
The Parliament of the Commonwealth of Australia

Phoning home

Inquiry into international mobile roaming

House of Representatives

Standing Committee on Communications

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Canberra

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Foreword

There can be no doubt about the utility of international mobile roaming, a service that allows you to use your own phone and phone number wherever you are in the world.

The utility of roaming was recognised by many of the participants to the inquiry. The Consumers' Telecommunications Network said the following at the public hearing in Sydney on 28 November 2008:

...the expectation these days is to be able to be contacted. People want to take their phones with them, but they do not want to do that at the expense of getting a shock when they come back.

As is clear from this statement, roaming is also known for its cost. During the inquiry, the Committee was confronted with evidence of international mobile roaming bills in the tens of thousands of dollars.

The Committee found that there were two apparent reasons for the high cost of mobile roaming.

The first has to do with how costs are attributed. Roaming is supported by a complex technical treatment of calls to and from roamed phones. This treatment means that the cost of making and receiving calls is higher for roamed calls.

The most obvious example of this is the approach to receiving calls. In the regular use of mobile phones, the recipient of a call is not charged. However, if the recipient is using roaming, they will be charged for the international leg of any calls they receive.

To enhance consumer understanding of roaming costs, the Committee recommends that the:

- Australian Communications and Media Authority facilitate a meeting of the Communications Alliance to discuss the development of a minimum standard for consumer information and awareness on roaming and potential costs; and

- Australian Government explore opportunities to collaborate with the Australian Telecommunications Users Group's 'Roam Fair' campaign.

The second apparent reason has to do with the power of Australian providers in negotiations with overseas providers over the provision of roaming services. Australian providers do not appear to have the customer base to negotiate competitive prices for roaming services.

The Committee believes this situation is best overcome through a policy of regulating the framework for the wholesale cost of roaming through bilateral and multilateral negotiations with other countries, ensuring that countries with the largest number of Australian visitors are given priority.

In an effort to improve competition between Australian providers, the Committee recommends that the Australian Communications and Media Authority develop, through the Communications Alliance, an amendment to the *Code on mobile number portability* to allow temporary mobile number portability for roaming services.

While there are a number of other ways in which travellers can remain in touch, none of these has the utility of roaming. Nevertheless, the Committee believes that with careful planning most travellers can find an alternative that offers some of the utility of roaming at less cost.

In order to ensure travellers are aware of the alternatives, the Committee has recommended they be incorporated into information on roaming provided by the Australian Government.

Ms Belinda Neal MP
Chair



Membership of the Committee

Chair Ms Belinda Neal MP

Deputy Chair The Hon Mark Vaile MP (untill 26/8/08)

Mrs Kay Hull MP (from 26/8/08)

Members The Hon Bruce Billson MP

Mr David Bradbury MP

Ms Julie Collins MP

Mr Steve Georganas MP

Mr Steve Irons MP

The Hon Peter Lindsay MP

Ms Kerry Rea MP

Ms Amanda Rishworth MP

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	Russell Chafer (until 21/11/08)
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Administrative Officers	Dorota Cooley
	Emma Martin (from 15/9/08 to 18 /12/08)
	Claire Young (from 2/7/08 to 12/9/08)



Terms of reference

The Committee is to inquire into and report on:

- The extent to which retail international mobile roaming charges for both voice and data services reflect the underlying costs to operators of supplying the service.
- The adequacy of information available on Australian mobile operators' international mobile roaming costs and revenue in both retail and wholesale markets.
- The impact of new and emerging technologies and commercial initiatives that may reduce international mobile roaming charges for users or provide a substitute for international mobile roaming services.
- The adequacy of existing information from mobile operators available to consumers concerning international mobile roaming charges for users.



List of abbreviations

ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
AMTA	Australian Mobile Telecommunications Association
APEC	Asia Pacific Economic Cooperation group of nations
ATUG	Australian Telecommunications Users' Group
CTN	Consumers' Telecommunications Network
DBCDE	Department of Broadband, Communications and the Digital Economy
EC	European Commission
ERG	European Regulators' Group
EU	European Union
GSM	Global System for Mobile
ICN	International Competition Network
ITU	International Telecommunications Union
OECD	Organisation for Economic Cooperation and Development
SIM	Subscriber Identity Module

SMS Short Message Service

IOT Inter Operator Tariff

VoIP Voice over Internet Protocol



List of recommendations

4 Regulation of international mobile roaming

Recommendation 1

The Committee recommends that the Australian Government pursue a policy of regulating the framework for the wholesale cost of roaming through bilateral and multilateral negotiations with other countries, ensuring that countries with the largest number of Australian visitors are given priority.

Recommendation 2

The Committee recommends that the ACCC introduce reporting requirements for international mobile roaming services on Australian providers. In particular, the Committee recommends that cost, revenue and service usage information should be provided.

Recommendation 3

The Committee recommends that the:

- Australian Communications and Media Authority facilitate a meeting of the Communications Alliance to discuss the development of a minimum standard for consumer information and awareness of roaming and potential costs; and
- Australian Government explore opportunities to collaborate with the Australian Telecommunications Users Group's 'Roam Fair' campaign.

Recommendation 4

The Committee recommends that the Australian Communications and Media Authority develop, through the Communications Alliance, an amendment to the *Code on mobile number portability* to allow temporary mobile number portability for roaming services.

5 Alternative services to international mobile roaming

Recommendation 5

The Committee recommends that when an Australian Government agency provides information to the public on roaming, the alternatives to roaming be included as part of the information. These alternatives should include:

- international calling cards;
- short Message service;
- use of local networks;
- email; and
- use of hotel telephones.

Introduction

- 1.1 Anybody who has travelled overseas and used their mobile phone knows how useful it can be to reach loved ones and conduct business using international mobile roaming. They also know the significant cost they pay for this privilege.
- 1.2 International mobile roaming permits international travellers to use their existing mobile phone account on networks in other countries. The service is underpinned by agreements between the traveller's provider and providers in the country the traveller is visiting. The traveller is then billed for the service by their home provider.
- 1.3 When the ACCC examined international mobile roaming costs in 2005, it considered the end user charge for international roaming services to be high because of: a lack of competition; the limited range of substitutes; and the lack of consumer information on international mobile roaming costs.
- 1.4 With four years having elapsed since the ACCC's Review and with rapid development of mobile technologies, the Minister referred terms of reference for an inquiry into international mobile roaming to the Committee.

Conduct of the inquiry

- 1.5 The Committee agreed on 4 June 2008 to undertake an inquiry into international mobile roaming. The inquiry was referred by Senator the Hon Stephen Conroy, the Australian Government Minister for Broadband, Communications and the Digital Economy.

- 1.6 The terms of reference called on the Committee to inquire into and report on:
- the extent to which retail international mobile roaming charges for both voice and data services reflect the underlying costs to operators of supplying the service;
 - the adequacy of information available on Australian mobile operators' international mobile roaming costs and revenue in both retail and wholesale markets;
 - the impact of new and emerging technologies and commercial initiatives that may reduce international mobile roaming charges for users or provide a substitute for international mobile roaming services; and
 - the adequacy of existing information from mobile operators available to consumers concerning international mobile roaming charges for users.
- 1.7 The inquiry was advertised on 19 June 2008 in *The Australian* newspaper.
- 1.8 The Committee sought submissions from relevant Australian Government Departments, regulatory agencies, telecommunications operators, consumer groups, and peak bodies representing the telecommunications industry. In all, the Committee sent 47 letters inviting submissions.
- 1.9 The Committee received 18 submissions, including two supplementary submissions. These submissions are listed at Appendix A.
- 1.10 The Committee received one exhibit to the inquiry. The exhibit is listed at Appendix B.
- 1.11 The Committee held four public hearings in Canberra and Sydney and called 15 witnesses. These witnesses are listed at Appendix C.
- 1.12 Copies of submissions and exhibits, and transcripts of public hearings, can be obtained from the Committee's website:
<http://www.aph.gov.au/house/committee/coms/mobileroaming/index.htm>.

Structure of the report

- 1.13 This report contains five chapters. Chapter one is this introduction.

Chapter two

- 1.14 Chapter two describes how international mobile roaming (called 'roaming' hereafter) works. An explanation is necessary because the delivery and charging arrangements associated with roaming services are far more complex than the delivery and charging arrangements behind domestic mobile services.
- 1.15 Roaming is based on agreements between providers in different countries. The agreements permit a provider to host another provider's clients on its network when those clients travel.
- 1.16 For the traveller, roaming allows them to use their mobile phone in the same manner they can use it in their home country.
- 1.17 Roaming is supported by a complex technical treatment of calls to and from roamed phones. This treatment means that the cost of making and receiving calls is higher for roamed calls. The chapter concludes that this technical complexity is one of the reasons why roaming is expensive for Australian travellers.

Chapter three

- 1.18 Chapter three examines why, even with the more complex nature of roaming, charges are considered high for Australian travellers.
- 1.19 To understand the reason for this, the Committee examines two previous reviews of roaming costs:
- the ACCC's 2005 *Mobile services review: International inter-carrier roaming* (hereafter called the ACCC report); and
 - the Department of Broadband, Communications and the Digital Economy's (DBCDE's) 2008 *Report of findings on International mobile roaming charges*, prepared for the Department by KPMG (hereafter referred to as the KPMG report).
- 1.20 The ACCC and KPMG reports each adopt a different approach to investigating roaming, leading to findings that emphasise different aspects of the roaming market. The ACCC's approach focuses attention on the role played by the party-to-party agreements in determining the end user cost. KPMG's approach directs attention to the discrepancy between the actual cost of roamed calls and the end user cost.
- 1.21 While both the KPMG and ACCC reports are based on valid sources, neither entirely reflects the pricing situation as both rely on extrapolating

conclusions rather than direct data, and that as a consequence, both are flawed.

- 1.22 The ACCC argued that the large wholesale cost was a result of Australian providers being price takers in the wholesale roaming market. The wholesale market does not operate effectively because the small size of the Australian population distorts competition. Australian providers cannot offer enough customers to providers in other countries to make negotiations over price competitive.

Chapter four

- 1.23 Chapter four discusses:

- regulating the retail price of roaming (called retail price control); or
- regulating the wholesale price of roaming; and
- whether the price information provided to travellers is adequate for them to be aware of the costs involved in roaming.

- 1.24 Retail price control involves placing a cap on the retail cost of calls. In other words, consumers cannot be charged more than the cap for a call. The Committee decides against retail price controls. Australian providers would be left with the double burden of coping with the underlying distortion while carrying the cost of retail price controls. In the long run, it might even mean Australians are not offered the option of roaming in some countries at all.

- 1.25 However, the Committee notes that an alternative to retail price control is to regulate the percentage of the retail mark up charged over the wholesale price.

- 1.26 Regulating the wholesale cost of roaming is very complicated because of the international element involved. The Committee considers three regulatory mechanisms for dealing with the wholesale cost of roaming:

- declaring international roaming under Part XIC of the *Trade Practices Act 1974*;
- regulation similar to the European Commission (EC) Roaming Regulation; and
- regulation through international cooperation.

The Committee concludes that regulation through international cooperation is the most practical mechanism for dealing with the cost of roaming.

- 1.27 The Committee recommends that the Australian Government continue its efforts to seek international cooperation in dealing with roaming costs.
- 1.28 In relation to information provision, the Committee discusses both the provision of information by Australian providers to it to assist the ACCC in price monitoring; and the provision of information to the public. The Committee recommends:
- that the ACCC introduce reporting requirements for international mobile roaming services on Australian providers, in particular, cost, revenue and service usage information should be provided; and
 - that the Australian Communications and Media Authority facilitate a meeting to discuss the development of a minimum standard for information on roaming.

Chapter five

- 1.29 Chapter five examines the following alternatives to roaming:
- international calling cards;
 - Short Messaging Service (SMS);
 - use of local networks;
 - email; and
 - use of hotel telephones.

