

## Regulatory Impact Statement

### Trans-Tasman mobile roaming: final report

#### Agency Disclosure Statement

- 1 This Regulatory Impact Statement has been prepared by the Ministry of Business, Innovation and Employment (MBIE).
- 2 It provides an analysis of options to address a lack of competition in the provision of trans-Tasman mobile roaming telecommunications services.
- 3 The analysis is informed by an exhaustive market investigation undertaken by MBIE in collaboration with Australia's Department of Broadband, Communications and the Digital Economy (DBCDE), which involved two public consultations over a period of more than two years.
- 4 Implementation of the preferred options will require legislation to amend the Telecommunications Act 2001. To ensure that this amendment process is coordinated with Australia, a bilateral arrangement will first have to be concluded with the Australian government.
- 5 The preferred options will impose some costs on mobile operators, but will generate savings for other businesses who use international mobile roaming services.

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## Commercial in Confidence

### Status Quo and Problem Definition

#### Background

- 6 The Cabinet paper that this RIS accompanies concerns international mobile roaming ("IMR") services between New Zealand and Australia ("trans-Tasman roaming"). It presents the recommendations of a final report on this matter prepared by New Zealand's Ministry of Business, Innovation and Employment (MBIE) and Australia's Department of Broadband, Communications and the Digital Economy (DBCDE). In accordance with those recommendations, it asks Cabinet to agree that New Zealand should work with Australia on a bilateral arrangement, settling out enhanced powers and responsibilities that each country should provide to its telecommunications regulatory authority, in the area of trans-Tasman roaming.
- 7 This RIS defines the problem being addressed, analyses the different options considered, and sets out why the chosen option was preferred.
- 8 The RIS necessarily includes vocabulary specific to the telecommunications sector. For information purposes only, the key terms can be explained as follows:
  - a. Operator: a company that operates a telecommunications network. It may provide fixed or mobile services.
  - b. Mobile operator: an operator whose network supports mobile services.
  - c. End-user: an individual or business that purchases, from an operator, telecommunications services;
  - d. Roamer: an end-user who purchases, from a mobile operator, telecommunications services that they can use while travelling abroad;
  - e. Access seeker: an operator that wishes to gain access to (i.e. purchase) a wholesale service provided by another operator;
  - f. Access provider: an operator that provides access to (i.e. sells) a wholesale service to another operator.

#### Status quo

- 9 There are currently three mobile operators in New Zealand and three in Australia. They provide a broad range of services. These include voice calling, text messaging and mobile broadband services, enabling end-users to surf the Internet or send emails. Mobile operators provide these services over handsets, tablets and laptops.
- 10 Mobile operators also conclude arrangements with foreign mobile operators to enable their end-users to continue enjoying these services when they travel abroad. This is referred to as international mobile roaming. While end-users are free to use alternative services in the country they are visiting, such as hotel wifi or purchasing a local SIM card, many enjoy the convenience of seamlessly continuing to use their home mobile device, and so purchase international mobile roaming services.
- 11 Like electricity, transport, and postal communications, telecommunications is a network industry: it comprises a network of interconnecting structures. In network industries, the costs of entering the market (sunk costs) are high, larger operators enjoy economies of scale, and innovation and reinvestment in the network is required. This tends to mean fewer market participants than in non-network industries and as a result a greater risk of market failure. In this context, governments often set out specific regulatory regimes for network industries, to assist market forces in ensuring competitive outcomes for end-users.

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- 12 New Zealand and Australia have thus both established regulatory regimes specific to the telecommunications sector, New Zealand in the Telecommunications Act 2001 and Australia in the Competition and Consumer Act 2010. These regimes are broadly the same. They establish an industry-specific regulator to investigate relevant markets within the sector and to intervene in that market if there is limited competition.
- 13 More specifically, the telecommunications regimes in New Zealand and Australia provide the telecommunications regulators with the ability, in the event that an inquiry determines that it is appropriate, to set regulated terms available to access seekers should they wish to take advantage of them. In other words, the two regimes are both predicated on the assumption that there will be access seekers with an interest in accessing competitive terms of supply, including in respect of price.
- 14 The assumption that access seekers have an interest in accessing competitive wholesale prices appears to be valid for domestic services. However, the final report has made it apparent that, in respect of IMR, this assumption is tenuous. Operators have less than the usual interest in exercising any countervailing buyer power they may enjoy, for the following reasons:
  - a. First, international mobile roaming services are reciprocal between mobile operators. This means that, for a given operator, the wholesale component of international roaming is not just a source of cost (payments to the foreign operator) but also a source of revenue (payments from the foreign operator). As a result, operators do not make their choice of partner network on the sole basis of the wholesale price terms they have to pay; they will also consider the amount of "return traffic" that they will receive from the potential partner, as the payments they receive for this traffic can improve their net wholesale outcome (by offsetting their own payments to the foreign operator). This means that it may make economic sense for an operator to choose to pay a high price to a foreign operator with a lot of return traffic, over a low price to a competing foreign operator with little return traffic.

