InternetNZ

InternetNZ

Study of mobile telecommunications markets in New Zealand

InternetNZ's submission

26 October 2018

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1. Introduction

1.1 InternetNZ welcomes the Commerce Commission's Study of mobile telecommunications markets in New Zealand (the Issues Paper) and appreciates the chance to submit on this. The focus for InternetNZ is to ensure the telecommunications market is driving good internet access and outcomes for all New Zealanders.

1.2 InternetNZ is an independent, membership-based charity, which works to support the benefits of the Internet for all New Zealanders.

InternetNZ's vision is "A better world through a better Internet"

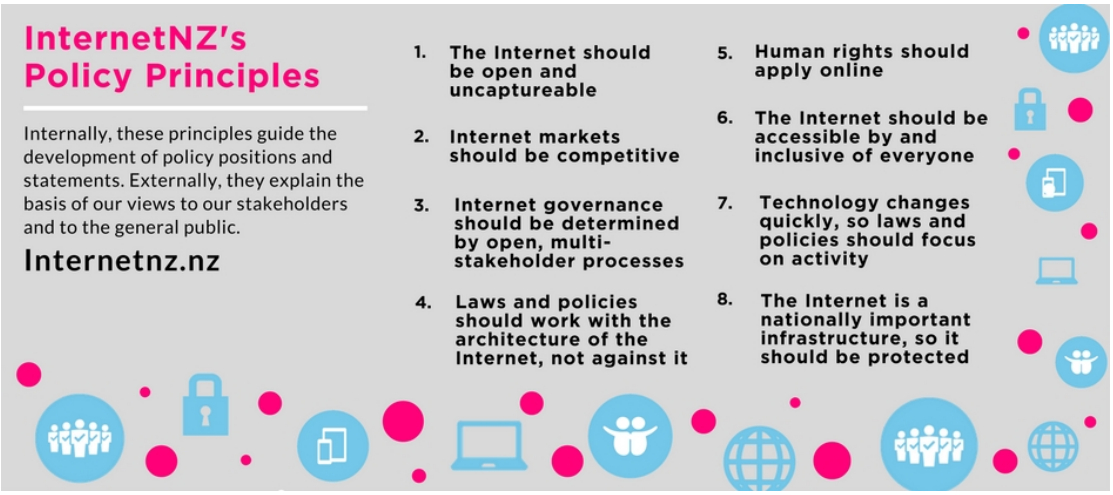
1.3 Our mission is to promote the Internet's benefits and uses and protect its potential. We do that with a cause in mind, that being the Open Internet. In doing this, we act as part of the New Zealand Internet community.

Our policy principles

1.4 InternetNZ's policy work is guided by principles. Of relevance to this submission are the principles that:

a) Laws and policies should focus on activity rather than specific technologies

b) Internet markets should be competitive.



1.5 We support the purpose of the Issues Paper to gain a better understanding of how mobile markets are currently performing and developing, alongside how the mobile landscape may evolve in the future. We particularly welcome consideration of mobile alongside other access modes, and consideration of

broader and emerging issues with changing technology, such as 5G and e-SIMs.

1.6 Our submission provides an overview of InternetNZ's support of the Issues Paper and identifies three key issues we think the Commission should cover in its subsequent mobile market study. We have provided answers to specific questions outlined in the Issues Paper in appendix one.

2. The importance of information for decision-making

2.1 To make good policy decisions Government and New Zealanders need good information. On the surface, our markets may be working well to serve New Zealanders, but, like getting a warrant of fitness, the only way to know how well things are working is to look under the hood. The mobile market study is a chance to ask the right questions and set up systems to monitor the right outcomes.

2.2 We support the Commission's Issues Paper as a way of gathering information to providing robust evidence for good decisions-making across New Zealand.

2.3 With only three network operators, and limited uptake of virtual network operators, it is important to ask how well our mobile markets are serving New Zealand. We believe the Commission's broad scope for the Issues Paper is appropriate given the current market and coming technology shifts. A study narrowly focused on the mobile market would miss important dynamics that matter for long-term consumer outcomes.

2.4 The key issues we have considered in writing this submission are:

Mobile internet is increasingly important

2.5 Mobile connectivity is key infrastructure and is an increasingly important part of how New Zealanders get online and benefit from the Internet. People want work, play and communication wherever they are - whether it be the beach, the office or Hong Kong. The expectation we now all have is that connectivity is on our terms - when and where we want it.