The Committee finds that none of these offers the mobility and functionality of roaming. However, the Committee finds that the use of email provides a close alternative at a fraction of the cost.

- 1.30 The Committee concludes that, given improved regulation of international mobile roaming is a long term proposition, the alternatives provide the best opportunity to reduce the costs of staying in touch with work and family while travelling overseas. While none of the alternatives offers a direct replacement for the utility of roaming, a traveller who pays attention to their communications needs can come close to replicating the utility of roaming at a fraction of the cost.
- 1.31 To make travellers more aware of the alternatives, the Committee recommends that when an Australian Government agency provides information to the public on roaming, the alternatives to roaming be included as part of the information.

International Mobile Roaming

- 2.1 This chapter describes how international mobile roaming (called 'roaming' hereafter) works so as to facilitate discussion of the issues surrounding roaming in later chapters. An explanation is necessary because the delivery and charging arrangements associated with roaming services are far more complex than the delivery and charging arrangements behind domestic mobile services.
- 2.2 The chapter describes the technical process for routing international roaming voice, Short Messaging Service (SMS) and data calls, describes the administrative arrangements that underpin the service, and explains how the costs of roaming services are determined.
- 2.3 Roaming is a service that allows travellers to use their mobile phone while in another country. In other words, it allows someone who has subscribed to a service provider in one country to take their mobile phone to another country and still receive coverage through their subscription in the original country. During the course of the inquiry the Committee focused on roaming services for subscribers of Australian mobile networks who travel overseas, as opposed to subscribers of foreign networks who travel to Australia. The Committee has also largely focused on issues surrounding voice roaming services, however SMS and data services are also discussed in this report.

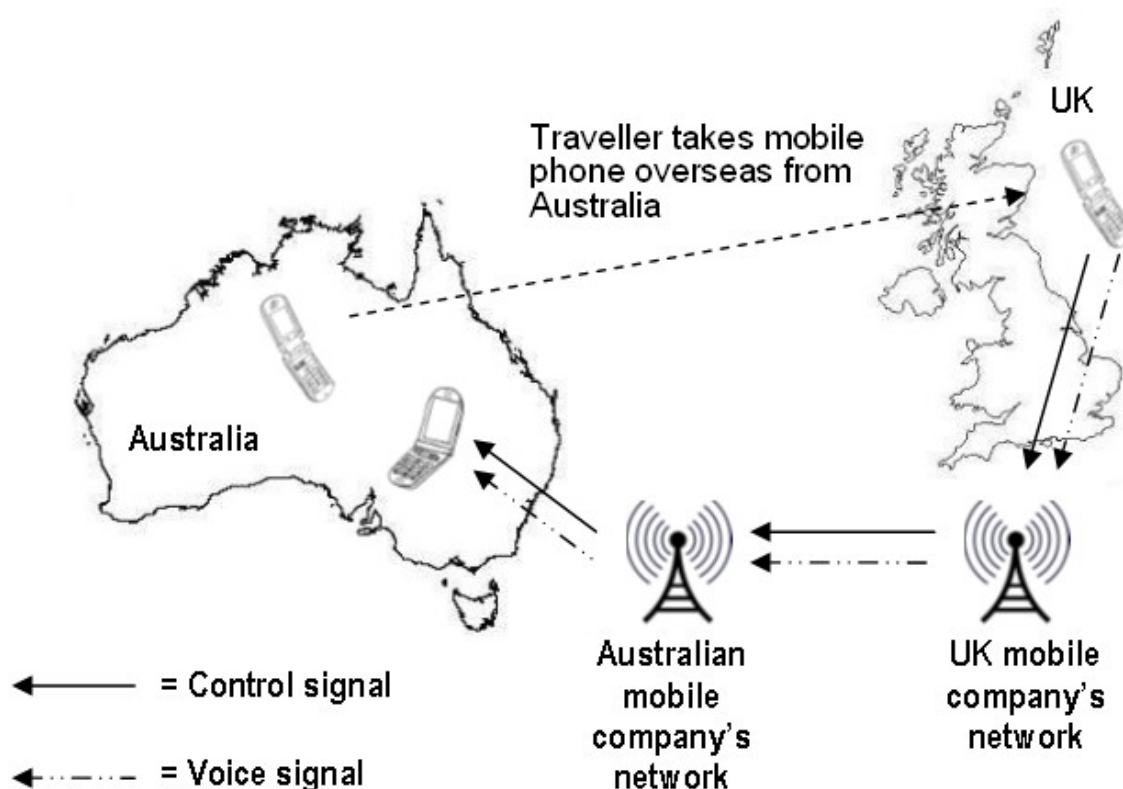
The technical aspects of international mobile roaming

- 2.4 The technical process of a roaming call is called 'routing'. To understand the routing of international mobile, SMS and data roaming services, a basic

understanding of the signalling behind mobile phone calls is needed. A mobile phone call requires two different types of signals: the 'control' signal and the 'voice' signal. The control signal carries the network data of the call. This signal allows for the mobile phone to be identified, and records the destination, length and geographical location of the call. The voice signal carries the actual voice, SMS or data message.¹

- 2.5 The routing of roaming voice, SMS and data calls is such that the 'control' signal must at some point contact the home operator's network.² This is so that the home network operator can recognise and record that a call has been made from the mobile to maintain accurate billing records.³
- 2.6 Figure one below illustrates how both the control and voice signals are routed for a roamed voice or SMS call back to Australia. For the purpose of this example, the country of origin for the roamed call is the UK.

Figure 2.1 – Sending and receiving international voice calls and SMS from and to Australia

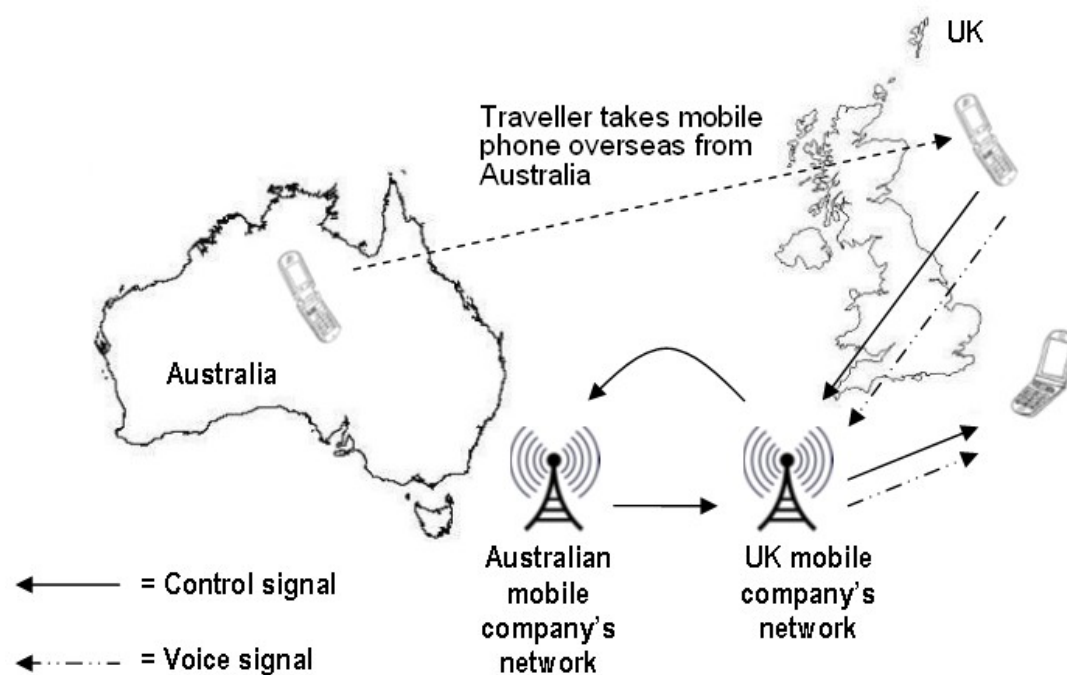


Source Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 29.

- 1 Brian, M., Tyson, J. and Layton, J., *How Cell Phones Works*, 2000.
- 2 Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, pp. 29-31.
- 3 Ms Georgia-Kate Schubert, *Transcript of Evidence*, 28 November 2008, p. 51.

- 2.7 First, the traveller's handset connects to a UK based network provider. Both the control and voice signals are then routed from the UK provider's network to the Australian provider's network. Finally, the signals are delivered to the Australian landline or mobile. For a call originating from Australia to a roaming mobile, the route would be reversed.⁴
- 2.8 Figure two below illustrates how a roamed voice or SMS call to a phone in the overseas country the user is calling from is routed.

Figure 2.2 – Sending and receiving voice calls and SMS within foreign country



Source Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 30.

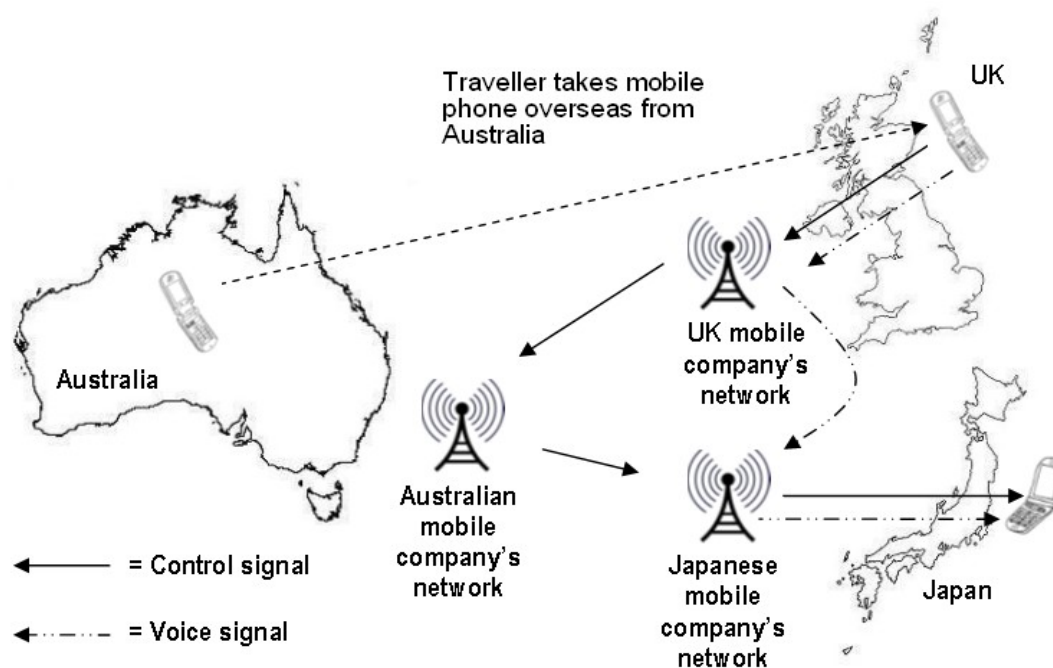
- 2.9 First, the traveller's handset connects to a UK based network provider. The voice signal of the call is routed through the UK provider's network straight to the UK based landline or mobile. The control signal of the call is routed from the UK provider's network to the Australian provider's network. The signal is then routed back to the UK provider's network and delivered to the UK based landline or mobile. For a call originating from a UK based landline or mobile to the roaming mobile, the route would be reversed.⁵

4 Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 31.

5 Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 29.

- 2.10 Figure three below illustrates how a roamed voice or SMS call is routed when the user is calling a phone in another foreign country. In this case, Japan has been used.
- 2.11 First, the traveller's handset connects to a UK based network provider. The voice signal of the call is routed from the UK based network straight to the Japanese based network provider and the landline or mobile phone on their network. The control signal of the call is routed from the UK provider's network to the Australian provider's network. The control signal is then routed to the Japanese provider's network and delivered to the Japan based landline or mobile. For a call originating from a Japan-based landline or mobile to the roaming mobile, the route would be reversed.⁶

Figure 2.3 – Sending and receiving international voice calls and SMS from and to other foreign countries



Source Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 30.