This scenario is not unknown in the case of domestic mobile services. For example, mobile termination access services (MTAS) are also provided on a reciprocal basis between operators. However, with domestic mobile services, a low wholesale price, to the extent it is passed through into retail prices, can attract new customers. There is therefore an overriding incentive on both operators to agree to a low wholesale price.
  - b. By contrast, and second, retail roaming is a "subsidiary" service that is bundled with (or "tied to") domestic mobile services. As a result, customers' choice of mobile operator is based primarily on the pricing of the domestic service, rather than on the pricing of the roaming service, a finding confirmed by the results of a survey conducted by MBIE, with the assistance of Customs New Zealand, targeting New Zealanders returning from travel to Australia. This means that customers are unlikely to switch operators in response to a change in the price of roaming, in turn removing any remaining incentive on operators to seek lower wholesale prices.
- 15 In this context, the New Zealand and Australian regulatory regimes have not constrained operators' behaviour as much as they have in respect of domestically-provided services.
- 16 The lack of downward pressure on wholesale rates is exacerbated by an uneven playing field for operators at wholesale level. For example, it is:
  - a. difficult for 2degrees to compete to host Australian operators' roamers, because it lacks a nationwide network comparable to those of Telecom and Vodafone, and it also lacks a large volume of "return traffic" (since its customer base is smaller and lower spending);

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- b. difficult for Optus in Australia to host New Zealand operators' roamers, because Telecom uses frequencies more closely aligned with those of Telstra and, because they are both members of Vodafone Group, Vodafone New Zealand is likely to prefer VHA.

17 Prices have been falling recently but the Final Report has determined that this is due to the regulatory threat posed by the current investigation.

### *Problem definition*

18 The regulatory status quo (use of "regulated terms of access"), combined with current market dynamics (a focus on "return traffic", and the bundling of roaming services with domestic services), means that mobile operators do not have an incentive (regulatory or market-driven) to compete in the provision of roaming services.

X 19 This applies to both price and non-price matters. For example, the Final Report found that New Zealand operators' margins were significant (in 2009, over [redacted] at wholesale level, and over [redacted] % at retail level) but also that operators had failed to introduce new roaming services that could benefit their customers, such as "mobile local-access" services, which allow roamers to become local users in their visited destination, without swapping SIM cards and without losing access to their home number. Specialised roaming solutions companies have been offering mobile local-access services to operators for over ten years and these solutions have been successfully deployed and operated by Hong Kong and Saudi operators, amongst others (including the Hong Kong subsidiary of Telstra Australia). X

20 Pressure from the current joint investigation has prompted some price cuts but, upon its conclusion, New Zealanders travelling to Australia and Australians travelling to New Zealand are likely to experience less than competitive outcomes when consuming trans-Tasman roaming services. In particular, prices are likely to be uncompetitively high.

21 How uncompetitively high can be illustrated by operators' past practice. For example, before the joint investigation commenced, one New Zealand operator was charging \$10 per megabyte (MB) for data roaming in Australia and another \$30 per MB; they are now charging between \$0.50 and \$0.95 per MB, an up-to sixty-fold drop. Experts commissioned by MBIE and DBCDE to estimate costs did not consider that costs had dropped by anywhere near similar amounts. Pricing this far from costs may return.

22 This outcome is a matter of concern, because:

- a. roaming is a service on which trans-Tasman travellers rely; and
- b. uncompetitively high roaming prices interfere in travellers' efficient use of this service.

23 Regarding the importance of IMR, the ability to use a mobile device while across the Tasman is clearly a service that many trans-Tasman travellers value. In the results of a survey published in May 2011 by the then Ministry of Economic Development, which questioned New Zealanders returning from trips to Australia, almost all individual respondents took either a mobile phone or a datacard/dongle-equipped laptop with them when they visited Australia, and the majority of those who took these devices used them to roam at some stage during their trip, despite the premium price. Comments from respondents emphasised the importance of roaming to them on a social and business level: "It was extremely important that I kept in touch"; "I use txt to meet up with people when out or lost"; "[You enjoy] the convenience of keeping your number when you travel overseas"; "Communications and staying on top of business is no longer a luxury but a necessity".

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- 24 Similarly, almost all SMEs and large corporates surveyed stated that they provide their staff with either a mobile phone or a datacard/dongle-equipped laptop that they can take to Australia when they travel. Over half of these respondents indicated that their staff's ability to work effectively would be handicapped "a lot" if voice and text roaming services, or data roaming services, were phased out and they had to rely on other forms of communication (such as local SIM cards, local wifi, and the like).
- 25 Regarding the impact of uncompetitively high roaming prices on travellers' use of the service, the responses to the MED survey showed that, as a result of the high costs involved, a large majority of individuals limited their use of roaming, and a large majority of SMEs and large corporate customers encouraged staff to use roaming only if they really needed to. In particular, comments from survey respondents make clear that uncompetitive roaming prices impede the ability of businesses to operate as they might at home: "The cost of roaming forces us to waste large amounts of time setting up alternative comms channels, Skype, VOIP"; "This kind of activity dramatically hampers NZ business, especially when we are trying to grow in Aussie"; "We regard [competitive roaming rates] as a key aspect to being 'trading competitive' as an export service provider."; "[High roaming rates are a] big deterrent to effective business when travelling overseas".
- 26 In sum, it would appear that, for New Zealand travellers, roaming is a service on which they rely, and yet which they try to avoid using as much as possible when faced with uncompetitively high prices. The scale of this problem is made apparent when one considers that there are over a million short-stay visits each year in both directions across the Tasman.

## Objectives . . .

- 27 The Government's objective is to promote competition in the provision of international roaming services for the long term benefit of end-users in New Zealand and Australia.
- 28 To avoid doubt, consistent with the practice of the Commerce Commission in applying the Telecommunications Act 2001, the Government considers wealth transfers from operators to end-users to be relevant to the assessment of the long term benefit of end-users.
- 29 The governments of New Zealand and Australia also 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, in particular in the Asia-Pacific region.
- 30 New Zealand and Australia are linked by the CER trade agreement, and this is now being supplemented by work towards a Single Economic Market ("SEM") which first emerged at government-to-government level in 2004.
- 31 With most of the trade goals now met, the SEM work program is focusing on the creation of a more favourable climate for trans-Tasman business collaboration. Ultimately, the long-term aim is to have a seamless trans-Tasman business environment in which it is as easy for New Zealand and Australian companies to do business in the other country as it is at home. This will enhance the ability of New Zealand and Australia to increase national productivity, maintain and drive job creation and foster international competitiveness.

