

5th September 2008

Dr Ross Patterson  
Commissioner  
Telecommunications Branch  
Commerce Commission  
Wellington  
New Zealand

Dear Commissioner Patterson

**Re: Cross Submissions of the Standard Draft Terms Determination for Mobile Co location**

I attach the NZ Communications Limited (NZCL) cross submission regarding the response to the comments made by interested parties to your co-location STD as published by your agency on the <sup>22nd</sup> August 2008.

There has been substantial push back by the access providers on the initial standard terms determination as released by the Commerce Commission on 25<sup>th</sup> July. We believe the Commission should proceed with the original STD. NZCL notes that this push back illustrates the lack of incentives for the access provider to see more competition in New Zealand. This pushback also illustrates the need for substantial incentives which must be attached to the STD. The co location debate in NZ has been proceeding since 1999, when it was first recommended in the Fletcher Ministerial enquiry into Telecommunications.

Co-location, or lack of it for cell towers, is creating a serious distortion in the NZ telecommunications market, Vodafone benefits from co-location in local exchanges and is leveraging its dominance in the mobile market to compete in the bundled land line & broadband market. Because cell tower co-location is not available simultaneously to the telephone exchange unbundling, it means that smaller broadband players will have to wait longer in order to gain the benefit of a new mobile player to assist with their product offering. Vodafone are the main beneficiaries of regulatory intervention in local loop unbundling as they can compete with Telecom on bundled mobile, fixed and broadband services. Consumers are suffering as a result.

A new mobile entrant must build "like for like" infrastructure over a very short period, in order to compete. Incumbents however, built infrastructure over 18 years whilst penetration was very low. Whilst we acknowledge that not all cell sites are co-locatable but a large proportion are and these need to be accessed on terms which match access terms to exchange unbundling.

There are strong negative incentives on incumbents to co-locate cell towers with a potential new entrant. If they allow unfettered access they merely allow competition into the market that much sooner. It is not in their commercial interests to do so and any obligation placed on them to provide access can be interpreted in such a way as to cause maximum delay. This would appear to be playing out in New Zealand. If the incentives on those incumbents were to be changed from negative to positive, then NZCL believe that we will see a swift change in attitude from incumbents and co-location will be widely accepted.

Regulation must proceed as originally proposed by the first Commerce Commission co-location STD with urgency. Incentives for industry to co-locate must be large in order to prevent further delay and to ensure that our environment is managed efficiently.

NZCL would like to submit that the conference should be extended and should include a ½ day trip in a bus to a selection of cell sites with the relevant commission investigators, media and related experts so a true understanding of all the engineering issues are captured.

NZCL has addressed the Cross submission points in the attached submission but is available to answer more questions or share engineering research with the commission.

We are grateful for all the Commission's work on this matter, thank you for your consideration of our position .

Yours sincerely

A handwritten signature in black ink, appearing to read 'Tex Edwards', with a stylized flourish at the end.

Tex Edwards

**New Zealand Communications Ltd.**

**NZ COMMUNICATIONS LIMITED**



**Cross Submissions regarding the Commerce Commission's Draft  
Standard Terms Determination for  
the Mobile Co-location Service**

**VERSION  
FINAL PUBLIC VERSION  
DATE  
8th September 2008**

## INDEX

*Page*

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A. EXECUTIVE SUMMARY

B. CROSS SUBMISSIONS

1. Introduction

2. Cross Submission in relation to submissions of Kordia Limited

3. Cross Submission in relation to submissions of Tarantula

4. Cross Submission in relation to submissions of TUANZ

5. Cross Submission in relation to submissions of Woosh Wireless

6. Cross Submission in relation to submissions of Telecom NZ

7. Cross Submission in relation to submissions of Vodafone NZ

8. Overview of Key Issues & MUIL

C. CONCLUSION

Appendix a Crown Castle Buys Australian Tower Assets

Appendix B Profile of "NZCL" NZ Communications Limited

## A. EXECUTIVE SUMMARY

- A.1 NZ Communications Limited (“NZCL”) has a number of significant concerns with many of the submissions made by other parties (“**Submissions**”), particularly Vodafone and Telecom New Zealand in relation to the Commerce Commission’s (“**Commission**”) *Draft Standard Terms Determination regarding the Mobile Co-location Service* (“**Draft STD**”). NZCL urges the Commission to appreciate the many signals that have been delivered by Access Providers in their Submissions. These illustrate a requirement for the Commerce Commission to maintain an ongoing monitoring of the Mobile Co location Service, specifically as to price and timing of delivery.
- A.2 In our view, issues such as interference management have been used unnecessarily to try to influence the Commission into not regulating the Mobile Co-location Service appropriately. The argument that important calls will not be completed or marginal consumers will not be served is, in our view incomplete and debateable. Network competition will create additional capacity, freeing up congested networks, thereby increasing cell coverage and facilitating an environment whereby operators are competing for excellent coverage at the network level.
- A.3 It is NZCL’s cross submission that it is in the long term interests for all New Zealand consumers to allow for the potential of some marginal degradation in a regulated environment, thereby permitting new entrants to use co located facilities. This is because the impact of competition significantly exceeds the small potential for a degradative effect by an order of magnitude. We strongly urge the Commission to persevere with the 1 db benchmark and seek to align co location benefits with consumer interests.
- A.4 We urge the Commission to continue to be pragmatic in its considerations of the NZ landscape, the size of mobile phone towers in NZ and the requirements of the *Resource Management Act*. NZ does have smaller towers and unique bespoke conditions. Every country is different. As towers are not high in NZ it means that Co location is even more important.
- A.5 There is no question from an economist’s perspective that there is material economic efficiency, allocative efficiency and also dynamic efficiency from a regulated co location Standard Terms Determination. NZCL reiterates the requirement to regulate the mobile collocation service as commercial negotiations have been unsuccessful and the Telecommunications Carriers Forum procedures have failed to result in agreement on anything substantive that actually assists in a roll out.
- A.6 As noted in the NZCL Submission, we request that the Commission invest in simplifying the procedure set out in the Draft STD. It was correct to use the LLU protocol as a conceptual framework for the mobile co-location service; however an impact of this has been that Access Providers have, in our view, used this framework to make the process overly bureaucratic and unworkable. Co-location on mobile towers is much simpler than co-location D-slam unbundling and cabinet co location. The Draft should reflect this. We note that the Australian Code is 88 pages and the NZ Code is currently 301
- A.7 There has been considerable debate about whether a third party needs to be involved in the co location process. The TCF processes have in our view not worked, and it’s unrealistic that the Commission be available to micro manage engineering issues and administrative procedures. NZCL believe that a 3<sup>rd</sup> party manager using a new system similar to the Tarantula style system is essential to get some actual co locations built. The Commission needs to vest reporting powers in some independent 3<sup>rd</sup> party to break the current impasse.
- A.8 Antenna minimisation is used by Vodafone and Telecom in situations where they are RMA constrained, NZCL believes it should be mandatory in circumstances where to do so would assist in mobile co location. In a perfect world, mobile co location would have been regulated 12 years ago like it was in Australia before most of the towers were built. It wasn’t and as a consequence incumbents