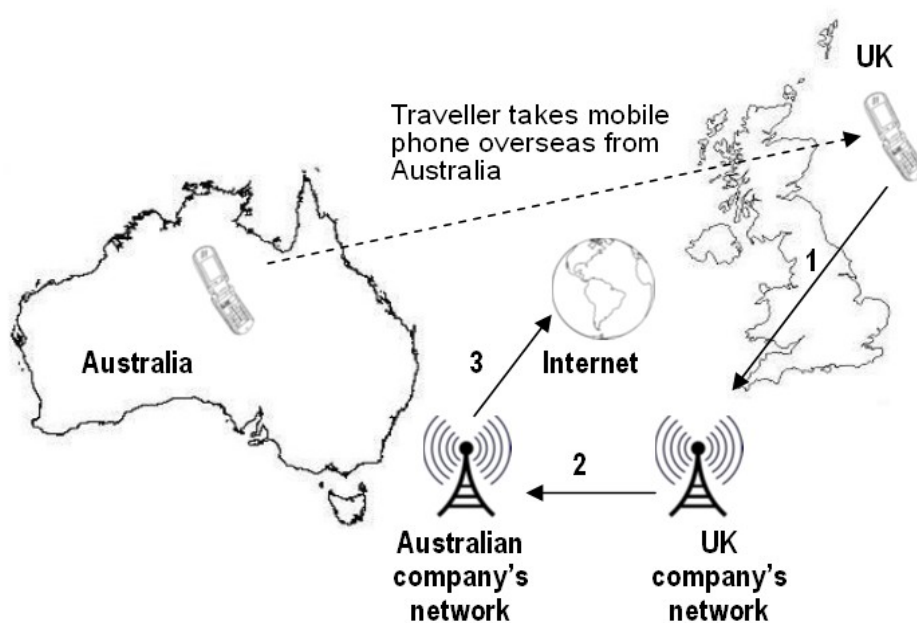
- 2.12 Like voice and SMS services, international data roaming relies on individual party to party agreements between home network operators and visited network operators where information is routed between their mobile networks. The home network operator then connects the device to

⁶ Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 30.

the internet. Data roaming includes accessing email and the internet from an internet-enabled mobile phone or laptop.

- 2.13 Figure four illustrates the routing for users on Australian networks that utilize international mobile data roaming whilst in the UK. First, the traveller's device connects to a UK based mobile provider's communications network. The data from the device is then transmitted from the UK provider's network to the Australian provider's mobile communication network. The Australian provider's network then connects the device to the internet.⁷

Figure 2.4 – Accessing the internet via laptops and internet-enabled mobile phones



Source GSM Association, *Mobile SMS and Data Roaming Explained*, 2008, p. 5.

Party to party agreements

- 2.14 International voice, SMS and data roaming relies on bilateral agreements between country-of-origin service providers (home network operators) and foreign country service providers (visited network providers).⁸

⁷ GSM Association, *Mobile, SMS and data roaming explained*, 2008, p. 5.

⁸ ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 4.

- 2.15 The Australian Competition and Consumer Commission (ACCC) describes these agreements as negotiated between two mobile operators who seek to get the best commercial arrangement depending on the relationship between the two. The Department of Broadband, Communications and the Digital Economy (DBCDE) advised the Committee that there does not appear to be any logic or consistency between party-to-party agreements in different countries and among different providers.⁹ It is difficult to gain insight into the negotiation and operation of these agreements because much of the information surrounding these agreements is claimed to be commercially sensitive.¹⁰ Vodafone Australia, for example, argued that the lack of transparency surrounding these agreements is not unique and is necessary for operators to remain competitive.¹¹
- 2.16 Notwithstanding this, the ACCC found that the general principles behind the agreements have been laid down by the Global System for Mobile communications (GSM) Association. The GSM Association is a wireless industry association facilitating the development, uptake and promotion of GSM mobile technology.¹² GSM technology is a widely used form of mobile phone technology with 80 percent of the world's population being covered by GSM mobile networks.¹³
- 2.17 The GSM Association has developed the Inter-Operator Tariff (IOT) system to guide the charging arrangements set down by operators when negotiating party-to-party agreements. The IOT is charged by the visited network operator to the home network operator for allowing the home network's subscribers to use the visited network.¹⁴
- 2.18 In addition to the IOT, the GSM Association provides a Standard International Roaming Agreement that can be used by operators as a basis for their roaming agreements.
- 2.19 While party-to-party agreements are based on the IOT and the standard agreement, the ACCC argues that the terms of these agreements vary greatly among operators, depending on the market strength of the parties involved.¹⁵

9 Mr Keith Besgrove, *Transcript of Evidence*, 24 September 2008, p. 5.

10 Mr Colin Oliver, *Transcript of Evidence*, 24 September 2008, p. 5.

11 Ms Georgia-Kate Schubert, *Transcript of Evidence*, 28 November 2008, p. 46.

12 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 15.

13 GSM Association, www.gsmworld.com, viewed on 4 February 2009.

14 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 4.

15 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 4.

Charging arrangements

2.20 During the inquiry, the Committee noted that the charging arrangements for international roaming are quite complex. This section will describe the types of end user charges involved in international roaming and the composition of these charges.

Charge types

2.21 The Committee surveyed the types of charges applied by Australian network providers for international mobile roaming services. The information for this survey was sourced from the Telstra¹⁶, Optus¹⁷, Vodafone¹⁸, and '3'¹⁹ websites.

2.22 The survey determined that different charging arrangements apply for outgoing voice calls, incoming voice calls, outgoing SMS, incoming SMS and data services. Below is a description of the charges involved for all five types of services.

Outgoing voice call

2.23 When a traveller places a roamed voice call:

- to a phone within the country they are in;
- to their home country; or
- to another foreign country,

a charge is applied to the traveller who makes the call. This charge is usually a per-minute rate and varies depending on which country the traveller is calling from and the fees negotiated in the agreement between the traveller's service provider and the overseas service provider. These fees may be very different to the fees charged to domestic users of the overseas provider.

Incoming Voice Call

2.24 When a traveller receives a call that originates:

- from the country they are in;

16 Telstra Corporation Ltd, www.telstra.com.au, viewed on 5 February 2009.

17 SingTel Optus Pty Limited, personal.optus.com.au, viewed on 5 February 2009.

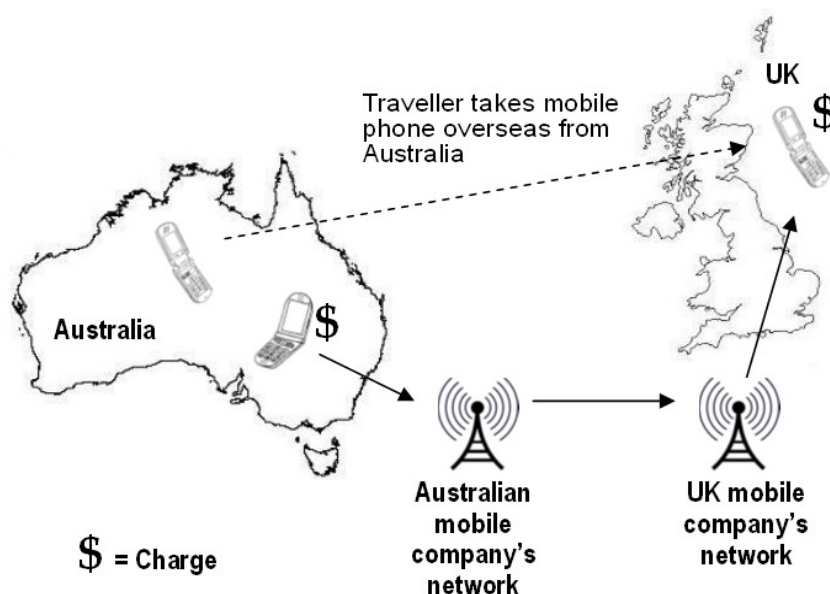
18 Vodafone Australia, www.vodafone.com.au, viewed on 5 February 2009.

19 Hutchison 3G, www.three.com.au, viewed on 5 February 2009.

- from their home country; or
- from another foreign country,

two charges are usually applied. One charge is applied to the person who makes the call to the roamed mobile and a separate charge is applied to the traveller who receives the call on the roamed mobile. The charge to the person who makes the call is the standard charge they would usually face for calling the mobile if it was on its home network. The charge to the traveller is the rate for receiving calls via international roaming mandated by their home network provider. This rate is usually a per-minute charge that varies depending on the country the traveller is in. This differs from local calls where there is no charge for receiving a call. Effectively, the traveller is charged for the international leg of a received call. This arrangement is illustrated below.

Figure 2.5 – Charges when a person in home country calls an internationally roaming mobile



Source Department of Broadband, Communications and the Digital Economy, *Report of findings on: International mobile roaming charges*, 2008, p. 30.

2.25 Figure five shows where the two charges would apply for a person on an Australian network calling a roamed mobile in the UK. First, the person making the call from Australia would pay their usual charge for calling the traveller's mobile if it was on its home network. The call is then routed through the Australian network to the UK network and delivered to the traveller's mobile. The traveller then pays a charge to receive the call on the UK provider's network. This arrangement would be the same for calls to the traveller's mobile that originate from within UK or from another country. Both the caller and receiver would be charged for the call.

- 2.26 The arrangement above is the most common among the providers surveyed. However, the Committee notes that Hutchison 3G offers a deal where travellers do not pay to receive calls in certain circumstances.

Outgoing SMS

- 2.27 In regards to SMS, where a traveller sends an SMS from their roamed mobile to another mobile:
- in the country they are in;
 - in their home country; or
 - in another foreign country,
- a single charge is applied to the traveller only. This charge is usually a set amount for each 160-character SMS message. A message that contains more than 160 characters would be charged as two or more messages.

Incoming SMS

- 2.28 When a traveller receives an SMS message:
- from within the country they are in;
 - from their home country; or
 - from another foreign country,
- only the sender is charged. The sender would face their usual charge for sending an SMS to the mobile if it was on its home network. Usually, no charge is applied to the traveller for receiving an SMS message.

Data

- 2.29 For data roaming, a charge is applied to the traveller to access data services. Usually, this charge relates to the amount of data downloaded and uploaded, or is a fixed fee which provides a limit on the amount of data that can be downloaded and uploaded.²⁰
- 2.30 These charging arrangements are summarised in the table below.

²⁰ GSM Association, *Mobile, SMS and data roaming explained*, 2008, p. 3.

Figure 2.6 – Common international mobile roaming charging arrangements

Type of call (from perspective of roamer)	Charge faced by roamer	Type of charge faced by roamer	Charged faced by other party	Type of charge faced by other party
Outgoing voice call	Yes	Per minute	No	No
Incoming voice call	Yes	Per minute	Yes	Per minute
Outgoing SMS	Yes	Per message	No	No
Incoming SMS	No	No	Yes	Per message
Data	Yes	Per data amount	No	No

Source Telstra Corporation Ltd, www.telstra.com.au, viewed 5 February 2009; SingTel Optus Pty Limited, personal.optus.com.au, viewed 5 February 2009; Vodafone Australia, www.vodafone.com.au, viewed 5 February 2009; and Hutchison 3G, www.three.com.au, viewed 5 February 2009.

2.31 In this chapter the Committee has endeavoured to provide a description of how international mobile roaming works and how the costs are arrived at.

2.32 From the description, it is clear that, both technically and in terms of how charges are determined, roaming is much more complex than standard local calling arrangements. The complexity of roaming is an influence on the cost of roaming services. Of particular note is the fact that a traveller using roaming pays for both made and received calls. For example, a traveller who:

- receives a call, but allows the call to go to voicemail;
- retrieves the message from voicemail; and
- returns the call,

is effectively paying for four international calls. This pricing arrangement is almost certainly responsible for a number of unexpectedly high bills.

