

Australian Government

Department of Broadband, Communications and the Digital Economy

Regulation Impact Statement:
Trans-Tasman Mobile Roaming
Public version

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1. Background

International mobile roaming (IMR) services allow users of mobile devices to use those devices (and their associated telephone numbers) while abroad to make and receive voice calls, to make and receive SMS and to upload and download data. While there have been reductions in international roaming charges in some countries over recent years, IMR prices remain very high across the OECD area compared to prices for similar domestic services. The prices of roaming have generally not moved downwards in line with domestic pricing patterns resulting in an increasing gap between domestic and international roaming mobile charges. In the OECD's *Recommendation of the Council on International Mobile Roaming Services*, member countries determined "to take the necessary steps to ensure effective competition, consumer awareness and protection, and a fair price level in international mobile roaming services". It was also determined that where market dynamics are insufficient to produce reasonably competitive wholesale price, member countries are encouraged to reach agreement between Members to regulate wholesale roaming prices. A

A number of Australian Government investigations have brought the issue of IMR prices into focus in the Australian context. In 2005, the Australian Competition and Consumer Commission (ACCC) examined IMR services and concluded that the prices paid by Australian consumers appeared high. Subsequently, in 2009, the Australian House of Representatives Standing Committee on Communications conducted an inquiry into the issue and released the report 'Phoning Home: Inquiry into international mobile roaming' (the parliamentary inquiry). One of the recommendations of this report was that the government engage other countries in bilateral and multilateral negotiations to address high roaming costs⁷, ensuring that countries with the largest number of Australian visitors be given priority.

New Zealand is the top destination for Australian travellers, with approximately, 1.1 million Australians visiting the country in 2009-10;8 similar numbers of New Zealanders visited Australia over the same period. New Zealand is also an important economic partner for Australia. Australia provides over half of New Zealand's foreign direct investment and represents the country's largest export market. New Zealand is also a major market for Australia's manufactured exports.

The Australian and New Zealand governments have as general objectives the promotion of regional integration as a positive force for economic good. It is in this context that each government has entered into, and continues to explore, regional trade agreements with a number of countries.

3 OECD, Recommendation of the Council on International Mobile Roaming Services, 16 February 2012, C(2012)7, http://acts.oecd.org/instruments/

http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=coms/mobileroaming/report.htm

¹ New Zealand Ministry of Economic Development and the Australian Department of Broadband Communications and the Digital Economy, *Trans-Tasman mobile roaming discussion document*, May 2010, p.6, http://www.dbcde.gov.au/ data/assets/pdf file/0008/127709/Trans-Tasman mobile roaming discussion document.pdf

² Unpublished OECD paper

⁴ OECD, Recommendation of the Council on International Mobile Roaming Services, 16 February 2012, C(2012)7, http://acts.oecd.org/instruments/

⁵ ACCC, Mobile Services Review: International inter-carrier roaming', 2005, p. 53, www.accc.gov.au/content/index.phtml/itemId/333898

⁶ Standing Committee on Communications, Phoning Home: Inquiry into international mobile roaming, March 2009,

⁷ IMR differs from domestic services in that the wholesale and retail providers are always in different countries, which limits the range of measures that policy makers and regulators may adopt to unilaterally reduce IMR costs for domestic customers. For further information see unpublished OECD paper.

⁸ Australian Bureau of Statistics, http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features20Sep+2010, accessed 5 November 2012.

Australia and New Zealand are linked by the Closer Economic Relations trade agreement, which is now being supplemented by work towards a Single Economic Market (SEM). The SEM work program has been characterised by the Prime Ministers in terms of a seamless market in which people and business can have a 'domestic-like' experience in either country.⁹

At the November 2010 APEC Leaders meeting, Prime Minister Gillard cited international mobile roaming as an example of how business can be frustrated by trade barriers. The goal of removing international barriers for trade and travel underpinned the EU's decision in 2007 to introduce regulation on public mobile telecommunications networks. One of its key objectives was to ensure that consumers do not pay excessive prices for EU-wide roaming services compared to competitive national prices, thereby contributing to the smooth functioning of the internal [EU] market.

In February 2011 Prime Minister Gillard and the New Zealand Prime Minister made a commitment to work towards more competitive trans-Tasman mobile roaming rates. In May 2010, the Australian Minister for Broadband, Communications and the Digital Economy and the then New Zealand Minister for Communications and Information Technology released a discussion document prepared by the Department of Broadband, Communications and the Digital Economy (DBCDE) and the then New Zealand Ministry of Economic Development. This discussion document established that the state of the market for mobile roaming services between the two countries warranted a full market investigation.

DBCDE and its New Zealand counterpart, the Ministry of Business, Innovation and Employment (MBIE), undertook a joint investigation of the trans-Tasman wholesale and retail roaming markets (the trans-Tasman joint investigation). The trans-Tasman joint investigation considered traffic and revenue information provided by the two countries' mobile operators for the years 2009-11. The data collected was from the established mobile carriers and did not include data analysis from mobile roaming resellers in Australia or New Zealand. To assist with the investigation, DBCDE engaged consultancy firm WIK-Consult to determine and prepare a report on the underlying costs that mobile operators face in providing trans-Tasman mobile roaming (TTMR) services (the WIK report). ¹¹

The trans-Tasman joint investigation resulted in a draft report for public consultation which provides a market definition, a competition assessment, and a range of options for addressing market and regulatory failure. The analysis in the draft report shows that prices and margins in the trans-Tasman roaming wholesale and retail markets have been trending down since 2009 (particularly for data roaming). The draft report concludes that the regulatory threat posed by the trans-Tasman joint investigation has been a key factor in the emergence of reduced prices and margins in each country's wholesale market. These reductions have coincided with the joint investigation, and other factors, such as service alternatives, existing *ex ante* regulatory frameworks and market entry and market rationalisation, though they may have contributed to the reductions, are unlikely to have been sufficient The draft report concludes that the downward trend in wholesale prices and margins is likely to cease following the conclusion the investigation if the governments are not able to maintain a credible regulatory threat.

⁹ Productivity Commission Final Report, Strengthening trans-Tasman Economic Relations, November 2012, p.2.

¹⁰ New Zealand Ministry of Economic Development and the Australian Department of Broadband Communications and the Digital Economy, *Trans-Tasman mobile* roaming discussion document

¹¹ WIK-Consult, Trans-Tasman Roaming Service Costs, 30 May 2012, http://www.dbcde.gov.au/ data/assets/pdf_file/0017/157013/Trans-Tasman Roaming WIK Study - Public version.pdf

¹² Department of Broadband, Communications and the Digital Economy and the New Zealand Ministry of Business, Innovation and Employment, *Trans-Tasman Roaming Draft Report*, August 2012, http://www.dbcde.gov.au/__data/assets/pdf_file/0015/157011/Trans-Tasman_Roaming_Draft_Report.pdf

DBCDE and MBIE received a total of seventeen submissions in relation to the draft report, including submissions from each of the major Australian and New Zealand operators in the TTMR market, consumer advocacy groups in each country, the Australian Telecommunications Industry Ombudsman, and a number of interested citizens. A final report has now been prepared which gives consideration to these submissions. It reasserts the conclusion reached in the draft report. The final report has been released in conjunction with this Regulation Impact Statement.

2. Problem

Consumers and business travellers moving between Australia and New Zealand once faced very significant charges for TTMR voice, SMS and data services across the board. In general, over the course of the trans-Tasman joint investigation, prices and margins have trended down from a very high base. More recently, new entrants at the retail level have also added competitive pressures to the benefit of roaming customers.

The reductions in prices and margins and the introduction of closer substitutes to TTMR services suggest that the market is evolving to a competitive one. Whether these competitive pressures will continue in the future to the benefit of consumers in Australia and New Zealand is difficult to predict. In terms of the trans-Tasman joint investigation, it concluded that the most important factor in driving prices and margins down is the continued threat of regulatory intervention.

Trans-Tasman mobile roaming pricing

Prices for TTMR have trended down recently from a very high base. The trans-Tasman joint investigation concluded that wholesale and retail margins in the TTMR market are not reflective of the cost of providing the roaming services. It seems margins vary significantly amongst roaming providers.

Wholesale margins

As part of the trans-Tasman joint investigation, the Australian and New Zealand governments collected wholesale pricing information from mobile network operators in the TTMR market (on a confidential basis) and engaged a consultant to estimate the costs to operators of providing wholesale and retail TTMR services. The analysis was based on a number of data assumptions related to mobile roaming charges and markets and information sourced from Telstra, Optus and Vodafone in Australia and NZ Telecom, Vodafone NZ and 2degrees in New Zealand.

The joint-investigation estimated approximate wholesale margins for TTMR services using the wholesale pricing information and the consultant's wholesale cost estimates. Assuming that the cost estimates were 5 per cent higher in each of 2010 and 2011 (costs were only estimated by the consultant for 2009), the joint-investigation calculated wholesale margins by estimating the profit (revenues minus costs) that Australian visited networks (VNs) enjoyed in the provision of TTMR services to New Zealand home networks (HNs) and divided the profit by the adjusted cost estimates to determine the margins (and vice versa for New Zealand visited networks). These wholesale margins are presented in Figures 1 and 2 below.

¹³ Visit http://www.dbcde.gov.au/mobile_services/mobile_roaming/trans-tasman_mobile_roaming for copies of the submissions.

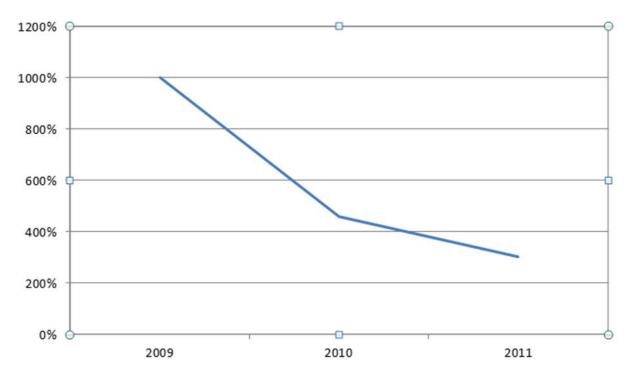


Figure 1: Australian VNs - Profit as a percentage mark-up over cost (voice, SMS and data combined)

Source: Trans-Tasman Roaming: Draft Report, August 2012

[Confidential Information Removed]

Figure 2: New Zealand VNs - Profit as a percentage mark-up over cost (voice, SMS and data combined)
Source: Trans-Tasman Roaming: Draft Report Confidential Version, August 2012.

Figures 1 and 2 indicate a distinct downward trend in wholesale margins between 2009 and 2011. While these margins were about [Confidential Information Removed] in 2011, they had fallen significantly from 2009 estimates. It is difficult to ascertain what constitutes a reasonable return on investment in providing roaming services. It is also not clear the extent to which these estimated wholesale profit margins are above wholesale margins for domestic services.

In addition, these margins are averages for different products (voice, SMS and data combined) offered by the major Australian and New Zealand roaming providers and do not take into account differences in market shares. In other words, weighted profit margins may differ from the simple averages presented in the figures.

Retail margins

The joint investigation also estimated approximate margins for TTMR retail services using retail pricing information and the HNs' total expenses. The total expenses were calculated using the wholesale price information provided by operators and the consultant's estimates of the costs incurred by HNs in providing the retail services. These retail margins are presented in Figures 3 and 4 below.

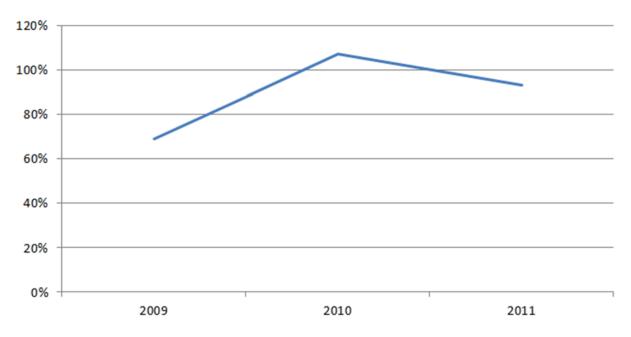


Figure 3: Australian HNs – Profit as a percentage mark-up over Total Expenses (voice, SMS and data combined)

Source: Trans-Tasman Roaming: Draft Report, August 2012.

[Confidential Information Removed]

Figure 4: New Zealand HN – Profit as a percentage mark-up over Total Expenses (voice, SMS and data combined)

Source: Source: Trans-Tasman Roaming: Draft Report Confidential Version, August 2012.