built entrenched monopoly business. Unravelling a monopoly business is difficult. It requires regulation and compromise.

- A.9 NZCL reiterates its observation that regulation is difficult and unpopular, with entrenched monopolistic or duopolistic incumbents. The lessons learned from the Telecom separation are constructive. It was tough, difficult and time consuming, but ultimately in the best interests of end users and the New Zealand economy. Ironically, the enterprise that has become the biggest beneficiary of unbundling has been Vodafone, a GSM monopolist. Their ability to get fast, cost effective co location of D-SLAM equipment has meant that they are able to use their market power in the mobile sector to become the largest competitor to fixed line. As a consequence, they have co location into the Telecom exchanges and they are bundling mobile, broadband and wire line services together, further entrenching their dominance. Regulation of Vodafone's Co location access provision is needed to balance this regulatory uplift Voda got as a co location access seeker into Telecom exchanges and cabinets.

***1.1 In the event that NZCL has not commented on an issue in these cross submissions, same should not be taken as agreement by NZCL with any Submission made by any other party.***

## **B. CROSS SUBMISSIONS**

### **1. Introduction**

- 1.2 We refer to the Commerce Commission's request of 25 August 2008 for cross submissions in relation to the submissions made regarding the Draft STD.
- 1.3 NZCL provides its cross submissions as follows. In relation to each of the primary Submissions, NZCL has provided, where relevant, comment on 7 key issues in the Appendix. These key issues are:
- (a) Greenfield's Co-location;
  - (b) Interference Management;
  - (c) Antennae minimization;
  - (d) Access Provider future use forecasts;
  - (e) Access Seeker use during reservation period;
  - (f) Service Levels; and
  - (g) Common format site database.
- 1.4 In the case of the Vodafone Submission, as referred to below, a number of other issues have been addressed.
- 1.5 Given the scope of the Submissions and the time available for cross submissions, NZCL has focused on providing its views on these key points of principle arising out of the Submissions. *In the event that NZCL has not commented on an issue in these cross submissions, same should not be taken as agreement by NZCL with any Submission made by any other party.*

### **2. *NZCL comments on Kordia Limited - Submission to the Commerce Commission on the Draft Standard Terms Determination for the Specified Service Co-location on Cellular Mobile Transmission Sites – 22 August 2008 (“Kordia Submission”)***

We note that Kordia is supportive of 1db degradation, antenna minimisation and the use of the Common Format Site Database.

#### Access Seeker use during reservation period

- 2.1 NZCL does not agree with the observation at paragraph 6.3 of the Kordia Submission that, if an Access Seeker uses Access Provider reserved capacity during the reservation period, *“it will be difficult for the Access Provider to remove the incumbent Access Seeker”*. Adequate provision is made in the Draft STD for the removal by the Access Seeker of the Access Seeker's Equipment in these circumstances.

**3. NZCL Comments on Tarantula.net – Submissions to the Commerce Commission (New Zealand) in relation to the Draft Standard terms Determination for Co-location on Cellular Mobile Transmission Sites Service – Public Version (25 July 2008) – 22 August 2008 (“Tarantula Submission”)**

3.1 NZCL believes a 3<sup>rd</sup> party is required to assist in breaking the bottleneck to mobile co-location site applications and processes. NZCL understands that it takes less than 3 days to get access to a mobile site on a Crown Castle site in other jurisdictions. Directive regulation enabled the Crown Castle model to work. We believe that part of the Commission’s work on the Draft STD should facilitate a 3<sup>rd</sup> party to assist with the process.

Common Format Site Database

3.2 As noted in NZCL’s Submissions in relation to the Draft STD, NZCL was supportive of the Common Format Site Database being maintained by an independent third party accountable to the Commission.

3.3 The process, envisaged by the Draft STD, of manual offline databases maintained by each Access Provider, will not provide the maximum benefits and transparency to the co-location process in New Zealand. NZCL agrees with the observations in paragraphs 5 and 6 of the Tarantula Submission in this regard.

