoted by declaration.

5.2.1 Views of interested parties

The CCC argues that declaration of the MOAS is required to ensure that any-to-any connectivity is achieved while Telstra and Vodafone consider that any-to-any connectivity would continue to be achieved if the declaration of the MOAS were revoked.

The CCC considers that while existing interconnection arrangements, which it believes tend to operate on a termination basis, might diminish the need to continue regulation of the MOAS, there may still be a need for continued declaration of a MOAS on the grounds of promoting any-to-any connectivity as:

> … an MNO could refuse to provide connectivity to a particular 13/1300 or 1800 service, leaving the 13/1300 and 1800 service provider with no option but to acquire the mobile originating service.[62]

[61] ACCC, *Deeming of Telecommunications Services*, 30 June 1997, p. 19.
[62] CCC*, op cit.*, p. 37.

In contrast, however, Telstra argues that continued regulation of the MOAS is not required to ensure any-to-any connectivity because the level of competition with regard to the provision of mobile services provides sufficient incentives for mobile operators to ensure connectivity with special service providers. Further, it argues that:

> In practice, mobile operators have been diligent in ensuring that their customers have access to all special services, as preventing access to services reduces the attractiveness of their mobile network. In other words, the strong competition between mobile carriers has provided sufficient incentives for mobile operators to ensure connectivity with special service providers.[63]

Vodafone also argues that any-to-any connectivity would be achieved in the absence of regulation because parties have commercial incentives to interconnect. It states that:

> … as evidenced in the marketplace, there are mutual commercial incentives to connect, for example, CDMA and GSM connectivity, and GSM and 3G connectivity.[64]

5.2.2 Commission view

As noted above, when the MOAS was deemed to be declared in 1997, the Commission specified in its deeming statement that this service should be deemed to be declared as it was likely to help promote the achievement of any-to-any connectivity.

In the general case, however, the Commission believes mobile operators and network providers of 13/1300 and 1800 services are likely to have an incentive to interconnect with each other. For mobile network operators, it is important that their subscribers are able to call as many B-party end-users as possible in order for it to compete in the retail mobile services market. That is, a mobile network operator (MNO) might appear less attractive to potential subscribers if it could not enable its subscribers to call as many 13/1300 and 1800 numbers as its competitors.

Similarly, it is important that providers of 13/1300 and 1800 number services are able to receive calls made by as many A-party end-users as possible. Given 13/1300 and 1800 number services are often used by businesses in order to promote a single number nationwide in order to encourage more calls to their business, it is important to these businesses that as many A-party end-users are able to call these numbers as possible. Accordingly, network providers of 13/1300 and 1800 number services are likely to have a strong incentive to interconnect with all mobile operators in order to effectively compete to provide 13/1300 and 1800 services to B-party end-users.

Hence, the Commission believes that sufficient incentives exist, in the absence of regulation, for MNOs and 13/1300 and 1800 number service providers to interconnect with each other to ensure any-to-any connectivity. That said, the Commission believes there may be an incentive for incumbent network operators that provide both mobile services and 13/1300 and 1800 services to deny access to a MOAS to new entrants into the market for special number services. This would especially be the case if a MNO has a substantial share of mobile subscriptions. By denying a MOAS

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[63] Telstra, *op cit.*, p. 2.
[64] Vodafone, *op cit.*, p. 25.

to a new entrant into the market, the incumbent vertically-integrated operator could inhibit the ability of the new entrant to effectively compete against the incumbent in the retail market for 13/1300 and 1800 number services.

That said, the Commission has been provided with no evidence during the course of this inquiry that MNOs have sought to deny access to a MOAS or sought to charge unreasonably high fees for this service.

The Commission considers that the question of whether operators would provide access to their mobile termination service in the absence of declaration applies equally to origination services on 2G, 2.5G and 3G networks.

5.3 Will declaration encourage the economically efficient use of, and the economically efficient investment in, infrastructure?

As discussed in Chapter Three of this report, when deciding whether declaration of a service will be in the LTIE, the Commission is required to consider whether declaration would be likely to encourage:

- economically efficient use of infrastructure; and
- economically efficient investment in infrastructure.

In considering these questions, the Commission is mindful that such consideration must be made in an environment where the mobile origination service is already declared. Hence, the Commission addresses these issues from the perspective of considering the likely consequences of continued or varied declaration as opposed to those that would be likely to emerge if declaration were revoked.

The Commission's consideration of each of these decisions on economically efficient use of, and economically efficient investment in, the infrastructure by which telecommunications services are provided is outlined in turn below.

5.3.1 Views of Interested Parties

Throughout the course of this inquiry, only two parties commented on whether declaration would have any impact on the efficient use of, and investment in, the infrastructure by which telecommunications services are provided. In its submission to the Mobile Services Review, the CCC argued that:

> … as with the mobile terminating service, there are no competitive forces present in the wholesale market and hence an efficient price for the service will only be achieved through regulation.