Figures 3 and 4 reveal differing trends for Australian and New Zealand HNs. In the case of Australian HNs, Figure 3 suggests that the wholesale margins have decreased significantly, while retail margins have somewhat increased. However, these estimated margins are based on averages and do not illustrate any variability in wholesale and/or retail prices charged by the major roaming providers. As such, the estimated margins should be considered with caution. In addition, the estimates exclude changes in retail prices offered by the non-major roaming providers which are continuing to emerge (see discussion below).

Retail prices for roaming services compared to domestic services

Retail prices for TTMR roaming are considerably higher than retail prices for domestic services. However, there is a significant variation in the retail prices charged for roaming by the major service providers as well as newly emerging substitutes.

Current retail prices for roaming services

Table 1 provides current rates for roaming services offered by the three major Australian operators. Rates for roaming services can vary depending on whether a customer is pre-paid or post-paid, and the particular plan or pack the customer is on. In addition some operators offer special call and / or data packs for international roaming. Where this is the case, the best available rates offered have been considered.

Table 1: Roaming prices for voice, text and data - Major Australian operators

Service Type	ervice Type Telstra Optus		Vodafone
Call within New Zealand	\$1.28 per minute	\$1.65 per minute plus a \$0.40c connection fee	\$0.98 per minute plus \$0.40 connection fee
Call to Australia	\$2.80 per minute	\$3.50 per minute plus a \$0.40 connection fee	\$0.98 per minute plus \$0.40 connection fee
Receive calls	\$0.64 per minute plus \$0.40 connection fee	\$1.45 per minute	\$1.00 per minute
Send text	\$0.75 per SMS	Send an SMS to an Australian number: \$0.55 roaming fee + standard SMS rate.* Send an SMS to a non-Australian number: \$0.55 roaming fee + standard international SMS rate (\$0.50).	\$0.75 per SMS
Received text	\$0.00	\$0.00	\$0.00
Data	\$1.85 per MB**	\$20.00 per MB	\$0.01 per MB ⁺

Prices as advertised on respective company websites as at 12 December 2012.

Retail prices for domestic mobile services

Table 2 provides current rates for domestic mobile services offered by the three major Australian operators. Prices for domestic services vary depending on the package that consumers opt for. In some cases, the number of calls and SMSs are not limited. In order to provide a reasonable comparison across operators, we have selected similar packages from each, which based on marketing information from operators, are their most popular plans.

^{*}Unlimited texts to Australian mobiles provided as part of the \$60 Optus plan.

^{**}Telstra offers international roaming data packs and plans to its post-paid mobile customers. For a specified charge you receive an allowance toward connection, access and data usage for 30 days. Any unused allowance if forfeited at the end of the 30 day period. The allowance is consumed at the standard PAYG rate of \$15.36 per MB + a \$0.30 connection fee. The cheapest rate is available for the most expensive data pack: for a once off charge of \$1800 you receive \$15 000 of included allowance. This rate is based on the data rate for this pack, excluding connection fees.

[†] Vodafone offers a number of data packs for travellers to New Zealand beginning from \$25 for 500MB (\$0.05 per MB) up to \$100 for 2GB (\$0.01 per MB).

Table 2: Retail prices for domestic services for voice, text and data - Major Australian operators

Service type	Telstra*	Optus**	Vodafone ⁺
Call within Australia	\$0.99 per minute	\$0.95 per minute +	\$0.98 per minute plus
	+\$0.40 connection	\$0.35 connection fee	\$0.40 connection fee
Receive call	\$0.00	\$0.00	\$0.00
Send SMS	Unlimited	Unlimited	Unlimited
Receive SMS	\$0.00	\$0.00	\$0.00
Data	1.5 GB included	1.5 GB included	1GB included + Bonus
			500MB for the first 12
			months
Send SMS to New	\$0.50 per message	\$0.50 per message	
Zealand			Unlimited

Prices as advertised on respective company websites as at 12 December 2012.

Calls comparison

Comparison of domestic and roaming calls is often difficult given the various products, bundles and consumer preferences. One way is to compare the "dollar headline" rates, which are the advertised rates per minute. Another method would be to undertake analysis of "dollar effective rates", which are based on the total number of minutes that customers can utilise given their monthly "included value" of their bundle or package. In other words, "dollar effective rates" are based on a customer extracting maximum value in calls from their plans.

However, what matters from consumers' perspective is their assessment of the likely use of their mobile when roaming in terms of the number and length of phone calls. For example, for an occasional mobile roaming user, calling within New Zealand from an Optus service is \$1.65 per minute plus a \$0.40 connection fee (Table 1). The same phone call made from Australia to New Zealand is \$0.95 per minute + \$0.35 connection fee (Table 2), which is cheaper than the roaming call, notwithstanding any differences in the costs of providing these services. To the extent that consumers' use of roaming is relatively limited, then headline rates are a good indicator of differences in domestic and roaming charges. However, for "heavy" users, effective rates may be more appropriate for analysis. ¹⁴

For example, when customers purchase the Telstra and Optus plans set out in Table 2, they pay a monthly access fee for which they receive a bundle of services, comprising calls, texts and data usage with an "included value" that is significantly higher than the monthly fee. Because services are bundled together, it is not possible to determine precisely the effective call rate for each plan.

^{*\$60} plan with an \$800 monthly call allowance, unlimited calls at night, unlimited text messages and a 1.5 GB data allowance. The Monthly Call and Data Allowance do not include use while roaming. Customers are billed separately for this. This is available for a minimum 12-month term.

^{**\$60} per month plan with a \$650 included value for standard national calls and texts to Australian mobiles, unlimited national SMS, and 1.5GB of included data. The plan also provides for unlimited calls to Optus mobiles within Australia. This is a 24 month contract.

^{*}Vodafone \$60 with \$700 included value, as well as unlimited calls to Vodafone and 3 customers. This is a 24 month contract.

¹⁴ In determining the effective rates paid by a customer, the likely effective rate paid by a customer who uses the entire value of the cap has been used as a proxy. In order to test whether international mobile roaming prices and domestic prices are comparable, the analysis considers the cost of the usage of the maximum value of the most popular domestically available capped plan against the cost of the same usage profile for international mobile roaming services.

On the Telstra plan set out in Table 2, a customer pays a \$60 monthly access fee in return for up to \$800 worth of calls. At the advertised call rate, this provides up to 807 minutes talk time to numbers within Australia (not including unlimited domestic calls to standard Australian numbers every day from 7pm to 7am), representing an effective rate of approximately \$0.075 per minute. At the best available rate Telstra offers on this plan for roaming services in New Zealand, 807 minutes of talk time would cost the customer approximately \$1033. This is assuming that all calls are to New Zealand numbers; if all calls were made to Australian numbers, 807 minutes talk time would cost the customer approximately \$2259.

Applying this pricing methodology to Optus results in similar costs, for example, the \$60 Optus plan provides for \$650 of included value. Therefore, at the advertised call rate this plan provides for up to 683 minutes talk time to numbers within Australia, representing an effective call rate of \$0.095. If all calls while roaming in New Zealand were made to Australian numbers, 683 minutes talk time would cost an Optus customer approximately \$2389.

With the Vodafone plan, a customer pays a \$60 monthly access fee and receives \$700 of included value each month, representing an effective call rate of \$0.084. Vodafone has structured its rates for making roaming calls so that there are two components: one component is based on the standard domestic call rate and connection fee, and the other is based on a roaming premium rate per minute. The roaming premium rate per minute varies depending on the geographical zone in which the customer is roaming when making a call. The standard domestic call rate and connection fee are deducted from the included value, but the roaming premium rate is charged as out of plan usage and thus represents an additional expense.

However, in the case of New Zealand, the roaming premium rate charged by Vodafone is zero, which provides the customer with the same amount of talk time when making roaming calls as when making domestic calls. In other words, a customer receives approximately 714 minutes talk time for domestic calls and roamed calls made in New Zealand to both Australian and New Zealand numbers.

The fact that one of the three major mobile carriers allows customers to make roaming calls at the same prices as domestic calls is a significant outcome in terms of developing the competitive nature of the TTMR market.

In addition, close but not perfect substitutes to roaming services provided by the major carriers (see discussion below) are adding to competitive pressures in the market in favour of consumers. For example, Woolworths Global Roaming SIM, RoamingSIM and TravelSIM all offer substantially lower per minute mobile roaming rates (of about \$ 0.75 per minute and no connection fee), which are even more competitive than Vodafone's roaming rates.

While information is not available on the market shares for mobile roaming of the more traditional service providers and the newly emerging competitors, the price signals are indicative of an evolving and dynamic market suggesting that market forces are not insignificant in delivering lower roaming prices for TTMR users.

Nevertheless, there are aspects of the roaming services that appear less competitive in the case of the major three providers. For example, unlike in the domestic context, TTMR customers must not only pay for the calls they make but also for the calls they receive. Therefore, calls received represent a considerable cost to the roaming customer. For each of the roaming plans provided in Table 1, the cost of calls received is considered out of plan usage – these charges are not deducted from the included value provided as part of the plan.

¹⁵ Vodafone has divided the world into four zones. The zones and respective charges are as follows: Zone 1: Singapore & New Zealand – standard call rate + connection fee; Zone 2: United Kingdom & Europe – \$1.50 per min + standard call rate + connection fee; Zone 3: North America & Asia Pacific – \$2 per min + standard call rate + connection fee; Zone 4: Rest of the world - \$4 per min + standard call rate + connection fee.

Tables 3, 4 and 5 use the headline rates provided in Tables 1 and 2 above to demonstrate the charges a customer incurs when using a domestic service compared to a TTMR service. The examples are based on the assumption that 50 per cent of talk time is calls made and 50 per cent is calls received; this is intended to be illustrative only and is not based on actual phone usage patterns (and for simplicity excludes connection charges).

Table 3: Domestic calls within Australia

	Telstra	Optus	Vodafone
Cost of a 5 min call made	\$4.95	\$4.75	\$4.90
Cost of a 5 min call received	\$0.00	\$0.00	\$0.00
Total	\$4.95	\$4.75	\$4.90

Table 4: Roaming calls within New Zealand

	Telstra	Optus	Vodafone
Cost of a 5 min call made	\$6.40	\$8.25	\$4.90
Cost of a 5 min call received	\$3.20	\$7.25	\$5.00
Total	\$9.60	\$15.50	\$9.90

Table 5: Roaming calls from New Zealand to Australia

	Telstra	Optus	Vodafone
Cost of a 5 min call made	\$14.00	\$17.50	\$4.90
Cost of a 5 min call received	\$3.20	\$7.25	\$5.00
Total	\$17.20	\$24.75	\$9.90

As Tables 3, 4 and 5 indicate, once costs to receive calls when roaming are taken into account, charges for roaming services are significantly higher than domestic services, although there is a marked difference between Vodafone and Optus, for example. If the effective rates rather than headline rates for domestic calls made were considered, the difference in cost for domestic and roaming call services would be greater.

There are alternative roaming providers, which are close but not perfect substitutes to the traditional roaming providers that charge lower costs for receiving phones calls from Australia while roaming in New Zealand. For example, the Woolworths Global Roaming SIM charges \$0.58 per minute for an incoming call (with the option to receive calls to an existing mobile number by paying a small monthly fee). In addition, TravelSIM offers zero charge to receive phone calls while roaming in New Zealand (the customer purchases a new SIM and is provided with a new mobile number). ¹⁶

¹⁶ See http://www.travelsim.net.au/Rates/

To illustrate the different prices available in the market place for roaming customers travelling to New Zealand, Tables 6 and 7 below extend the analysis of the prices illustrated in Tables 4 and 5.

Table 6 is the same as Table 4, but with the addition of prices for roaming charges by Woolworths and TravelSIM for phone calls within New Zealand. Table 7 reflects roaming phone calls from New Zealand to Australia.

In terms of roaming phone calls within New Zealand, Vodafone is the most competitive of the three major roaming providers. However, both Woolworths Roaming and TravelSIM offer rates that are significantly more competitive than the major roaming providers, notwithstanding them being not perfect substitutes since use of their services requires a new SIM, a new mobile number or keeping the traveller's existing mobile number which may result in additional costs (see discussion below on the Woolworths Global Roaming SIM).