3.4 NZCL reiterates the observations at paragraph 7(iv) of the Tarantula Submission which provides as follows:

*“New Zealand is in a unique position to adopt an online co-location process with the start of the implementation of the STD that the industry can benchmark, rather than adopting an offline process. Early adoption will save considerable time and cost for all parties involved in the co-location process and ensure swifter time to market. It will also provide transparent data during any “soft launch” of how the co-location end to end process is actually working.”*

3.5 Internationally it is common place to have major 3<sup>rd</sup> party enterprises running co-location companies and managing mobile towers. Their arrival into the modern day telecommunications business has been a function of regulation and commercial pressures brought about by competition. In Australia for example Crown Castle is an independent tower company which was formed as consequence of the co location protocol in Australia forcing co location in the 1990s. These 3<sup>rd</sup> party tower companies need a regulatory framework for them to commence operation. NZCL believes the Commission should require an independent 3<sup>rd</sup> party to participate in this process.

3.6 NZCL believes that a system like Tarantula’s only works when there is a regulatory framework to facilitate it.

3.7 NZCL believes Tarantula (or a company similar) should run the industry databases and assist in the “similar cell site “exercise which will help build the rapid multi access process.

3.8 NZCL acknowledges and agrees with Appendix B of the Tarantula Submission.

#### **4. *NZCL Comments on TUANZ Comment on Commerce Commission consultation – Draft Mobile Co-location Standard Terms Determination (“TUANZ Submission”)***

- 4.1 NZCL supports the observations at paragraph 3 of the TUANZ Submission and believes that constant monitoring of the implementation of Mobile Co-location Service will be required by the Commerce Commission to determine whether the status of Mobile Co-location should be changed from a Specified Service to a Designated Service. NZCL’s experience is that the issue of costs has been a significant impediment to NZCL, as a primary Access Seeker, obtaining the Mobile Co-location Service to date.
- 4.2 NZCL notes and agrees with the main thrust of the TUANZ submission which advocates, “*Why should the NZ Consumer have to pay for 3 cell towers when 1 community tower is all that is required in many situations*”. TUANZ understands the economic efficiency argument whereby occasionally regulation is needed to prevent unnecessary investment.

#### **5. *NZCL Comments on Woosh Wireless Mobile Co-location – Response to Draft Determination (“Woosh Submission”)***

##### Service Levels

- 5.1 NZCL does not support any submission that Access Providers with less than 300 co-locatable sites on the Common Format Site Database should not be the subject of the Service Levels.
- 5.2 NZCL does not support any lengthening of the Soft Launch period. It has now been many years since co-location was first promoted in the New Zealand market. A soft launch in which an Access Provider is only required to “progress” up to 10 applications in a 6 month period (or any other variation to same) is further substantial and unnecessary delay and not in the long term interests of end users. Soft Launch was refused by Access providers in the TCF meeting of March 2008

##### Common Format Site Database

- 5.3 NZCL rejects, and does not understand, submissions made by Woosh and others that greater time is required to construct a Common Format Site Database. The fact that a Standard Terms Determination will be made by the Commerce Commission, and that it will contain an obligation for a Common Format Site Database, can and should now be taken as a given by all industry participants. All Access Providers should now be preparing information for inclusion in that Common Format Site Database in accordance with the requirements of, at least, the Draft STD so that Common Format Site Database will be operational on, or within 5 days of, the Determination Date. Ideally, the Commerce Commission should provide an indication now as to whether it will require that that Common Format Site Database be an independent online database similar to that envisaged by the Tarantula Submission, to enable industry participants to continue their work in this regard.

##### Service Levels

- 5.4 For the reasons outlined below, NZCL does not support any diminution of performance penalties relating to the individual service levels defaults back to the previous 7% of the monthly charge.

##### Greenfields Site

- 5.5 NZCL would be prepared to support a voluntary Greenfields Co-location process if the Standard Terms Determination made it clear that a potential Access Provider erecting infrastructure in the Greenfields location does not do so in a manner which would unreasonably inhibit mobile co-location

at locations where mobile co-location is otherwise possible.

#### Access Provider Future Use Forecast

- 5.6 NZCL is strongly supportive of the 2 year future use reservation period for Access Providers as referred to in the Draft STD. The long term interests of end users should not be compromised by internal inefficiencies of Access Providers in the time taken to rollout extended or additional networks, nor there any opportunity for Access Providers to unnecessarily “reserve” space in order to avoid a co-location obligation. As the Commerce Commission may be aware, NZCL has had recent experience in this regard in which it appeared that an Access Provider was reserving space to itself after NZCL’s access request had been made with the effect of frustrating NZCL’s network rollout.
- 5.7 A 2 year framework provides some industry incentive to resolve the structure of the industry during the longer period. A consequence of mobile co location is that it will start the industry toward greater co operation and a possible sale of towers to 3<sup>rd</sup> party specialist owners. If this were to happen, in our view the natural future proofing of the industry would happen as, over time, commercial specialists (with true 3<sup>rd</sup> party wholesale characteristics) would own ,manage and develop sites (that were workable for co location). With a 5 year reservation system co location would not occur and develop. No Industry co-operation would be fostered .Co location would continue to be discretionary rather than mandatory.

#### Interference Management

- 5.8 A number of submissions are made in relation to interference management, and in particular the impact on emergency service calls, in the Woosh Submission, the Telecom Submission and the Vodafone Submission.
- 5.9 In relation to this issue generally, NZCL makes the following observations, which observations are equally applicable to all 3 of the abovementioned submissions:
- (a) The geography of many cells is such that the location of a network operator’s equipment will often need to occur in the same approximate location. In NZCL’s view, from an interference management prospective it is often, in these cases, a far better radio communications outcome for the equipment of each network operator to be projecting from the one site. For instance, this is preferable to potentially having another network operator’s site at a location proximate to the potential co-location site which may have an inferior radio communications outcome for both parties.
  - (b) This also facilities like for like use of monopoly or bottleneck assets, i.e. there is only one hill next to the small rural town.
  - (c) NZCL is strongly supportive of the 1dB threshold. A mobile phone has Omni directional reception and transmission. The environment it resides in is constantly changing, even when the end user is static. Its reception is impacted by:
    - (i) The angle the phone is held;
    - (ii) The head orientation to sites;
    - (ii) External influences such as nearby vehicles or machines;
    - (iv) Seasonal issues such as temperatures, leaves on trees etc; and
    - (v) forced handover by a network for quality or capacity reasons.