However, it also argued that:

> …since 13/1300 and 1800 calls represent a relatively small percentage of mobile calls, it is likely that regulation of the mobile originating service would have minimal impact on the efficient use of, or efficient investment in, infrastructure.[65]

[65] CCC, *op. cit.,* p. 38

In its submission, Telstra considers that revoking the declaration of the mobile origination service may improve incentives for efficient investment.

> Telstra considers that regulation is unnecessary for promoting efficient use of and investment in infrastructure. If anything, revocation of the existing declaration is likely to improve the incentives for efficient investment, as the uncertainty surrounding the possible imposition of heavy-handed regulation that could prevent efficient cost recovery by the Commission would be eliminated.[66]

5.3.2 Commission view

As indicated in Chapter Three, the Commission considers that efficiency has three major components – allocative, productive and dynamic. In general, each of these forms of efficiency is enhanced when the prices of given services reflect the costs of providing these services. In more competitive markets, service providers have a greater incentive to lower prices in order to win market share. Accordingly, this incentive helps push prices towards costs, and thereby improves the efficient use of infrastructure.

Where declaration is likely to promote competition in markets for carriage services or services provided by means of carriage services, the Commission's competition analysis will generally help it to form a view about the impact of declaration on efficiency. For instance, where the Commission finds that declaration can lead to greater competition in downstream markets by helping to ensure prices for the eligible service better reflect their efficient costs of provision, it is likely such declaration will also help promote efficiency in use of telecommunications services. By enabling greater competition in downstream markets, declaration would be expected to improve productive and dynamic efficiency in these markets by giving service providers the incentive to find lower-cost means of producing goods and services in downstream markets, and by encouraging them to invest and innovate in ways that will ensure they produce goods and services of a chosen quality at the lowest possible cost in the future. Further, the Commission would expect allocative efficiency to be improved as it would be more likely that the final prices paid for retail services by end-users will better reflect the efficient costs of provision of these services. In the language of subsection 152AB(2)(e), declaration will be expected to result in the more efficient use of infrastructure used to supply the eligible service. Conversely, a decision not to declare would – on this reasoning – lead to less competition in downstream markets and a less efficient outcome.

A clear implication of this, therefore, is that the level of costs (inclusive of a normal profit) is important in determining whether declaration will lead to a more efficient use of infrastructure. The comparison of costs to prices, and the impact declaration will have on any difference between the two, is a key consideration in whether declaration will lead to a more efficient use of infrastructure.

In addition to this, however, the competitive dynamics associated with a given market structure are also of relevance to considerations of the efficient use of telecommunications infrastructure. In particular, it is important to consider the overall structure of prices across a range of inter-related services when considering

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[66] Telstra, *op. cit.*, p. 3.

whether a particular pricing structure is economically efficient or not, rather than focusing narrowly on the inter-relationship between prices and costs for individual services such as the mobile origination service alone.

Finally, in considering the impact of declaration of a service on the efficient use of telecommunications infrastructure, the Act also requires the Commission to consider whether it is 'technically feasible' to supply and charge for the eligible service when determining whether declaration would encourage the efficient use of infrastructure. In this regard, the Commission must particularly consider:

- whether supply is feasible in an engineering sense (i.e. having regard to the technology that is in use or available);
- the costs of supply and whether the costs are reasonable; and
- the effects, or likely effects, of supply on the operation or performance of telecommunications networks.

Given the MOAS has been declared and provided since 1997, the Commission believes it is technically feasible to provide a mobile origination service.

Efficient investment in infrastructure, on the other hand, makes an important contribution to the promotion of the LTIE. It can lead to more efficient methods of production, foster increased competition and lower prices, and enhance the level of diversity in the goods and services available to end-users.

Accordingly, in examining the likely impacts of declaration on economically-efficient investment, and the extent of such investment, the Commission focuses on the likely impact on economically-efficient investment in:

- infrastructure by which the eligible service is supplied; and
- infrastructure by which other communications carriage services, and services supplied by means of communications carriage services, are supplied in related markets.

Central to the consideration of the incentives declaration gives to service providers is the impact on their 'build/buy' decisions. That is, carriers operating in related markets will have a choice as to whether they invest in their own infrastructure in order to provide the eligible service (i.e. 'build') in order to provide final services to end- users, or to seek access from an existing provider of the eligible service (i.e. 'buy'). In this regard, the Commission is particularly concerned to ensure declaration would not prevent efficient investment (such as efficient investment in the infrastructure used to provide the eligible service by potential service providers) or encourage inefficient investment (such as excessive investment in related markets or inefficient duplication of network infrastructure). To a large extent, creating the right incentive for service providers to make an efficient build/buy choice is a matter of determining appropriate pricing principles for a declared service.