## Regulatory Impact Analysis

- 32 In August 2012, during public consultation, officials put forward seven options for addressing the problem identified above. These were:
- a. Maintaining a watching brief

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- b. Unbundling roaming services from domestic mobile services;
  - c. Requiring mobile operators to offer mobile local-access services, a solution enabling them to become a local user without having to swap SIM cards;
  - d. Imposing price caps;
  - e. Imposing regulated terms of access;
  - f. Requiring regulators to collect and report on pricing trends; and
  - g. Enhancing the regulatory constraint posed by the two countries' regulators.
- 33 During consultation, it became apparent that respondents considered options b through e to form a single group under the banner of direct intervention by governments in the roaming market.
- 34 In this context, officials have considered the options under four main headings:
- a. maintaining a watching brief;
  - b. direct intervention in the market by Government;
  - c. imposition of reporting requirements to enhance pricing transparency; and
  - d. enhancing the regulatory constraint posed by the two countries' regulators.
- 35 Within some options (notably "direct regulation by Government"), we have also considered alternative approaches ("sub-options")
- 36 The analysis of each option is primarily qualitative. However, where appropriate, quantitative assessment has been undertaken to the extent possible. Much of the analysis has been completed in the Final Report accompanying the Cabinet paper. This Impact Analysis draws on that Final Report.

#### ***Option 1: Maintaining a watching brief***

- 37 The key finding of the Final Report was that recent price drops have resulted primarily from the regulatory threat posed by the joint investigation. In this context, it would be possible for New Zealand and Australia to decide to take no action at present, but to maintain a "watching brief" and recommence an investigation should circumstances warrant it. The fresh investigation would then stimulate further price drops.

#### ***Impact on roamers***

- 38 This is a "stop-start" approach. We consider that, if New Zealand and Australia chose to maintain a watching brief, recent progress towards competitive roaming offers would likely stall, until such time as a fresh investigation were commenced. The cycle would continue indefinitely, with multiple investigations required at regular intervals.
- 39 This would result in a "bunny hop" market where roamers occasionally enjoy competitive offerings but in between suffer uncompetitive market outcomes.

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### *Impact on non-roamers*

- 40 A decision to maintain a watching brief would largely eliminate the risk of a waterbed effect,<sup>1</sup> during periods with no active investigation, meaning mobile customers would, all other things being equal, continue to enjoy current domestic rates, handset subsidies and the like. However, a waterbed effect could re-emerge when a fresh investigation was launched.
- 41 In addition, the long-term interests of end-users are served not just by low (roaming) prices but also by enduring investment in networks, platforms and features. To the extent that Option 1 would leave higher than normal profits in the roaming market, and free up operators' time and resources to concentrate on delivering more and better retail products, it would serve non-roamers' long-term interests.

### *Impact on operators*

- 42 Option 1 would require operators to provide traffic and revenue data to Ministry officials each time a fresh investigation was launched (and potentially in between investigations). They would also expend resources reading and submitting on any discussion documents or draft reports released for consultation.
- 43 Beyond this, Option 1 does not entail costs to mobile operators in their capacity as visited networks, since it would mean the wholesale market was free of regulation. Conceivably it could involve costs to mobile operators in their capacity as home networks, since they will be paying higher than efficient wholesale prices to visited networks, but to the extent that they can pass these prices on to retail customers, the net effect on them would be neutral.

### *Impact on government*

- 44 This approach would represent a regular and significant diversion of resources for both the Governments and the operators.
- 45 The diversion of resources would be regular due to the need to launch a fresh investigation each time retail outcomes became uncompetitive, and the fact that the launch of the investigation would likely stimulate short-term behaviour from operators that mimicked a competitive market.
- 46 The diversion of resource would be significant because of the staff hours required to monitor the market, test whether it was appropriate to launch a fresh investigation, and then launch and maintain though to its end that fresh investigation.
- 47 To illustrate, it was in mid-2009 that the New Zealand and Australian governments decided to collaborate in the examination of trans-Tasman mobile roaming, and the Final Report has been completed at the end of 2012: a process of over three years. This has included the preparation and release:
- a. In May 2010 of a high-level discussion document to test whether there was a problem requiring a full market analysis;
  - b. In August 2012 of a comprehensive draft report assessing the state of competition in the market and analysing potential measures to address identified issues; and
  - c. presently, of a comprehensive final report that takes account of submissions on the draft report.

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<sup>1</sup> A waterbed effect describes circumstances where a forced reduction in pricing in one market leads operators to raise prices in other markets.

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- 48 Conservatively, MBIE alone expended 350 staff days on this process. Other agencies, including MFAT, Treasury and the Commerce Commission, have also had to make staff available throughout the process, meaning a total of at least 400 staff days has been consumed, just in New Zealand.

### *Option 2: Direct Intervention*

- 49 Officials considered several forms of direct government intervention as a way of addressing the problem identified. These interventions would require change to, and in some respects override, the telecommunications legislative frameworks in New Zealand and Australia.

- 50 The interventions can be aimed either at pricing levels directly, or at altering the market structure.

- 51 There are two main ways to target pricing levels directly:

- a. by requiring access providers to offer certain wholesale price terms to access seekers ("regulated terms of access") – a sort of "opt-in" service which is there if the access seeker wants to use it, but which the access seeker can also ignore; and
- b. imposing price limits that cannot be exceeded ("price caps").

