



## Mobile Market Study Scoping

Submission to Commerce Commission

30<sup>th</sup> November 2017

## ABOUT VOCUS

1. Vocus New Zealand is the third largest fixed line operator employing over 800 staff In New Zealand. Our retail operation includes a number of challenger brands - Slingshot, Orcon, Flip and 2Talk. We are also an active wholesaler of services including access, voice and broadband over both fibre and copper.
2. Vocus has made significant investments in New Zealand. We are the largest copper unbundler with a presence in over 200 exchanges throughout New Zealand. In addition we operate 4,200km fibre optic network transits between virtually all major towns and cities, and connects directly into all major peering exchanges. .
3. Our customers in New Zealand range from government agencies, integrators, large corporate, SME and residential households. We are committed to New Zealand's fibre future.
4. Vocus Group is one of the fastest growing telecommunications companies in Australasia and a major provider of voice, broadband, domestic and international connectivity and data centres throughout New Zealand and Australia.
5. If you would like any further information about the topics in this submission or have any queries about the submission, please contact:

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## SUMMARY

6. Vocus welcomes the opportunity to submit on the scope for the Commission's mobile market study. As the Commission notes "Potential competition and regulatory questions in mobile markets have been accumulating for some time".
7. Going forward Mobile data will be the most critical component of telecommunications. Fixed-mobile convergence continues to gain pace. Spark already have over 10% of their broadband base on a fixed wireless access service and increasingly a diverse range of services will require access to both fixed network and mobile network capability. As such any study of the mobile market needs to factor in the implications on competition for the fixed line telecommunications market.

## THE REVIEW NEEDS TO BE FORWARD LOOKING BUT ACTION NEEDS TO BE TAKEN NOW

8. It is clear that mobile telecommunications will be the most rapidly growing and changing component of telecommunication in the foreseeable future, increasing converging with fixed line telecommunications.
9. Mobility, seamlessly integrated with other components, will be the most critical aspect of telecommunications with potentially the biggest impact for NZ business and consumers. It is arguable that the real innovation in telecommunications comes from the global equipment manufacturers and the rapidly evolving devices and services that often utilize both fixed and mobile components seamlessly to open up opportunities that change people's lives. The Internet of Things will be a reality opening up unprecedented opportunities to a wide range of end-users
10. Developments such as 5G are changing how mobile networks will need to be built & have the capability for greater sharing of network components in order that networks can be built efficiently & meet the evolving demand.
11. As such the review needs to be forward looking or risk delays in New Zealanders accessing capabilities as well as higher cost as our 3 'silo' networks from established Mobile Network Operators (MNO's) gradually and inefficiently evolve.
12. The biggest risk Vocus sees is that focusing on future developments we lose sight of some of the immediate issues that need to be addressed now to give the market time to adjust. If no timely action is taken these will be inhibitors, slowing innovation and delaying businesses and consumers benefiting from technology developments.

## TWO KEY AREAS OF MARKET FAILURE NEED ADDRESSING NOW TO ENSURE NZ CONSUMERS AND BUSINESSES BENEFIT FROM FUTURE DEVELOPMENTS

13. Vocus sees two interrelated areas of market failure:-
  - (a) The lack of a viable mobile wholesale market as evidenced by the failure of MVNOs by any measure.

- (b) The lack of infrastructure sharing and the effective foreclosure of entry by a new entrant network operator as a result of the current regulatory framework and reliance on infrastructure based competition from 3 MNO's

14. Vocus would like to see action taken now to: -

- Regulate to create a viable Wholesale Market for Mobile services which moves away from the tightly controlled resale services and creates the framework which gives MVNO's the opportunity to grow and a framework that can evolve over time as capabilities, such as network slicing, become a reality.
- Review policies and approach, particularly national roaming, co-location and spectrum rules, in order to encourage efficient network build by allowing the entry of new regional network operators, particularly those with open access policies.

Even if changes are made in the short term it will take a number of years for the market to adjust.

## CREATE A VIABLE WHOLESALE MARKET FOR MOBILE SERVICES

15. The failure of the mobile wholesale market is self-evident with MVNO services representing less than 1% of the market, in contrast to overseas markets.
16. **MVNOs in Australia accounted for around 45 per cent of all new mobile connections in the first six months of 2017.** Research company Telsyte reported that in the Australian Market MVNOs added more than 200,000 of the 444,000 new services during the first half of the year. [ Telsyte's Australian Mobile Services Market Study FY2017]
17. Existing New Zealand MVNO's are not wholesale services but selective resale services, with tightly controlled scope and access to technology capability, handsets and resale services which are often withheld (for example mobile data as a backup for fixed line outages is only available if the customer has both services with the same retail supplier)
18. There is no scope for innovation, effectively Mobile Network Operators (MNO's) tightly control the MVNO's capability and structure of their services. MVNO's commercial arrangements are typified by multiple contracts, for different services, with an endless cycle of contract renegotiations and special deals in the business segment. MVNO agreements are rapidly 'out of the market' price wise as renegotiated prices become unviable within 6 months.
19. Over the last two decades Vocus have been one of the most successful of the small 'fixed line telecommunications' operators. Initially wholesaling regulated fixed services we built a customer base through smart marketing and service. Vocus recently entered the power retailing market and has been the fastest growing small retailer in that market.
20. However despite a proven track record in acquiring customers Vocus has been unable to successfully build an MVNO base, with a mere 21,000 MVNO services ( the bulk of the total MVNO market in NZ but a rounding error in the market). This is after almost a decade of marketing and switching mobile network supplier in an attempt to get a more viable commercial arrangement and 'break out of the shackles'.