2.33 The complexity of the charging arrangements for roaming was identified by the Consumers' Telecommunications Network as a significant part of the problem consumers had with roaming charges:

... they do not understand that if somebody calls them they get charged for a proportion of the call. That charge when they are receiving is not clear. ... even if people try to control their call costs, it is hard for them to calculate if they receive calls from people in other countries and other zones how much it costs them

to receive the call. It is as much as it has been costing them to make calls from overseas.²¹

- 2.34 The Telecommunications Industry Ombudsman reported a particular example, relating to data roaming, which had come to their attention:

We have another case that is still open that I thought I would share with you. This is where the complainant says to us that he approached his company in a retail shop. He said he was off to Europe, specifically to the UK, Ireland and France, and he wanted a plan that could give him internet access while he was there. The company sold him a plan that said it was like home pricing, so that international roaming data charges were the same in selected countries as they are in Australia. It is not cheap, but not outrageous either. The complainant used his internet in Britain and Ireland on this basis and he incurred moderate charges, the same as he would here. He then went to France and that was not included in the like-home pricing. He incurred a debt of several thousand dollars over a few days before he was barred for unusually high usage. He was going back to Ireland where he wanted to use his service and the company insisted that he pay part of those charges, even though they were in dispute. That investigation is still underway at a senior level at the TIO.²²

- 2.35 The Australian Government is not in a position to directly alter these arrangements as they are set in place by the GSM Association. The best that can be done in relation to these arrangements is for the Committee to ensure that travellers are appropriately informed. The suitability of the information provided to travellers is discussed in chapter four.
- 2.36 In the next chapter, the Committee will discuss the findings of previous inquiries into the costs of international mobile roaming.

21 Ms Danielle Notara, *Transcript of Evidence*, 28 November 2008, p. 7.

22 Ms Deirdre O'Donnell, *Transcript of Evidence*, 28 November 2008, pp. 19-20.

Previous reports on international mobile roaming

3.1 In the previous chapter, the Committee described how the administrative and technical framework of roaming contributes to the cost of this service. Even with the technical nature of roaming, charges are considered high, with both the Consumers' Telecommunications Network (CTN) and the Australian Competition and Consumer Commission (ACCC) making this point.¹

3.2 Two reports on Australian international mobile roaming charges have been published in recent years:

- the ACCC's 2005 *Mobile services review: International inter-carrier roaming* (hereafter called the ACCC report); and
- the Department of Broadband, Communications and the Digital Economy's (DBCDE's) 2008 *Report of findings on: International mobile roaming charges*, prepared for the Department by KPMG (hereafter referred to as the KPMG report).

These reports provide an insight into the underlying price components of international mobile roaming services.

3.3 Both reports investigated a range of issues including:

- the uptake and usage of roaming services;
- the level of competition in the market;

¹ Ms Teresa Corbin, *Transcript of Evidence*, 28 November 2008, p. 5; and ACCC, *Submission No. 3*, p. 11.

- the cost of international roaming services compared to non-roaming services; and
- what proportion of the end user charges is attributable to the wholesale price, and what proportion is attributable to the retail mark-up applied by home network providers.²

Report findings

- 3.4 Both reports contain a number of similar findings about how the person who subscribed to the roaming service (described as an 'end user') is charged.

Wholesale charge

- 3.5 The wholesale part of the end user price reflects the Inter Operator Tariff (IOT) charge as negotiated between the home network operator and the visited network operator.³
- 3.6 Optus provided the Committee with some insight as to how these wholesale arrangements are agreed upon and passed on to consumers. Optus asserted that carriers negotiate the best wholesale price they can with the visited network operator, then reflect this wholesale price in their end prices to consumers.⁴
- 3.7 The Committee also heard evidence as to how these wholesale transactions occur. When a call is made on a visited network, the billing personnel of the visited network compile a billing file with the details of the call and the wholesale charges associated with it. This billing file is then sent to a clearing house where the file is distributed to the home network operator. The home network operator then pays the wholesale charges as recorded in the billing file.⁵
- 3.8 These wholesale costs are incurred by the home network operator whenever one of their subscribers makes a call on a visited network. The home network operator then attempts to recover these wholesale costs by including them in the retail roaming bill to the subscriber who made the call.

2 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 15.

3 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 15.

4 Mr Andrew Sheridan, *Transcript of Evidence*, 3 December 2008, p. 4.

5 Mr Declan Walsh, *Transcript of Evidence*, 28 November 2008, p. 44.

3.9 The Australian Mobile Telecommunications Association's (AMTA's) submission to the inquiry highlighted that, due to this wholesale arrangement, home network providers shoulder some amount of risk to facilitate the roaming service. The submission stated:

... IOT charges are paid to the visited network by the home network irrespective of whether the home network recovers any fees from its customer. The home network operator therefore takes on all bad debt risk (i.e. the risk of the non-recovery of charges from the end customer).⁶

3.10 The Committee heard evidence that this wholesale billing method can cause delays to the billing of international mobile roaming charges to the end user. The CTN stated that sometimes providers are unable to provide current balances of international roaming charges to their customers because of delays in receiving billing information from visited network providers.⁷ However, Vodafone Australia argued that these delays are an exception to the rule.⁸

Home network operator's mark-up

3.11 The ACCC determined that the mark-up component of roaming retail charges is not governed by any common set of principles. Rather, each home network operator is free to determine the size of the mark-up component of the retail price. The ACCC suggested that usually this mark-up is determined by adding a percentage of the IOT onto the wholesale charge as negotiated in the party-to-party agreement.⁹

3.12 Telstra advised that the mark-up varies depending on both the carrier and the destination country in which the subscriber uses international roaming.¹⁰

3.13 A range of evidence was provided to the Committee as to how the size of these retail mark-ups are determined by carriers.

Operational costs

3.14 First, many home network providers asserted that there are significant operational costs that must be recovered by providers through the retail mark-up. For example, Telstra pointed out that retail mark-ups must cover

6 AMTA, *Submission No. 9*, p. 11.

7 Ms Teresa Corbin, *Transcript of Evidence*, 28 November 2008, p. 7.

8 Mr Declan Walsh, *Transcript of Evidence*, 28 November 2008, p. 33.

9 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 16.

10 Dr Tony Warren, *Transcript of Evidence*, 3 December 2008, p. 3.

the operational costs of the home network operator including front-of-house customer service, customer support and customer billing costs.¹¹

3.15 AMTA argued that the mark-up component of the retail price covers the costs of negotiating and administrating party-to-party roaming agreements, marketing, customer support as well as cost associated with the maintenance and construction of the network operator's infrastructure.¹²

3.16 Vodafone Australia added the operational costs associated with facilitating wholesale transactions is included in the retail mark-up to the list. According to Vodafone Australia, the operation of the clearing houses, where the wholesale billing information is transacted can be quite costly. The cost of operating of these clearing houses must be recouped by the home network provider by including the cost in the retail mark-up.¹³

Bundling

3.17 Another factor contributing to the home network providers' mark-up was the bundling of roaming with other mobile phone services.

3.18 Vodafone Australia stated that its international mobile roaming service comes bundled with a range of other mobile services, such as domestic voice and SMS. Thus, revenues to Vodafone from the retail mark-up on roaming may allow it to reduce the mark-up applied to other high-demand mobile services within the bundle. This makes the bundle more attractive to a wider range of consumers.¹⁴

Premium service

3.19 Finally, there was a consistent view amongst the providers that international roaming was a premium service and that this may be a factor considered by providers when determining the size of the mark-up on the service.¹⁵ In other words, international mobile roaming is considered to be a privilege type of service, attracting a commensurate cost.

11 Dr Tony Warren, *Transcript of Evidence*, 3 December 2008, p. 3.

12 AMTA, *Submission No. 9*, pp. 16-17.

13 Mr Declan Walsh, *Transcript of Evidence*, 28 November 2008, p. 33.

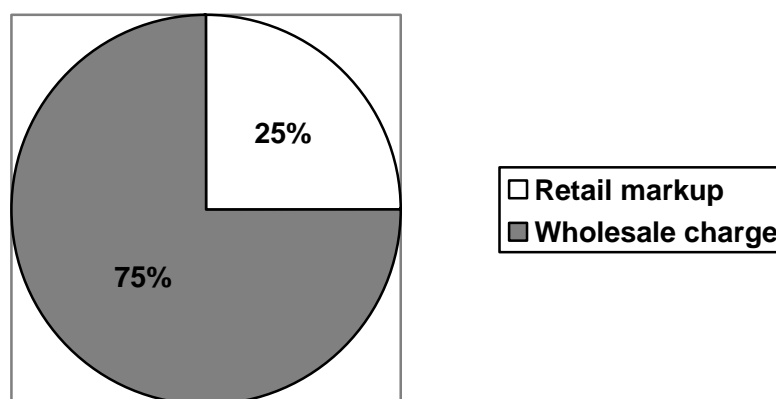
14 Ms Gerogia-Kate Schubert, *Transcript of Evidence*, 28 November 2008, p. 37.

15 ATMA, *Submission No. 9*, p. 9

ACCC report

- 3.20 The size of the IOT tariff is negotiated between providers and can be expected to vary depending on the home network operator's call volume, customer expenditure, call volume growth and destination of calls as well as the number of providers in the foreign country.¹⁶
- 3.21 In order to investigate what proportion of the final consumer price of roaming is attributable to the wholesale price and what proportion is attributable to the retail mark-up charged by home network providers, the ACCC used publicly available information from Telstra stating that the retail mark-up for their outbound international roaming services is 30 percent. Using the Telstra figures, the ACCC extrapolated a general figure for the Australian market of a 25 percent markup.¹⁷
- 3.22 Given this 25 percent retail mark-up, the report infers that wholesale charges make up 75 percent of the final price charged to consumers.¹⁸ This conclusion is illustrated below.

Figure 3.1 – ACCC's conclusion regarding wholesale and mark-up components of final consumer price



Source: ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 22.

- 3.23 According to the ACCC, the size of the wholesale charge is based on the profitability of an Australian operator's customer base and the nature of the visited network providers.¹⁹

16 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, pp. 15-16.

17 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 22.

18 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 22.

19 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 22.

- 3.24 The BDCDE suggested that network providers who have a relatively small share of the global international roaming market, such as many Australian providers, are inevitably price takers when it comes to party-to-party agreements:²⁰
- ...[Australian network operators] tend to be price takers rather than price setters. They are often confronted with negotiating roaming agreements with, in some cases, a limited number of alternatives and they are often negotiating with existing alliances of international carriers, so they are confronted with existing pricing arrangements.²¹
- 3.25 According to the ACCC, another factor affecting IOT pricing is the number of providers in a country. Where there are the least number of mobile providers in a country, IOTs are likely to be highest.²²
- 3.26 Industry representatives generally agreed with this assessment. Vodafone Australia supported the arguments put forward by the BDCDE and the ACCC, advising the Committee that the scope, scale and volume of the Australian international roaming market puts most Australian providers at a disadvantage when negotiating IOTs with foreign providers.²³
- 3.27 However the Committee also heard evidence that some network providers are in a position to limit the impact Australia's small volume has on their negotiating power. Vodafone Australia, a subsidiary of the Vodafone Group which has a presence in twenty six countries,²⁴ is sometimes able to take advantage of this global presence when negotiating prices.²⁵
- 3.28 Another possibility for limiting the impact of Australia's small volume is for Australian providers to become members of inter-carrier alliances. The ACCC's submission to the inquiry notes the emergence of inter-carrier alliances that allow network providers from different countries to form a coalition to negotiate IOTs with other larger network providers, increasing the negotiating power of the providers.²⁶ The BDCDE was also of the view that some Australian providers are no longer price takers due to participation in such alliances.²⁷

20 Mr Colin Oliver, *Transcript of Evidence*, 24 September 2008, p. 6.

21 Mr Keith Besgrove, *Transcript of Evidence*, 24 September 2008, p. 4.

22 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 27.