As a result, the received signal strength can vary a number of dB in normal usage at a defined geographic point. Many of the Submissions argue that the 1dB limit should be lowered to

0.5dB. For the reasons stated here, these changes are immaterial and unnecessary when taking into account the end user experience.

- (d) In NZCL's submission, the arguments put forward in the various submissions regarding the adverse impact on emergency service calls are misplaced and unnecessarily alarmist. While all network providers use their best endeavours to provide quality services, because of the nature of mobile telecommunications it is not possible for any provider to provide fault free service. The quality and coverage of service depends partly on an end user's device, partly on the network operator's network and partly on other providers and telecommunications networks to which a network is connected. Coverage and service can be adversely affected by radio interference, atmospheric conditions, geographic factors, network congestion, maintenance, outages and other networks and provider sites, the configurational limitations of a mobile device at either end of the call or other operational or technical difficulties which means that any user may not receive some or all of the services in certain areas at certain times. In NZCL's view, the 1dB v 0.5dB discussion has little or no bearing on the emergency services issue.
- (e) As a general observation, there currently exists significant degradation in service in urban areas due to many industry factors such as:
- (i) over-subscription of service;
  - (ii) The addition of more data and copper replacement products etc.

It is the opinion of NZCL's engineers and consulting engineers that a 1dB tolerance would not degrade the experience of a typical customer in any material way given the ever changing networks and environments.

1db tolerance would assist in ensuring additional investment because with the inception of competition, it will mean that there will be more competition

The benefits of this marginal degradation substantially exceed the short term impact, over a period of time; as a result of extra capacity being available network quality will improve. Currently there is no competition on network quality and no published statistics on dropped calls. If there was a competing network then quickly consumer preference groups would be measuring the level of dropped calls and the quality of signals.

It is the position of NZCL that the NZ public is more at risk of only having one network and no competition because it's the network congestion, of having no material competition that means there will be questionable network coverage and therefore a difficult situation if emergency services are required. NZCL notes that consumer contracts have a degradation waiver.

**6. NZCL Comments on Telecom New Zealand Submission on the draft Commerce Commission Mobile Co-location STD – Executive Summary – Public Version – 22 August 2008 (“Telecom Submission”)**

Greenfields Co-location

- 6.1 NZCL does not agree with the Telecom Submission that the Commission is prohibited from providing for the regulation of Greenfields Site. This argument is summarised at paragraphs 4 to 11 of the executive summary to the Telecom Submission. Taken to its logical conclusion, Telecom’s argument would mean that any “relevant facilities” which did not exist at the time of promulgation of Schedule 1 of the *Telecommunications Act* would not be caught by the description of “Service”. This clearly is not the intent. 6.2 NZCL submits that the best interpretation of the “Description of Service” contained in Schedule 1 of the *Telecommunications Act* is that the “Description of Service” extends in scope to enable the Commerce Commission to regulate any facility which at any time may become a Relevant Facility. That is, it is sufficient that that Relevant Facility will, at the time co-location is to occur, be used, owned, managed or leased as provided in Schedule 1 of the *Telecommunications Act*.
- 6.3 Further, in relation to paragraph 7 of the executive summary to the Telecom Submission, NZCL submits that a building currently hosting or capable of hosting network transmission and reception equipment would be a “similar structure”, for the purpose of paragraph (a) of the “Description of Service”.
- 6.4 In relation to paragraph 8 of Telecom’s Executive Summary, NZCL is wary of comments such as:
- “This is not to say that Greenfields Site sharing will never happen – to the contrary Telecom is committed to undertaking commercial Greenfields where this is feasible. However, Greenfields site sharing will not make sense in all instances and will need to be balanced against the cost of added time and complexity of build on a site by site, operator by operator basis, which can only sensibly be done on a commercial basis.”*
- 6.5 Similarly, at paragraph 29 of Telecom’s main submission, Telecom makes the observation that:
- “While the arguments raised by TUANZ and Kordia in favour of the regulation of Greenfields Sites may seem conceptually appealing, Telecom’s experience suggest that the practicalities associated with erecting masts may make this type of regulation unattractive and/or unworkable ...”*
- 6.6 NZCL submits that this provides a good indication that, without mandatory Greenfields Co-location being provided by regulation, it is unlikely that Access Providers will willingly undertake Greenfields Co-location to the detriment of the New Zealand community.
- 6.7 If the Commission is of the view that Greenfields Co-location should be voluntary, it is comments such as that above which cause NZCL considerable concern. As noted above, it is essential that the Commission then provide clear guidelines in the Draft STD to prevent an Access Provider from deliberately under-building a site to avoid co-location in the future.

Antennae Minimisation

- 6.8 In relation to paragraph 18 of the executive summary to the Telecom Submission, the first Access Seeker should not bear the burden of mast replacement, revision or extension where same is not required in circumstances where existing infrastructure can accommodate that Access Seeker if antennae minimisation is implemented. While it is accepted that in many cases, including for the first Access Seeker, such activities will be required, it is in the long term interests of end users that the

maximum number of network operators are able to provide services from existing infrastructure without any unnecessary delay or economic waste.