21. Digital Island, one of the larger MVNO's, has recently been acquired by Spark. Historically a major inhibitor for their growth was access to viable MVNO services.

## WHY IS A VIBRANT MOBILE WHOLESALE MARKET IMPORTANT FOR BUSINESSES AND CONSUMERS?

22. The internet of things (IoT) will open up unprecedented opportunities to a wide range of end-users and industries including manufacturing, energy, transportation, agriculture and healthcare.
23. In turn this will spawn many small innovative, entrepreneurial companies looking to develop products and services to consumers that will be underpinned by access to mobile capability. In the recent Communications Day (9 Nov 2017) Vodafone commented:

*“Vodafone has revealed that half of its IoT customers need help making a business case for Internet of Things technology deployments.*

*Vodafone Australia IoT head Leticia Jennings told the inaugural IoT Australia Summit in Sydney – hosted by CommsDay, Comms Alliance and the IoT Alliance Australia – that the large number of companies requiring help making an IoT business case had given partnerships a particularly important role in the carrier's strategy for taking IoT solutions to market.*

*“What we're realising is that the majority of customers out there, 50% of them, say that they have a start-up or new idea but they need help with the business plan,” she said. “They really want to get into IoT but they don't know how. So, what we're finding globally is that they need that help, they need that partnership, they need the experience.”*[COMMUNICATIONS DAY 9 November 2017]

24. Typically the large MNO's are not good at meeting the needs of small innovative businesses who cover a wide range of industries. In fact this is exactly the environment in which small telco's emerged in NZ, using regulated wholesale services, focusing on niches in the market and aggregating demand for services to ensure a viable input cost for downstream service providers or end users – a role which the larger telecommunications companies lacked the focus and specialist skills to perform.
25. Small wholesalers met the gap in the market and delivered to customer needs. Examples historically would be areas such as Managed WAN services, PBX or VoIP service providers where there were numerous wholesalers innovating and selling solutions, or components of solutions, directly or through other downstream providers such as PBX suppliers.
26. The first VoIP providers, for example, were all the small service providers, such as CallPlus, WorldX, Orcon, and Digital Island, who innovated & offered equipment and capability to downstream providers. In the case of VoIP the services were available **almost a decade earlier than the large network operators made them available.**
27. In addition to being key to innovation the wholesale market was also important to ensure affordability as the smaller Telco's acted as aggregators of demand **and as a result of building scale were able to provide services to customers and downstream providers at a lower cost than they could access directly themselves from the network operator.**

28. Furthermore successful MVNO's are also important to new entrant network operators in that their customer bases potentially reduce one of the barriers to the entry of new network operators who need to be able to fill their networks. Clearly any new network operator is not going to have access to the customers of the three existing MNO's which currently accounts for 99% of the market.

## **ENCOURAGE NEW NETWORK OPERATORS TO ENTER THE MARKET**

29. The rapidly evolving changes in technology means that: -
- The distinction between networks (fixed, mobile, wifi etc) are blurring as CPE seamlessly takes advantage of multiple network types and new services rely on components of both.
  - The type of network build is evolving – small cell high density urban networks will be required to meet demand, advanced mobile network multi-tenancy approaches such as network slicing are evolving and network sharing is a fundamental feature of evolving 5G systems.
30. To date spectrum allocation, failed co-location (RBI with its 'government funding carrot' being the exception) and national build requirements in roaming contracts have been major barriers to entry. Technology changes are driving a need to change the approach.

## **EFFICIENT BUILD OF NETWORKS AND NETWORK SHARING**

31. For over a decade little or no network sharing occurred in New Zealand, forcing inefficient 'silo' network builds which are ultimately paid for by the consumer. After years of incumbent MNO's raising technical issues RBI suddenly changed things. RBI with its '*government funding carrot*' and limited regional coverage (whereby it poses little threat to the core business model of the MNO) is the notable exception. The reality is the dominant MNO's have little or no incentive to share networks and have actively avoided it, as 2 degrees frequently highlighted in the past.
32. However things have evolved, most notably the advent of UFB and LFC's with open access deeds.
33. Regional LFC's, and others, with significant fibre assets are well placed to efficiently build high density, small cell networks. They have open access deeds within which they operate. It is in the best interest of New Zealanders that they have the opportunity to cost effectively build networks in the areas where they have assets however for this to occur they will need:-
- Access to spectrum
  - Access to national roaming or partner with retailers who have access to viable roaming arrangements
  - Access to customer bases that they can leverage – 99% of which are currently locked up with three MNOs who are 'doing their own thing' with network builds.
34. Efficient network build plus open access deeds should result in consumers getting more timely, more economic access to services than the current 'silo' approach by existing MNO's who don't have the fibre assets and aren't necessarily incentivised to rapidly deploy new technology.