23 Mr Michael Brealey, *Transcript of Evidence*, 28 November 2008, p. 31.

24 Vodafone Australia, www.vodafone.com.au, viewed on 4 February 2009.

25 Mr Michael Brealey, *Transcript of Evidence*, 28 November 2008, p. 32.

26 ACCC, *Submission No. 3*, p. 8.

27 Mr Colin Oliver, *Transcript of Evidence*, 24 September 2008, p. 6.

- 3.29 There are two weaknesses in the ACCC's analysis. The first is its extrapolation from publicly available Telstra figures on the retail mark-up to all Australian providers. This weakness is quite difficult to overcome because of the commercial in confidence nature of this information. In other words, the ACCC could not obtain the same information from other providers.
- 3.30 The second weakness is the age of the report. The report was published in 2005 and was based on information obtained some years earlier. In the mobile phone market, that is enough time for substantial changes to have occurred.

KPMG report

- 3.31 KPMG's investigation employed a different method to the ACCC's analyses. KPMG used publicly available international benchmark data, published by the Technical University of Denmark, to estimate the actual per-minute costs of providing an international mobile roaming service and the average retail cost per-minute to consumers of this service. These costs were then converted to Australian dollars. These estimates include the actual costs associated with termination rates, international call transit rates and roaming specific costs.²⁸
- 3.32 To determine the approximate mark up applied to a roamed call by the overseas and Australian providers, the report deducted the total estimated actual cost from the average end user cost.²⁹ The figures for this analysis are illustrated in the table below.

Figure 3.2 – KPMG's analysis of wholesale and mark-up price components

Charge element	Charge per minute (AUD\$)
Estimated total actual cost	0.46
Average retail cost to consumers	2.75
Approximate retail margin on the actual cost	2.29

Source: Department of Broadband, Communications and the Digital Economy, *Report of findings on international mobile roaming charges*, 2008, p. 23.

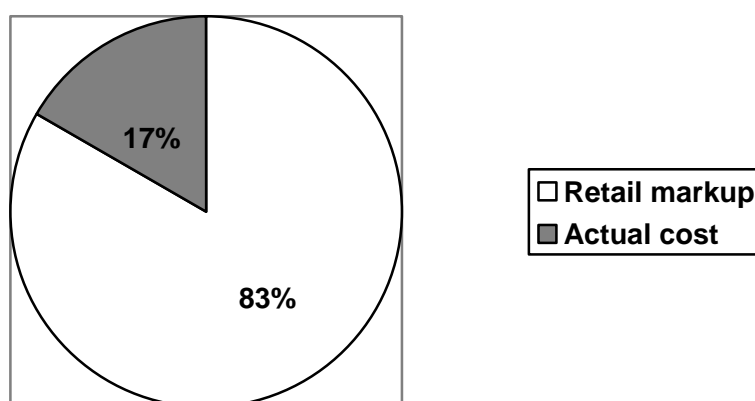
28 Department of Broadband, Communications and the Digital Economy, *Report of findings on international mobile roaming charges*, 2008, p. 23.

29 Department of Broadband, Communications and the Digital Economy, *Report of findings on international mobile roaming charges*, 2008, p. 23.

3.33 Figure two shows that KPMG determined that where a consumer pays \$2.75 per minute for an international mobile roaming call, \$0.46 of this per minute charge is accounted for by the actual cost and \$2.29 by the mark up applied by the overseas and home network providers.

3.34 Figure three demonstrates KPMG's conclusion as a percentage.

Figure 3.3 – KPMG's conclusion regarding actual cost and mark-up components of final consumer price



Source: Department of Broadband, Communications and the Digital Economy, *Report of findings on international mobile roaming charges*, 2008, p. 23.

3.35 The disadvantage of this approach is that the actual cost of the roamed call is not what Australian providers are charged. As has already been discussed, the Australian market has some specific peculiarities, such as being a small market with little bargaining power in international negotiations over IOT tariffs. This could mean that the Australian situation is very different.

Different approaches by the ACCC and KPMG

3.36 Whilst both the ACCC and KPMG analyses are validly based, the Committee notes that the ACCC and KPMG reports each adopt a different approach to investigating roaming, leading to findings that emphasise different aspects of the roaming market. The ACCC's approach focuses attention on the role played by the party-to-party agreements in determining the end user cost. KPMG's approach directs attention to the discrepancy between the actual cost of roamed calls and the end user cost.

- 3.37 In doing this, the KPMG report relies on international benchmark cost information and then assumes that Australian providers are charged this actual cost for roamed calls by overseas providers. The ACCC, on the other hand, has relied on publicly available information directly from a single Australian carrier and extrapolated this to all Australian service providers.
- 3.38 It should also be noted that the ACCC has investigative powers which provide it with information resources, and an understanding of Australian markets, largely unavailable to private-sector consultancy firms.
- 3.39 The Committee asked the ACCC to comment on KPMG's findings. The ACCC suggested that:
- ...the KPMG 2008 Report appears to correctly identify the actual component costs of providing a roamed call ... as being quite small compared to the charges faced by the end-user. However, no account appears to have been made of the wholesale charges levied by [visited network operators].³⁰
- 3.40 The ACCC also suggested that the benchmark cost information provided by the Technical University of Denmark, and used in the KPMG report, may underestimate the component costs of transmitting a mobile call to and from Australia. The transmission of mobile calls between northern hemisphere countries, which make up the bulk of international call traffic, cover much smaller distances, and may use significantly less resources, than transmitting a call between Australia and Europe.³¹
- 3.41 When carriers were asked to comment on the reports, they suggested that the ACCC's analysis was a better reflection of the reality of roaming arrangements. Telstra, for example, suggested that the conclusion of the ACCC was accurate when compared to their cost data.³²
- 3.42 Vodafone Australia concurred, stating that the wholesale price paid by home network providers to visited network providers constitutes the biggest component of the end user price to consumers.³³
- 3.43 The Committee is of the view that, while both the KPMG and ACCC reports are based on valid sources, neither entirely reflects the pricing situation as both rely on extrapolating conclusions rather than direct data, and that as a consequence, both are flawed.

30 ACCC, *Submission No. 3.1*, p. 4.

31 ACCC, *Submission No. 3.1*, p. 4.

32 Dr Tony Warren, *Transcript of Evidence*, 3 December 2008, p. 3.

33 Mr Michael Brealey, *Transcript of Evidence*, 28 November 2008, p. 50.

Market distortions

- 3.44 In the case of roaming services offered by Australian providers, the Committee considers that the market does not operate effectively because the size of the Australian population reduces competition. Australian providers cannot offer enough customers to providers in other countries to make negotiations over price competitive.
- 3.45 In addition, Australian customers do not generally choose their provider on the cost of international mobile roaming, but on the domestic charges.
- 3.46 The result of this distortion is that the price of roaming in Australia is high, and the product is considered by Australian providers to be a premium service.
- 3.47 In the next chapter, the Committee considers what can be done to ameliorate this distortion.

Regulation of international mobile roaming

- 4.1 In the previous chapter the Committee concluded that the international mobile roaming market in Australia is not functioning effectively because the relatively small domestic population prevents Australian providers from negotiating a competitive wholesale price with providers overseas. This chapter considers the regulatory options available to deal with this problem.
- 4.2 As discussed in the previous chapter, the end user price for roaming has a wholesale and retail component. The wholesale component is a result of negotiations between providers in Australia and in other countries. The retail component is the mark up applied by the Australian operator.
- 4.3 The Department of Broadband, Communications and the Digital Economy (DBCDE) argued that there are two possible regulatory options available:
- regulate retail prices (called retail price control); or
 - regulate wholesale prices.¹
- 4.4 This chapter will consider these options and whether the price information provided to travellers is adequate for them to be aware of the costs involved in roaming.

¹ DBCDE, *Submission No. 10*, p. 2.

Retail price control

- 4.5 Retail price control involves placing a cap on the retail cost of calls. In other words, consumers cannot be charged more than the cap for a call.
- 4.6 Retail price control would involve the Australian Government legislating to implement price caps. Retail price controls for mobile telephony have been used in the past. Specifically, domestic mobile to mobile price control arrangements existed between July 1992 and June 2002. Roamed calls were not included in this price control.²
- 4.7 Retail price controls have, on the face of it, a big advantage for consumers. In a market where the price of a service is high, retail price controls can be used to reduce the price of the service by capping its price. In the telephony market, retail price controls have been used principally to ameliorate the effect of having a single provider with close to a monopoly in the market.³
- 4.8 However, the nature of the roaming market means that retail price control is not necessarily the best regulatory tool to employ. While retail prices for roaming are high, this is not due to one provider holding a monopoly in the market, rather it is due to the fact that the wholesale cost of the product may make up to 75 percent of the end user charge.
- 4.9 The wholesale cost is negotiated between Australian providers and overseas providers. As the Australian Government can only impose retail price controls on Australian providers, overseas providers would not be subject to the price control. Australian providers will be forced to negotiate for a charge that allowed them to price roaming services below the cap. If the overseas provider they are negotiating with is not prepared to meet that price, then no roaming agreement will be reached, and roaming will not be available from that provider.⁴
- 4.10 In the Australian Competition and Consumer Commission's (ACCC's) 2005 *Mobile services review: International inter-carrier roaming*, it reached the conclusion that retail price controls are not the appropriate regulatory response to consumer concerns about the high price of roaming services.⁵ The Australian Mobile Telecommunications Association (AMTA) agreed

2 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 45.

3 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 45.

4 DBCDE, *Submission No. 10*, p. 9.

5 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 45.

with this assessment, arguing that retail price controls 'would come at a huge cost to Australian mobile network providers.'⁶

- 4.11 In AMTA's view, any price controls imposed on Australian providers to reduce the end user price of roaming would unfairly penalise Australian providers for an issue outside their control.⁷
- 4.12 The Committee believes that the ACCC's and AMTA's arguments against retail price controls on roaming are sound. Retail price controls would reduce the end user price, but would not deal with the underlying market distortion in the wholesale cost. Australian providers would be left with the double burden of coping with the underlying distortion while carrying the cost of retail price controls. In the long run, it might even mean Australians are not offered the option of roaming in some countries at all.
- 4.13 However, the Committee notes that an alternative to retail price control may be to regulate the percentage of the retail mark up charged within an agreed wholesale pricing framework.

International regulation of costs

- 4.14 The alternative to retail price control is regulation of wholesale costs. Regulation of wholesale costs has the advantage of targeting the distortion that is causing high roaming costs, but, because wholesale costs involve an international negotiations, regulating these costs is much more complicated.
- 4.15 The Committee considers the following regulatory mechanisms for dealing with the wholesale cost of roaming:
- declaring international roaming under Part XIC of the *Trade Practices Act 1974*;
 - regulation similar to the European Commission (EC) Roaming Regulation; and
 - regulation through international cooperation.

6 AMTA, *Submission No. 9*, p. 4.

7 AMTA, *Submission No. 9*, p. 4.

Declaring international roaming

- 4.16 The ACCC noted in its 2005 Review that participants in that inquiry had suggested the ACCC use its powers under Part XIC of the *Trade Practices Act 1974* to declare wholesale roaming charges.⁸ To 'declare' a product or service means to create a legislative instrument that permits the ACCC to regulate that product or service.
- 4.17 In assessing whether to declare the wholesale roaming charge, the ACCC must be satisfied declaration will promote the long-term interests of end users of the service. The ACCC indicated that to do so, it must first be satisfied that it has the jurisdiction to regulate roaming charges set by providers in overseas jurisdictions.⁹
- 4.18 The ACCC believes it is unlikely that it has jurisdiction over the setting of wholesale prices by overseas providers, or over telecommunications services established outside Australia. The Committee also believes it is unlikely that the ACCC has these powers. Further, the ACCC is concerned that, even if it did have jurisdiction over the wholesale cost setting behaviour of overseas mobile network providers, it would be impractical to regulate the wholesale costs set by the large number of overseas mobile network providers on whose networks Australian consumers could potentially roam while travelling overseas.¹⁰

The EU example

- 4.19 Roaming has been under review by the European Commission (EC) since 2005. In 2007, the EC introduced a Roaming Regulation, with the view to reducing voice roaming costs across the EU (European Union). The Roaming Regulation includes the following:
- a Eurotariff, which was a tariff providers in the EU were required to offer their customers who wished to roam within the EU;
 - a cap on wholesale charges between EU providers for roaming until 2010; and
 - a requirement that customers be sent an SMS when they crossed a border to inform them of the mobile roaming rate they were going to be charged.¹¹

8 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 43.