In fact, TravelSIM's total cost of a 5 minute phone call made and received (\$3.65) is lower than the lowest domestic headline rate for the same phone call made and received when compared with the three major roaming providers (as shown in Table 3 above, the costs of a 5 minute phone call made and received in the domestic market for Optus based on its headline rate is \$4.75).

Table 6: Roaming calls within New Zealand - comparison with new market entrants

	Telstra	Optus	Vodafone	Woolworths	TravelSim
Cost of a 5 min call made	\$6.40	\$8.25	\$4.90	\$3.50	\$3.65
Cost of a 5 min call received	\$3.20	\$7.25	\$5.00	\$2.90	\$0.00
Total	\$9.60	\$15.50	\$9.90	\$6.40	\$3.65

Table 7: Roaming calls from New Zealand to Australia – comparison with new market entrants

	Telstra	Optus	Vodafone	Woolworths	TravelSim
Cost of a 5 min call made	\$14.00	\$17.50	\$4.90	\$3.50	\$3.65
Cost of a 5 min call received	\$3.60	\$7.25	\$5.00	\$2.90	\$0.00
Total	\$17.60	\$24.75	\$9.90	\$6.40	\$3.65

The analysis shown above for the trans-Tasman roaming market suggests that:

- estimated wholesale and retail margins continue to trend lower, although it is not clear what constitutes a reasonable "profit margin" or return on investment for roaming services.
- in the case of Australia, one of the three major roaming providers is charging for phone calls made at headline rates equivalent to domestic calls, noting that customers pay for incoming phone calls when roaming.

- new market entrants are appearing at the retail level that are providing not perfect but close substitutes and are pricing at competitive levels, even when compared with domestic headline rates.
- the choices of roaming products and services available to customers have increased in recent times. This may have the effect of greater market competition.

SMS comparison

Telstra, Optus and Vodafone provide unlimited SMS within Australia on their bundle packages, while under other packages, such a pre-paid, the cost of an SMS is generally about \$0.25. This makes direct comparison between roaming and domestic SMS prices difficult. The rate per SMS while roaming in New Zealand is between \$0.75 and \$0.80 per SMS for the major Australian providers. Woolworths' SMS charges are \$0.53 for sending SMS within New Zealand and to Australia.

Data comparison

Telstra's best available data rates for New Zealand are provided as part of the roaming data packs and plans available to its post-paid mobile customers. As part of these pack/plans a customer receives, for a specified charged, an allowance toward connection, access and data usage. The allowance is consumed at the standard PAYG rate of \$15.36 per MB plus a \$0.30 connection fee. The cheapest rate per MB is available if a customer purchases the most expensive data pack: for \$1800 the customer receives \$15 000 of included allowance, with any unused allowance expiring at the end of the month. Ignoring the connection fee, this provides for a rate of \$1.85 per MB. In other words, the best available rate for data roaming in New Zealand using a roaming service is approximately 46 times more expensive than data available domestically, and is only available after a very significant initial outlay.

At \$20.00 per MB, Optus's best available rate is substantially higher. Data use while roaming with Optus in New Zealand is 500 times more expensive than data available domestically.

Unlike the other two operators, Vodafone now offers rates that are in some cases lower than the proxy rate shown in Table 2 for domestic data. It offers a number of data packs for travellers to New Zealand beginning from \$25 for 500MB (\$0.05 per MB) up to \$100 for 2GB (\$0.01 per MB).

New market entrants are also providing competitive data rates, especially when compared with Telstra and Optus. For example, Woolworths offers \$0.90 per MB while RoamingSIM charges \$1.00 per MB.

Demand inelasticity and consumer complaints

Demand for IMR services is relatively inelastic. In large part this inelasticity derives from the fact that IMR services are bundled with domestic services. IMR services are rarely foremost in the mind of consumers when purchasing telecommunications services and their purchasing decision is unlikely to be based significantly on the IMR rates an operator is offering. Since customers' choice of operator is based primarily on the pricing of domestic services, bundling IMR services with domestic services diminishes commercial incentives for the provision of reasonably priced retail services and

limits consumers' capacity to seek favourable IMR rates.¹⁷ At the same time, the ACMA reports that as at June 2011 only three per cent of mobile subscribers use IMR services.¹⁸ From a consumers' perspective this may be an "optimal decision" to make by not focusing on any particular details on roaming charges given the extent of their use. However, such consumer choice may impact on the structure of the market, including the extent to which market entry is likely, which in turn, has the potential to impact on the competitiveness of the market.

Australian consumers are increasingly complaining about high mobile roaming charges. The Telecommunications Industry Ombudsman (TIO) has noted that consumers regularly complain about the size of roaming bills. ¹⁹ In its 2012 Annual Report, it reports a 69 per cent increase in complaints relating to roaming charges compared to the previous year. ²⁰ This translates to a total of 4 186 complaints relating to disputed roaming charges. While this number is low and refers to all complaints in all international roaming markets, it must be viewed within the context of the size of the overall roaming market, which is a small proportion of the mobile market as a whole. By way of illustration, Optus submitted that on average 0.2 per cent of its subscriber base (or 19 000 subscribers) roam in New Zealand in any given month. ²¹ With increasing smart phone penetration and a rapidly growing number of Australians travelling abroad each year, this issue can be expected to become an increasingly significant issue had prices not started to move to competitive levels. ²²

To the extent that lack of information is contributing to these complaints, the industry standard that is being developed will assist. However the industry standard will not provide any information on the relevant wholesale costs and prices. Industry information on these costs and prices could assist the ACCC to exert a credible regulatory threat. In 2008 the ACCC noted that monitoring and publication of price movements in international roaming could improve consumer awareness and assist regulators in relation to further regulatory responses should decreases in international roaming prices not occur over time.

The availability of substitutes

The trans-Tasman investigation has concluded that alternative services such as pre-paid SIMs, wifi are imperfect substitutes and do not alone create sufficient competitive pressure to push TTMR markets toward delivering competitive outcomes. The investigation found that:

- even if a particular service was a seamless alternative, operators would need to build brand awareness and overcome customer inertia in order to establish itself as a credible service alternative;
- purchasing and using a local SIM means that the customer is not able to use their normal phone number while overseas and may also mean that the full functionality of their device is unavailable. This is of particular concern for businesses including SMEs;
- SIM locking means that many consumers are unable to use a local SIM unless they pay to have their device unlocked before heading overseas many consumers would be unaware of the need to check whether their device is locked before travelling overseas.

¹⁷ The 2009 OECD report supports this view. See OECD, International mobile roaming charging in the OECD area, December 2009, p 8, http://www.oecd.org/internet/broadbandandtelecom/44381810.pdf

¹⁸ ACMA, Communications Outlook 2010-11,

¹⁹ See Telecommunications Industry Ombudsman website at http://www.tio.com.au/publications/blog/international-roaming-know-your-rights, updated 13 September 2011, accessed 5 November 2012

²⁰ Telecommunications Industry Ombudsman, 2012 Annual Report: Preparing for the Future, http://annualreport.tio.com.au/data/assets/pdf-file/0005/107735/TIO-2012-Annual-Report.pdf

²¹ Optus submission, paragraph 3.6

²² Australian Bureau of Statistics, Holidaying Abroad, http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features20Sep+2010

- using wi-fi enabled services means that the traveller only has intermittent access to communications services.

Recent market offerings suggest that closer substitutes are beginning to appear in the market. Woolworths has introduced a service which uses a global SIM to provide roaming services for travellers. Its rates to New Zealand are 58 cents per minute for incoming calls and 70 cents per minute for outgoing calls. Travellers are able to use their local number for incoming calls using this product, if they:

- unlock their SIMs;
- use a mobile phone which is less than 5 years old; and
- forward their local mobile number to a local Australian landline number purchased from Woolworths.

Under this option, in addition to the call charges levied by Woolworths, in order to be available on a local mobile number, the traveller would have to forward their mobile number to a landline purchased from Woolworths, available at an ongoing cost of \$8 per month, in addition to paying any applicable charges levied for call forwarding by their mobile subscriber which may not be included in the customer's capped plans.

While this represents an additional burden on customers both in terms of potential added charges for the diversion and the need to set up, cancel call diversions, and the ability to unlock SIMs, it is a better substitute than previously available alternative services.

Thus, while closer alternatives to IMR services have been introduced, and there are signs that the market may further evolve in response to these services, it is not yet clear that they will act in the future to constrain prices in the market for IMR services.

In 2010, the OECD released a paper on IMR services setting out its policy recommendations, which identified that while a number of substitutes are available, there are a number of shortcomings with each of the identified alternatives. It noted that the extent to which substitutes are used depends on a number of factors, including technological proficiency of users. It concluded that consumers' preference for IMR services suggests that consumers place value on the ability to use their mobile phone as they do at home. ²³ Table 8 sets out available substitutes and their advantages and disadvantages, as identified by the OECD.

²³ Diaz-Pines, Augustin, OECD Digital Economy Papers No. 168, International mobile roaming – Analysis and policy recommendations, 2010, p. 31, http://dx.doi.org/10.1787/5kmh7b6zs5f5-en

Table 8: Roaming substitutes

SUBSTITUTE	ADVANTAGES	DRAWBACKS	
GLOBAL MVNOs – GLOBAL SIM CARDS – REGIONAL SIM-CARDS	Local calls at local rates Price reductions (use of call-	No incoming calls to the customer's usual number ⁶⁴	
CARDS - REGIONAL SIIVI-CARDS	back)	Lack of brand recognition	
PURCHASING A LOCAL SIM-CARD	Local calls at local rates	No incoming calls to the customer's usual number	
		Language barriers	
DUAL SIM CARD HANDSET AND		No incoming calls to the customer's usual number	
SERVICES	Retention of domestic provider	Availability of handsets	
		SIM-lock	
		No incoming calls to the customer's usual number ⁶⁵	
VoIP SUBSTITUTES (mobile or	Inexpensive over low-cost Wi-Fi	Data roaming charges	
WiFi network)	access	VoIP application lock or surcharge (mobile handsets)	
		Specific handset or laptop necessary ⁶⁶	
HOTEL TELEPHONES –		No incoming calls to the customer's usual number	
PAYPHONES - CALL SHOPS		No mobility	
		Cost	
		No incoming calls	
INTERNATIONAL CALLING CARDS	Inexpensiveness	No mobility/some nomadicity	
		Language barriers	
1105 05 0140	Perfect substitute of domestic	Weak substitute (no voice calls)	
USE OF SMS	SMS	High price compared to domestic SMS	
0.47511175 - 0.11111		No incoming calls ⁶⁷	
SATELLITE ROAMING	Global coverage	High prices/limited handset availability	
VoIP SUBSTITUTES (fixed network)	Inexpensiveness	No incoming calls to the customer's usual number	
	Inexpensiveness	No incoming calls	
EMAIL	More flexibility (longer text, file	Very weak substitute	
	exchange)	Lack of real-time communication	

As noted in Table 8, none of the alternatives allow a customer to receive calls on their usual number, although recent offerings such as from Woolworths may provide this service. This is a crucial factor which limits the extent to which these services are perfect substitutes for IMR services. This is particularly true for SMEs, which often rely on continued availability on a given number in order to conduct business. Additionally, an IMR workshop held by the APEC Telecommunications and Information Working Group in Singapore in June 2009 noted that none of the alternative services provided the full flexibility and functionality of international mobile roaming.

A survey by the New Zealand Ministry of Economic Development in May 2011 demonstrated a high level of demand inelasticity. The results of the survey show that while a small but significant non-

transitory increase in price (SSNIP) may result in both individuals and SMEs at least attempting to use IMR services less, this did not necessarily translate into switching to using alternatives.²⁴

The survey found that 71 per cent of individuals would use voice roaming less, and 53 per cent of SMEs and 40 per cent of large companies would try to get staff to use voice roaming less (though many fewer thought they would be successful). For the data usage question, 65 per cent (handheld) / 64 per cent (laptops) of individuals would use data roaming less, and 53 per cent (handheld) / 52 per cent (laptops) of SMEs, and 51 per cent (handheld) / 51 per cent (laptops) of large companies would try to get staff to use data roaming less (though, again, many fewer thought they would be successful). ²⁵ An indication that a respondent is likely to use a service less does not mean they will switch to an alternative, which is necessary for demand side substitutability.

However, from a consumer's perspective, a consumer may be using the service less in response to a price increase, meaning that this price increase has not been sufficient to alter the consumer's behaviour in terms of using alternatives to roaming. One possible interpretation is that the consumer's willingness to pay for roaming services at existing prices may represent a consumer's optimal choice and therefore may not be a sign of a market failure.