- 6.9 Just as subsequent Access Seekers will obtain the benefit of the first Access Seeker's activities in relation to mast replacement, revision and extension, so the first Access Seeker should be able to obtain the benefit of the Access Provider's existing masts if that Access Seeker's equipment can be accommodated on existing masts. This is particularly important where there are local councils and local residents continuing to demand antenna minimisation solutions in residential neighbourhoods. Antenna minimisation is a requirement that impacts many OECD countries and councils in high value residential districts.
- 6.10 The impression given by paragraph 18 of the executive summary of the Telecom Submission is that mast replacement is a mandatory obligation under the *ACCC Code*. Mast replacement is principally provided for under Schedule 3 of the Australian *Telecommunications Act* as a maintenance activity which may be undertaken by any carrier subject to carrier powers and immunities and subject always to strict terms which apply as set out in that Schedule. There is no implication to be drawn from Schedule 3 or Schedule 1 of the Australian legislation that subsequent Australian Access Seekers should be obliged to undertake mast replacement.
- 6.11 NZCL rejects out of hand the suggestion at paragraph 67(b) of the main body of the Telecom Submission that an Access Seeker would deliberately degrade an Access Provider's service by targeting their sites for co-location. It damages the credibility of Telecom to suggest that a new entrant, who has yet to build one co location, would in fact undertake co location to degrade a competitor's network. NZCL has over 1500 mobile sites to build to get like for like coverage. It is nonsensical to suggest that this would happen.

#### Access Provider Future Use Forecast

- 6.12 NZCL is not persuaded, nor should the Commission be persuaded, by the arguments put forward at paragraph 20 of the executive summary to the Telecom Submission. The internal processes of Telecom and delays in approvals from its board should not be an argument to support the extension of the reservation period for Access Providers. Just as Telecom argues that its inability to identify the cells in which its network will be rolled out would act as a limitation to any future network rollout on its behalf, the same applies to an Access Seekers such as NZCL, who are unable to determine during its network planning phase on which Relevant Facilities it is able to co-locate because Access Providers have arbitrarily reserved space to themselves for extensive periods of time which may not be used.
- 6.13 At paragraph 20 of the executive summary to the Telecom Submission, Telecom provides that:

*"It is important to remember that the Telecommunications Act allows parties to reserve space to enable this type of rollout to occur."*

This, of course, is not technically correct. The limits on access principles set out in Schedule 1 to the *Telecommunications Act* provide that "*the Access Provider's current and reasonable forecast requirements for capacity on the relevant facilities*" [our emphasis] may be taken into account. It is NZCL's view that current and reasonable forecast are those which extend for a period of 2 years and no more.

- 6.14 In any event, NZCL does support the submission of Telecom made at paragraph 79 of its main submission that provisions for the expiry of forecasts should be included in the Draft STD. This support is without limitation to NZCL's submission that current and reasonable forecast are those which extend for a period of 2 years and no more.

#### Access Seekers Use during Reservation Period

- 6.15 NZCL does not accept the observations contained in paragraph 23 of the Telecom Submission. Speculation that Access Seekers may flout their obligations to remove equipment if they choose to use a

relevant facility during the forecast period is self serving. Taken to its logical conclusion, that argument could be raised in relation to any of the matters the subject of the Draft STD. The observations are purely speculative and should be ignored.

#### Service Levels

- 6.16 Each of the services the subject of the issued or pending 7 STDs are different, and have a different potential impact on the long term interests of end users. Any argument that a particular provision included in a previous STD should be included in the Mobile Co-location STD, should be rejected outright. NZCL rejects the submission by Telecom at paragraph 83 of its main submission that service levels and performance penalties should be set consistently with other STDs for the administrative convenience of the party. Service Levels are not about administrative convenience, but about providing the right incentive for participants to act in the long term interest of end users. As was observed in NZCL's submission in relation to the Draft STD, adequate incentives are missing even from the Draft STD.
- 6.17 NZCL has now had considerable experience in endeavouring to achieve any mobile co-location at all in New Zealand, let alone cost effective and time efficient co-location. The results have not been satisfactory. NZCL strongly supports not only the service level and performance penalties provisions proposed in the Draft STD, but also the enhancements contained in NZCL's submissions in relation to Draft STD. Simply put, NZCL has not one co location built 2 years after having commenced new negotiations with "new Telecom" and an agreement with Telecom which has been running for nearly 18mths.
- 6.18 NZCL rejects the observations of Telecom at paragraph 95 *ff* of the main submission in which Telecom asserts that, if it is to be the subject of service levels which it may not meet and in relation to which it may need to pay performance penalties as a result, it will simply pass on that cost to some other person. It appears a perverse result that Telecom's inability to meet its regulatory obligations should be blatantly passed on to some other party, whether it is the Access Seeker or the end users.
- 6.19 NZCL strongly supports the inclusion of the cumulative delay day's penalty, and rejects the submission of Telecom in this regard. It is noted that Vodafone also agrees to the cumulative delay day's performance regime. Contrary to the assertion of Telecom that to inject such a regime would be effectively penalising them twice for the one failure to meet their regulatory obligations, in fact it addresses two failures by the Access Provider; the first being a failure to meet regulated time frames for a particular task, and the other being to address the overall commercial impact on the Access Seeker and its end users of the general conduct of the Access Provider in meeting its co-location obligations.

