

**SUPPLEMENTARY SUBMISSION TO THE
AUSTRALIAN COMPETITION AND
CONSUMER COMMISSION**



Mobile Services Review 2003

Discussion Paper

2 July 2003

1. Introduction

- 1.1 This submission provides additional material on the Commission's Mobile Services Review discussion paper.

2. National Roaming

- 2.1 Vodafone provides the following response to the questions set out in the discussion paper:

Question 1: Should the domestic intercarrier roaming service be regulated?

- 2.2 Regulatory intervention should only occur in instances of durable market failure. While Vodafone notes that the ACCC has received a confidential complaint regarding national roaming, Vodafone is aware of no evidence to suggest that mobile carriers have – or are likely to have - acted anti-competitively by not agreeing to commercial terms for national roaming agreements.
- 2.3 Commercially negotiated and agreed national roaming is a feature of the Australian mobile services market. Since 1999, there have been a number of commercially agreed national roaming agreements that have provided customers with greater service levels and carriers with an alternative to new infrastructure investment. Vodafone has experience in such commercial negotiations as both an “access provider” and as an “access seeker”.
- 2.4 When the ACCC last reviewed the national roaming issue, Vodafone considered that there were strong incentives on carriers to agree to commercial deals. In Vodafone's case, these incentives manifest themselves in the desire for us to maximise the efficiency of our mobile network by developing new commercial relationships. Since the ACCC's review, industry developments appear to have strongly backed up this view (see discussion below for further information on the range of commercial agreements that have occurred since 1999).
- 2.5 As a commercial matter, some parties will choose not to seek national roaming as they do not see a sustainable commercial benefit in doing so.
- 2.6 In addition, it is important to note that there are a range of supply side and demand side alternatives to the traditional national roaming service.
- 2.7 On the supply side there is infrastructure sharing (ie sharing of a range of network elements from towers, cabins, antennae to base stations and switches). Alternatively, carriers could potentially share administrative functions, or the costs of one network. Or an MVNO-type relationship may develop. Commercial negotiation will determine the most appropriate solution for a particular set of circumstances. Similarly, the business model will be negotiated through commercial discussions and structured according to each situation and each party's requirements.
- 2.8 On the demand side customers have a range of alternatives. For instance, our customers can purchase the Globalstar satellite service that provides 100%

mobile coverage across Australia and coverage up to 200 nautical miles off the mainland and Tasmania. This technology integrates both GSM and satellite services with dual-mode mobile handsets. So when no GSM signal is detected, the customer's mobile handset automatically switches to satellite mode to continue coverage. Vodafone recently sold the Globalstar service to a local consortium and continues to offer the service to its customers. In addition, customers may have SIM cards for each network on which they want to have a service.

Question 2: How should domestic intercarrier services be defined?

- 2.9 Vodafone considers that it is difficult to tightly define a national roaming service. Domestic intercarrier roaming may take a variety of forms to cater to the different needs of commercial parties.
- 2.10 Given our strong views that this service should not be declared, we have not provided detailed views on how a proposed service definition should be defined, but we would be happy to discuss this point with the ACCC in more detail if required.

Question 3: Should the domestic intercarrier roaming service description be limited to only apply to areas where a carrier has no network coverage? Should the service description be limited to apply to only a subset of mobile telephony networks (ie GSM, CDMA, or 3G)?

- 2.11 We do not consider that the national roaming service should be declared. No market failure exists to justify such an intervention. Given this view, we have not provided detailed views on what services should be subject to a determination.

Question 4: Is a broad market definition, such as that implemented for the GSM/CDMA termination service appropriate for domestic intercarrier roaming? Or should a narrower market definition be applied (eg 1800MHz)?

- 2.12 We do not consider that the national roaming service should be declared. No market failure exists to justify such an intervention. Given this view, we have not provided detailed views on the appropriate market definition of a national roaming service at this time.
- 2.13 Our view is that regulation should be tightly defined to areas of the market where there is a durable market failure. We did not support extending the GSM mobile access declaration to CDMA service because there was no evidence that a market failure existed for CDMA access. Similarly, given that there appears to be no evidence of a market failure in the provision of national roaming services, declaration is not warranted.