Declaration may distort the access provider's decisions about maintenance, improvement and expansion of existing infrastructure, thus harming the LTIE. For instance, if the access price of a declared service were to be based on a provider's actual incurred costs, then declaration may lead to the access provider over-investing in the existing network in order to raise the access price (also known as 'gold plating').

Conversely, if the access price for a declared service was set at an inefficiently low level, it may deprive the access provider of the ability to earn an economic rate of return on its efficient investment in the infrastructure used to provide this service. In this instance, the access provider may be deterred from making efficient investment in the infrastructure used to provide a mobile origination service.

In other situations, the access provider may have an incentive to under-invest in order to limit the scope for third-party access to its network. Consequently, the Act requires the Commission to consider the likely impact of declaration on the incentives for investment in infrastructure by which the eligible service is supplied.

Throughout the course of this inquiry, no party has provided any arguments to suggest continued declaration of the MOAS would be likely to significantly promote the efficient use of, or investment in, the infrastructure by which telecommunications services are provided. Indeed, the CCC (which is otherwise in favour of continued declaration of a mobile originating access service) argues that since calls to 1800 and 13/1300 services comprise a small proportion of total mobile calls, continued declaration is unlikely to have a significant effect on the efficient use of, or investment in, telecommunications infrastructure.

In the absence of any detailed arguments to support declaration on the grounds of promoting the efficient use of and investment in telecommunications infrastructure, the Commission believes it has no basis upon which to argue declaration would help achieve these criteria.

5.4 Conclusion

Overall, therefore, the Commission considers that evidence has not been provided during the course of this inquiry to suggest that continued declaration would, on balance, be in the LTIE. Retail charging restrictions that apply to the provision of calls to fixed-line consumers of 13/1300 and 1800 services do not apply to calls made from mobile phones. Accordingly, the need for an 'origination' model to underpin wholesale interconnection arrangements is unclear. The Commission also understands that, in many cases, calls made from mobile phones to 13/1300 and 1800 services do not operate on the basis of an 'origination' model such that providers of 13/1300 and 1800 services pay for access to the MOAS.

Further, the Commission has not been provided with any substantial evidence to suggest MNOs are taking advantage of their control over access to calls originating on their networks to set unreasonably high prices for this service. Indeed, it has been indicated by most parties to the inquiry that MNOs often pay a fee to network providers of 13/1300 and 1800 numbers to terminate calls made by their mobile

subscribers. Based on the information presented during this inquiry, therefore, the Commission does not believe that continued declaration of a MOAS would be likely to promote competition in telecommunications markets.

Further, no party to this inquiry has provided evidence of potential efficiency losses that might result from existing commercial interconnection arrangements that underpin the provision of calls from mobile phones to 13/1300 and 1800 numbers, or how continued declaration of a MOAS could be expected to eliminate any such inefficiencies or promote efficient investment in telecommunications markets.

Finally, the Commission believes that, in the general case, network providers of mobile originating access and 13/1300 and 1800 services are likely to have commercial incentives to interconnect with each other to ensure any-to-any connectivity is promoted with regard to mobile calls to the special number services. While the Commission is mindful that these incentives may not always exist in situations where a small carrier or new entrant to the market seeks interconnection with a larger incumbent operator, the Commission has not been provided with any evidence during this inquiry to indicate access is being denied to the MOAS. However, if in the event the Commission went on to make a final decision to allow the existing declaration of the MOAS to expire, it would continue to monitor whether access is continuing to be provided. Were evidence to be presented that mobile operators were denying access to MOASs, the Commission could revisit this matter.

The Commission's Draft Decision is that the MOAS declaration should be allowed to expire on 30 June 2004.

If the Commission were to be presented with compelling evidence in submissions to the Draft Decision, it may be inclined to change its view on this matter.

Attachment A

DRAFT Domestic Mobile Originating Access Service

The Domestic Digital Mobile Originating Access Service is an Access service for the carriage of voice calls from the access provider's digital mobile network to a point of interconnection, or potential point of interconnection, where the calls are made to a service supplied using a freephone or local rate service number.

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:

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 Discussion Paper

AAPT

Adam Lucas Johns

Australian Consumers' Association

Australian Telecommunications Users Group

Charles River Associates (on behalf of Optus)

Competitive Carriers Coalition

Convergent Communications Research Group, University of Adelaide

Competitive Telecommunications Association (CompTel)

Core Research (on behalf of Hutchison)

Frontier Economics (three submissions on behalf of Vodafone)

Hutchison

MCI

Network Economics Consulting Group (on behalf of Telstra)

Optus (three submissions)

PowerTel

Queensland Department of Innovation and Information Economy

Small Enterprise Telecommunications Centre Limited

Telstra (two submissions)

Vodafone (three submissions)

vRoam Australia