#### General Observations

- 6.20 NZCL makes the following general comments on the executive summary to the Telecom Submission, using the numbers used in that executive summary:
- (2) Telecom states that many of its comments are based on its experience as a mobile operator, but NZCL's comment is that not one co location has been built yet by Telecom. There is no experience of rapid access within the company, nor has the company got international subsidiaries like Vodafone where large Crown Castle style mobile co-location deals have been completed.
- (3) NZCL believes it is disingenuous to suggest that mobile co-location will result in "*undermining the government's objective of ensuring faster broadband and its ability to deliver these services*". This, in our view, simply is not true. The opposite is the more likely result as more competition in HSDPA broadband will ensure more investment and that the government's objective is met.
- (4) NZCL expresses concern about the failure of the Co-siting Code and advocates that the land and buildings should be submitted as potential sites because of this failure.

(8) NZCL questions the green credentials of Telecom NZ, whereby there is a reluctance to enter into any Greenfield access. NZCL does not accept the reasoning that local authorities don't want co location to occur.

(9) It is NZCL's view that the TCF working party on mobile co location should be ignored and that that process was a failure. NZCL notes that Telecom threatened to use its power of veto to pull out all unfavourable issues that is faced during the co location workshop. In a negotiation whereby Access Seekers made material compromises, Telecom had appeared to make compromises during the 4 week negotiation. However during the final day's summary negotiations, Telecom sought to veto all issues that Telecom didn't support. This bad faith negotiation and regulatory gaming damaged the credentials of the TCF and Telecom, and is one of the reasons why NZCL seeks immediate regulation of mobile co-location.

(11) NZCL believes that Telecom's review of overseas jurisdictions with regard to Greenfields does not illustrate the true picture because the industry structure is different in many international environments where there has been co location for over 10 years.

(13) NZCL believes that it is a spurious argument to suggest that in building coverage will fall as a consequence of degradation of a 1db benchmark. Simply put, NZCL believes that in building coverage will improve as operators compete on in building coverage, as is the case in more competitive markets.

(14) **Progress on actual co location builds:** NZCL believes it is essential that the Commission is aware of the lack of progress on the first co location to be built with Telecom. Despite a fresh negotiation on co location back in September 2006 and a new agreement for Co location with Telecom in April 2007, not one co location is built. Kumeu has taken over 6 months to build (it still hasn't been built despite it being an "easy to build "lattice tower). This lack of progress and the damage to the systems and motivations are significant. It highlights the requirement for substantial incentives. One third of NZCL's total site build of 1400 sites is required to be co locations. Initial budgets showed that NZCL would have 125 co-locations built by this time in 2008. 2 years into the project, we have not one. Co-location is not a silver bullet that can solve all the challenges of a new build but merely a tool to help speed up construction and reduce unnecessarily infrastructure duplication. Co location also benefits consumers, due to reduced environmental impact, lower pricing and increased speed to market.

## ***7. NZCL Comments on Vodafone New Zealand Limited Submission to the Commerce Commission – Submission on the draft Standard Terms Determination for the mobile co-location on cellular transmission sites service – 22 August 2008 (“Vodafone Submission”)***

### Access Provider Future Use Forecast

- 7.2 Vodafone argues that the 2 year forecast window is too short and a 5 year forecast window is required. In this regard, NZCL makes the same relevant submission as made above in relation to the Telecom Submission.
- 7.3 Vodafone submits that the occupation right of an Access Seeker during the forecast period would be impractical. This would be a commercial decision for the Access Seeker on each occasion and should not form a basis for deleting this Access Seeker right entirely.
- 7.4 In relation to paragraph 63 of the main body of Vodafone Submission, NZCL would be supportive of such an arrangement provided that the 2 year forecast window is retained.
- 7.5 In relation to paragraph 66 of Vodafone Submission, NZCL submits that it is essential for Access Providers to be included in the queue. Of course the Access Provider will not be making application to itself as suggested in paragraph 66. It is however important that the Access Provider clearly articulates to all Access Seekers what its reserved capacity is and when that reservation commences.

### Site Alteration

- 7.6 At paragraph 69 of Vodafone Submission, Vodafone indicates that it is not aware of any other jurisdiction in which an Access Provider is required to make alterations of the type contemplated in the Draft STD. NZCL draws the Commerce Commission's attention to Part 5 of Schedule 1 of the Australian *Telecommunications Act 1997*, Section 33(4) (c). In the Australian jurisdiction, site alterations are contemplated to ensure that a first carrier can comply with its obligation to a second carrier to give access to the second carrier to the first carrier's telecommunications transmission towers.

### Antennae Minimisation

- 7.7 For the reasons stated above in relation to the Telecom Submission, NZCL does not agree that antennae minimisation should only occur after mast replacement, extension or revision has occurred, as referred to at paragraph 80 of the Vodafone Submission. However, NZCL does not object to any provision which would provide that re-arrangement of an Access Provider's existing antennae on a mast should be the first resort before antennae minimisation is undertaken if that re-arrangement results in an Access Seeker being able to co-located in a reasonable way. Antenna minimisation is a practical reality of living in a country with an environmental understanding. It is not relevant to replace a tower when antenna minimisation is also a successful solution.

### Service Levels

- 7.8 As noted above, NZCL does not agree that the cumulative delay day's penalty is any form of "double jeopardy", nor does it change its character to a punitive penalty. As noted above, the penalties address two different issues and two different impacts on the Access Seeker and end user.
- 7.9 As noted above, NZCL rejects any assertion that service levels and performance penalties contained in the Draft STD need to be consistent across all STDs. In relation to paragraph 88 of the main body of Vodafone Submission, NZCL re-asserts its view that mobile services are more profitable to network operators than landline and broadband services, and as a result of same there will be a significant effect on the Access Seeker in the event of delays in securing the co-location service. In NZCL's view, even a change to 20% of the monthly charge will not constitute an adequate amount of liquidated damages for the genuine and reasonable pre-estimation of loss which would be suffered by NZCL as a result of the conduct of a non-complying Access Provider. In stating this position, NZCL does not in any way concede that the performance penalties contained in the Draft STD, imposed as they are by a regulator upon the parties pursuant to enabling legislation, and are governed by the same rules as contractual liquidated damages.