The OECD, in its 2009 report on IMR services, identified that, in order to be effective, a substitute must be convenient, stable and always on. ²⁶ It is important to note that the service which most closely fulfils these requirements is the use of a local SIM for the period of travel.

To this end, the survey further found that when asked about switching to specific alternative services, the figures were more limited. It found that there was likely to be insufficient switching behaviour to make any one service alternative an effective substitute for IMR services, with the greatest indication of switching behaviour being an indication that approximately 27 per cent of consumers surveyed would switch to local SIMs in response to a SSNIP. By contrast, only 5 per cent of SMEs surveyed would switch to local SIMs in response to a SSNIP. This suggests that the elasticities of demand and the willingness to pay between leisure and business travellers in the trans-Tasman market vary markedly. Due to the absence of data on the extent to which operators derive their revenue from business and leisure travellers respectively, it is not possible to conclude definitively on the extent to which these substitutes act as a constraint on TTMR pricing.

It is interesting to note that only a small percentage of business customers would with to local SIMs and 53 per cent would use the roaming services less. This indicates that there would likely be much less communication taking place between SME travellers and home offices, and possible between travellers and NZ business partners. It is possible to conclude from this that high roaming prices and the limited availability of substitutes present an impediment to the growth of trans-Tasman economic ties, a stated objective of the Australian government.

In October 2012, DBCDE undertook a survey of the telecommunications industry to determine its likely use of the proposed identity verification methods for prepaid mobiles. The survey, which collected data on the use of the online activation processes, (adjusted for manual checks and approximated figures for industry stakeholders that did not participate in online activation), indicated that less than 10 per cent of all international visitors use local SIMs while travelling in Australia. While this data is not specific to the TTMR market, and does not provide information on

²⁴ New Zealand Ministry of Economic Development, 'Analysis of New Zealanders' Communication Technology Use While in Australia', May 2011, <a href="http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/mobile-phones/trans-tasman-roaming/summary-of-survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/survey-trans-tasman-roaming/sur

results-of-nz-while-in-australia.pdf

²⁵ Department of Broadband, Communications and the Digital Economy and the New Zealand Ministry of Business, Innovation and Employment, *Trans-Tasman Roaming Draft Report*, p. 21

²⁶ OECD, International mobile roaming charges in the OECD area, December 2009, p. 32, http://www.oecd.org/internet/broadbandandtelecom/44381810.pdf

the extent to which Australian travellers to New Zealand switch to local SIMs, it is potentially indicative of the actual use of the closest substitute to IMR services by consumers travelling to overseas destinations or consumers' willingness to accept existing roaming charges.

High costs of market entry

The relatively small size of the mobile telephony markets and the significant costs associated with getting up a mobile service in Australia and NZ suggests there is little prospect of new entrants. Entry into the mobile market requires significant investment in a mobile network and associated backhaul infrastructure and significant information systems to manage billing, marketing and network management. The size of this investment presents a natural barrier to entry. This is particularly so, given that IMR services represent a very small part of overall mobile telephony use, which further restricts the likelihood of market entry.

The GSMA, in 2007, identified that in the Asia Pacific region, only 8 per cent of mobile telephony users utilised IMR services at least once a year. In the trans-Tasman context, between July 2007 and June 2008, Australian travellers to New Zealand generated approximately USD 29.1 million in revenues from the supply of IMR services. By way of comparison, the current size of the Australian mobile market is around \$20 billion.²⁷

The OECD in its 2009 report also identified the limited availability of spectrum as a barrier to entry and exit.²⁸ One of the key costs of entry into the mobile market is the acquisition of spectrum. For example, the 2001 Australian spectrum auctions for 3G spectrum earned approximately \$1.17 billion²⁹, and the renewal of spectrum licences is expected to raise approximately \$3 billion³⁰.

The OECD further noted that while the costs of entry for a mobile virtual network operator are lower, they are limited in their ability to provide any significant change in the market. It noted that MVNOs have, to date, priced IMR services in a manner overwhelmingly similar to mobile operators, due to the inelastic demand for IMR services at the retail level. ³¹ The OECD further identified the nature of wholesale agreements as another key factor in limiting MVNOs ability to disrupt the current market arrangements.

Given these significant entry costs, the small size of the market overall, and in particular, the limited opportunities presented by IMR services, suggests that market entry is unlikely.

Wholesale agreements as a barrier to entry

According to the OECD, larger operators, or operators which are part of a buying alliance, are often able to obtain better wholesale rates than smaller or unaligned operators, which are largely wholesale price takers.³² The OECD notes that the smaller or unaligned operators do not have the bargaining power of the larger or aligned networks. This limits such operators' ability to introduce flat rate or bundled offers which would constrain IMR prices.³³ MVNOs lack the scale of integrated operators and usually simply resell the IMR services offered by their host network without differentiation.

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²⁷ IBIS World report 2011

²⁸ OECD, International mobile charging in the OECD area, December 2009, p 14, http://www.oecd.org/internet/broadbandandtelecom/44381810.pdf

 $^{29\,}ACMA,\,Auction\,summary-2GHz\,third\,generation\,mobiles,\,http://www.acma.gov.au/WEB/STANDARD/pc=PC_310648$

³⁰ Senator the Honorable Stephen Conroy, Media Release – Renewal decision provides to certainty for mobile customers, 10 February 2012, http://www.minister.dbcde.gov.au/media/media_releases/2012/015.

 $^{31\,}OECD, International \,mobile \,charging \,in \,the \,OECD \,area, \,December \,2009, \,p\,15, \,http://www.oecd.org/internet/broadbandandtelecom/44381810.pdf$

³² Unpublished OECD paper.

³³ Unpublished OECD paper

No distinguishing factors specific to the TTMR market have been identified which suggest that this global trend does not apply to this wholesale market. Wholesale arrangements in the TTMR market may act to limit the effectiveness of the threat of new entry as a constraint on TTMR prices.

Conclusion on current competition outcomes in the TTMR

The reductions in prices and margins observed in the TTMR market since 2009, when the trans-Tasman joint investigation began, suggest that the threat of regulatory intervention may have been an important factor in constraining TTMR prices. Despite demand inelasticity, the growing availability of substitutes suggests that demand side factors are increasingly an important factor in operators' pricing behaviour. This applies to the "incumbents" as well as new retail market players. Recent market offerings at the retail level suggest that there is a possibility that alternative services such as Woolworths global SIM may evolve to present greater competitive outcomes as consumer awareness increases. The threat of new entry at the wholesale level has had limited impact, due to the high costs of entry and the possibility that the nature of the wholesale arrangements in the market limit the effectiveness of market entry.

The pricing data presented suggests that competition in the market may have emerged and that the TTMR market is a noticeably different market than a few years ago in terms of roaming prices and profit margins.

Regulatory failure

Regulatory failure arises from:

- the nature of IMR services such that the wholesale component of the IMR service that an
 Australian consumer receives operates in an overseas market. This means that if regulatory
 action were to be taken to benefit trans-Tasman roaming consumers it needs to be taken on
 a co-ordinated, reciprocal basis;
- existing *ex ante* telecommunications regulatory powers cannot be applied with respect to services supplied in New Zealand; and
- the regulators do not have the powers to introduce what are judged to be the most potentially effective regulatory responses namely wholesale price caps or structural interventions in the event that regulators determine there is a case for intervention.

Inability to gather required information

Information on pricing, cost and revenue is not readily available to the independent competition regulator, the ACCC. While the ACCC has information gathering powers under Part XIB of the Competition and Consumer Act 2010, this does not extend to IMR related information particularly at the wholesale level either for Australian or overseas markets.

Ineffectiveness of unilateral action by the ACCC

The existing telecommunications-specific provisions of the CCA cannot be used to pose an effective regulatory threat in the TTMR market. Specifically the access and pricing regulatory powers that are considered the most effective in tackling concerns at the wholesale level are not within the remit of Part XIC of the CCA, and do not arise even where a breach of s46A (misuse of trans-Tasman market power) could be proven.

In a 2008 submission to a Parliamentary Inquiry, the ACCC described IMR as "an intractable problem, with little incentive for operators to engage in competition and jurisdictional issues hindering any

unilateral initiatives."³⁴ For example, in the domestic context the ACCC is able to regulate terms of access to ensure that operators have access to competitive wholesale rates. In this situation, the wholesale and retail services are both provided in Australia, so access to lower wholesale costs translates into lower retail rates for Australian consumers. However, IMR services differ from domestic services in that the wholesale and retail service providers are based in different countries. This means that if the ACCC were, for example, to unilaterally introduce regulated terms of access for IMR services, these wholesale terms would be available to New Zealand operators. New Zealand operators would then have lower wholesale costs and be able pass this on to their customers travelling to Australia in the form of lower retail prices.

This regulatory action would provide no benefit to Australian consumers. Because the New Zealand operators are based outside of Australia, they would not be obligated to provide the same terms of access to Australian operators. This means that the Australian operators would not have access to lower wholesale rates and so would not be in the same position to provide lower retail rates to their customers travelling to New Zealand.

For Australian consumers to benefit, the New Zealand regulator would need to take reciprocal regulatory action. For this reason the ACCC is not able to effectively act under current arrangements.

The need for co-ordinated bilateral action

Within the existing telecommunications regulatory framework there is no ability for the ACCC to act in a co-ordinated way with its overseas counterpart

The OECD has recommended that where "Members determine that market dynamics are insufficient to produce reasonably competitive wholesale prices, they are encouraged to regulate wholesale roaming prices, including by reaching bi- or multilateral agreements between Members, as appropriate, and/or through the introduction of price caps based on commonly established principles." ³⁵

The nature of international mobile roaming means that unless there is reciprocal action with another country, there are no fully effective measures to address wholesale international mobile roaming prices. The ACCC also holds this view. It stated, in its submission to the parliamentary inquiry that "[t]here may be opportunities for Australia to explore bilateral regulatory cooperation with other countries to address concerns over international mobile roaming charges. This may include the sharing of information regarding traffic data and volumes, co-ordinating regulatory inquiries and/or co-ordinating the application of regulation on a bilateral basis."³⁶

Any such bilateral action should be centred around the telecommunications-specific regulatory regime administered by the independent competition regulator. It recognises the key role of telecommunications as an important sector of the economy in its own right, but also as a key enabler of other sectors of the economy. It recognises that due to the significant investment costs involved in market entry that one or a small number of firms may dominate the market, presenting significant asymmetry between operators and users of telecommunications services.

⁴² ACCC, Submission to the House of Representatives Standing Committee on Communications inquiry into international mobile roaming, August 2008, p. 11, http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=coms/mobileroaming/subs.htm

 $^{35 \} OECD, \textit{Recommendation of the Council on International Mobile Roaming Services}, 16 \ February \ 2012, \ C(2012)7, \\ \underline{\text{http://acts.oecd.org/Instruments/}}$

⁴⁴ ACCC, Submission to the House of Representatives Standing Committee on Communications inquiry into international mobile roaming, August 2008, pp. 7-8, http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=coms/mobileroaming/subs.htm

In particular regulators need the powers to introduce what are judged to be the most potentially effective regulatory responses – namely wholesale price caps or structural interventions – in the event that regulators determine there is a case for intervention

Addressing this problem with New Zealand will provide a clear, tangible and powerful demonstration that both Australian and New Zealand are committed to integrating and deepening the trans-Tasman relationship.

Australia supports the promotion of regional economic integration. This objective drives it to consolidate economic ties with its major trading partners including through bilateral and regional free trade agreements. New Zealand is one of Australia's major trading partners and the two countries are linked by the Closer Economic Relations (CER) Trade Agreement. The CER was the first of Australia's bilateral agreements and it has continued to grow and improve with new amendments added over the years.

Action in the trans-Tasman IMR market will be a step towards the creation of a single market for Australian and NZ businesses and consumers in which, from a telecommunications perspective, it is as easy to do business in the other country as it is to do at home. A seamless trans-Tasman business environment will enhance the ability to increase national productivity, maintain and drive job creation and foster international competitiveness.