2.6 The next few years will see several continuing shifts in how New Zealanders connect to and benefit from the Internet. From 2020, new regulations will govern the price and quality of fibre and allow for the deregulation and removal of copper networks. Across the board, the quality and coverage of connectivity will improve. Continued rollouts of UFB fibre, RBI2, and mobile black spot coverage will be joined by preparations for 5G, and services aimed at Internet of Things devices

Consumers do not care if it is fixed or mobile

2.7 For consumers, distinctions between fixed and mobile connectivity are likely to be increasingly artificial. Smartphones and other devices move seamlessly between mobile networks, and home or office WiFi. A WiFi connection may be served by fibre, or perhaps by 4G mobile connectivity, which in turn connects to fibre backhaul.

Mobile competition affects outcomes across modes

2.8 The ability to access and offer mobile connectivity is a potential constraint on the competitive efficiency of other access modes. For consumers, having a good connection when and where needed is an increasing priority - not how that connection is delivered to them. This makes interactions between mobile and other modes more important.

Service for today, investment for tomorrow

2.9 Our markets and regulation need to work both now and over coming decades. For today, New Zealanders need fast and reliable connectivity on fair and reasonable terms. For the future, we need continued investment in infrastructure, and innovation in services. This is a delicate balance - that calls for insightful policy-making and monitoring.

Holistic, efficient and evidence-based regulation is needed

2.10 Delivering the full benefits of the internet requires competition and consumer choice in telecommunications markets. This competition and consumer choices needs to be backed up by efficient and evidence-based regulation agnostic to how the service is delivered. We support the Commerce Commission as the key agency to deliver that regulation.

3. Key issues to investigate in the mobile market study

3.1 InternetNZ has identified three key issues that should be considered in the mobile market study. These are:

- increasing costs of supply through bundling
- the need to consider the whole user experience
- the importance of considering competition over the long-term

Bundling

3.2 As the Issues Paper sets out in paragraphs 86-92, there are potentially important issues with bundling in telecommunications markets. Bundling an exclusive or limited-access product may allow a higher price for mobile services.

Bundling may be:

Type of bundling	Potential scenario
Across network modes	Are bundled mobile services unfairly influencing fixed-line Internet markets?
Over-the-top services	Is bundled streaming video unfairly influencing mobile connectivity markets?
Devices	Is access to consumer devices influencing competition in mobile markets?

3.3 InternetNZ does not oppose bundling if it is based on informed consumer choices. However, currently the choice of bundling sits with the provider, who get to choose what is bundled together. It would be better if this power sat with the consumer - what is it that what in a package, and what discount could they receive. For this, consumers need adequate, accessible and easily understandable information. This information also needs to include understanding wider implications. For example, a consumer data right as discussed at paragraph 179 would sit alongside existing rights to personal information under our privacy law, and might need to be considered in that context.

3.4 The mobile market study needs to examine how the Commission can monitoring the extent to which bundling of exclusive, limited-access, or "must have" products can add complexity to the market for consumers or increases the cost. The issue of cost is particularly relevant when consumers are looking at switching providers.

Consider competition across the whole user experience

3.5 It is important to manage competition across the whole user experience. The services consumers access spill across both products and services. These includes the locking of a phone to one provider, or apps not working on different operating models. No one part of connecting to the internet stands in isolation.

3.6 For most consumers however, they do not differentiate between service or product. So, although technologies can offer flexibility at one level, they can also shift or increase control at another level. Perfect competition in access modes can fail to benefit consumers if there is lock-in at the level of devices or content services.

3.7 We recommend the Commission looks at the whole user-experience, and how network operators can use other mechanisms to limit a consumer's ability to make decisions that benefit them.

Consider competition over the long-term

3.8 We welcome consideration in the Issues Paper of technology shifts, such as the likely adoption of 5G, and the potential effects of a shift to e-SIMS.

3.9 Across these shifts, we see the potential for a mix of effects on consumers that need to be addressed in the mobile markets report. Thought needs to be given in the study to issues such as, which models are likely for 5G network and how will it be priced, how will the Internet of Things be monitored to allow changes between providers, how should fibre be treated versus mobile modes, and how e-SIMs will affect competition, service development and investment.