Question 5: Would declaration of domestic intercarrier roaming promote competition in any downstream markets? If so, in which

- 2.14 We consider that declaration of national roaming services will have a detrimental impact on the long term interests of end users. There is no

justification for regulation because there is no market failure. Any moves to regulation will create unnecessary distortions to the proper functioning of the market. It will also signal to the market a heightened regulatory risk. For example, a declared national roaming service is unlikely to stimulate any additional national roaming and if implemented would be likely to discourage additional investment in extended coverage.

Question 6: Have commercial processes been successful in the provision of domestic roaming services to date? Have these had any impact on competition in downstream markets? Are current prices for domestic intercarrier roaming cost reflective?

- 2.15 As discussed earlier, commercial processes have been successful in providing domestic roaming services.
- 2.16 Vodafone has made two commercial arrangements for national roaming. These are:
- Vodafone-Telstra Roaming Agreement
Vodafone entered into a roaming agreement with Telstra in 2001 that allows Vodafone customers to roam on designated highways in Victoria and Tasmania using Telstra's network. The commercial arrangement provides Vodafone with extended coverage in those rural and regional areas.
 - Vodafone-Hutchison Roaming Agreement
During 2002 an agreement was concluded to provide Hutchison 3G customers with roaming on Vodafone's GSM network when out of Hutchinson 3G coverage. The agreement includes voice, TXT and GPRS traffic.
- 2.17 In addition, the Mobile Phones on Highways project (launched in 2001) allowed Vodafone to extend the existing GSM network along major rural and regional highways. As part of the contract with the Government, Vodafone is required to provide inter-carrier domestic roaming upon request on commercial terms.
- 2.18 We are also aware of a number of other commercially agreed national roaming deals that have been agreed over recent years, such as the One-Tel agreement with Telstra and the Hutchinson CDMA roaming deal with Telstra.
- 2.19 We have not used a formal economic cost model to establish or negotiate prices for national roaming. The mobile services market is intensely competitive. This provides a powerful commercial constraint on the prices that can be charged for national roaming services. As such, we consider that both the structure and the quantum of prices agreed could be considered to reflect the nature and extent of the costs of providing the service.

Question 7: Is any-to-any connectivity relevant to intercarrier roaming?

- 2.20 Vodafone considers that the objective of any-to-any connectivity is unrelated to intercarrier roaming. Vodafone agrees with the Commission's findings in its previous inquiry into domestic intercarrier roaming that domestic roaming involves the connection of a customer to a network rather than the communication between two customers who are already connected.
- 2.21 Achievement of the any-to-any connectivity is measured in terms of the service provided, not any potential geographic extension to the service. We consider that customers are aware of the geographic boundaries of our services with coverage maps freely available.

Question 8: Would the declaration of domestic intercarrier roaming encourage economically efficient use and investment in the infrastructure used to provide the service and/or any downstream services?

- 2.22 Where the risk of regulatory error is significant, it is critical that regulation is squarely focused on real and durable market failures, where there is a likelihood that such intervention will lead to net benefits.
- 2.23 We consider that a move to regulate domestic intercarrier roaming will have a number of adverse impacts on the market for mobile services. We consider that this move would act to dull incentives on firms to invest in new products, services and infrastructure, as doing so would increase the risks of regulatory intervention.

Question 9: What impact would declaration of domestic intercarrier roaming have on the legitimate commercial interests of carriers who would be supplying the service?

- 2.24 As discussed above, declaration would impact on the incentives to invest and innovate in new services.
- 2.25 The existence of an explicit regulatory backdrop would also significantly change the tenor of commercial negotiations. New entrants will have incentives to delay agreeing to commercial arrangements if they believe that a regulated price may lead to advantageous commercial outcomes. Similarly, firms that expected to be caught in the regulatory net would be likely to act more conservatively and limit the range of commercial outcomes that they would be willing to consider. Hence, the existence of a regulatory backdrop may lessen the probability that commercial agreement will be reached by the parties.

Question 10: Is it technically feasible to provide a domestic intercarrier roaming service? Is its application limited only to certain types of network?