The very high prices for data roaming services were of particular concern given the increasing adoption of smartphones in Australia. The 2012 Australian Mobile Phone Lifestyle Index compiled by the Australian Interactive Media Industry Association indicates that 76 per cent of all respondents to the survey owned a smartphone, an increase from 67 per cent in 2011. Telstra, in its submission to the trans-Tasman joint investigation also suggested that smartphone adoption is increasing, reporting that over 50 per cent of Telstra customers are smartphone users and that, as of August 2012, 91 per cent of handsets sold were smartphones. The move to smartphones indicates increasing demand for data, and potentially, a greater need for access to trans-Tasman mobile roaming services as the mobile telecommunications services required by end-users become more integrated.

3. Objective

The government's objective is to establish a (co-ordinated) regulatory framework which, if necessary, can be used to ensure Australian consumers travelling to New Zealand have access to reasonably priced IMR services that reflect costs to operators of providing the services consistent with a reasonable rate of return.

4. Options

Five options to address competition issues are considered below. With the exception of Option One, these options are predicated on coordinated action by the Australian and New Zealand governments. Any action taken to address IMR prices will need to be developed and implemented in a manner which considers each country's international rights and obligations.

^{37 &}lt;a href="http://www.aimia.com.au/enews/AMPLI/AMPLI/8202012%20Report_FINAL_upd_Oct.pdf">http://www.aimia.com.au/enews/AMPLI/8202012%20Report_FINAL_upd_Oct.pdf The survey sample feeding into the AMPLI is consistent with the profile used by the Australian Bureau of Statistics and is representative of Australian mobile phone users (See: Bender, Adam, Smartphone, tablet adoption accelerates: AIMIA survey, Computerworld, 27 September 2012, https://www.computerworld.com.au/article/437620/smartphone_tablet_adoption_accelerates_aimia_survey/)

³⁸ Telstra submission, joint trans-Tasman investigation, Figure 20, paragraph 20.

Option 1: Do nothing – maintain a watching brief and launch further investigations in the future if necessary.

Option 2: Structural intervention – effect structural changes in the trans-Tasman market for IMR services as soon as possible. There are two sub-options for structural intervention: retail unbundling and mobile local access. Retail unbundling would require service providers to supply an IMR service unbundled (or decoupled) from domestic mobile services. Mobile local-access services (MLA services) would enable roamers to act as local users in their destination without having to change SIM cards or becoming unreachable on their original numbers.

Option 3: Direct price regulation – empower the ACCC to intervene in the trans-Tasman market for IMR services to influence prices. There are two sub-options for direct price regulation: price caps at the wholesale and / or retail level, and regulated terms of access (with or without retail pass-through).

Option 4: Monitoring – require that mobile operators provide the ACCC with wholesale traffic, revenue and pricing information on IMR services supplied to customers travelling to New Zealand. The regulators would report publicly on retail and wholesale pricing.

Option 5: Enhance regulator's powers – empower the ACCC to choose from the regulatory measures in Option Two and Option Three, should it determine that intervention in the trans-Tasman mobile roaming market is warranted. While the ACCC would have the power to implement these remedies, it would not be required to do so.

These options and their respective merits are discussed in the following section.

5. Impact analysis

This section draws on the market analysis the DBCDE and MBIE have conducted as part of the trans-Tasman joint investigation. However due to the commercially sensitive nature of wholesale pricing information, the analysis contained in this section is limited in the extent to which it can use actual market pricing information.

Reciprocal action with New Zealand would be required for a number of these options and suboptions to be effective.

Option 1: Do nothing

This option would maintain the status quo. The government would maintain a watching brief of developments in the TTMR market. No further action would be taken as part of the recently concluded trans-Tasman joint investigation. However, the government would reserve the right to conduct a full market investigation into TTMR services.

The GSMA, Telstra and VHA submitted to the trans-Tasman joint investigation that the governments should forbear from intrusive regulation. The GSMA and Telstra argued that the threat of regulatory intervention has not placed downward pressure on wholesale prices for TTMR services. Both argued that market and structural factors were the primary causes for the decline in prices in this context. VHA submitted that the proposed options are unlikely to address perceived or actual problems relating to IMR services. Conversely, the Australian Communications Consumer Action Network (ACCAN) submitted that investigations into prices for TTMR services conducted over the last decade have had limited impact on prices for these services. Accordingly, continued investigation is unlikely to lead to lower wholesale and retail prices.

Limited impact of market and structural factors

The trans-Tasman investigation concluded that market and structural factors, such as the availability of service alternatives, market rationalisation/entry and the nature of roaming agreements, have had only a limited role in the decline in wholesale and retail prices for IMR services in the trans-Tasman market between 2009 and 2011.

Service alternatives

The investigation determined that service alternatives such as local SIM cards, and hotel and commercial wifi provide limited constraint on the market for IMR services.

On the supply-side, it is not feasible for these providers to enter the market for IMR services as only mobile operators in country, or visited networks offering MLA services are capable of supplying a competing IMR service.

On the demand side, a survey by the New Zealand Ministry of Economic Development in May 2011 indicates that while a small but significant non-transitory increase in price (SSNIP) may result in both individuals and SMEs at least attempting to use IMR services less, this did not necessarily translate into switching to alternatives.³⁹ An indication that a respondent is likely to use a service less does not mean they will switch to an alternative, which is necessary for demand side substitutability.

The survey found that 71 per cent of individuals would use voice roaming less, and 53 per cent of SMEs and 40 per cent of large companies would try to get staff to use voice roaming less (though many fewer thought they would be successful). For the data usage question, 65 per cent (handheld) / 64 per cent (laptops) of individuals would use data roaming less, and 53 per cent (handheld) / 52 per cent (laptops) of SMEs, and 51 per cent (handheld) / 51 per cent (laptops) of large companies would try to get staff to use data roaming less (though, again, many fewer thought they would be successful).⁴⁰

The ACCC has set out a number of types of information that can inform an assessment of substitutability. 41 These include:

- the function of the product;
- physical and technical characteristics of the product;
- costs of switching purchases;
- views and past behaviour of buyers;
- evidence of buyers switching to other products in response to price increases in the recent past;
- evidence of producers redeploying their production capacity in response to price increases in the recent past;
- views, business records and past behaviour of suppliers;
- relative price levels and price movements.

As evidenced by the submissions to the draft report, the two main contenders for inclusion in the same market as TTMR services are wifi services and SIM cards.

For a number of reasons wifi hotspots are not considered an effective substitute and should be excluded from the market. For example:

http://www.accc.gov.au/content/item.phtml?itemId=809866&nodeId=3a4cf8c822dc673b7de0a525ac267933&fn=222 Merger%20guidelines FA WEB.pdf, para 4.27.

³⁹ New Zealand Ministry of Economic Development, 'Analysis of New Zealanders' Communication Technology Use While in Australia', May 2011,

 $[\]underline{http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/mobile-phones/trans-tasman-roaming/summary-of-survey-results-of-nz-while-in-australia.pdf$

⁴⁰ Department of Broadband, Communications and the Digital Economy and the New Zealand Ministry of Business, Innovation and Employment, *Trans-Tasman Roaming Draft Report*, p. 21

⁴¹ ACCC, Merger Guidelines, 2008

- the function of TTMR is to allow communications across the breadth of a territory; the function of wifi is to enable communications within discrete geographic zones;
- the main technical characteristic of roaming is support for voice, SMS and data services; the main technical characteristic of wifi is support only for data services;
- the costs of switching to wifi are high in the sense that the customer loses the ability to use his or her
 original number, can no longer use traditional telephony or SMS service, and may face difficulties in
 registering complaints;
- There seems little possibility for wifi providers to switch to providing mobile cellular services in response to a SSNIP; and
- operators, while they have expressed the view that they compete with wifi, have produced no evidence in support, be it evidence that they have actively monitored wifi prices abroad or evidence that roaming price trends correlate with foreign wifi prices.

New SIM cards purchased by the traveller, be they "local" (e.g. for a New Zealander, a Telstra SIM card) or "global" (e.g. TravelSIM) seem to be a more possible substitute but even they have shortcomings and impose costs on consumers.

In this regard, while TUANZ points out that "swapping out a SIM card for a local provider's card is rarely as simple as it sounds" local and global SIMs do share with trans-Tasman roaming the same function and the same technical characteristics (except to the extent that some global SIMs are limited to voice and text).

Further, as Vodafone NZ states, "mobile operators on both sides of the Tasman including Vodafone have spent considerable amounts on advertising at international airports. International airport advertising for local SIMs, similar to airport car-parking, is considerably more expensive than most other forms of similar advertising. Vodafone New Zealand continues to spend significant on advertising at international airports. However, the benefit of engaging in such activity is clearly correlated and only justified by local SIM substitution for mobile roaming."

One significant issue, however, is the need to change SIM cards and the associated loss of the customer's usual mobile number. Optus claims that the fact that alternative local services do not allow a roamer to be contacted on his or her usual number is "not sufficient to warrant a separate economic market". However, as TUANZ states in its submission, loss of one's usual mobile number "is not a painless experience for most customers". For business consumers in particular the inability to retail their usual mobile number under this option represents a significant cost.

Optus has itself previously underlined the barrier that loss of one's mobile number poses domestically, stating that with the introduction of mobile number portability in the Australian domestic market "the last barrier to competition in the mobile market is about to finally come down". In New Zealand, the Telecommunications Forum (TCF) states on its website that local and mobile number portability "has empowered consumers and businesses to choose the service provider that best meets their needs."

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⁴² TUANZ, Submission to the Trans-Tasman roaming draft report, 2012, <a href="http://www.med.govt.nz/sectors-industries/technology-communication/pdf-docs-library/communications/mobile-phones/trans-tasman-roaming/TUANZ-submission-TTR-draft-report-sep-2012.pdf, p.4.

⁴³ Vodafone New Zealand, Submission to the trans-Tasman roaming draft report, September 2012, http://www.med.govt.nz/sectors-industries/technology-communications/mobile-phones/trans-tasman-roaming/Vodafone-submission-TTR-draft-report-sep-2012.pdf, para 25. However, while operators' domestic teams are aware of pricing for, and compete with, roaming services (e.g. advertising at airports), operators have produced no evidence that their roaming teams are aware of pricing for, and compete with/feel constrained by, domestic services. New Zealand operators produced no charts from their roaming teams showing they track (or are even aware of) Australian prepaid pricing, and Australian operators produced no charts from their roaming teams showing they track (or are even aware of) New Zealand prepaid pricing.

⁴⁴ Optus, Submission in response to the Trans-Tasman Roaming Draft Report (Public Version), September 2012,

 $[\]underline{\text{http://www.dbcde.gov.au/}} \quad \underline{\text{data/assets/pdf file/0007/158425/12.09.27 OPTUS submission trans-Tasman IMR PUBLIC.pdf,} \\ \mathbf{para 2.57} \quad \underline{\text{para 2.57}} \quad \underline{\text{para 2.$

⁴⁵ TUANZ, Submission to the Trans-Tasman roaming draft report, p.4.

⁴⁶ See Optus media release, Optus unveils MNP plans, dated $\,$ 27 August 2001 at

www.optus.com.au/aboutoptus/About+Optus/Media+Centre/Media+Releases/2001/Optus+unveils+MNP+plans

⁴⁷ See www.tcf.org.nz/content/26d0a04d-68a3-4cbd-bafb-ebee1d688992.html

Another issue with including local and global SIM cards in the same market as trans-Tasman roaming services, at least for the downstream market relevant to Australian roamers, ⁴⁸ is SIM-locking. All Australian operators SIM-lock some of their customers: for example Telstra had 2,029,000 unique users SIM-locked as at June 2012, according to its 2012 annual report. While most SIM-locking concerns prepaid roamers (who are, we understand, less likely to roam):

- this is of little comfort to prepaid roamers; and
- post-paid customers using Apple and Blackberry devices are also SIM-locked. While this is at the direction of the device manufacturer and can be reversed by a call to the operator concerned, it remains an extra obstacle to those who, upon arrival in New Zealand, find themselves unable to make a local SIM function.

The costs to the consumer of switching SIMs are not insignificant. Roaming customers are in an unfamiliar environment and, unless they hold a (still active) SIM card from a previous trip, they will also have to either go without communication, or navigate a period of roaming charges, before they locate and insert a local SIM (and for New Zealand travellers in Australia, produce appropriate registration details). After switching numbers, they are unlikely to be as easily contactable as they will be operating with a different mobile phone number. They may also lose in terms of mobile network coverage: roamers enjoy the combined coverage of all the visited networks with which their home network has a roaming agreement, but on switching to a local SIM they are limited to the coverage offered by the local operator they have chosen. Roaming customers who use local SIM or global cards also have to switch numbers twice: once upon arrival in the destination; and again on their return to their home market.