### Capacity Limit

- 7.10 NZCL believes that Vodafone are being disingenuous with its illustration at paragraph [ ] of its Submission. Simply put, NZCL argues that a rule of thumb in terms of complexity is that the work required to undertake 10 mobile sites co-locations is equivalent to one co-location at a telephone exchange. Vodafone has built the over 21 exchange co-locations. This equates to over 210 mobile co-location sites. NZCL's concern is that Vodafone is currently working through the land line and broadband market entrenching itself in same. This asymmetry in co location is limiting competition in the market.

### Common Format Site Database

- 7.11 NZCL refer to its submissions above in this regard.

### Soft Launch Timeframes

- 7.12 For the reasons stated at paragraph 5 above, NZCL does not agree with the Vodafone Submission that Soft Launch should be extended in any way. 15 applications are more than sufficient for Access Seekers and Access Providers to become familiar with processes which are highly prescribed in any event. NZCL notes that Vodafone has refused to agree to a soft launch protocol on any sites.

### Multi- Site application project

Rapid multi access is a core requirement of any STD and the new Section 14 – Operations Manual proposed by Vodafone to be inserted effectively removes this capability from the STD. The requirement for standard site types needs to be resolved with the same urgency as the common format site database. Section 14, as submitted by Vodafone effectively restarts the process for rapid multi access.

### General Comments

7.13 NZCL believes that the intent and current balance of the Draft STD needs to be preserved because it is a step to balancing access to an infrastructure bottleneck of mobile co-location. It will improve coverage for Kiwis as same technology competition occurs on a like for like basis, and operators start to compete on quality of coverage for the first time in NZ. It will make networks safer for emergency services as increased capacity and less congestion makes for more reliable calling. It will reduce costs for consumers, as the economic efficiency of co location reduces all operators' costs, but as reduced calling costs as a consequence of competition, in addition to improved **innovation**.

7.14 NZC does not acknowledge that there is substantial long term derogative effects of co location as competition will force networks to compete on quality of service and net new investment in infrastructure will increase. Should Vodafone illustrate independently produced data on congestion and dropped call rates between the New Zealand network and other networks, it would assist the Commission in making a judgement.

7.15 Vodafone's Submission provides a long list of reasons why acceptable levels of degradation should be other than as proposed by the Commission, but which reflect in reality a very small level of degradation which most customers would not notice, or simply dismiss as an immaterial; change in the amount of coverage bars on their handset. It becomes unnoticeable to the average customer. However the impact on NZ consumers of a third operator is material ,with the following benefits being available:

Lower Costs for airtime

Increased level of innovation in open portal applications

Lower data prices (in HSDPA services)

Lower land line prices as Fixed to mobile substitution occurs

Increased level of value add service use

Increased productivity as the consumer becomes more mobile

7.16 NZCL believes that it is unnecessarily alarmist to suggest that there will be "*significant levels of performance degradation on access providers networks*" (page 19 of the executive summary).

NZCL rejects outright that if the STD was to agree to the terms and principles agreed by the TCF, then these things will enable co location to occur. The TCF process stalled Co-location Code development for over 4 years and then further diluted focus and stalled it further in March of 2008. These comments should be rejected, including Vodafone's ideas on the multi site process and a dilution of the database concepts. NZCL advocates a maintenance of the original capacity limit is a formula for which access seekers may catch up with an access provider.

## 8. Overview of Key Issues & MUIL ( Major undecided issues list)

This matrix highlights the key decisions that are essential to workable co location

### MUIL UPDATE AS PER CROSS SUBMISSIONS

NO	Issue	Cross Submission Observation	Pathway to Resolution
1	<b>Standard site types</b>	Vodafone and Telecom wish to effectively remove this process from the Draft STD.  The current process means that the co-location debate starts again to agree standard cell tower types	The Commission engage an independent engineer to decide upon standard site types.  At the same time the database is produced, standard site types must be agreed.
2	<b>Databases</b>	Databases need to be available simultaneously to the STD being decided upon by the Commission. The breadth and width of this are critical. 5 working days after the STD is a realistic date, given the order of magnitude delays caused by Access Provider regulatory gaming to date on this process	The ComCom reference international databases from an international tower owning company, and consider making it a condition precedent that the Access Providers deliver similar databases to the Commission for their inspection.
3	<b>Requirement to use antenna minimisation technology</b>	There has been complete push back to use of technology which frees up headspace.	The Commission needs to stick its proposals in the Draft STD for antenna minimisation and the right for the Access Seeker to have Access Providers move their antenna position on the mast to require an Access Provider to use the latest technology to facilitate a more efficient use of resources.
4	<b>Requirement to accept a level of degradation</b>	It is essential that the Commission persevere with 1db degradation limit. This allows some co location to be completed.  Vodafone & Telecom have not submitted any solid evidence to suggest that consumers will be worse off, after accounting for the benefit of a competitive network	Vodafone & Telecom have not submitted any solid evidence to suggest that consumers will be worse off, after accounting for the benefit of a competitive network.  The existing 1 db should be maintained.
5	<b>Requirement to set targets</b>	There can be no push back on the requirement for targets. It is essential mobile tower co	Targets must be maintained as a new entrant must catch up and build its infrastructure in an