9 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 43.

10 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 43.

11 ACCC, *Submission No. 3*, p. 6.

- 4.20 The EC Roaming Regulation was reviewed by the European Regulators' Group (ERG) in 2008 with the intention of assessing the effectiveness of the regulation and whether SMS and data roaming should be included in the regulatory regime. The ERG found that:
- the price of voice roaming had fallen significantly to the level of the Eurotariff or just below, and had remained there;
 - the price of SMS roaming had not decreased for some time and was high compared to the actual cost of sending an SMS on a roamed phone; and
 - the price of downloading data while roaming had steadily decreased.¹²
- 4.21 The ERG review recommended that the EC Roaming Regulation be extended beyond 2010, and that SMS roaming be included. In relation to data roaming, the ERG considered that monitoring costs would be sufficient at this stage.¹³
- 4.22 The Australian Telecommunications Users' Group (ATUG) expressed support for international regulation through development of a single market mechanism similar to the EU regulations. ATUG recommends using mechanisms such as free trade agreements to negotiate EU type regulatory arrangements.¹⁴
- 4.23 Alternatively, AMTA argued that the introduction of price regulation in the EU is no reason to consider similar price regulation in Australia. According to AMTA, Australian and European conditions, such as the size of the market, the structure of the market, and the fact that the EU encompasses a number of countries, makes the situation very different.¹⁵
- 4.24 Outside of the EU, regulation of roaming costs is virtually non-existent. This is primarily because the advantages to roaming regulation offered by the structural arrangement of the EU are not replicated elsewhere. The close proximity, both geographically and in regulatory terms, makes negotiating and implementing roaming regulation much easier in the EU. Other regions (including the Asia Pacific) do not exhibit the strong economic ties and commonality of cultural and political institutions that characterise the EU.¹⁶

12 ACCC, *Submission No. 3*, p. 6.

13 ACCC, *Submission No. 3*, p. 6.

14 ATUG, *Submission No. 6*, p. 18.

15 AMTA, *Submission No. 9*, p. 4.

16 ACCC, *Submission No. 3*, p. 7.

International cooperation

- 4.25 The DBCDE described three approaches to international cooperation to regulate wholesale costs:
- bilateral discussions between countries;
 - multilateral discussions at forums such as the Asia Pacific Economic Cooperation group of nations (APEC) and the Organisation for Economic Cooperation and Development (OECD); and
 - negotiations at international rule making bodies, such as the International Telecommunications Union (ITU).¹⁷
- 4.26 Bilateral discussions can cover mutually beneficial arrangements between like minded countries. The ACCC considered that the most productive bilateral partners for Australia would be with telecommunications regulatory counterparts, in particular, the New Zealand Commerce Commission, Ofcom (UK), and the Federal Communications Commission (USA).¹⁸ In addition, the DBCDE suggested discussions with the EU.¹⁹
- 4.27 In fact, the ACCC is already in discussion with the New Zealand Commerce Commission, primarily with a view to determining which regulatory arrangements, if any, might assist improving international mobile roaming outcomes for Australian and New Zealand residents.²⁰
- 4.28 A key issue in relation to bilateral regulatory cooperation is that the nations Australia enters into bilateral arrangements with must, to have any beneficial effect, be nations which Australians visit in some numbers. The ACCC advised that the top four destinations for Australians in 2007 were:
- Asia (47 percent of Australians travelling);
 - Europe, including the UK (25 percent);
 - New Zealand (19 percent); and
 - North America (12 percent).²¹
- 4.29 As is clear from these statistics, New Zealand is the largest single nation destination.

17 DBCDE, *Submission No. 10*, p. 9.

18 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 52.

19 DBCDE, *Submission No. 10*, p. 9.

20 ACCC, *Submission No. 3*, p. 7.

21 ACCC, *Submission No. 3*, p. 8.

- 4.30 International collaboration can be developed to provide better information on costs and charges, and to share best practices in forums such as APEC, the OECD, the ERG, and International Competition Network (ICN).²² Although the outcome of this work is usually non binding, it can be influential in encouraging action towards a common purpose and establish baselines for good regulatory practice.²³
- 4.31 Each of the bodies above has functions in relation to competition policy or regulation involving telecommunications. The ACCC advised that it will explore ways to co-ordinate a regulatory response with these bodies in order to find feasible measures to address the issue of high wholesale costs.²⁴
- 4.32 In particular, the ACCC considers that dialogue and collaboration with overseas regulators in relation wholesale roaming services may assist in identifying a range of regulatory and enforcement actions that will promote wholesale price competition in the supply of these services.²⁵
- 4.33 International rule making can be explored through the ITU. The ITU is the global forum where international telecommunications accounting methods are discussed. However, exploring international rulemaking through the ITU takes a great deal of time, as the agreement of many nations is required.²⁶
- 4.34 The DBCDE advised that the Minister for Broadband, Communications and the Digital Economy has already initiated discussions within APEC and bilaterally with the EU and others to explore options. This work is being followed up by the DBCDE.²⁷
- 4.35 The Committee believes that the only effective regulatory response to roaming prices is to establish an agreed regulatory framework for setting the wholesale cost. It is clear from the discussion above that this is likely to be a difficult and long term solution. Nevertheless, the other possible solutions do not address the underlying distortion in the roaming market.
- 4.36 Both bilateral and multilateral possibilities are being, and should continue to be, explored. In both cases, the Australian Government should continue to make countries with large numbers of Australian travellers, such as New Zealand, the priority.

22 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 52.

23 DBCDE, *Submission No. 10*, p. 9.

24 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 52.

25 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 52.

26 DBCDE, *Submission No. 10*, p. 9.

27 DBCDE, *Submission No. 10*, p. 9.

- 4.37 The Committee recommends that the Australian Government pursue a policy of regulating the wholesale cost of roaming through bilateral and multilateral negotiations with other countries.

Recommendation 1

The Committee recommends that the Australian Government pursue a policy of regulating the framework for the wholesale cost of roaming through bilateral and multilateral negotiations with other countries, ensuring that countries with the largest number of Australian visitors are given priority.

Choosing the best value service

- 4.38 In the absence of an immediate regulatory solution to the cost of roaming, the Committee now discusses what can be done in the short term to assist consumers deal with high roaming prices. Three issues are considered here:
- price monitoring by the ACCC;
 - standardisation of published pricing information; and
 - provision of advice on large bills.

Price monitoring

- 4.39 Periodic monitoring of prices by the ACCC might improve consumer awareness and assist in formulating any future regulatory response.²⁸
- 4.40 The ACCC is required, under Division 12 of Part XIB of the *Trade Practices Act 1974*, to report each financial year to the Minister for Broadband, Communications and the Digital Economy on prices paid by Australian consumers for telecommunications services. Providers are required to provide the relevant information to the ACCC. Roaming is not currently covered in this report.²⁹
- 4.41 When the ACCC considered whether to include roaming in this report in 2005, it found that the monitoring and publication of changes in average

28 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 50.

29 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 50.

prices paid by Australian consumers for international roaming services could help in improving consumer awareness and information, and may assist regulators in considering any further regulatory responses if international roaming prices do not decrease over time.³⁰

- 4.42 In September 2008, the ACCC released a discussion paper that included proposals to introduce reporting requirements for international mobile roaming services, in particular, cost, revenue and service usage information.³¹
- 4.43 Providers have responded to the ACCC's discussion paper. All have opposed the proposals, with some advising that the cost of collecting the information would result in an administrative burden.³²
- 4.44 AMTA acknowledges that information about providers' roaming costs and revenues might be useful for regulatory reasons, but notes that this information is sensitive, and may not be able to be used without disclosing sensitive commercial information about a provider.³³
- 4.45 Given that AMTA concedes that this information may be useful for regulatory reasons, the Committee supports the ACCC obtaining this information from providers. While providers may object to providing this information, the Committee believes it will be in their best interests in the long run. At the very least, it will enable the Australian Government to confirm that Australian providers are not responsible for high roaming costs, and it may even prove a useful tool in international negotiations over regulation of wholesale costs.
- 4.46 The Committee encourages Australian carriers to agree to provide the relevant information to the ACCC. In support of the ACCC's actions, the Committee recommends that the ACCC introduce mandatory reporting requirements for international mobile roaming services, in particular, cost, revenue and service usage information.

30 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 51.

31 ACCC, *Submission No. 3.1*, p. 1.

32 ACCC, *Submission No. 3.1*, p. 1.

33 AMTA, *Submission No. 9*, p. 20.

Recommendation 2

The Committee recommends that the ACCC introduce reporting requirements for international mobile roaming services on Australian providers. In particular, the Committee recommends that cost, revenue and service usage information should be provided.

Standardisation of information on costs

4.47 The DBCDE considered that one of the following options might assist consumers in selecting a roaming service:

- establishing mechanisms for pricing to be easily understood by consumers through standardised reporting mechanisms; and
- encouraging or mandating industry codes on such matters as informing consumers about excessive bills.³⁴

4.48 The ACCC, in its 2005 review, examined three of ways of standardising cost information:

- Enforcement action under section 52 of the *Trade Practices Act 1974* (which prohibits misleading or deceptive conduct) or other similar provisions in Part V of the *Trade Practices Act 1974*. The ACCC indicated that it had received a number of complaints alleging that a mobile network operator's conduct breached section 52 of the Act. However, the ACCC could not reach a view because of the disclaimers commonly provided by mobile providers in relation to, for example, fluctuations in exchange rates.³⁵ The ACCC also believes that section 52 of the Act was not a specific regulatory tool to address, in a pre-emptive manner, broad-based concerns about the provision of consumer information on roaming services.³⁶
- Provision of consumer information under section 28 of the *Trade Practices Act 1974*. Section 28 of the Act provides that the ACCC can develop consumer information campaigns and price information accreditation systems as possible measures for improving consumer information about services.³⁷ In relation to the provision of consumer information, the ACCC pointed out that the Australian Communications and Media Authority (ACMA) has specific

34 DBCDE, *Submission 10*, p. 8.

35 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 47.

36 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 47.

37 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 47.

responsibility for public information and education about telecommunications matters under section 6 of the *Australian Communications Authority Act 1997* and had published a consumer fact sheet on roaming. ACMA's fact sheet provides consumers with basic information about what roaming is, when roaming is available, how roaming services can be activated, the types of roaming services that may be available, and the prices associated with roaming services.³⁸

- Development of an industry code setting out the information to be provided to consumers about international roaming services.³⁹ Industry codes of practice are encouraged in Australia through industry self regulation. Under Part 6 of the *Telecommunications Act 1997*, telecommunications industry bodies (such as the Communications Alliance, a body of industry and consumer representatives) can develop and register industry codes to be registered by ACMA.⁴⁰

4.49 A key point when considering the standardisation of information is the quality of information already available to the public. In 2005, the ACCC judged that information provided by Australian providers was consistent with the requirements in the European International Roaming Code.⁴¹ On this basis, the ACCC did not consider that the development of an industry code dealing with the information provided to consumers on roaming services would significantly improve the information currently available.⁴²

4.50 AMTA argued that all Australian providers include the following information about roaming on their websites already:

- countries where the service is available;
- indicative prices in Australian dollars for each service and the components of the service;
- how to activate international roaming; and
- subscriber eligibility for international roaming.⁴³

4.51 Where an Australian operator has a roaming agreement with more than one operator in a country, the operator also provides cost information for each overseas provider so that the traveller can select a provider of their

38 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 47.