While these service alternatives, as a group, may potentially provide some constraint on the market for IMR services this conclusion must be balanced against the packaging of IMR services at the retail level. IMR services are provided as part of a bundled product that includes domestic mobile services, and constitute a small part of a typical consumer's mobile telecommunications service usage profile. As a result, the transparency of any price increase for such services is somewhat limited. This restricts consumers' ability to respond to an increase in the price of IMR services.

Market rationalisation and entry

The Australian mobile market has seen rationalisation, with the merger of Vodafone and Hutchison, and the New Zealand market has seen the entry of two new players. It is unclear that these changes in the number of market players have had a material impact on the wholesale rates paid by the home network. Figure 5 shows that there is little, if any link, between the number of compatible networks available and the wholesale rates paid by Telstra.

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⁴⁸ Telecom NZ's Skinny brand also SIM-locks its handsets, although it is a very minor player in the market.

⁴⁹ Local SIM cards are available at some international airports.

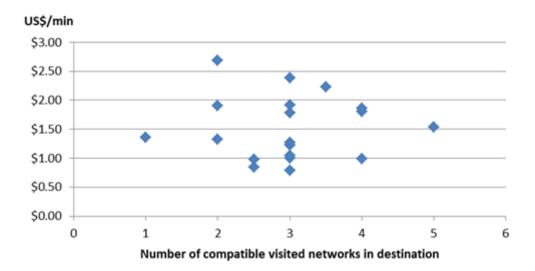


Figure 5: Lowest IOT paid by Telstra in various destinations, Feb 2009

The fact that none of the Australian operators suggested in their submissions to the parliamentary inquiry that the number of operators had any material impact on an operator's ability to negotiate wholesale rates supports this conclusion. Submissions emphasised instead the importance of the amount of return traffic a network could offer as a factor in choosing a visited network.

Market structure is determined by a number of factors other than the number of market operators. For instance, as seen in the trans-Tasman joint investigation, the availability of 3G services over a compatible band and the footprint of networks in the destination can impact on the availability of a visited network. This in turn affects market structure and the level of competition in a market.⁵⁰

Nature of roaming agreements

Operators negotiating roaming agreements are focused on the amount of return traffic they will receive from a visited network, and less on the wholesale prices charged. The symmetry of traffic determines the level of profit or loss, as wholesale rates are usually symmetric between operators. A net inflow of traffic to an operator's network, rather than a low cost base, is necessary to realise a profit, limiting operators' incentives to seek lower wholesale rates.

The threat of regulation

For the reasons set out above, existing market and structural factors have a limited role in exerting downward pressure on wholesale prices and, by extension, retail prices. The significant threat of regulation posed by the trans-Tasman joint investigation has acted as a key constraint on IMR service pricing at the wholesale and retail levels, exerting downward pressure on prices for IMR services.

The draft report shows that in the period 2009-11 prices for TTMR services trended downwards, with the most significant drops in retail prices occurring following the publication of the May 2010 discussion paper. ⁵¹ Similarly, in the European Union (EU), reductions in prices for IMR services were seen following the European Commission's first proposed legislative intervention.

50 Department of Broadband, Communications and the Digital Economy and the New Zealand Ministry of Business, Innovation and Employment, *Trans-Tasman roaming Draft Report*, p.47.

51 Department of Broadband, Communications and the Digital Economy and the New Zealand Ministry of Business, Innovation and Employment, *Trans-Tasman roaming Draft Report*, pp.33-42.

The 'do nothing' option constitutes a minimal threat of regulation, as it would take some time to launch any fresh investigation and demand a high level of resources to carry out. It would be up to market and other forces to resolve the competition issues that characterise trans-Tasman wholesale and retail IMR markets. It would likely mean the downward trend in prices and margins would slow significantly while the underlying costs faced by operators continue to fall.

Benefits:

- Does not require the creation of additional regulation
- Allows market to develop and respond to technological changes organically
- Minimal additional regulatory costs

Costs:

- Unlikely to exert downward pressure on the retail and wholesale price for international mobile roaming services
- Any necessary regulatory intervention will be delayed

Option 2: Structural intervention

The retail market for IMR services is currently characterised by a limited number of operators supplying these services as part of a broader package, including domestic mobile services. Typically, IMR services are a small part of a consumer's wider mobile telecommunications services needs, and therefore, do not play a major role in their choice of mobile telecommunications service supplier. This limits the pressure on operators to compete at the retail level on price.

Under this option, the government would enact legislation to allow the ACCC to intervene as soon as possible to facilitate structural changes in the market which may encourage competition for the supply of IMR services ie. It would separate IMR services from other mobile services that a consumer might subscribe to. There are two sub-options for structural intervention: retail unbundling and mandated mobile local access (MLA) services. Each sub-option would be implemented with New Zealand a reciprocal basis.

The EU is planning to undertake structural intervention, to take effect from 1 July 2014.

Retail unbundling

Mandated retail unbundling (or 'decoupling') would require operators to supply a standalone IMR service that is not bundled with local mobile telecommunications services. It would not preclude operators from offering bundled services as an alternative product. In this scenario, a customer could choose to use one network for their domestic communications and a different network for their IMR services.

This sub-option has the potential to create demand for IMR services which could be met through the introduction of small disruptive operators offering attractive standalone offers. It could also encourage existing operators to offer more attractive retail pricing, as consumers are able to select different operators to provide IMR services and local mobile telecommunications services. The result would be akin to the separation of local and toll calls in the Australian fixed-line market, where carrier pre-selection for toll calls has been implemented.

This approach has been adopted by the EU.⁵² Telekom Austria Group commented that this approach would be much more effective than a continuation of the price cap method in the EU. It stated that decoupling would change the market dynamic significantly, leading to "a wave of new and highly competitive offers in the market."⁵³

By contrast, Vodafone Group has stated:

[With decoupling] we do not think that competition would develop for all [roaming] customers ... investments in sales and marketing would only be made for those (frequent) roamers who generated sufficient revenues to cover those costs and earn a margin ... Decoupling roaming will also make the roaming experience more complex for users and increase their search costs. ⁵⁴

The Body of European Regulators for Electronic Communications (BEREC) has made statements to a similar effect, noting that 'on the basis of BEREC's competition analysis, there is a risk that such a measure [as decoupling] will deliver little incremental competition benefit, over and above the competition benefits likely to result from the combination of wholesale price reductions and wholesale access [already in place in the EU]. 555

WIK-Consult describes mandated retail unbundling, independently of its work with DBCDE and MBIE, as 'intensive retail intervention'⁵⁶. Although this measure is likely have some positive impact on retail market dynamics, at this stage it is not considered that it will generate sufficiently-improved retail outcomes to warrant further consideration.

Mobile local-access services

Under this form of structural intervention, Australia would require that operators provide consumers with the option of choosing an MLA service for their telecommunications needs while travelling overseas. There are two variants of this sub-option. Under one variant, consumers rely on their home network to arrange for an MLA solution at the destination. The network at the destination offers the service to the customer's mobile service provider, which then resells the service to the customer. The second would allow customers to establish a direct billing arrangement with networks at the destination for an MLA service, so long as the network at the destination has a relationship with the home network.

In traditional IMR arrangements, a visited network has little ability to attract foreign visitors away from their home networks. Typically, it will resort to advertising at ports of entry to encourage those visitors to purchase local SIM cards. It will then have to rely on the visitors' willingness and ability to obtain such cards. By contrast, MLA services, regardless of the variant offered, would increase choice in the market. It has the potential to introduce reduced prices in competition with traditional IMR offers, leading to a reduction in traditional IMR rates. The direct billing arrangement would potentially introduce new players to the retail market, and exert downward pressure on prices through greater competition among a greater number of players.

⁵² See Articles 4 and 5 of the EU Roaming Regulation, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:172:0010:0035:EN:PDF

⁵³ See comments of Alexander Zuser, Head of Group Regulatory & Roaming at Telekom Austria Group, 8 November 2011, www.telekomaustria.com/presse/news/2011/Telekom-Austria-Group-s-view-on-the-new-Roaming-Regulation-.php

⁵⁴ See comments of Vodafone (Richard Feasey), in the submission on the Review of the Functioning of the Roaming Regulation, 26 January 2011, at paras 69–72, http://ec.europa.eu/information_society/activities/roaming/docs/cons11/Vodafonel.pdf

⁵⁵ See BEREC Analysis of the European Commission's Proposal for a Regulation on Roaming, August 2011, at para 9, www.erg.eu.int/doc/berec/text-voting.pdf

⁵⁶ See the WIK-Consult, Study on the Options for Addressing Competition Problems in the EU Roaming Market, 2010, http://ec.europa.eu/information-society/activities/roaming/docs/cons11/wik_report_final.pdf, p.76.

Under both variants, visited networks providing wholesale IMR services would be constrained in their pricing by the existence of MLA service offerings at the retail level. Higher retail IMR rates increase the likelihood of customers switching to the non-revenue generating MLA service, creating an incentive for operators to lower retail IMR rates. Lower retail prices would in turn act as an incentive for home networks to negotiate for lower wholesale rates. The constraints on retail, and by extension, wholesale pricing also apply where the MLA service is supplied by an operator which also offers inbound IMR services. Operators have an incentive to reduce retail prices by reference to the prices of less lucrative MLA services to minimise the number of customers who choose the less lucrative MLA service.

The effectiveness of this structural intervention may be limited by Australian regulatory requirements around the verification of prepaid mobile telecommunications services, consumer fatigue, and consumer confusion, both in terms of pricing and the appropriate contact point in the event of problems with the service. Currently, vendors of prepaid mobile services are required to do a manual identification check at the point of purchase and collect customer information. This presents a barrier to pre-selecting a network for the supply of MLA services.

There is also a risk, particularly with the second variant, that consumers may be bombarded by offers, and feel unable to make a choice. This is particularly so given the lack of transparency in retail IMR prices. Roamers may find it difficult to get a full sense of the relative benefits of the MLA service as compared to traditional IMR services. Finally, particularly in relation to the second variant, as the consumer has a relationship with more than one operator, there is potential for confusion about which operator to contact in the event of problems with the service.

Conclusion on structural intervention

Structural intervention could deliver significant benefits in the form of increased consumer choice and the potential for greater competition in the market. These must be balanced against the significant costs of intervention and the time before which a structural solution could actually be introduced. Both options represent intense retail intervention which would mandate product offerings and design. It would result in significant regulatory and implementation costs. Any move to introduce structural measures, particularly retail unbundling, would require a further study of the net benefit of its introduction, which is likely to be a resource-intensive exercise, and require long lead times.

Structural intervention is likely to represent a significant cost to industry, and may be prohibitive for small, single country operators. By way of example, the Vodafone Group has estimated these costs at several million pounds for each of its EU subsidiaries.⁵⁷ The substantial costs associated with structural interventions are driven by:

- the need for complex technical changes in how the networks and systems of MNOs operate.
 Before such changes could be designed and introduced technical standards would need to be developed and agreed between Australia and New Zealand;
- network infrastructure, IT systems and billing systems would all need to be adjusted;
- for it to have any effect, MNOs would need to invest significantly in sales and marketing to consumers to explain how the system worked and what their choices were.

It is not considered beneficial to undertake a comprehensive study of the costs and benefits given the other options available and the fact that the structural measures have not yet been implemented anywhere and there is considerable uncertainty regarding their costs and benefits. It

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⁵⁷ Noted in discussion with DBCDE

will be useful to observe the European experience once their structural measures come into effect in 2014 and develop a clearer idea of the potential costs and benefits.

From a consumer perspective, structural remedies may create confusion and fatigue.

Benefits:

- Increased pricing transparency
- Potential shift in market dynamic
- Potential for increased competition in the retail market
- Increased consumer choice

Costs:

- Intensive retail intervention
- May require implementation of changes to Australian regulatory framework for prepaid services
- May have limited impact as a standalone measure
- May cause confusion to consumers
- Potential consumer fatigue and increased search costs
- Regulatory cost, including further investigation of costs and benefits of intervention
- Implementation costs for industry

Option 3: Price regulation

Price regulation can take one of two forms: the imposition of price caps, wholesale and/or retail; or the setting of regulated terms and conditions of access, including pricing. Under this option, the government would intervene as soon as possible to introduce measures requiring the ACCC to impose price caps or set regulated terms and conditions of access relating to IMR services. Intervention would occur on a reciprocal basis or in circumstances where the market in the destination delivers reasonable IMR charges for Australian travellers.