		location catches up to unbundling co location (on a basis of 10 cell sites per operator for every exchange)	18mth period when the incumbents have taken 18 years to build their infrastructure. There must be certainty of availability of sites. Like for like competition is required and we urge the Commission to consider a punitive roaming penalty as an incentive to assist in motivating co location
6	<b>Requirements to set penalties</b>	<p>There has been material push back on every aspect of penalties and costs. Co location occurs in every other country in the world with no problems. Incumbents see co location as breaking up the duopoly that has allowed them to keep prices high and service poor. Penalties need to be set to allow Access Seekers to commit the substantial resources it takes to facilitate co location</p> <p>Penalties break bottlenecks</p>	<p>We urge the Commission to consider a roaming protocol which facilitates a marginal cost roaming arrangement for mobile sites and LAC areas where co location agreements have failed to provide the access.</p> <p>a) Penalties/incentives must be set for the entire 500 sites.</p> <p>b) The threat of regulated TSLRIC MVNO's is another incentive to facilitate co location</p>
7	<b>Vertical versus horizontal separation</b>	Co location is meaningless unless it's on a like for like basis. Pole position needs more direction in the STD.	Antenna minimisation is needed to ensure that there is like for like coverage
8	<b>Rapid multi access approval systems</b>	<p>The Submissions of the incumbents represents a push back on the principle of Rapid Multi Access Principle (RMAP). Section 32 of the Standard Site Types in the operations manual pg 59 is not adequate to facilitate RMAP.</p> <p>It means the co location process starts again.</p>	<p>NZCL believes that standard site types must be added to the conference agenda and that these items must be attended to before the database is released.</p> <p>The process, as highlighted by Vodafone, means that the co-location process will start again when there is an agreement on standard cell tower type.</p>
9	<b>Requirement to reasonably assist with landlords and RMA</b>	NZCL believes that Access Providers should be required to reasonably assist obtaining RMA, which should include the right to move existing antennas and related equipment.	The wording of the operations manual needs changing in section 25

<b>10</b>	<b>Requirement for access providers to have a dedicated wholesale co location manager</b>	This should now include a requirement to include a requirement to appoint a 3 <sup>rd</sup> party manager. Similar to Tarantula	The process and protocol has now expanded beyond reason. There is an urgent need to shrink the Draft STD into a workable format, - Incentives are needed (wholesale roaming) as a way of shrinking the Draft STD, in addition to the process of having a 3 <sup>rd</sup> party manager.
<b>11</b>	<b>Forecast submissions by incumbents</b>	NZCL believes 2 years is reasonable. The benefit of this is 2 fold. Firstly it provides access, and secondly it provides the motivation to provide a new structure (i.e. like Crown Castle to provide ongoing requirements)	If 5 year forecasting was permitted then this is effectively shutting NZCL out of the market as new networks are built every few years and the access requirements of the incumbents would mean that no new entrants would get any substantial co location done unless it's a 2 year forecast

## Appendix A

### Crown Castle Buys Australian Tower Assets

Crown Castle Australia has purchased 140 mobile towers from the local arm of Vodafone for an undisclosed amount - but thought to be in the region of AU\$45 million (US\$39 million). According to Roger Hawke Crown Castle's managing director, adding the towers to its existing portfolio allows Crown to further support its customers as Crown expands its wireless networks across Australia.

"This is one of the most significant tower purchases Crown Castle has undertaken in Australia since acquiring its platform of tower assets from Cable & Wireless Optus in 2000 and Vodafone in 2001. It increases Crown's portfolio of assets by approximately 10 percent," said Hawke.

Andy Reeves, chief technology officer at Vodafone Australia said, "Vodafone will continue to utilise each transmission site under a leasing arrangement with Crown Castle, and use the proceeds of the sale to re-invest in its national mobile broadband network upgrade,"

In 2000, Crown Castle Australia signed an agreement to purchase over 700 mobile phone towers from Optus plus around 670 towers from Vodafone. In 2007, the company also took 49 towers from Hutchison Australia.

Crown Castle said that this latest acquisition has expanded its footprint to some 1600 sites.

Posted to the site on 25th August 2008

## Appendix B

### Profile of NZ Communications Limited

NZ Communications is a mobile telecommunications company. The company owns several blocks of spectrum 900 MHz, 1800, MHz and 2100 MHz which it is developing into a mobile phone network to compete on a like for like basis with Vodafone NZ and Telecom NZ. NZCL was formed as a response to the New Zealand Government passing the 2006 Telecommunications Amendment Act, to stimulate more competition. Co location was highlighted to the company as being available by the 1999 Fletcher Ministerial enquiry, the 2001 Telecommunications act ,the 2002to 2005 TCF Co location working party and again in the 2006 Mobile market enquiry. The Company welcomes the Standard Terms Determination (STD) in 2008 to regulate Co location.

The company's objective is to build a new NZ institution to own and operate a nationwide mobile phone network.

NZCL is owned and controlled by 3 private equity companies who specialise in investing and building mobile phone networks. General Enterprise Management (GEMS) and Communication Venture Partners (CVP) and Trilogy of Seattle USA. These organisations have built and invested in over 20 networks over the last ten years. They have injected cash and a management team into the company. The Maori-controlled Hautaki Trust owns 20% of the company.

NZCL has announced plans to commence business in NZ using Huawei Technologies as its technology partner. Huawei Technologies have supplied equipment on 32 GSM/WCDMA networks worldwide and are the fastest growing network equipment supplier in the world.

NZCL is headquartered in Auckland with offices in Wellington and Christchurch. The company is in the process of deploying an initial 840 cell sites to cover 60% of the NZ population. The Company has plans to roll out 1400 sites throughout NZ to ensure "like for like" competition the company currently employs 158 people. It is in negotiations for multiple co-location sites with Telecom and Vodafone. The organisation has filed for 362 RMA applications in 9 Councils Districts in NZ. The company has a functioning switch and Radio Access network in parts of Auckland City.