3.10 We recommend the report continue to maintain a broad and long-term analysis of mobile markets, that addresses these issues and creates an evidence base for inform regulatory settings for the future.

Conclusion

3.11 For the mobile market study to maximise its potential, we would encourage the Commission to continue with the current broad focus. The focus should be on how the consumer uses and benefits from mobile services regardless of mode. This will become even more critical as the future dynamics of changing technology impact on how New Zealanders access and use the internet.

3.12 Consumers are increasingly using Internet-based services and mobile data. Whether backed by a mobile tower or a fibre connection, users want a reliable and fast connection when and where they need it. The study needs to continue to treat mobile markets holistically, recognising the broader ecosystem. Regulators need to understand the impact of the whole user-experience, from device, to application to content-delivery networks.

3.13 When looking at markets - the focus should always be on driving good outcomes for New Zealanders. For this reason, we encourage the Commission to seek feedback from a wide range of stakeholders - including from people currently excluded from accessing mobile services due to skills,

cost or availability; from providers of adjacent services; as well as the traditional telecommunications industry.

3.14 We welcome the insights of the Issue Paper and acknowledge it as a way to collect evidence on the shape of the current mobile markets and on how the markets are likely to evolve. We look forward to the final mobile market study.

Want more detail? Get in touch!

3.15 We support this process and its intended outcomes. We would welcome the opportunity for further dialogue on how best to realise those outcomes.

3.16 Please contact James Ting-Edwards via james@internetnz.net.nz

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4. Appendix One - Answers to specific questions

4.1 We address the specific consultation questions below. We also provide detailed response to the proposed exceptions and examples in the following pages.

Bundling	
Q3	How, and to what extent, have consumers benefited from bundling of mobile services?
	We do not oppose bundling in the context of informed consumer choices. That may mean monitoring the extent to which bundling of exclusive, limited-access, or "must have" products raise switching costs or the complexity of markets for consumers.
Q4	What are the constraints on non MNO fixed line broadband providers' ability to compete by supplying their own bundles, such as bundling of fixed line broadband and electricity by Trustpower and Vocus?
	Access to mobile networks may constrain competition in fixed line broadband. We would welcome more information. The dynamics may depend on the appetite for convenience versus shopping around among different consumers.
Pricing	
Q5	What are the reasons for high retail prices for higher volume bundles of mobile services in New Zealand compared to other countries?
Q6	What are the reasons for high retail prices for standalone mobile data services in New Zealand compared to other countries?
	It is possible that the cost of delivering mobile data is higher in New Zealand. It is also possible that higher-data packages are open to more price discrimination than other product categories. However, one reason for higher costs in New Zealand is our commitment to prioritise universal mobile coverage over targeted cheaper service in heavily populated areas. An egalitarian view that a person in Bluff should have the same or similar service as a person in Auckland is a key part of how the market was established. Understanding this historical context is important for us having an informed discussion on the balance between cheaper or universal coverage.
Usage trends	
Q7	How are mobile data usage trends expected to evolve in the next few years, and how might that affect suppliers of mobile services?

Q8	How do you view mobile calling and messaging services evolving, given the emergence of OTT services?
	We expect continued uptake of mobile data, both in terms of more people using it, and more data used per person. Revenue from phone calls and SMS may change if Internet-based alternatives are taken up more widely. Pricing of data only services may reflect this.
Investment	
Q9	Q9 Do you agree that we have identified the relevant measures of mobile service quality?
	We think the quality criteria of coverage, availability, speed, and customer service are broadly correct. These might vary in importance for different customers. For example, some users might favour low price over a well-staffed call centre, or broad coverage over urban network speeds.
Q10	What further measures, and evidence may be relevant for monitoring retail service quality?
Q11	What are the incentives and constraints in New Zealand for improving customer service quality?
	As above, a one-size-fits-all metric may not be the best model for measuring quality. It might be worth developing some user-profiles to inform evaluations of quality. It might also be important to consider how informed consumers are, when for example, choosing between price and quality of customer service.