- 2.26 Vodafone only has experience with GSM technology. Domestic intercarrier GSM roaming is feasible, as evident from the commercial arrangements currently in place. The customer may have to manually select roaming, and the services available are limited to services provided by the host network and

specified under the roaming agreement. Intercarrier roaming requires the implementation of relatively complex and hence resource-intensive processes to implement. In particular, it requires planning and coordination between the two parties.

2.27 Requirements to provide intercarrier roaming include particular software which may need to be purchased, extensive network conditioning, dedicated infrastructure for the exchange of billing information, fraud management and lawful interception processes, and ongoing maintenance programmes.

2.28 **[commercial in confidence]**

Question 11: If declared, what form of regulation would most effectively promote the LTIE?

2.29 Vodafone does not consider that any form of regulation of national roaming would be in the long term interests of end users.

Question 12: What pricing principles should be applied for a domestic intercarrier roaming service in the event of declaration? Would the costs of implementing a cost-based approach outweigh any benefits

2.30 As discussed, regulation (and associated pricing principles) should only be considered if there is evidence of durable market failure for the provision of national roaming. In our view, there is no such evidence and hence, the service should not be declared.

3. International Roaming

3.1 International roaming is part of the bundle of services that Vodafone customers can use. There are two elements of international roaming services that are relevant to the issues covered in the ACCC discussion paper. One is for Australian customers who travel overseas and roam on overseas mobile networks ('outbound roaming'). The second is people from overseas who roam onto Australian mobile networks ('inbound roaming'). Vodafone earns revenues from both 'outbound' and 'inbound'.

3.2 It does not appear to us that the ACCC has any jurisdiction over the commercial arrangements relating to international roaming services. We would appreciate advice from the ACCC on the regulatory context in which the questions outlined in the discussion paper have been asked.

3.3 Notwithstanding this, in the interests of providing the Commission with a greater understanding of the competitive dynamics of the international roaming services market, we have provided detailed responses to the questions posed in the discussion paper.

Question 1: What is the structure of International Roaming charges in Australia?

3.4 International roaming has both a wholesale and retail component. On the retail level, mobile operators sell access to overseas networks to their customers to facilitate use of their service roaming on a visited network overseas. On the

wholesale level, mobile operators buy and sell roaming rights to each others networks to facilitate provision of the service in the retail market to roamers.

- 3.5 International roaming is formed through bilateral agreements between mobile operators. Bilateral agreements are generally formed on the basis of the GSM Association (GSMA) pricing principles. This is to ensure that the globally agreed billing mechanisms operate effectively. However, there are no universally agreed Terms and Conditions for the provision of International Roaming services.
- 3.6 Vodafone's view is that the GSMA pricing principles were necessary in the early stages of the development of the roaming market in order to provide the critical mass needed for billing systems to be developed and for international roaming agreements between carriers to be negotiated quickly.
- 3.7 In recent times we have seen a number of departures from what was a relatively standardised approach. These have occurred as operators compete for international roaming business both at a domestic and at an international level.

Question 2: Is there competition at the wholesale level for international roaming service for inbound roaming services?

- 3.8 Vodafone believes that there is extensive competition at the wholesale level for international roaming service for inbound roaming services.
- 3.9 Such competition exists on two fronts; between competing mobile operators in the domestic market in which the inbound roamer is visiting; and from the various substitutes available to overseas visitors to utilise as a communication tool in place of roaming services.
- 3.10 Competition between domestic mobile operators to attract traffic onto their network exists in the form of different roaming charges from mobile operators. Prior to 2000, such roaming charges were invariably based on the IOT regime under the GSMA pricing principles. Recently, as mobile operators have begun to push for greater value from the roaming market, greater competitive pressures have begun to influence prices for roaming services on a wholesale and domestic level. Increasingly, operators globally, are beginning to move away from the IOT regime and the principle of non-discrimination, so as to negotiate 'preferred' roaming deals with partners internationally so as to direct traffic onto their network. In order to direct greater levels of traffic onto their network, operators are increasingly negotiating volume discounts with partners overseas. We provide greater discussion of this below.
- 3.11 Competition also exists from the various substitutes available to inbound roamers to utilise as communications tools in place of roaming services. Such substitutes include, e-mail, payphones, international pre-paid calling cards, hotel room phones, and mobile phone rentals.