- 52 There are also two ways to target the structure of the trans-Tasman roaming market:

- a. unbundling the provision of trans-Tasman roaming services from the provision of domestic mobile services, so that a New Zealand end-user could, for example, choose 2degrees as its provider when in New Zealand and Vodafone as its provider when abroad (i.e. when roaming);
- b. requiring operators to offer to trans-Tasman roamers a "local access service", whereby they gain access to a local mobile number (and so are charged as locals) without having to swap SIM cards, while retaining the ability to call and be called on their original mobile number (in which case they are charged as roamers).

- 53 We have considered the impacts of all four variants of direct intervention in the market, namely:

- a. regulated terms of access;
- b. price caps;
- c. retail unbundling; and
- d. requiring the provision of mobile local-access services.

### *21/ Regulated terms of access*

#### *Impact on roamers*

- 54 Regulated terms of access are, in our view, unlikely to remedy the problem identified, at least if implemented as a stand-alone wholesale measure. This is because, as discussed in the problem definition section, there is a lack of interest from most mobile operators, in their capacity as access seekers, in obtaining lower wholesale rates.

- 55 For this reason, roamers would continue to face uncompetitive retail outcomes.



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### *Impact on non-roamers*

- 56 A decision to impose regulated terms of access, being ineffective in bringing down prices actually charged in the market, would be unlikely to create a waterbed effect, meaning mobile customers would, all other things being equal, continue to enjoy current domestic rates, handset subsidies and the like.
- 57 In addition, to the extent that imposing regulated terms of access would leave higher than normal profits in the roaming market, and free up operators' time and resources to concentrate on delivering more and better retail products, it would serve non-roamers' long-term interests.

### *Impact on operators*

- 58 Regulated terms of access are unlikely to have a material effect on operators' revenues, given the reluctance of the majority to access competitive terms of supply.
- 59 Operators are fully familiar with regulated terms of access, which are the only remedy that the Commerce Commission has imposed in the past.
- 60 Imposing regulated terms of access would likely require:
- a. for any non-price terms: one or more operators to prepare draft terms of access, for the Commerce Commission and its Australian counterpart to review and approve. This could take three to four months. Once the Commerce Commission has approved the proposal, operators would then have to begin to offer the regulated terms of access to operators across the Tasman;
  - b. for price terms: operators would be expected to submit on draft pricing levels prepared by the Commerce Commission in association with its Australian counterpart. This could involve operators commissioning work from economic consultants and would likely take up to three months.

### *Impact on government*

- 61 Imposing regulated terms of access would require adopting appropriate legislation to make wholesale trans-Tasman roaming a designated service under the Telecommunications Act, meaning that it would be subject to price and non-price regulation by the Commerce Commission.
- 62 The Commerce Commission, in collaboration with its Australian counterpart, would then:
- a. for any non-price terms, direct one or more operators to draft proposed terms of access, which the regulators would then have to examine and approve. This could take three months;
  - b. for price terms: set pricing levels. This would likely require assistance from economic consultants and could take up to six months.

### *2ii/ Price caps*

#### *Impact on roamers*

- 63 Price caps show promise in ensuring competitive outcomes for roamers.

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- 64 Price caps at retail level would immediately benefit roamers, by lowering the price they pay for their communications while travelling. Nevertheless, the evidence from the European Union is that operators have tended to cluster around the level of the retail caps that are in place there for voice and SMS roaming services, despite the existence of a healthy margin between wholesale and retail caps in which, theoretically, operators could create innovative retail offers. The issue appears to be that, because roaming services are tied to domestic services, retail price cuts for roaming services have not proved able to attract customers, and so are not pursued.
- 65 Price caps at wholesale level could improve outcomes for roamers. It is for example possible that, with caps meaning they make savings at wholesale level, smaller "disruptive" operators would pass on the savings to their retail customers, in an effort to win new customers or generate greater use of roaming services. However, the evidence from the European Union, where wholesale price caps have been introduced, is not encouraging, with most of the operators simply pocketing the savings thus far. This is again because, with roaming services tied to the much more used domestic services, retail price cuts for roaming services have not proved able to attract customers; nor have they generated enough extra traffic to compensate for the headline rate cut (i.e. retail price elasticity is less than 1.0). What has resulted is a simple transfer of wealth from larger operators to the smaller operators.
- 66 Potentially, far more aggressive wholesale price caps than those currently in place in the European Union could be more effective. Very low wholesale caps would allow disruptive operators to include roaming use within the domestic bundle (i.e. roaming and domestic usage would be deducted from the same bundle), just as very low mobile termination rates have started to allow mobile operators to include off-net calls (and not just on-net calls) in their calling minutes bundles. However, MBIE and DBCDE commissioned an estimate of the costs incurred by mobile operators in providing wholesale roaming services, and price caps should not be set below cost levels. It is uncertain whether these levels – as they stand at this time – would be low enough to unlock the disruptive "bundling" behaviour mentioned above.
- 67 To the extent that price caps resulted in more competitive offerings for retail customers, private individuals would feel freer to remain in touch with friends and family. In this regard, Vodafone New Zealand published an advertisement in the *Herald on Sunday* dated 30 January 2011 stating that, according to its survey of regular Vodafone customers, "40% say that having mobile Internet makes a good holiday". Lower roaming prices will make having mobile Internet a more realistic prospect for holidays outside the country.
- 68 Similarly, businesses would find it that much easier to operate across the Tasman and gain Australasian scale. For example, over 90% of both SMEs and corporate decision-makers surveyed by MED stated that, if the cost of using New Zealand mobile devices was the same in Australia as it was in New Zealand, their staff's ability to work effectively while in Australia would improve.
- 69 We note the draft Joint Study of the New Zealand and Australian Productivity Commissions on Strengthening trans-Tasman Economic Relations, published in September 2012, which stated that "reducing ... telecommunication costs would facilitate trade across the Tasman."<sup>2</sup>