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MVNO based entry	
Q12	Do you agree we have described the key factors relevant to wholesale competition both currently and into the immediate future? Are there any other factors likely to influence wholesale competition for mobile services, going forward?
	The evolution of the market and MVNO uptake will depend on a range of factors, including current and future regulatory settings. For this study, what is important assessing telecommunications markets and potential constraints on competition, to inform decisions on those regulatory settings. We welcome consideration of wholesale settings in the mobile market as a potential constraint on competition in fixed-line markets. Investigating is important and is the only way to find out if there is a problem or not. We think that all New Zealanders should have at least basic Internet service. We continue to promote a tech-neutral "essential services" product which should be available regardless of local access modes. It should: • Specify a minimum performance level, and maximum price for nationwide access; • Be compatible with different infrastructure - for example, it should have specified minimums for "calling minutes" and/or "monthly data" to allow for delivery by mobile operators; • Improve over time, on a path which meets or exceeds the 2025 targets The need for essential services should be considered when considering wholesale prices, and that any market strategy aligns with the with the Government's 2025 target that 99% of New Zealanders will have access to 50 Mbps services, and even the most remote 1% will have access to 10 Mbps services.
MNO based entry	
Q21	To what extent, and in what ways, do the current spectrum holdings constrain competition in the supply of retail or wholesale mobile services in New Zealand?
	We welcome consideration of spectrum alongside other potential constraints on the mobile market. A key part of the context for New Zealand is that, compared with overseas markets, New Zealand has relatively few players. As Figure 15 indicates, allocation of spectrum is uneven, with Spark holding a particularly large allocation. We have previously expressed concerns that spectrum is a relatively scarce resource that is allocated, usually on an auction basis, for periods of up to 20 years. The consequence of this is that it can create an artificial scarcity which inhibits competition and results in hoarding and inefficient

	use of spectrum. The lack of a nationally agreed long-term strategy for spectrum allocation and use exacerbates this problem.

Roaming based entry	
Q22	What evidence is there on whether or not national roaming and co-location regulation have promoted the efficient expansion of 3G and 4G coverage in New Zealand?
Q23	What evidence is there that the other forms of infrastructure sharing such as provisions of RBI1 and the RCG, have been effective in allowing competing operators to expand their coverage?
Q24	Have there been any problems in relation to the infrastructure sharing provisions of RBI1 that could inform infrastructure sharing arrangements in the future?
	The current settings for co-location seem cumbersome. 2 Degrees have managed to successfully co-locate, but other entrants have not attempted to use this method. The current regulations will mean it is unlikely that new entrants will try to enter the market using co-location methods. We support consideration of infrastructure sharing and roaming terms under RBI1 and through the RCG, including whether uptake under those models suggests problems for roaming access.
Mobile interconnection	
Q25	Q25 What are your views on the current regulation of mobile interconnection services?
	Mobile interconnection is not directly an Internet issue but may have implications for mobile Internet access. Interactions between mobile data pricing, over-the-top substitutes for phone and SMS services, and mobile interconnection may deserve investigation.
The ability of consumers to switch	
Q27	What difficulties do consumers face in comparing retail offers for mobile services? How could consumers access better information about prices and plan packages, service levels and associated facilities like international roaming in order to identify the package that best suits their needs?
Q28	Should mobile providers be required to provide consumers nearing the end of a fixed term with information on options that could better meet consumer needs?

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Q29	Should mobile providers be required to provide consumers with access to their data (usage, locations etc) in a format that facilitates comparison of services that best meet their needs?

Q30	What barriers and costs do consumers face when switching and what improvements could be made to make switching easier?
	To drive good outcomes, including investment that benefits New Zealanders, consumers must have meaningful and informed choices for Internet access. We welcome investigation of consumer switching costs, and consideration of better tools to inform consumer choices. The Issues Paper presents a consumer data access right as one potential model for informing those choices. We support consideration of a consumer data access right. It might be important to consider and consult on: • how this right would sit alongside access rights in privacy law • options for machine-readable records including APIs to better inform consumers and enable easier switching between telco services.
Consumer satisfaction	
Q31	How would you describe the relationship between customer satisfaction and switching in New Zealand?
	We welcome investigation of consumer satisfaction, with reference to informed and meaningful choices by consumers. Consumers vary in their use-cases, and reasonable service expectations may vary across product categories. While it may be important to establish a quality baseline, a one-size-fits all standard may not be the best approach.
Infrastructure sharing	
Q33	How important is infrastructure sharing likely to be to facilitate the widespread and timely deployment of 5G services—urban and rural—in New Zealand by improving the economics of a 5G deployment?
	We welcome consideration of the potential modes for 5G rollout. We favour consideration of a broad range of scenarios, including different infrastructure sharing settings, and whether led by MNOs, local fibre companies, or others.

