

Bluereach submission to Commerce Commission on Terms of Reference for Inquiry into the Mobile Market.

1. What is Bluereach

Bluereach is owned by Malcolm Dick, the founder of CallPlus and a major investor in the new Hawaiki submarine cable system. Malcolm is a highly successful telecommunications entrepreneur. When Malcolm sold Callplus the radio spectrum assets were retained by Bluereach. Bluereach is developing low cost 4G/LTE networks in rural and urban areas with the objective of being able to rapidly deploy a 5G national FWA and mobile network when the technology becomes available and if sufficient spectrum and roaming is available (predicted to be from 2019).

The Bluereach business model is one of low cost deployment of network by whoever has or wants to have a network. To this end, as part of the initial stages toward rolling out a national FWA and mobile service, Bluereach is collaborating with a number of existing Wireless Internet Service Provider ('WISP') to upgrade their existing wifi/wimax networks to LTE. Bluereach aggregates the network elements to form a broad reaching network utilising Bluereach's nationwide spectrum assets.

At present Bluereach has developed a number of regional 'islands of network' and is providing fixed wireless access services to WISP over these network elements. Bluereach is capable of delivering an FWA and mobile service over this deployed technology but the service is not, in the absence of an effective roaming agreement, ubiquitous.

Bluereach operates on a wholesale open access basis, such that any retailer may use any of the network to deliver service to their customers (previously they would have been restricted to only using their own network elements).

Bluereach strives to be innovative and disruptive in the telecommunications market

2. Issues the Commission should consider

There are a number of issues the Commission needs to address if the Inquiry into the Mobile Market is to be meaningful. These include:

- Forward-looking rather than an historical approach.
- Broaden the concept of public benefit beyond solely the benefit to end users.
- Spectrum availability.
- Spectrum auction terms.
- Timely introduction of new technology.
- Access to appropriate national roaming.

As this submission is limited to addressing the high level issue of scope of the forthcoming review, and we are submitting that the Commission should take a wide approach to what is included in the review, we have not identified all relevant issues to be considered during the review.

Dealing with each of these in turn:

2.1 Inquiry needs to be forward looking rather than an historical approach.

Past Commission Inquiries have tended to address issues after they have occurred and the issues became blocks on innovation and competition. A forward-looking approach has the advantage of anticipating the issues and dealing with them in such a way that it avoids creating a roadblock allowing innovation and competition to be more quickly introduced.

An example of an unfavourable outcome was the STD for Mobile Co-location which was issued so long after the need for such terms arose that it was never used. It is essential the Inquiry looks to address issues that are anti-competitive or are otherwise barriers to entry if the benefits of the Commission's efforts are to deliver maximum benefit.

2.2 Broaden the concept of public benefit

In conjunction with a forward-looking approach, it would be helpful if the Commission were able to take into consideration a concept of public benefit that is wider than merely "the long term benefit of end users". Given the growing impacts and benefits of technology, and given the variety of delivery mechanisms, the beneficiaries of the introduction of new technology may well be other than end users. Hence the need for a wider benefits test. This is particularly the case with respect to access to spectrum. (see below).

2.3 Availability of radio spectrum to enable the introduction of new technology

While recognising that the Commission has no policy setting responsibility over spectrum, beyond its remit under the Commerce Act and the Telecommunications Act any Inquiry by the Commission into the Mobile Market that does not consider spectrum is meaningless by failing to consider the impacts of the availability of a key enabler.

Without access to sufficient appropriate spectrum you can't offer a mobile service and/or an FWA service. Bluereach, unlike the WISPs, has a limited number of management rights appropriate to enable it to deploy limited elements of a LTE and 5G network. None the less to be able to deploy a competitive national network, Bluereach needs access to additional spectrum. Further, the more access to spectrum there is, beyond the minimum to deploy a national network, the greater the service that can be provided by Blue Reach, producing greater competition and innovation.

Given that the relevant management rights are closely held by the existing MNOs, there is minimal availability of management rights to new entrants, thereby severely constraining their ability to compete and innovate for the LTBIE and broader public benefit. It is appropriate to outline the behaviours exhibited by incumbent MNOs.

Unlike their counterparts in more congested markets, New Zealand MNOs enjoy an abundance of spectrum riches. This has led to a less constrained mindset where the use of

spectrum is concerned, that in turn has resulted in a less than fully efficient use of the spectrum.

Other unhelpful behaviours exhibited by the MNOs include (as above, given the limited focus of determining scope, this is not a complete list):

- Spectrum hoarding (acquiring spectrum and not using it in a timely manner or at all)
- Not being constrained by “use it or lose it” conditions.
- Persuading spectrum regulators to make spectrum available substantially ahead of any technology need for the spectrum and acquiring all the spectrum to the detriment of smaller competitors who are unable to wear the holding costs.
- Vigorously opposing initiatives by Radio Spectrum Management to re-purpose or re-farm spectrum to allow a wider spread of users.
- Delaying the widespread introduction of new technology, to the detriment of the people of New Zealand.

2.4 Spectrum auction terms

Spectrum auctions in New Zealand have been predicated on price maximisation being the driver of allocative efficiency. This has resulted in large spectrum holdings being amassed by MNOs while small players generally miss out, either because they cannot afford to match the price bid by the incumbent MNOs or are unable to carry the holding costs for spectrum which, at the behest of the MNOs, has been auctioned well ahead of the technology to maximise the value of the spectrum being available.

The inefficiencies exhibited by the price maximisation approach have been recognised by regulators in other jurisdictions (notably OFCOM and the ACCC) and different approaches are being tried. OFCOM has looked at total spectrum holdings and has excluded or limited MNO participation at auction. The ACCC has taken a different approach stating that public benefit will be the key driver of spectrum allocation.

2.5 Timely introduction of new technology

The ability to hoard spectrum and at the same time prevent new entrants from accessing spectrum required for new innovation enables the MNOs to delay the introduction of new technology. The MNOs have a positive incentive to defer the capital expenditure on new technology given the amount they have invested in legacy systems and their desire to maximise the return on those assets. New entrant disruptors are not burdened by expensive legacy systems and can rapidly introduce new technology which benefits the people and business of New Zealand.

2.6 Access to appropriate national roaming

A key factor in any mobile offering is the ability to offer as near a ubiquitous service from day one. In the case of 4G/LTE the MNOs do it by using their underlying 3G networks to fill the holes. To be

successful and to deliver the benefits of early access to new technology to New Zealand, new entrants need similar access to the underlying network on non-predatory terms.

In the case of 5G it is likely that there will only ever be islands of network built, concentrated in high demand areas. These network elements will need the underlying networks to be able to offer near ubiquitous coverage.

It is critical to get access to roaming, on reasonable price and non-price terms, to infill Blue Reach's network, including as it is rolled out before full implementation. Without it, Blue Reach and other new entrants cannot offer the substantial public and consumer benefits of competition and innovation.

David Stone

Blue Reach Services Limited