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<sup>2</sup> See p.10 of the draft Joint Study

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- 70 The potential impact of increased usage in trans-Tasman roaming is large. Australia is New Zealand's largest trading partner, taking over 23% of all New Zealand exports. The two-way trade in goods between New Zealand and Australia is worth over \$18 billion per annum and is continuing to grow, while two-way trade in services amounted to more than \$6 billion in 2010. By improving the ability of the businesses generating this trade to act more quickly, more competitive roaming services could facilitate the generation of millions of dollars of extra trade between our two countries.
- 71 In this regard, a 2011 stakeholder survey by the New Zealand Inc team from Ministry of Foreign Affairs found optimism amongst New Zealand businesses about significant commercial opportunities in Australia, especially in response to the commodities boom in Queensland and Western Australia – described as 'a once in generation opportunity' for economic growth. The survey found some urgency amongst businesses for New Zealand to develop the capability in the private sector and in government, through support services, to take advantage of this opportunity.
- 72 It might be argued that, because retail roaming price elasticity is low, more competitive prices would simply represent a transfer of wealth from operators to their customers and produces no overall dynamic increase in economic performance. Indeed, the experience in the European Union, and in Malaysia and Singapore (which negotiated reduced roaming prices between their two countries in 2010), has been reduced prices but only moderate corresponding growth in traffic volumes.
- 73 It is difficult to comment on such claims because no New Zealand or Australian operator has provided concrete information to MBIE on the response of users to recent price drops. As it stands, our "best guess" of retail price elasticity, based on information published by European Regulators, is 0.25 for voice, slightly less for SMS, and slightly more for data. This suggests price cuts would result in at least some growth in traffic volumes, and so claims of a "pure" wealth transfer would be misplaced. One should also bear in mind "collateral" benefits that operators would enjoy, such as fewer customer complaints and enhanced reputations for "fair deals".
- 74 In any event, as noted in the Objectives section of this RIS, the Government considers that wealth transfers from telecommunications suppliers to end-users should be considered as evidence of benefit.

### *Impact on non-roamers*

- 75 Price caps on roaming services would immediately reduce operator revenues. There is therefore potential for waterbed effects in separate markets, for example the retail market for domestic mobile services, or wholesale markets in which New Zealand operators sell services to operators from countries other than Australia. For example, roaming prices for other destinations might rise (or fall less than they might); domestic prices might rise (or fall less than they might); incentives and indeed ability to invest may decline, so that 4G networks might roll out more slowly than they might (harming dynamic efficiency); and prices for mobile devices will rise if subsidies are reduced.
- 76 It is likely that any waterbed effect would affect prices in other roaming markets, more than prices paid for domestic retail services, because there is less price elasticity, and less competition, in these other roaming markets than in the domestic market.
- 77 The 'strength of the waterbed effect' will be a function of:
- a. the size of trans-Tasman roaming revenues, relative to operators' overall revenues;

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- b. the proportion of trans-Tasman roaming revenues that is competed away (or 'lost'); and
- c. the proportion of lost trans-Tasman roaming revenues that operators decide (and manage) to recover elsewhere.

78 In this regard:

- a. trans-Tasman roaming revenues represent only a small proportion of operators' overall revenues. This should limit the strength of the waterbed effect.
- b. In principle, the proportion of trans-Tasman roaming revenues that will be competed away may be large. However:
  - i. trans-Tasman roaming is not just a source of (retail and wholesale) revenue but also a source of (wholesale) costs (payments to visited networks), meaning wholesale price reductions will be positive for some operators; and
  - ii. without wishing to overstate pent-up demand, some increase in usage of roaming services that results from lower prices.
- c. the proportion of lost revenues that operators decide, and manage, to recover elsewhere should be small, since (most) operators are enjoying healthy margins across the full suite of services they offer (both wholesale and retail). This would weaken the waterbed effect.

79 Overall, the waterbed effect (including as it impacts investment incentives) will not be significant, at least for the majority of operators. We note the conclusion of the European regulators group, BEREC, which stated that the price caps implemented by the EU Roaming Regulation do not seem to have had a significant impact on the pricing of other mobile services.

#### *Impact on operators*

80 As noted above, price caps on roaming services would immediately reduce operator revenues, to an extent proportional to the level of the caps. However, given the small contribution of roaming to operators' revenues, and the potential for some increased traffic due to demand elasticities described above, the losses would not be significant.

81 Operators could face a price squeeze if retail price caps are introduced without wholesale price caps.

82 New Zealanders in Australia generate a significant amount of traffic on Australian operators' networks, but Australians in New Zealand generate even more traffic on New Zealand operators' network. This traffic imbalance means that wholesale trans-Tasman roaming arrangements are a net source of revenue for New Zealand operators, and a net source of cost for Australian operators (which they make up for through revenues from retail roaming).

83 For this reason, to the extent that any intervention forces down wholesale prices, New Zealand operators' wholesale revenues will go down, while Australian operators' wholesale losses will lessen. New Zealand operators could consider this unfair.

84 However, it is not certain that the current traffic imbalance will exist in perpetuity. Australians travelling to New Zealand generate more traffic for a variety of reasons, some of which can change over time. For example, if the New Zealand dollar appreciated against the Australian dollar, then more New Zealanders would likely travel across the Tasman, generating more roaming traffic. Moreover, the two regulators would have the ability to set asymmetric remedies on operators in each country, to ensure all operators are impacted fairly.