Price caps

Price caps may be applied at either the wholesale or retail level. In its submission to the trans-Tasman joint investigation, Optus stated that prices at the wholesale level act as a price floor for the retail price of IMR services. It argued that the way wholesale rates are set dominant market players and major international groups or alliances may be able to obtain lower rates and that this in itself might represent market power. Given this view, Optus considered that wholesale price controls would be an efficient response in combination with retail pricing transparency measures.⁵⁸

Wholesale price caps

A wholesale price cap potentially creates incentives for smaller operators to enter the market and supply budget IMR services, in an effort to win new customers or encourage greater use. However, the EU's experience when employing such measures is not encouraging, as evidenced by the EU's recent decision to implement structural measures.

Since the EU's introduction of price caps, there has been little to no evidence of more competitive price offerings emerging at the retail level. Instead, prices have congregated around the retail caps

⁵⁸ Optus, Submission in response to the Trans-Tasman Roaming Draft Report (Public Version), pp.3-5, p.18.

that were established concurrently, indicating that operators have not passed savings on to consumers (beyond the requirements set by the retail cap).⁵⁹

A key reason for this behaviour is that the bundling of IMR services with domestic services means that retail price cuts for IMR services are unlikely to attract customers. IMR services also do not generate sufficient traffic to compensate for the reduced headline rate, as the market is relatively price inelastic.⁶⁰

Retail price caps

The EU has introduced retail price caps with mixed results. While prices have fallen, they have clustered around the regulated caps. WIK- Consult, in its review of the EU roaming market considered that there was "little indication that the mobile roaming market has become truly competitive [following the introduction of price caps]."

Regulated terms of access

Under this sub-option, the ACCC would make regulated terms and conditions of access in relation to the supply of IMR services, including pricing. These terms and conditions operate as a reference offer, which access seekers may choose to adopt in the event that commercial negotiations fail.

This sub-option is unlikely to have a significant impact as a standalone regulatory measure. As set out in the problem definition, providers have limited incentive to seek lower rates at the wholesale level for inputs used in supplying IMR services.

Additionally, the imposition of a retail pass-through requirement would likely further reduce incentives for providers to avail themselves of regulated terms of access. Retail pass-through would require an access seeker to pass savings on as direct reductions in the retail price of IMR services. In addition to making no change to an operator's margins, this requirement would also limit pricing flexibility. The Australian Competition Tribunal stated in relation to the pass-through of fixed-to-mobile termination rates:

We consider that the pass through provisions in the undertaking deprive access seekers of the flexibility to determine competitively the individual price elements for services within the basket of services that are supplied within the fixed-to-mobile market, and the form in which that pass through will take place. This approach retards allocative and dynamic efficiency, inhibits competition, is not in the long-term interests of end users and, in our view, is not reasonable. 62

With limited incentive to seek lower wholesale rates, it is unclear that an opt-in reference offer will put downward pressure on the price of IMR services.

Conclusion on price regulation

The EU experience with price caps suggests that they are unlikely to improve competitive dynamics. However, it is possible that wholesale prices caps, taken alone, may engender improved retail

⁵⁹ EC 2011 report: "average prices for the Eurotariff offered by operators and alternative tariffs are clustered around levels of the regulated caps" cited in Axiata presentation on International Roaming: Commerciat and Regulatory Perspective at ITU Roaming Workshop, Bangkok, May 2012.

⁶⁰ WIK-Consult, Study on the Options for Addressing Competition Problems in the EU Roaming Market

⁶¹ WIK-Consult, Study on the Options for Addressing Competition Problems in the EU Roaming Market

⁶² Decision of the Tribunal dated 11 January 2007, in the Application by Vodafone Network Pty Ltd & Vodafone Australia Limited, at para 290. Available at www.accc.gov.au/content/item.phtml?itemId=840731&nodeId=dd7b298ee1775ef1ed11cd7559acc48d&fn=114%20Aust%20Competition%20Tribunal%20Vodafone%20MTAS%20review%201-07.pdf

competition, but it is not yet clear that the benefits of implementing these measures immediately would outweigh the costs. Regulated terms of access provide operators with little incentive to seek lower wholesale rates, particularly if retail pass-through requirements are in place.

Benefits:

- Some potential for lower prices if tight retail and wholesale price caps are introduced
- Wholesale caps alone may engender some degree of improved retail competition

Costs:

- Significant use of ACCC resources.
- Could limit reductions in price
- Potential to limit competition and pricing flexibility

Option 4: Monitoring and reporting

Regulators currently have limited information on the wholesale and retail TTMR market. In order to gather information, regulators and policy makers must rely upon publicly available data, or launch an investigation and seek information from industry. While regulators have a range of existing powers to gather and publish information, there is a technical limitation on using the existing record keeping rules to gather information on all aspects of mobile roaming.

Additionally, as set out in the discussion relating to Option Two, consumers have limited information about retail pricing of IMR services, and are not able to compare pricing with ease.

Under this option, the ACCC would:

- make a record keeping rule which would require Australian operators to provide the ACCC with data on pricing for wholesale and retail TTMR services, and traffic and revenue data;
- publish an annual report on wholesale pricing related to TTMR services;
- publish an annual report on the retail pricing of TTMR services.

Unlike the industry standard the ACMA is currently developing, which is primarily aimed at enhancing consumer awareness, the monitoring and reporting proposed as part of this option is intended to enable the ACCC to more effectively monitor the state of competition in wholesale and retail markets for IMR services.

The ACCC's monitoring powers will apply to IMR services between Australia and New Zealand.

Wholesale and retail price monitoring

Record keeping and reporting requirements have the potential to provide the ACCC with a clearer picture of wholesale and retail pricing for IMR services and traffic and revenue flows. Providing the ACCC with information gathering powers would enable it to examine pricing and margin trends, and equip it with data to determine whether action is required. Providing the ACCC with the power to gather data to monitor the state of the market would allow it to respond to changes in the market which require regulatory intervention in a more effective and timely manner.

Retail and wholesale price reporting

A requirement to publish annual reports on the wholesale and retail price of IMR services has the potential to provide consumers with a clearer picture of retail pricing and the factors which impact

on pricing. This would allow consumers to make more informed decisions about their level of use and exert some countervailing power on the service provider. It also has the potential to encourage more competitive offerings from operators by 'naming and shaming' them (while noting that commercially sensitive information, would, if reported, be aggregated before being made public).

Conclusion on monitoring and reporting

Monitoring and reporting on prices is already undertaken by the ACCC with respect to the Australian telecommunications market. While this option would impose some additional costs on industry to collate and present data to the ACCC, industry has systems in place for other services which require it to collect, collate and present similar data. It also imposes costs on the ACCC to collect and process this data. These costs must be balanced against the benefits resulting from greater access to information for both the ACCC and consumers.

By consulting with industry in the implementation of monitoring and reporting the compliance costs for industry and for the ACCC would be minimised. In its submission to the trans-Tasman draft report, Telstra notes that monitoring and reporting measures can represent effective light-handed means of regulation, provided that they are appropriately designed in consultation with industry. ⁶³

Given the *prima facie* case that IMR prices are unjustifiably high, some greater visibility for regulatory into the operation of the market has merit. It would allow regulators to monitor the ongoing market developments and determine whether there is a systemic problem that might warrant further intervention.

Benefits:

- Increased consumer information, leading to more informed choice
- Potential for consumers to exercise countervailing power
- Increased transparency
- Increased ability for the ACCC to determine whether action is required based on fuller information

Costs:

- Collection, collation and presentation costs for providers
- Resource costs for the ACCC to collect and process the information

Option 5: Enhance regulator's powers

This option would give the ACCC the power to implement a number of structural and price regulation measures if an investigation indicated that regulatory intervention was required. It would enable the ACCC to sustain the threat of regulatory intervention, while also empowering it to intervene if the current trend stagnates or reverses when the trans-Tasman joint investigation concludes. A review of the regime could be commenced within two years of the regulatory measure being adopted.

At present the ACCC is unable to take effective action on TTMR, despite having previously identified that IMR prices are "substantially above domestic pricing equivalents." Given the cross border

⁶³ Telstra Corporation Ltd, Response to DBCDE and MBIE Trans-Tasman Roaming – Draft Report August 2012, Public Version, 8 October 2012, http://www.dbcde.gov.au/ data/assets/pdf file/0009/158868/Telstra-Submission-on-Trans-Tasman-Roaming 8-October-2012.pdf, pp.38-39.

⁶⁴ ACCC, Submission to the House of Representatives Standing Committee on Communications inquiry into international mobile roaming, August 2008, p.9.

nature of IMR, some forms of government action, particularly wholesale remedies, are considerably more effective with cross jurisdictional cooperation.

The range of measures given to the ACCC would include:

- a. structural intervention through mandated provision of MLA services, which enable roamers to be local users when overseas without swapping SIM cards; and
- b. price intervention through:
 - i. wholesale price caps;
 - ii. wholesale access obligations, including wholesale prices, that operators can opt in to; and
 - iii. retail price caps.

These measures have been discussed in options two and three above. Although that discussion noted that the immediate implementation of a number of these measures would likely deliver benefits to consumers, it also noted that the costs of intervention would likely be high. Under this option, however, the measures would not necessarily be implemented immediately and, as discussed further below, the balance of costs and benefits may become less precarious in the future. Nonetheless, a number of the stronger sub-options discussed in options two and three have been excluded from the proposed range of measures, namely retail unbundling and retail pass-through. This is because the benefits of implementing either of these two measures are unlikely to outweigh the costs, even in the future.

As set out in option one, the threat of regulatory intervention posed by the trans-Tasman joint investigation has encouraged a downward trend in TTMR prices. This option enables the ACCC to maintain a plausible regulatory threat in the first instance. If the regulatory threat proves sufficient to maintain downward pressure on TTMR prices, few of the costs involved in the more interventionist options would be incurred. Rather, costs would be limited to those required to implement the regulatory framework granting the ACCC the power to impose the remedies set out above.

However, if the regulatory threat does not result in better outcomes for consumers, the ACCC would have the power to intervene in a timely manner, drawing on the most appropriate regulatory mechanism at that time. Before implementing any measure, the ACCC would need to conduct a market investigation (conducted either pursuant to a Ministerial direction or as an exercise of its discretionary power) in line with its existing processes. The investigation would determine the most appropriate form of intervention given the state of the market at that time. If the ACCC needs to exercise one or more of its new powers, it will do so in consultation with relevant stakeholders, including operators. The measure would be implemented with New Zealand on a reciprocal basis.

Since regulatory action would not occur immediately, it is anticipated that the cost to operators to implement a number of the measures may have altered significantly. For example, as noted under option two, the EU is planning to adopt structural measures to address market failure for IMR services within the EU. To meet these new regulatory obligations, operators will need to develop new technologies and business models. This will likely significantly reduce the cost of any subsequent implementation of similar measures in other markets. In particular, for our purposes, it will likely make clearer the costs and benefits associated with adopting similar measures in the TTMR market.

This option would be based on the existing declarations powers contained in Part XIC of the *Competition and Consumer Act 2010* to enable the ACCC to conduct investigations into trans-Tasman mobile roaming services in the same way as it intervenes in other parts of the telecommunications market. That is, declaration would promote the long term interests of end

users, having regard to the promotion of competition, achieving any-to any connectivity and encouraging the economically efficient use of and economically efficient investment in, infrastructure. This power would be amended to provide that, in the case of IMR services, the long term interests of end users will be advanced if there is a reciprocal arrangement with NZ (or another country if there is bilateral agreement). The ACCC's decisions to declare a service is reviewable under the *Administrative Decisions (Judicial Review) Act 1977*.

The outcome of such a declaration inquiry would be to either declare the service or not. A declaration would be specific to NZ (or another country if there is a bilateral agreement). If IMR services were declared, then the regulator would have access to the menu of tools outlined above. The use of the menu of regulatory tools would be limited to IMR services.

As Australia's competition regulator, the ACCC has the expertise and experience necessary to determine how best to regulate to deliver competitive outcomes to consumers. The recent government investigation into trans-Tasman roaming has been an *ad hoc* process, difficult to establish and resource-intensive to run. It is unlikely that the two governments could quickly repeat the exercise. By contrast, with staff specialised in the regulatory process, the regulators' investigations can be undertaken more quickly. This reduces the risk of regulatory error, minimises the cost of intervention, and facilitates a timely response.