Question 3: Is there competition at the wholesale level for Australian carriers negotiating international roaming arrangements with overseas carriers for outbound roaming services?

3.12 Vodafone believes there to be extensive competition on this basis. Typically, the negotiation of an outbound roaming service is conducted in tandem with the negotiation of inbound roaming services. Hence the factors outlined above are relevant.

Question 4: What is the size of the mark-up over and above the IOT rate typically paid by Australian mobile operators when purchasing outbound roaming services for their directly-connected end-users in Australia?

3.13 Australian mobile operators do not pay a mark-up over and above the IOT when purchasing outbound roaming services. The structure of International Roaming charges are such that the home network is charged the IOT or some other agreed price as a wholesale rate for access to the visited network. The Australian mobile network levies the mark-up on top of the wholesale rate to supply the retail service to the end-user.

3.14 The size of this mark-up varies according to the mobile operator offering the service to the end-user and the wholesale rate offered by the visited network. In the past, this mark-up was traditionally based on the IOT, however as discussed above, mobile operators are increasingly moving away from this through negotiation of volume discounts to attract greater roaming traffic onto their network. This in turn places greater competitive pressures on the retail rate. One example of this is the agreements retail price arrangements that are in place for Vodafone New Zealand customers that roam to Australia. Notwithstanding the wholesale arrangements between Vodafone Australia and Vodafone New Zealand, customers face generally the same retail rates when roaming on the Vodafone Australia network that they face when they are at home. This is an example of some of the innovative pricing arrangements that are beginning to emerge world wide.

Question 5: What is the size of the mark-up charged by Australian carriers over and above the IOT rate in negotiating with overseas carriers whose end-users purchase inbound roaming in Australia?

3.15 In the inbound roaming context, Australian carriers do not levy a mark-up over and above the IOT rate.

3.16 In this context the home network purchases wholesale air-time from the Australian partner network. A mark-up is then levied on top of this mark-up by the home network, and charged to the end-user.

3.17 The size of this mark up is determined by the overseas operator and Vodafone Australia plays no part in determining its value.

Question 6: What is the size of the retail mark-up charged by Australian carriers over and above the overseas carriers' relevant charges for Australian end-users roaming on to overseas networks when abroad?

3.18 [commercial in confidence]

Question 7: Is the mark-up cost oriented? If so, why?

3.19 We consider that international roaming services are a market in transition. The initial period of market development has been focused on ensuring that the service can work from a technical perspective. As mobile penetration has increased and a larger potential market for international roaming services emerges, the focus is shifting to greater differentiation between players in terms of price and quality.

3.20 International roaming services is one part of a suite of mobile services that we offer to our customers. We consider the market for mobile services is intensely competitive. As such, there are powerful competitive constraints on the retail prices that can be offered for mobile services.

3.21 [commercial-in-confidence]

Question 8: To what extent are Australian consumers aware of the structure of international roaming charges?

3.22 We endeavour to ensure our customers are aware of the structure of international roaming charges prior to use of the service. This is achieved by making international roaming an opt-in service.

3.23 All Vodafone post-paid accounts are barred from access to international roaming at the time a customer subscribes to Vodafone. The customer must opt-in to the service prior to taking their service for use while roaming. This means, the customer needs to contact Vodafone Customer Care and request access to the service.

3.24 Upon contact with Vodafone Customer Care, we investigate the destination where the end-user will be visiting. Our policy is for Customer Care to then advise the end-user of the networks available in the destination of the end-user, including the network with the most favourable pricing structure, coverage, and access to the same suite of services as the Vodafone Australia network (eg voicemail, information services, SMS to and from Australia).

3.25 Access to this information is available to all Vodafone Customer Care staff via our Intranet. This information is updated regularly to reflect changes in the roaming market.

3.26 Information packs are also available to end-users. Customer Care can mail such packs out to end-users when activating their service for roaming capability. This information pack includes information on how to make and receive calls while roaming; how to use message services (SMS and voicemail); how to use fax and data services; call barring options to limit spend; network details; roaming checklist; and further assistance information.