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- 85 Vodafone Group made a decision to invest on both sides of the Tasman. It might be considered that, because no other operator is so positioned, it enjoys a competitive advantage from being present in both countries and that regulation might unfairly remove this hard-earned advantage. However, Vodafone's stake in its Australian operator (VHA) was reduced to 50% in 2009, reducing its control of decision-making. In addition, according to Vodafone New Zealand, its commercial arrangements are "on arm's length terms" with VHA (VFNZ submission, para 16). In this context, we do not consider that either Vodafone NZ or VHA has a competitive advantage from its presence on both sides of the Tasman that regulation could threaten.

### *Impact on government*

- 86 Imposing price caps would require adopting appropriate legislation. It would also require the setting of pricing levels. This would likely require assistance from economic consultants and could take up to six months

### *2iii/ Retail unbundling*

#### *Impact on roamers*

- 87 Unbundling as a stand-alone measure would be unlikely to remedy the problem identified. In theory, it could motivate some operators to offer lower retail prices, as they sought to poach roaming customers away from their rivals. However, as it has never yet been implemented in practice anywhere in the world, this expectation is as yet unverified by experience.<sup>3</sup> In our opinion, it is unlikely that operators would truly commit to competing for retail margins from customers (trans-Tasman roamers) who individually generate traffic only once or twice a year.
- 88 Moreover, unbundling would do little to impact the underlying price floor set by high wholesale rates. With wholesale rates representing up to          of retail prices (depending on whether the services is voice, SMS or data), this would mean limited benefit for end-users. X

#### *Impact on non-roamers*

- 89 Given the limited potential for retail unbundling to bring down prices for trans-Tasman roaming, this option would be unlikely to cause a significant waterbed effect through the reduction of operator revenues.
- 90 However, the costs of implementing retail unbundling for operators would be substantial (see Impact on Operators below), and this could generate some waterbed effect negatively impacting non-roamers.

#### *Impact on operators*

- 91 The costs associated with implementing retail unbundling are likely to be prohibitive, particularly for small single-country operators such as 2degrees. These amount to several million dollars per operator for the initial outlay; and ongoing loss of economies of scope, as operators would no longer be able to insist on bundling domestic and trans-Tasman roaming mobile services.

#### *Impact on government*

- 92 Imposing retail unbundling would require adopting appropriate legislation.

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<sup>3</sup> The EU has mandated retail unbundling but not until 2014. We therefore have no experience of its implementation on which to draw.

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### *2iv/ Requiring the provision of mobile local-access services*

#### *Impact on roamers*

93 Requiring operators to offer roamers a mobile local-access service would likely lead to continued drops in the charges paid for trans-Tasman roaming services.

94 There are two main variants of this approach:

- a. the roamer's home network reaches an agreement with the network in the visited destination to provide the roamer with a local number; however the home network maintains the entire billing relationship with the roamer (including for the calls made as a local user); or
- b. the network in the visited destination establishes a direct billing relationship with the roamer (for example, by prepaid credit card payment), in respect of the calls made as a local user.

95 Both variants would mean roamers could gain access, if they so chose, to local or near-local prices for their mobile service. This would also put pricing pressure on operators' pricing of traditional roaming services.

96 The first variant, which has been introduced commercially notably between Hong Kong and mainland China, would bring new offers to the retail market. Each home network would offer its standard roaming product but also, in cooperation with an operator in the visited destination, a "local access" alternative. To ensure that the local access alternative was offered at competitive rates (something akin to local rates), some price regulation might also be required.

97 The second variant, which has been introduced commercially notably in Saudi Arabia and which has been mandated for introduction in the European Union from 2014 (for data communications only), would potentially be less complex to implement, since it would be unlikely to require additional regulation. It does however carry the risk of being more confusing for roamers, since they would not have received information from their home provider about the visited network's prices and coverage. It may also be difficult for roamers to pursue disputes with the visited network, since they will likely be back in their own country after a short period, although inasmuch as this variant is likely to be a prepaid solution, this limits the extent of loss that roamers could face.

#### *Impact on non-roamers*

98 Requiring operators to introduce mobile local-access services would reduce operator revenues, as a significant proportion of their roaming traffic would likely shift to the local-access alternative. There is therefore potential for waterbed effects in separate markets.

99 However, the diverted traffic would continue to generate some revenue for operators, in their capacity as providers of the local-access service. For this reason, any waterbed effect is likely to be less significant than with options such as price caps.

#### *Impact on operators*

100 The market for the provision to operators by specialised roaming companies of roaming solutions is highly competitive. For this reason, off-the-shelf mobile local-access solutions can be easily purchased from vendors (whose products operators already use to good effect) for less than \$1 million and with very short "to market" time specifications.

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- 101 Given that, for the three New Zealand operators combined, net revenues (i.e. margins) in the wholesale and retail markets for trans-Tasman roaming services exceeded ; in 2011, we consider this price to be affordable and unlikely to threaten the viability of any New Zealand operator's trans-Tasman roaming services. X
- 102 Operators would lose some revenue as roamers switched away from traditional roaming services to mobile local-access services, but would recapture a small proportion of this in their capacity as providers of the mobile local-access services.

*Impact on government*

- 103 Imposing retail unbundling would require adopting appropriate legislation.

**Option 3: Measures to promote pricing transparency**

- 104 Creating visibility on wholesale and retail prices and margins is used in some sectors, notably energy, to create downward price pressure. The Commerce Commission has also reported on such matters in the telecommunications sector, but as yet has not done so in the area of trans-Tasman roaming.
- 105 In this context, it would be possible to require the telecommunications regulators in New Zealand and Australia to collect and report regularly, perhaps in their annual monitoring reports, on wholesale and retail prices and margins for trans-Tasman roaming services.