35. Furthermore the opportunity to expand into mobile may be critical for LFC's as fixed-mobile substitution continues. Speaking in Sydney this month Mike McTighe, Chair of Openreach said:-

*"We already provide backhaul to pretty much every tower in the UK... the issue for 5G is [providing fibre for] microcell architecture," he said. "We want to provide that; it's not currently within Openreach's scope; I want to change the scope so that when we build down a street, we not only provision for the homes and businesses that we pass but we provision architecturally for whatever radioheads need to be built to support the microcell architecture. That will help our business case."*

*But McTighe also cast the move as critical to secure Openreach's future in the face of increasing fixed-mobile substitution. [COMMUNICATIONS DAY 14 November 2017]*

### **INNOVATION AND DISRUPTIVE TECHNOLOGY**

36. Increasingly disruptive technology will likely be available that the incumbent 3 MNO's have little incentive to deploy. Under the current regime, which focussed on infrastructure competition and national network deployment, arrangements appear to be designed to make it difficult for a new entrant to create a pocket networks taking advantage of new technologies.
37. In Vocus' view companies such as Blue Reach are an example of such a new entrant. They should be encouraged.

### **SPECTRUM ALLOCATION AND NATIONAL ROAMING SHOULD BE IN SCOPE**

38. With the rise of the Internet of Things there will be smaller players seeking spectrum sharing and use of unlicensed bands. Their needs should be met by the spectrum allocation policies.
39. As the ACCC noted in its recent Communications Sector Market Study :-
- "Spectrum allocation and management is increasingly important for communications markets. The value of spectrum lies in the economic and social benefits it supports, rather than in any revenue return to the Budget. The Government's proposed new radiocommunications regulatory framework does not explicitly recognise the impact of spectrum allocation and assignment on competition and efficiency in downstream retail markets." [Communications Sector Market Study Oct 2017 p.186]*
40. The use of spectrum caps may be considered and the appropriateness of highest bidder approach reviewed given the incentive for incumbents to spectrum block. Our two largest telco's have significant spectrum holdings when compared to overseas markets.
41. New players in the wireless sector will not necessarily be national carriers seeking dedicated spectrum. Regional allocations & shared spectrum may be appropriate.
42. National Build requirements should be removed from roaming agreements & alternative types of roaming considered.

## OTHER AREAS TO BE INCLUDED IN THE SCOPE

### INTERCONNECTION – MOBILE ORIGINATION, TERMINATION AND SMS

43. Mobile origination rates of between 8 to 9 cents per minute are excessively high as a result of avoiding regulation. They represent a significant cost for some businesses to the extent that some businesses have in the past not allowed mobile calls to their 0800 numbers. That is not in the best interest of consumers.
44. Mobile termination rates have been held at 3.56c per minute following the conclusion of the 2011 regulated glide path. In 2015 the ACCC more than halved Australian mobile termination rates to 1.7 cents from 3.6 cents noting that the cost of switching 3G calls was lower than 2G and that they expected further reductions from VoLTE.
45. Increasingly the distinction between mobile and fixed calling is becoming artificial with many 'mobile' calls occurring over fixed networks. The gap between fixed line termination (a blend of bill & keep and 1c) and 3.56c for mobile is artificial and risks creating distortions between fixed and mobile operators.
46. In Vocus' opinion a review of the mobile termination, origination and SMS rates is long overdue.

### HANDSET ISSUES AND CPE PRACTICES

47. Access to handsets is another inhibitor for MVNO's, there are multiple examples of new handset being made available to the MNO's retail arm for a period before MVNOs can access the service or MNO's retail arms selling handset at retail below the wholesale price.
48. MNO's will often, conveniently, blame global suppliers with rationale such as "stock is heavily constrained and there won't be any allocation to the MVNO".
49. The area of CPE / Handset should be reviewed. With future developments in CPE capability the Commission's study should follow the ACCC and review this area. The example cited in the ACCC's 'Communication's Sector Market Study' Oct 2017 is a good example of the type of market failure that will likely occur if no intervention, or threat of intervention, is present: -

*"Case Study: e-SIMs*

*Traditional removable SIM cards are being replaced by dynamic reprogrammable e-SIMs embedded in wireless devices.*

*We consider that e-SIMs have the potential to greatly promote competition in the IoT sector (and the broader mobile sector) by facilitating consumer switching. However, we are concerned that*

*restrictions associated with the e-SIM model are impeding the ability of MVNOs to compete with the mobile network operators, and reducing consumer choice.*

*As ACCAN has noted:*

*“there are clear competition issues, with the e-SIM and Apple SIM models. In Australia, consumers can only select a plan with Optus, Vodafone and Telstra. Consumers cannot sign up for a service with any MVNOs.”*

*By way of example, we understand that Apple is offering connectivity to its Apple Watch 3 exclusively through the mobile network operators and that MVNOs are currently unable to provide services for this and other Apple e-SIM devices”. [ACCC’s ‘Communications Sector Market Study Oct 2017 p.182 ]*