3.27 Vodafone staff are also trained to provide customers with helpful advice on how to limit spend while roaming. This advice flows from explaining the structure of charges for roaming services. We then offer the customer the option of

activating an all calls divert to CALLscreen, Vodafone's paging service. Activation of all calls to CALLscreen means all calls made to the end-users number will terminate at the Vodafone network without an international leg. The end-user can remain active on the network to receive messages via this service in TXT format, and then chose which ones they wish to respond to on the basis of priority.

Question 9: To what extent do Australian consumers purchase international roaming services when travelling abroad? Does the content and distribution of international roaming 'fact sheets' assist end-users to make informed choices when using these services, and assist promoting competition in these markets?

3.28 Please see above question 8.

Question 10: What is the size of revenues of Australian carriers from providing outbound and inbound roaming services?

3.29 In an effort to provide the ACCC with a sense of the size of inbound and outbound roaming market, we are happy to provide some broad information about revenues and customers. However, as discussed above, it does not appear to us that the ACCC has any jurisdiction over the commercial arrangements relating to international roaming services. We would appreciate advice from the ACCC on the regulatory context in which question 10 have been asked.

3.30 **[commercial in confidence]**

Question 11: Is regulation of international roaming services needed in Australia?

3.31 Before answering this question, we refer the Commission to our earlier discussion about jurisdictional issues with respect to the ability of the ACCC to regulate international roaming services. We look forward to receiving more detail on the Commission's views on this important matter.

3.32 Vodafone does not believe regulation of international roaming services is needed in Australia. Vodafone believes that given the growing development and maturity of the roaming market, and recent developments in technology, regulation is unwarranted.

3.33 As discussed earlier, Vodafone considers that the international roaming market is an immature market in transition. Billing and commercial systems are barely able to keep pace with technological capability. We consider that regulation is even less able to keep pace with market developments.

3.34 Specifically, Vodafone believes that an emerging maturity in the roaming market, coupled with technological innovation, is creating intensifying service competition into the wholesale roaming market.

3.35 Vodafone believes aspects of traditional IOT arrangements have dampened rather than facilitated the competitive dynamics of the market. More specifically, the combination of non-discrimination and publication obligations has the potential to dampen price competition as operators are obliged to pass

cost advantages onto competitors. Vodafone expects that the IOT arrangements will be increasingly marginalised as operators pursue bi-lateral discount arrangements outside of the ambit of the GSMA framework – as they are entitled to do – or as they adopt bypass arrangements such as using call back platforms.

- 3.36 Vodafone's ability to drive a step-change in the market for international roaming services has been further complicated by the existence of additional obligations arising from the Undertakings given to the European Commission as a result of the purchase of Mannesmann in Germany in 2001. These undertakings meant that Vodafone was forced to offer the same international roaming wholesale prices to competitors as offered to Vodafone subsidiaries.
- 3.37 Whilst Vodafone is simply one of many competitors in the roaming market, the Mannesmann undertakings constrained Vodafone's ability offer a differentiated and competitive roaming service that leveraged our global coverage footprint.
- 3.38 Since the expiration of the Mannesmann undertakings in early 2003, Vodafone is reviewing the International Roaming market.
- 3.39 Vodafone believes that, irrespective of the regulatory constraints implied by the GSMA IOT regime and the Mannesmann undertakings roaming markets are now well placed to move to the next phase of competition. This is a complex interplay of commercial strategy, technological innovation and customer behaviour; the precise outcomes of which are uncertain.
- 3.40 In our view, the history of regulation of international roaming services provides the Commission with powerful evidence to back up our claim that regulation is unwarranted. Past regulatory measures, particularly in Europe, has actually held back market development and dulled competitive pressures, leading to poorer outcomes for consumers. Moving forward, we suggest that market based outcomes should be strongly preferred to regulatory intervention.

Question 11: If so, what form should it take?

- 3.41 As stated above, Vodafone does not believe regulation of International Roaming services is required in Australia.

4. 3G services

Question 1: What is the appropriate service definition for 3G mobile services ?