*Impact on roamers*

- 106 Where customers understand clearly how much they are paying for a service, they can choose not to use it, and so exert some countervailing buyer power on the service provider (in the case of trans-Tasman roaming, on the home network).
- 107 However, for so long as trans-Tasman roaming services remain bundled with other retail services, the ability of roamers to put real pressure on their home networks (for example, by switching suppliers) will be hampered, even when informed by the regulators' monitoring. Customers will continue to choose their supplier by reference to the pricing and quality of domestic services, rather than of roaming services.
- 108 In this context, the effectiveness of pricing reports is likely to be limited to its ability to "name and shame" operators into providing more competitive offerings, to the extent that report findings are picked up by the general media.
- 109 In this regard, the electricity and gas disclosure regimes established in the 1990s are generally considered to have failed to exert significant downward pressure on prices in those industries, and as a result were supplemented by price controls under Part 4 of the Commerce Act.
- 110 In this context, unless measures to promote pricing transparency were introduced in tandem with other measures, retail roaming offers would likely become uncompetitive over time.

*Impact on non-roamers*

- 111 Introduced alone, pricing transparency measures would be unlikely to exert material pressure on operators to make competitive offerings available, for the reasons discussed above.
- 112 For this reason, such measures would be unlikely to create any material waterbed effect affecting non-roamers.

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### *Impact on operators*

- 113 The impact of a reporting regime on operators would depend on how it is structured.
- 114 To avoid an overly-intrusive and ineffective monitoring regime that simply imposes costs on all carriers and risks disclosing confidential information, the Governments should:
- a. establish the key indicators that they wish to measure for the purposes of assessing competition – this avoids targeting the wrong data;
  - b. only request the necessary information required for the key 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; and
  - c. ensure the data requested is as closely aligned to operators' 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.
  - d. ensure the data is sufficiently aggregated – this avoids the risk of disclosure of sensitive wholesale pricing information that may impact on future commercial negotiations.
- 115 Operators also face the risk that commercially sensitive information (in particular, wholesale prices) will be disclosed by the regulators. This can be managed by requiring the regulators to aggregate information received and to favour discussion of "percentage changes" in wholesale pricing (an index method) rather than discussion of actual wholesale price levels.

### *Impact on government*

- 116 Option 3 would require adopting appropriate legislation, with all the attendant costs.
- 117 It would impose costs on the regulators to collect and process the relevant data. These costs must be balanced against the benefits resulting from greater access to information for both the regulator and consumers.
- 118 In this regard, regulators would enjoy access to information they can use to decide whether consideration of further intervention is necessary. Governments, like the general public, will be able to read the regular reports from the regulators, to determine whether any further legislative change might be appropriate.

### *Option 4: Enhancing the abilities of the regulators*

- 119 The Final Report concluded that the joint investigation by the New Zealand and Australian governments has, by posing a threat of effective regulation, been an essential factor in the emergence of the downward trends in the wholesale and retail margins we see today.
- 120 In this context, it would be possible for the New Zealand and Australian governments to legislate to enable the two countries' telecommunications regulators to pose an enhanced level of regulatory threat. This could be done by equipping the regulators with the ability, should they launch an investigation and demonstrate market failure, to choose from a palette of regulatory measures, rather than being limited to imposing regulated terms of access.



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- 121 Under the option being considered, the two regulators would, when jointly examining trans-Tasman roaming services, follow their normal approach to market investigations – defining the relevant markets, assessing the level of competition and, if appropriate, weighing the costs and benefits of intervening. However, the regulators would have the ability to select from a wider range of interventions than they do today.
- 122 The regulators currently have the ability to set regulated terms of access (specification and designation in New Zealand; declaration in Australia). The wider palette of measures would be drawn from amongst the "direct intervention" measures canvassed earlier in this Impact Assessment.

### *Precise nature of measure proposed*

#### *Expanded palette of remedies*

- 123 The two regulators would be entitled to choose from the following remedies in any case where they found market failure:
- a. wholesale regulated terms of access i.e. a price-capped offer that access seekers can demand from access providers;
  - b. wholesale price caps;
  - c. retail price caps, whether opt-in, opt-out or compulsory for roamers (with a presumption in favour of opt-in, to minimise market distortions);
  - d. mobile local-access obligations:
    - i. a wholesale obligation on visited networks to offer home networks a mobile local-access service, and a corresponding retail obligation on home networks to offer that mobile local-access service to their end-users; or
    - ii. a retail obligation on visited networks to offer directly to inbound roamers a mobile local-access service.
- 124 However, neither regulator could impose the remedy of retail unbundling, which was canvassed above. The earlier discussion identified a number of problems with the remedy of retail unbundling. These include:
- a. an uncertain impact on the competition issues identified;
  - b. very high implementation costs (several million dollars per operators) relative to the size of the market (the only other jurisdiction where unbundling has been considered is the EU, where the roaming market is much bigger);
  - c. ongoing loss of economies of scope, as operators have to serve two distinct markets (a market for domestic services and a market for roaming services).
- 125 Retail unbundling would also be difficult for regulators to implement on a bilateral basis just with Australia: it would mean, for example, that New Zealand mobile customers could choose a new operator for trans-Tasman roaming services, but would have to continue to use their domestic provider for roaming to other countries.

#### *Extension to other countries*

- 126 The Cabinet paper recommends that the regulators be able to choose from their extended palette of remedies when working not just with the regulator in Australia but also with regulatory authorities in countries with which New Zealand has an explicit bilateral arrangement on roaming in place.

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### *Direction by Minister*

- 127 The Cabinet paper also recommends that the New Zealand and Australian Ministers responsible for telecommunications each be able to direct their national telecommunications regulator to commence an investigation into the relevant roaming market.