Q34	If 5G fixed wireless becomes a substantial substitute for fibre to the home, what is the right approach to setting the price of backhaul from mobile towers and from the additional cell sites?
	Consider, as a starting point, neutral treatment of fibre backhaul regardless of the ultimate access mode being served. We expect UFB fibre to remain the best-performing access mode, but if New Zealanders opt for 4G or 5G on fair and competitive terms, that may also be a good outcome.
Q36	Q36 What aspects of infrastructure sharing are most likely to facilitate the entry of a fourth MNO, or expansion of existing MNOs once 5G has been rolled out?
	Analysis of 5G rollouts should consider the relative positions of players including MNOs, local fibre companies, and potential market entrants, including relevant open access requirements.
Q39	What are the likely incentives for infrastructure owners to expand sharing arrangements and to provide access to their network infrastructure assets to third parties?
	Benefit to New Zealanders comes from efficient investment that improves connection coverage and quality and allows a choice of services at fair prices. Shared infrastructure supports consumer choices but may deter potential investment. Infrastructure owners have mixed incentives, depending on current and potential customer bases and network infrastructure. Each will want sharing that adds revenue and complements its position, not sharing that competes. We welcome consideration of these dynamics, in terms of how best to translate potential network investment into good Internet access outcomes.
Q40	Q40 What are your views on the viability of three or more separate 5G networks, and what alternative models do you consider as potentially viable?
	Potential competitive constraints include coverage by geographic area, network speeds, spectrum, and backhaul. Depending on the importance of each constraint, there are different potential models for 5G rollout. Access to fibre networks including backhaul may be a key constraint on 5G, implying a potential role for owners of that infrastructure, with dynamics depending in part on the terms of access to regulated fibre products.
Q41	Q41 How important is access to the infrastructure established by the Rural Connectivity Group to roll out 5G services to rural areas?

	Access to coverage may be a constraint on competition and market entry including for 5G. We welcome consideration of open access to the RCG infrastructure. Given the investment in public money for a wider roll-out of rural broadband, more recently, the and the Government's clear goals for better Internet, with speeds of 50 Mbps reaching 99% of Kiwis we would expect a commitment to 5G in rural areas. The long-run interest of rural and remote users is the same as for everyone else – getting the best viable service at a fair price. These users should not be "left out" as progress happens elsewhere but should share in the benefits from efficient rollout of better services.

Network slicing	
Q42	Is network slicing likely to increase the presence of non-traditional providers such as Apple and Google in mobile markets, and are these providers likely to be able to negotiate competitive wholesale access arrangements with MNOs?
Q43	Given the non-traditional providers' economies of scale, what are the likely benefits and harms that may materialise for existing MNOs, potential MVNOs and consumers in New Zealand should a non-traditional provider enter the market?
	We welcome consideration of broad and long-term issues, including the potential for market entry by international businesses like Apple and Google. Monitoring overseas markets may be important for early information on this scenario. Potential scenarios have different effects for consumers and network investment. Customer relationships may increasingly emphasise over-the-top services and devices, and risk lock-in on those terms. International businesses may choose to bundle with a particular telco on favourable terms or use network slicing to turn local network access into a low-margin commodity. Network operators may make investments in a bid to win a favoured position. Or they may be deterred from investing in network improvements, which may seem less important to customer choices.
Spectrum issues	
Q44	To what extent can MNOs compensate for a reduction in network quality from having less spectrum by building or acquiring access to more mobile sites?
Q45	What restrictions, if any, ought to be placed on the forthcoming 5G spectrum allocation to best facilitate competition in 5G services?
	Dynamics for access to spectrum interact with a range of issues, including the terms on which infrastructure sharing is available

e-Sims	
Q46	What impacts are e-SIMs likely to have on consumer switching costs?
Q47	How will MNOs support the use of e-SIMs in mobile devices?
	We welcome consideration of e-SIMs as a technology influencing mobile markets. As with network slicing, we see the potential for e-SIMs to lower switching costs for mobile connectivity, but also some potential for e-SIMs to constrain competition or lock-in consumers at the level of applications or devices.