It is possible that providing the ACCC with the power to enact a range of regulatory measures could create a degree of regulatory uncertainty for industry. However, while the ACCC will be empowered to undertake a range of regulatory action, it could only do so following its usual processes, including consultation with stakeholders. If the market is delivering competitively priced outcomes, the service would not be declared and regulatory action not occur.

This option would involve some small additional costs to the ACCC which, under the existing arrangements would be recovered from the telecommunications industry through annual carrier licence fees. Balanced against the possible benefits to consumers from continued and ongoing reductions in international mobile roaming prices between Australia and New Zealand, and the alternative of having to revisit the question of the regulators powers in the future if it was decided that prices were not reasonable, this small additional cost is considered justified.

Regulatory flexibility

This option enhances the array of measures that the ACCC could take to deal with uncompetitive IMR prices. There are varying views on the merits of each of the regulatory measures considered in this RIS. These views very much depend on the circumstances being addressed at the time. Rather than the government choosing between these at this time, this option provides the ACCC with the full array of powers to use in a targeted way depending on the circumstances as they emerge (or not use if recent downward trends continue and TTMR markets deliver competitive outcomes without intervention).

Possible competition effects of regulatory options

Options 3, 4 and 5 would all impose some additional requirements on industry. While significant additional requirements on industry could act as a barrier to new entrants in the market, in the case of roaming services which are bundled within domestic mobile communications services they are not likely to have any impact on whether there are new entrants into the market. As discussed previously, the nature of the market is such that even with major structural changes the prospect of new entrants is limited. The arguments for immediate intervention (for example Option 3) or the ability to have regulatory interventions in the future (option 5) is to ensure that the benefits in the

form of lower prices that consumers might expect in a competitive market can be delivered with respect to mobile roaming services.

There is already a view among some players, for example Optus, that dominant players or major groups or alliances might be benefiting from their market power in the establishing of wholesale roaming agreements at present. In the view of Optus this position supports the case for wholesale price intervention. A more cautious approach is to conclude that this position supports the case for ensuring that the regulatory has appropriate powers to intervene in the future should it be warranted.

Benefits:

- Maintains market constraint presented by threat of regulatory action
- Facilitates timely and efficient responses to changing market dynamics
- Ensures regulatory decisions reside with the body which possesses the requisite expertise and experience to make the best decision
- Lower costs of implementation
- Enhances the capacity of the ACCC to adopt the most effective regulatory mechanisms to address high wholesale and retail IMR prices

Costs:

Potential uncertainty for industry

6. Consultation

The Australian and New Zealand governments released a draft report in August 2012 as part of the trans-Tasman joint investigation. The report provided a market definition, a competition assessment and the options for addressing the lack of incentives to compete in the supply of retail and wholesale IMR services considered in this RIS. The report invited submissions from interested parties. In total, DBCDE and MBIE received 17 submissions: six from operators (all present in the trans-Tasman market); two from industry associations; and eight from concerned individuals, groups representing end-users and academia. The submissions received form the basis for consultation on this RIS.

Telstra, VHA, Vodafone NZ, Telecom, and 2degrees dispute the findings of the Draft Report in their totality. Telstra, for example, argues that the recent declines in the market are the result of competitive pressures at the wholesale and retail level. However, they note that, if the government were to proceed, they favour Option 1 (do nothing). Telstra argues that, although it "does not agree with the Draft Report assessment that the threat of the investigation has been the primary driver for decreases in the margins in the TT [trans-Tasman] market, if it is correct, then maintaining a watching brief with the ongoing prospect of a future investigation will continue to produce the desired outcomes of decreasing margins. It would achieve the desired outcomes without customers and operators facing the unnecessary costs and the risks associated with the other options."

⁶⁵ Telstra Corporation Ltd, Response to DBCDE and MBIE Trans-Tasman Roaming - Draft Report August 2012, Public Version, para 184, p.41.

⁶⁶ Telstra Corporation Ltd, Response to DBCDE and MBIE Trans-Tasman Roaming – Draft Report August 2012, Public Version, para 136, pp.32-33.

In contrast to the other operators, Optus accepts the Draft Report's proposal to intervene at the wholesale level, but disputes the need to intervene at the retail level.

ACCAN argues that enhancing the regulators powers is the solution "most likely to reduce roaming prices in the long-term". ⁶⁷ However, it expresses concern that pursuing this measure could delay the benefits to consumers. As a result, it argues that wholesale price caps with retail pass-through requirements should be rolled out as soon as possible, and that regulators should be provided with a range of powers, as presented in Option Five. ACCAN suggested that structural intervention would create confusion for customers. It also argued that the government should attempt to prevent operators from using SIM-locking to lock their handsets to their networks. ⁶⁸

7. Conclusion and recommended options

The trans-Tasman joint investigation identified that the threat of regulatory intervention has been the key factor constraining IMR prices in the TTMR market. There have been some encouraging price reductions in the last 36 months at both the wholesale and retail levels, but it is not clear that in the absence of an effective regulatory threat, existing market and structural forces would continue to drive price reductions or encourage new market entrants. One of the three major Australian roaming providers is now charging for roaming in New Zealand at headline rates equivalent to domestic mobile calls. However, customers have to pay for incoming calls when roaming, which is not the case in the domestic market. New and emerging market entrants at the retail level which are close but not perfect substitutes to the major providers are providing further downward pressure on retail prices.

The pricing data analysed in this RIS suggests that competition in the market is emerging and that the TTMR market is a noticeably different market than a few years ago in terms of roaming prices and profit margins.

This RIS examines five possible options for achieving better outcomes for Australian consumers. Irrespective of the merits of the options, there is an overarching issue which is that the regulator's existing powers do not enable it to pose an effective regulatory threat to constrain TTMR prices, if it judges that to be the case.

Price regulation could certainly be used to drive better prices for consumers and has been used in the EU for this purpose. However pricing interventions are a relatively blunt instrument and thus should only be used in circumstances where it is absolutely clear that there is a market failure.

Regulation to drive structural change could be used to encourage more competition in the provision of IMR services, but structural change comes at a cost and has not yet been implemented anywhere in the world. As with price regulation, structural interventions are probably best considered when it is beyond doubt that there is a market failure.

The monitoring and reporting measures set out in option four will complement the industry standard on IMR consumer awareness the ACMA is currently developing. It will provide greater transparency, allowing regulators to more effectively monitor market movements and to better assess the effectiveness of the market in delivering competitive outcomes. It will allow consumers to

⁶⁷ ACCAN, Response to Trans-Tasman Roaming: Draft Report, October 2012,

http://www.dbcde.gov.au/ data/assets/pdf file/0009/158427/ACCAN Response to Trans-Tasman Roaming Draft Report FINAL.pdf, p.7.

⁶⁸ ACCAN, Response to Trans-Tasman Roaming: Draft Report

better inform themselves of the retail prices for IMR services available to them, potentially increasing the price elasticity of retail IMR services. This may have the effect of stimulating greater retail competition, which may put pressure on wholesale and retail prices. Enhanced transparency will also potentially reduce instances of bill shock. The benefits of the monitoring and reporting measures are likely to outweigh the costs, and the measure can be adopted unilaterally.

The measure to empower the regulator, set out in option five, will allow for the maintenance of a plausible regulatory threat, and allow the ACCC to undertake an inquiry in a timely and effective manner should the threat fail to deliver reasonable market outcomes (or a clear trend toward such outcomes). This option is likely to most appropriately address any concerns about competition in the market, despite what appear to be more competitive recent market outcomes.

This option also addresses the core problem which is that the regulator does not have the power to either gather information or to inquire and, if it considers it necessary, to use regulatory tools that will minimise the extent of any intervention. While the ACCC will be empowered to intervene utilising a number of measures, it will do so only following an inquiry in line with existing processes. This measure represents a lower cost option as compared to immediately introducing either structural or pricing measures since regulatory action would only be undertaken if it is deemed necessary. It also acknowledges the potentially far-ranging nature of the powers granted to the ACCC, and could include a requirement for the government to commence a review of the regime implemented by this regulatory measure within two years.

For a limited cost this option allows for a continuation of the status quo whereby the industry responds to policy and regulatory pressure and introduces commercially determined solutions. In addition, this option means that if concerns persist there is no need to undertake another *ad hoc* investigation and process to provide powers for intervention rather the regulator is able to take steps consistent with the approach for other telecommunications markets.

This option provides the industry with more time to develop commercial solutions of its own and respond to evolving market conditions. Further, it gives the regulator the ability to observe and learn from the interventions being undertaken in other jurisdictions before proposing any application in Australia. Under this option the ACCC would have the scope to do nothing, but if it concluded there was a market failure, it could intervene.

It is recommended that the government adopt option four to further increase pricing and margins transparency, and option five to provide the ACCC with a range of structural and price regulation powers, which it can use should it decide following an investigation that there is a need to intervene.

8. Implementation and Review

In developing the legislation with the Office of Parliamentary Council, DBCDE will continue to consult with the ACCC and other relevant agencies on details of the record keeping and reporting requirements and the ACCC's new structural and price regulation powers.

The ACCC will consult with operators to avoid an overly-intrusive and ineffective monitoring and reporting regime. In consultation with operators, the Government will:

 establish up front what the key indicators that they wish to measure for the purposes of assessing competition – this avoids targeting the wrong data;

- only request the necessary information required for the key summary statistics on which competition is being assessed this avoids "nice to have" and superfluous information being required, which will increase the time and costs of any collection and handover process;
- ensure the data requested is as closely aligned to operator's existing account, billing and IT systems as possible this avoids time-consuming, costly and at times unnecessary development of bespoke systems, and the requirement to retrofit the information available from existing IT and reporting systems manually with information from contracts; and
- ensure the data is sufficiently aggregated this avoids the risk of disclosure of sensitive IOT information that may impact on future commercial negotiations.

The New Zealand Government will introduce similar legislation to Australia. The Australian legislation will be developed in consultation with New Zealand authorities to ensure consistency as far as possible. The additional powers set out in the legislation will only be applicable to New Zealand in the first instance. However, it will include a mechanism to include other countries that have reached a similar reciprocal arrangement with Australia. The listing of any additional countries through a regulatory mechanism will be subject to cabinet's approval.

DBCDE, the Department of Foreign Affairs and Trade (DFAT) and the Attorney-General's Department (AGD) will work with New Zealand authorities on an arrangement to facilitate any reciprocal action between Australia and New Zealand.

The agreement will set out the reciprocal approach and the regulatory rules that will apply between Australia and New Zealand and establish a mechanism for the ACCC and the Commerce Commission (NZ) to take coordinated action as required.

9. Glossary and acronyms

ACCAN	Australian Communications Consumer Action Network
ACCC	Australian Competition and Consumer Commission
BEREC	Body of European Regulators for Electronic Communications
DBCDE	Department of Broadband, Communications and the Digital Economy
EU	European union
GSMA	The GSMA represents the interests of mobile operators worldwide. Spanning 219 countries, the GSMA unites nearly 800 of the world's mobile operators, as well as more than 200 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organisations.
Home network (HN)	At the retail level, the mobile operator who purchases the wholesale input repackages it as a retail roaming service. When acting in this capacity, it is known as the 'home network'. It sells its repackaged (retail) service to its own customers, when they roam across the Tasman.
IMR	International Mobile Roaming
MBIE	Ministry for Business, Innovation and Employment
MLA service	Mobile Local Access service
MNO	Mobile Network Operator
MVNO	Mobile Virtual Network Operator
NZCC	New Zealand Commerce Commission - New Zealand's primary competition regulatory agency
OECD	Organisation for Economic Development and Cooperation
SIM	Subscriber Identity Module – SIM cards are used in mobile telephone handsets.
SSNIP	Small but significant non-transitory increase in price – The SSNIP test seeks to identify the smallest relevant market within which a hypothetical monopolist or cartel could impose a profitable significant increase in price.
TTMR	Trans-Tasman mobile roaming
TUANZ	Telecommunications Users Association of New Zealand
VHA	Vodafone Hutchison Australia
Visited network	At the wholesale level, a mobile operator acts as a host to roamers from across
(VN)	the Tasman. When acting in this capacity, it is known as the 'visited network'. It sells its (wholesale) services to mobile operators across the Tasman.
WIK-Consult	Firm providing contract based consultancy services for public and private institutions