39 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 47.

40 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 48.

41 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 49.

42 ACCC, *Mobile Services Review: International inter-carrier roaming*, 2005, p. 49.

43 AMTA, *Submission 9*, p. 28.

choice in the country they are visiting.⁴⁴ In addition there are ancillary sources of information available to travellers, such as the fact sheets provided by ACMA and AMTA.⁴⁵

- 4.52 The Committee considers that prescriptive requirements for publishing pricing information are not warranted at the moment in the roaming market because information on roaming is reasonably widely available. However, the Committee believes it is worth establishing a minimum standard for information on roaming provided to travellers. The minimum should include:
- countries where the service is available;
 - the choice of providers in each country;
 - indicative prices in Australian dollars for each service and the components of the service;
 - how to activate international roaming and any charges this will incur; and
 - basic information on how the pricing of international roaming differs from the pricing of local calls, including:
 - ⇒ the fact that the traveller pays an international charge to receive calls;
 - ⇒ the fact that the traveller pays an international charge when a caller leaves them a voicemail message; and
 - ⇒ the fact that exchange rate fluctuations means the exact cost of a roamed call cannot be determined in advance.
- 4.53 This minimum standard of information should be available from providers' websites, in hard copy on request by a customer, from shop fronts where customers subscribe to roaming services, and verbally on request by a customer.
- 4.54 The Committee cannot make a recommendation binding on the private sector, but the Committee suggests that AMTA and the Australian providers of roaming services agree amongst themselves to introduce this basic information standard.
- 4.55 Nothing in this suggested minimum should limit providers from providing more information in other ways. In addition, nothing in this standard should restrict the creation of innovative (and cost effective) pricing models by providers.
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44 AMTA, *Submission 9*, p. 28.

45 AMTA, *Submission 9*, p. 28.

- 4.56 To encourage the development of such a standard, the Committee recommends that ACMA facilitate a meeting of the Communications Alliance to develop such a minimum standard.

Recommendation 3

The Committee recommends that the:

- **Australian Communications and Media Authority facilitate a meeting of the Communications Alliance to discuss the development of a minimum standard for consumer information and awareness of roaming and potential costs; and**
- **Australian Government explore opportunities to collaborate with the Australian Telecommunications Users Group's 'Roam Fair' campaign.**

Temporary mobile number portability for roaming

- 4.57 Mobile number portability has been available to Australian consumers since 2001. Mobile number portability allows consumers to retain their mobile phone number when they change provider. Portability is administered under the *Code on mobile number portability* developed by the Australian Communication Industry Forum, now known as the Communications Alliance.⁴⁶
- 4.58 The technical mechanisms involved in mobile number portability vary depending on whether the customer is using a pre-paid or post-paid plan, and the suite of services, such a messaging and fax services, included in the customer's mobile plan. Generally, 'porting' a number involves the customer buying out the remaining plan with the provider they are leaving, and entering into a new plan with the provider they are moving to. There may also be a fee to cover the administration of the 'port'.⁴⁷
- 4.59 Mobile number portability was introduced to improve competition between providers. Prior to the introduction of portability, a customer wishing to retain their mobile number had to remain with the provider from whom they had obtained the number, even if another provider was offering a plan more suitable to the customer's needs. Portability enables

⁴⁶ ACCC, *News release: Mobile number portability a reality*, 25 September 2001.

⁴⁷ ACCC, *Pricing principles for mobile number portability*, 2001, p. 5.

the customer to take their mobile number to another provider, thus enhancing competition.⁴⁸

- 4.60 The Committee believes that a similar arrangement in relation to roaming might reduce the retail mark up through enhanced competition. The Committee's proposal involves allowing temporary number portability between Australian operators for the time a customer uses roaming services overseas. This would allow the customer to select the roaming plan offered by an Australian provider that most suited their travel arrangements, and for the duration of their trip, have access to that provider's plan using their regular phone number. Temporary number portability would be limited to roaming services only.
- 4.61 As all the administrative and technical arrangements are in place to support portability, arranging temporary portability for roaming purposes should not be an insurmountable task.

Recommendation 4

The Committee recommends that the Australian Communications and Media Authority develop, through the Communications Alliance, an amendment to the *Code on mobile number portability* to allow temporary mobile number portability for roaming services.

Providing advice on high bills

- 4.62 At the public hearing on 3 December 2008, the Committee spent some time discussing with AMTA the possibility of advising customers when they are incurring excessive charges while roaming to avoid them experiencing 'bill shock'.
- 4.63 AMTA's representatives advised the Committee that the industry's strategy for dealing with large bills was a preventative one. Providers make every effort to ensure that customers know beforehand that they will experience higher charges using roaming. AMTA pointed out that large bills that cannot be paid by the customers are rarely recovered, and turn into bad debts for the provider, so the provider has some incentive to warn travellers about the costs of roaming.⁴⁹

48 ACCC, *Pricing principles for mobile number portability*, 2001, p. 5.

49 Dr Tony Warren, *Transcript of Evidence*, 3 December 2008, p. 5.

- 4.64 Telstra provided further information on the possibility of advising customers of large bills in a submission to the inquiry. Telstra does not have a protocol for contacting customers who are incurring higher than usual charges while roaming. There are a number of reasons for this, including that Telstra advises travellers using its roaming service to expect higher bills, and that it does credit checks to ensure travellers will be able to pay for roaming.
- 4.65 However, there is a technical barrier to being able to advise customers of excessive charges. When customers are roaming overseas, there is a delay in receiving billing information from the overseas carriers.⁵⁰ Telstra advised the Committee that this problem only arises for post-paid customers. Pre-paid phones operate on a different arrangement that allows immediate information about the cost of a roamed call. Another advantage of pre-paid phones is that there is a specific limit on the amount of money that can be spent on roamed calls.⁵¹
- 4.66 The Committee understands that the possibility for near real time costing information to be available for post-paid roaming customers is at least two years away. Given that real time cost information is available to pre-paid phone customers, it would appear to the Committee that the technological infrastructure for providing real time cost information to post-paid customers is already available.
- 4.67 The Committee encourages providers to utilise this technology for post paid users to ensure customers receive billing information in a timely manner and to reduce the risk of bill shock.
- 4.68 There is no simple solution to the problem of the cost of roaming. Australia's small population means that Australian providers cannot offer the large client base needed to negotiate a cheap wholesale price for roaming services.
- 4.69 As the wholesale price is negotiated with an overseas provider, it is effectively beyond the reach of Australian regulators. Further, Australia is not part of an active economic region that could develop a regulatory response that would be binding on its members, such as the EU. Australia will have to work bilaterally and multilaterally with single countries and trade groups.

50 Telstra, *Submission 17*, p. 2

51 Telstra, *Submission 17*, p. 2.

- 4.70 Users of roaming services hoping for costs to fall should not be in any doubt that regulatory action will take time and is likely to only be periodically successful.
- 4.71 Roaming users wishing to reduce the cost of staying in touch while travelling may wish to consider some of the alternatives to roaming. These alternatives are examined by the Committee in the next chapter.

Alternative services to international mobile roaming

- 5.1 A range of alternatives to international mobile roaming are available to consumers. During the inquiry the Committee investigated these alternatives for:
- their utility in comparison to roaming;
 - their cost; and
 - whether they exert any downward pressure on the costs of roaming.
- 5.2 In considering the alternatives it needs to be noted that only a small proportion of travellers use roaming. The Australian Mobile Telecommunications Association (AMTA) put the number of users at between five to 20 percent of Australians travelling overseas. It can thus be inferred that the majority of travellers either do not communicate whilst overseas, or use substitutes.¹
- 5.3 The alternatives considered in this chapter are:
- international calling cards;
 - short message service;
 - use of local networks;
 - email; and
 - use of hotel telephones.

¹ Mr Christopher Althaus, *Transcript of Evidence*, 3 December 2008, p. 1.

International calling cards

- 5.4 International calling cards allow users to make international calls via land-line telephones. Users purchase the card either in their home country or overseas. At the point of purchase, the card contains an amount of 'credit' which can then be used to make telephone calls. The user dials the Person Identification Number contained on the card and then dials the telephone number of the person they are trying to contact. Credit is then deducted from the card's balance for that call. The call rates and rate types (for example being charged per minute or per call) vary depending on the type of card and the location from which the user is calling. When the credit on the card runs out, users can either recharge the credit on the card or purchase a new card.
- 5.5 International calling cards are widely available, both in Australia for purchase prior to travel and overseas.² Further, in some cases international calling card charges are much cheaper than international mobile roaming services.³
- 5.6 However the Committee was informed of the limitations which apply to international calling cards. The Consumers' Telecommunications Network (CTN) pointed out that many calling cards are not transferable between countries and users have to purchase a new card in each country. Further, CTN stated that sometimes users must pay a charge to access fixed phone lines, such as in hotels, and this may in fact make the use of calling cards more expensive than mobile roaming.⁴
- 5.7 International calling cards do not provide the mobility or convenience of international mobile roaming services, and do not permit travellers an immediate form of contact. Because of these limitations, the Australian Competition and Consumer Commission (ACCC) considered that international calling cards are not a viable alternative for roaming.⁵
- 5.8 The Committee concurs with the ACCC view that calling cards aren't an effective alternative to roaming. Nevertheless, with planning by the traveller, such as calling work or home at an agreed time, international calling cards can come close to replicating the utility of voice roamed calls at a much cheaper price.

2 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 30.

3 Ms Danielle Notara, *Transcript of Evidence*, 28 November 2008, p. 10.

4 Ms Teresa Corbin, *Transcript of Evidence*, 28 November 2008, p. 11.

5 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 32.

Short Message Service (SMS)

- 5.9 While SMS is a roaming service, it is examined here as a competitor of roamed voice calls. As discussed in chapter two, SMS is a facility for exchanging short text messages between mobiles. Users prepare a message on their mobile phone with up to 160 characters. This message is then sent via the overseas carrier's network to the home carrier's network where it is delivered to the recipient's mobile.
- 5.10 AMTA argued that the use of SMS through international mobile roaming is often much cheaper than making a voice call via international roaming. Thus SMS can be considered as a feasible alternative to using voice calls via international roaming.⁶
- 5.11 However there are some drawbacks to using SMS. The ACCC's review pointed out that SMS only allows consumers to communicate in a truncated and intermittent way as opposed to the simultaneous communication allowed by voice calls. The ACCC concluded that SMS is not a true substitute of international mobile roaming voice services.⁷
- 5.12 The Committee believes that SMS provides an alternative to voice roaming for users who only require an intermittent and basic form of communication. For example, SMS may prove an effective low cost means for fellow travellers to keep in contact.

Use of local networks

- 5.13 Users can either hire or buy a Subscriber Identity Module (better known as 'SIM') card from one of the mobile phone providers in the country they are travelling to. The SIM card is then installed in their mobile and replaces the SIM card from their Australian provider. In effect, the traveller is taking out a short term contract with a provider in the country they are visiting. A range of such services are available:
- users can buy a SIM from a local provider in the destination country;
 - users can hire a mobile phone and SIM that functions as a local phone on the visited network either before leaving or once they have arrived in the destination country; and

6 AMTA, *Submission No. 9*, p. 24.

7 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 31.

- users can purchase a SIM card that operates as a local network SIM on the visited network before leaving to their destination country.