- 4.1 3G is a technology, not a service. It is difficult to come up with a single or simple definition. For instance, 3G networks can support circuit switched voice services, IP voice services, data services and content services. Services provided over 3G networks could be substitutes for mobile services, fixed wire services or internet services. They could be provided using a variety of numbering (eg PSTN or mobile numbers) and commercial structures. As 3G services develop over time, the appropriate service definition will become clearer. It is premature to define a service definition for 3G services in a regulatory sense at this time.

4.2 Frontier Economics has also provided views in their paper (attached to our first submission) about the appropriateness of providing a service definition for 3G services.

Question 2: Are there likely to be any bottlenecks associated with the provision of 3G services ?

4.3 We are not aware of any market worldwide that has sought to regulate the pricing and non-price terms and conditions of 3G services (other than coverage and roaming obligations in some countries that were tied to 3G spectrum auctions). Our view on 3G services and the existence of bottlenecks are similar to our views on the 2G mobile services.

Question 3: If the Commission were to consider declaring 3G mobile services, should the Commission declare a separate 3G service or vary the existing service description for other mobile services to include 3G mobile services ?

4.4 Vodafone does not have a view on the appropriate way for the Commission to declare 3G services.

Question 4: Would declaration of a 3G mobile service (or a variation of the existing mobile service descriptions to include 3G mobile services) be in the LTIE?

4.5 The long term interests of end users would be best served by giving potential 3G service providers certainty that market competition and not regulation will determine how 3G services and commercial structures evolve.

Question 5: Would declaration of a 3G mobile service be likely to promote competition in the market for 3G mobile and/or related services?

4.6 It is likely that a number of 3G service providers and infrastructure providers will emerge over the next few years. Almost all the services they provide will have direct competition from similar services provided over alternate technologies. We do not consider that regulation at this stage and in the absence of any evidence of market problems will promote competition in the market for 3G mobile and related services. Indeed, our view is that declaration will have adverse impacts on the development of competition for 3G services.

Question 6: Would declaration of a 3G mobile service be likely to promote any-to-any connectivity in relation to carriage services that involve communication between end-users of 3G mobile services, either in terms of making or receiving calls?

4.7 We consider that there are powerful commercial drivers to ensure networks are connected. Vodafone is not aware of any new mobile networks having problems interconnecting to existing networks, noting in particular that One.Tel GSM, Hutchinson CDMA and Hutchinson 3G all achieved connectivity to other networks without difficulty.

4.8 The existence of transit opportunities means that there is no need for regulation to promote 'every-to-every' connectivity in order to promote the long term interests of end-users.

4.9 We do not consider that regulation at this stage and in the absence of any evidence of market problems will promote any-to-any connectivity in relation to carriage services that involve communication between end-users of 3G services mobile services. Indeed, our view is that declaration will have adverse impacts on the development of the market for 3G services (as discussed above).

Question 7: Would declaration of a 3G mobile service be likely to promote the economically efficient use of, and the economically efficient investment in, the infrastructure by which 3G mobile services are supplied ?

4.10 Given the lack of evidence that any problems exist combined with the fact that the service has only just been launched commercially, Vodafone considers that the market is much better placed to determine efficient investment in infrastructure at this time.

Question 8: Are there particular risks for the development and uptake of 3G services arising from the vertical integration in the provision of network services, 3G applications, and content services? How might these risks be reduced?

4.11 Vertical integration of the provision of network services, applications and content services may well produce cost effective outcomes. At the same time specialisation in a particular area may allow better focus and enhanced results. The market will decide the appropriate mix, which will undoubtedly change from time to time. Any anti-competitive conduct due to market power in any one area can be dealt with by using the appropriate anti-competitive generic provisions of the Trade Practices Act.

Question 9: Should the Commission engage in regulatory forbearance until such time as the 3G services industry is more mature?

4.12 There is no reason to believe that regulation now, or in the future, is warranted.

Question 10: What is the most appropriate commercial interconnection model for governing the exchange of traffic generated by 3G mobile services?

4.13 The most appropriate commercial interconnection model will be determined by the market through commercial negotiation. It may well be different for different services. Undoubtedly it will be influenced by global considerations as much as local.