### *Impact of the option as defined*

#### *Impact on roamers*

- 128 We anticipate that, with regulators better equipped to intervene effectively in trans-Tasman roaming markets, mobile operators would be wary of setting unreasonable wholesale terms of supply to other operators and unreasonable retail terms of supply to trans-Tasman roamers.
- 129 Furthermore, the regulators would have an advantage of note over MBIE and DBCDE: speed. The 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 rarely exceed two years (excluding the subsequent time necessary to define the precise terms of a determination). This would enhance the regulatory threat on operators.
- 130 For these reasons, we anticipate that roamers on the trans-Tasman route would enjoy increasingly competitive retail offerings.
- 131 If bilateral arrangements on roaming were agreed by New Zealand with other countries, then these benefits would likely flow through to roamers on those routes.

#### *Impact on non-roamers*

- 132 To the extent that it put downward pressure on trans-Tasman roaming prices (and potentially other roaming route prices over time), or encouraged operators to spend money on new and innovative services, operators' net revenues from roaming would reduce over time. There is therefore potential for waterbed effects in separate markets.

#### *Impact on operators*

- 133 Operators would be likely to lose revenues as they sought to price sufficiently low to avoid intervention by the regulators.
- 134 In the event that the regulators nevertheless decided to launch market investigations, operators would expend time and resources on participating in the public consultation process.
- 135 If, at the end of any investigation, the regulators decided to intervene, then the impact on operators would mimic the impacts described under Option 2 (direct intervention) above, although the regulators' greater expertise in telecommunications regulation would lessen the risk of regulatory error.

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### *Impact on government*

- 136 Option 4 would require adopting appropriate legislation, with all the attendant costs. It also pre-supposes that future Governments will at least consider the appropriateness of seeking bilateral arrangements on roaming with countries other than Australia. Such consideration would involve significantly fewer resources and significantly less time than those involved in the current investigation, as the "legwork" required to understand the dynamics of international roaming has already been completed.
- 137 There would be no additional costs on regulators for monitoring roaming markets (in order to assess the need for an investigation) as they are already empowered to do so under the relevant telecommunications legislation. However, to the extent that having a wider palette of remedies available to them complicated their assessment of the costs and benefits of intervention, regulators may be required to devote more resources than currently to the investigation process. Nevertheless, given their expertise in the area of regulation, this is expected to be cheaper than the governments maintaining a watching brief (Option 1).

### **Consultation**

#### *Consultation with market stakeholders*

- 138 MBIE has, in association with DBCDE, consulted stakeholders on several occasions over the course of more than two years:
- a. In May 2010, a high-level discussion paper was published, seeking submissions on a proposal to launch a full market investigation;
  - b. In mid-2012, operators were consulted on the cost estimate work commissioned by MBIE and DBCDE;
  - c. In August 2012, a draft report was published, seeking submissions on a proposal that the governments of New Zealand and Australia should consider coordinated intervention in the market.
- 139 Respondents to consultations have been divided in their opinions. With the exception of the Australian operator Optus, operators have opposed intervention, arguing that recent price drops in the market are a result of enhanced competition since the entry into the market of 2degrees and the launch of the XT network by Telecom New Zealand. User groups have supported intervention, agreeing with officials' assessment that recent price drops have resulted from the threat of regulation created by the joint MBIE/DBCDE investigation.

#### *Consultation with government agencies*

- 140 Amongst New Zealand agencies, MBIE has consulted MFAT, Treasury, and the Commerce Commission in the development of its recommended course of action. The Department of the Prime Minister and Cabinet has been informed.
- 141 Outside New Zealand, MBIE has worked closely with DBCDE [ ] n d X

### **Conclusions**

- 142 The impacts of the different options are summarised in the table below:

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Option	Description	Impact				Overall
		Roamers	Non-roamers	Operators	Government	
1	Watching brief	Stop-start benefits	Sporadically negative	Sporadically negative	Very costly	x
2	Terms of access	No material impact	No material impact	Mildly costly	Costly	x
	Price caps	Positive	Potentially negative	Very costly	Costly	x
	Retail unbundling	Uncertain	Potentially negative	Very costly	Costly	x
	Mobile local-access	Very positive	Potentially negative	Costly	Costly	x
3	Reporting	Positive	No material impact	Mildly costly	Costly	✓
4	Enhancing regulators	Very positive	Potentially negative	Mildly costly	Costly	✓

143 The options that appeared to deliver the highest level of net benefit were price caps, requiring the provision of mobile local-access services, reporting requirements, and enhancing the powers of the regulators. However, the first two options carry a significant risk of regulatory error, notably in the calculation and setting of cap levels and/or the setting of appropriate local-access specifications.

144 In this context, we consider that the benefits of Option 4 (enhancing the powers of the regulators) exceed the costs and that Option 4 will deliver the highest level of net benefit of all the options considered individually.

145 We consider that the benefits of Option 3 (price trend reporting) exceed the costs and that Option 3 would enhance the positive impact of Option 4 without significantly adding to costs.

### Implementation

146 If Cabinet agrees to the recommendations in the Cabinet paper, MBIE will commence the preparation of drafting instructions for PCO.

147 However, because the necessary legislation will need to be coordinated with legislation in Australia, MFAT and MBIE will first negotiate an appropriate bilateral arrangement with their Australian counterparts.

148 The announcement of the decision to adopt Options 3 and 4 will be made by the Prime Ministers of New Zealand and Australia at their summit in early 2013.

### Monitoring, Evaluation and Review

149 MBIE will review the impact of the changes on the relevant stakeholders on an ongoing basis. In addition, the Telecommunications Act is subject to a formal review by 2016. Consideration of the effectiveness of the options adopted will occur at that time.