These services are available in both pre-paid and post-paid forms. A pre-paid SIM would allow the consumer to use the local network until the credit on the SIM runs out. Alternatively a post-paid SIM would allow the consumer to use the local network and then pay for their calls via a regular bill.⁸

- 5.14 Both the ACCC and KPMG reviews note that the availability of this service is growing.⁹ Both the AMTA and Vodafone submissions state that the availability and low cost of these options make them very competitive alternatives to international mobile roaming.¹⁰
- 5.15 There are some disadvantages to this option. The first is that the traveller has a new phone number which needs to be communicated to everybody who might need to contact the traveller. Also, in order to access local mobile networks it may be necessary to purchase a new card in every new country. This is time consuming and expensive for the consumer, especially when taking into account the language barriers that exist in some regions. The language barrier features as a further problem when the traveller needs to access customer support services.¹¹
- 5.16 The Committee feels that local networks are a good alternative for travellers spending extended periods in one region. However the Committee recognises that for other travellers this alternative has a series of limitations including restricted mobility, difficulty of purchase and limited ability to access support services. Signing up to services provided by local networks in the destination country is not a full substitute for international mobile roaming.

Using the internet

- 5.17 The Committee surveyed two internet based alternatives to international mobile roaming: Voice over Internet Protocol (VoIP) and email.

8 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 31.

9 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 31, and Department of Broadband, Communications and the Digital Economy, *Report of findings on international mobile roaming charges*, 2008, p. 36.

10 Vodafone Australia, *Submission No. 13*, p. 14, and AMTA, *Submission No. 9*, p. 23.

11 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 32.

Voice over Internet Protocol (VoIP)

- 5.18 VoIP is a technology that allows for the transmission of voice communications over the internet. This technology has been implemented to transmit voice calls between fixed-line telephones and the benefit for travellers is that VoIP enables communication from a computer to VoIP land lines, other computers and VoIP enabled mobile phones.
- 5.19 A user accesses the internet and downloads a VoIP software program onto the computer. Some VoIP software programs are free whilst some require a subscription fee. The user can then initiate a conversation with particular users who have a compatible VoIP capability enabled on their phone line, mobile or computer. Next, the user speaks into a microphone connected to the computer. The VoIP program then converts the sound into a digital signal and transmits it via the internet to the recipient's device. The recipient's VoIP device then converts the digital signal back into sound and conveys the voice to the listener. The quality and speed of VoIP calls are virtually the same and sometimes better than other voice services.¹²
- 5.20 Vodafone Australia's submission to the inquiry stated that many areas frequented by travellers such as airports, hotels and cafes have wireless internet access and thus VoIP communication is a viable substitute.¹³ The submission to the inquiry by AMTA further supports the notion that a wide range of internet resources are available to travellers and that VoIP provides an almost perfect alternative to international mobile roaming.¹⁴
- 5.21 The AMTA submission further notes that a range of mobile devices are emerging which can access the internet and run VoIP programs, thus increasing the applicability of VoIP communication as a substitute to international roaming.¹⁵ However the Committee notes that accessing the internet from these mobile devices whilst overseas would presumably incur international data roaming charges which may in turn make the use of VoIP on mobile devices significantly less cost effective.
- 5.22 The Committee notes that some of the limitation's outlined in the ACCC's review apply to the use of VoIP. Namely, VoIP services (with exception of VoIP on mobile devices) do not provide the mobility or ease of contact as do international mobile roaming voice services.¹⁶

12 Federal Communications Commission, *FCC Consumer Fact Sheets: Voice over Internet Protocol*, 2009.

13 Vodafone Australia, *Submission No. 13*, p. 14.

14 AMTA, *Submission No. 9*, p. 24.

15 AMTA, *Submission No. 9*, p. 23.

16 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 32.

Email

- 5.23 Email allows users to exchange extended written messages via the internet. Most email accounts can be accessed remotely through internet web browsers. Thus, for travellers who can access the internet, communication via email could be substituted for making a voice roaming call.
- 5.24 As previously mentioned, the submissions of both Vodafone Australia and the AMTA argue that a wide range of internet resources are available to travellers, including internet-enabled mobile phones.¹⁷
- 5.25 The submission to the inquiry by the Department of Foreign Affairs and Trade states that the use of internet-enabled mobile devices to send emails can often eliminate the need for extended international phone calls and provides a flexible means of contacting people whilst travelling.¹⁸ Vodafone Australia also advocates email as a substitute to international mobile roaming.¹⁹
- 5.26 Email is similar to SMS, but significantly more flexible, enabling large amounts of text and attachments to be sent. In addition, where email is accessed at internet cafes or on hotel computers, it can be very inexpensive.
- 5.27 The Committee is of the view that internet-based options provide a good alternative to roaming. In many countries, internet connections are widely available and relatively cheap. Travellers can frequently access their email from any computer with an internet connection. Further, the utility of the internet as medium for voice communications is growing with the proliferation of VoIP technology. The Committee notes that some limitations do apply to both email and VoIP, such as diminished ease of contact. Nevertheless, the Committee believes that internet-based communication provides the best available substitute to roaming.

The use of hotel phones

- 5.28 Another alternative to international mobile roaming cited during the inquiry was the use of fixed lines in places such as hotel rooms. Hotels and guesthouses usually provide access to a fixed line phone either in the room

17 AMTA, *Submission No. 9*, p. 24.

18 DFAT, *Submission No. 5*, p. 2.

19 AMTA, *Submission No. 9*, p. 14.

or in a central common room. Travellers can use this phone to call locally or internationally at the rates as charged by the local network. The use of these phones usually incurs an extra charge levied by the hotel or guesthouse.

- 5.29 Both Vodafone and AMTA advocated hotel phones as a widely available and accessible alternative to international mobile roaming.²⁰
- 5.30 The ACCC reported that the use of hotel phones is not only an imperfect alternative because of its lack of mobility and lack of ease of contact, but also because the use of hotel phones usually comes at a premium price. Therefore the ACCC was of the view that hotel phones do not provide a cost effective alternative to international mobile roaming services.²¹ Further, the CTN also advised that extra charges on hotel phones are common and prevent this being a cheap alternatives to international mobile roaming.²²
- 5.31 In the Committee's view, the use of hotel phones may provide an alternative to roaming for users with little or no budget constraints, such as business travellers, and travellers that are staying in the one place for an extended period. However, the Committee observes that the high price of using hotel phones means that it may not be widely perceived as a viable alternative to roaming.

Committee conclusion

- 5.32 None of the options offered here are genuine alternatives to international mobile roaming, although internet based options come closest. The Committee considers that it is unlikely that any of these alternatives exercises a downward pressure on roaming prices. This finding is supported by the ACCC, which stated that the alternatives to international mobile roaming available to consumers are imperfect substitutes and do not provide a true alternative.²³
- 5.33 Given that regulation of international mobile roaming is a long term proposition, the alternatives provide the best opportunity to reduce the costs of staying in touch with work and family while travelling overseas. While none of the alternatives offers a direct replacement for the utility of roaming, a traveller who pays attention to their communications needs can come close to replicating the utility of roaming at a fraction of the cost.

20 AMTA, *Submission No. 9*, p. 22, and Vodafone Australia, *Submission No. 13*, p. 14.

21 ACCC, *Mobile services review: International inter-carrier roaming*, 2005, p. 34.

22 Ms Teresa Corbin, *Transcript of Evidence*, 28 November 2008.

23 ACCC, *Submission No. 3*, p. 12.

- 5.34 The bulk of travellers are opting either for one of these alternatives or are not communicating at all. Consumers, in other words, are 'voting with their feet' when it comes to the cost of roaming.
- 5.35 However, inexperienced travellers may not be aware of the range of alternatives to roaming that exist, some of which may be more appropriate for those travellers.
- 5.36 In order to further assist travellers with decisions about alternatives to mobile roaming, the alternatives should be included information on roaming provided by the Australian Government such as 'Smart Traveller'. The Committee notes, for example, that the fact sheet on roaming provided by the Australian Communications and Media Authority makes no mention of the alternatives. The Committee therefore recommends that, when an Australian Government agency provides information to the public on roaming, the alternatives to roaming be included as part of the information.

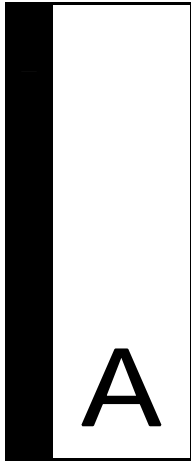
Recommendation 5

The Committee recommends that when an Australian Government agency provides information to the public on roaming, the alternatives to roaming be included as part of the information. These alternatives should include:

- international calling cards;
- short Message service;
- use of local networks;
- email; and
- use of hotel telephones.

Ms Belinda Neal MP

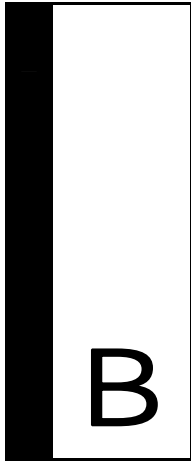
Chair



Appendix A – List of submissions

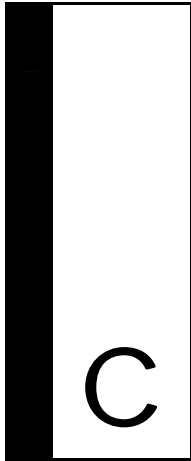
- 1 Monash University
- 2 Mr Robert Johnston
- 3 Australian Competition and Consumer Commission
- 3.1 Australian Competition and Consumer Commission
SUPPLEMENTARY (to Submission No. 3)
- 4 BackChat Mobile
- 5 Department of Foreign Affairs and Trade
- 6 Australian Telecommunications User Group
- 7 AUSTAR Entertainment Pty Ltd
- 8 CHOICE
- 9 Australian Mobile Telecommunications Associations
- 9.1 Australian Mobile Telecommunications Associations
SUPPLEMENTARY (to Submission No. 9)
- 10 Department of Broadband, Communications and Digital Economy
- 11 EVUA Limited
- 12 Hutchisons Telecoms
- 13 Vodafone Australia
- 14 Telecommunications Industry Ombudsman Ltd.

- 15 Consumers Telecommunications Network
- 16 Mr Gerard Webb
- 17 Telstra
- 18 CONFIDENTIAL



Appendix B – List of exhibits

- 1 Department of Broadband, Communications and Digital Economy
Report of findings on: International Mobile roaming charges
(Related to Submission No. 10)



Appendix C – List of hearings

Wednesday, 24 September 2008 – Canberra

Department of Broadband, Communications and Digital Economy

Mr Colin Oliver, Assistant Secretary, International Branch

Dr Jason Ashurst, Manager, ITU & Treaties Section

Mr Keith Besgrove, First Assistant Secretary Telecommunications,
Networks Regulation & Australia Post

Wednesday, 26 November 2008 – Canberra

Australian Competition and Consumer Commission

Mr Michael Cosgrave, Group General Manager, Communications Group

Mr Robert Wright, General Manager, Compliance & Regulatory
Operations Communications Group

Friday, 28 November 2008 – Sydney

Consumers Telecommunications Network

Ms Teresa Corbin, Chief Executive Officer

Ms Danielle Notara, Policy & Research Project Officer

Telecommunications Industry Ombudsman Ltd.

Ms Deirdre O'Donnell, Ombudsman

Vodafone Australia

Mr Michael Brealey, Manager Public Policy & Corporate Responsibility

Mr Matthew Russell, Public Policy

Mr Declan Wash, Head of Roaming

Ms Georgia-Kate Schubert, General Manager Public Policy & Corporate Responsibility

Wednesday, 3 December 2008 – Canberra**AMTA**

Mr Brain Currie, AMTA Member & Regulatory Affairs Manager,
Hutchison Telecommunications Australia Limited

Mr Andrew Scheridan, AMTA Member & General Manager, Interconnect
& Economic Regulation Optus

Mr Chris Althaus, Chief Executive

Dr Tony Warren, Executive Director Regulatory Affairs, Public Policy &
Communications