



COMMERCE COMMISSION

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To all interested parties

**Mobile Co-location STD: Kordia's KorKor Network**

1. On 11 December 2008, the Commerce Commission ('**Commission**') released a Standard Terms Determination ('**STD**') for the specified service co-location of cellular mobile transmission sites ('**the Mobile Co-location Service**'). In the STD the Commission defined a number of access providers and access seekers of the service, and noted that this list could change based on entry and exit from the cellular mobile telecommunications market.
2. Kordia recently launched its 'KorKor' digital two-way radio network, which is based on Terrestrial Trunked Radio ('**TETRA**') technology. The Commission wishes to invite submissions from interested parties on whether Kordia is now an access provider of the Mobile Co-location Service following the launch of this network.

*Background*

3. In accordance with the "description of service" in the Act, "every person who operates a cellular mobile telephone network" is an access provider of the Mobile Co-location Service. The Commission defined Cellular Mobile Telephone Network in the Mobile Co-location STD as follows:<sup>1</sup>

**Cellular Mobile Telephone Network** means a telecommunications network:

- (a) that is designed to enable:
  - (i) two-way communications between end-users; and
  - (ii) an end-user of the service that uses that network to use the service while moving continuously between places or when standing still; and
- (b) that has the following characteristics:
  - (i) the end-user equipment used in relation to the network has a wireless connection to the network;
  - (ii) the service area of the network is divided into a number of contiguous geographical radio coverage areas (known as cells) and each cell is served by an antenna and a base station, which transmits and receives signals to and from the end-user equipment within that cell;
  - (iii) the service that uses that network is capable of re-using the radio frequencies in different cells within the service area; and
  - (iv) as the end-user equipment travels between adjacent cells, the service that uses that network uses intercell hand-over functions to:

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<sup>1</sup> Commerce Commission, *Decision No. 661: Standard Terms Determination for the Specified Service Co-location on Cellular Mobile Transmission Sites*, 11 December 2008, Mobile Co-location General Terms, p 3, clause 1.1.

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- a. *determine in which cell the equipment is located; and*
- b. *allow the transmit and receive signal connection to transfer from one base station to an adjacent base station when the end-user equipment moves out of that cell to an adjacent cell.*

4. In the Mobile Co-location STD, the Commission noted that:<sup>2</sup>

In order to determine if a particular entity is an Access Provider or an Access Seeker it is necessary to determine whether that party operates (or in the case of an Access Seeker, operates, or is 'likely to' operate) a cellular mobile telephone network. This may be done by determining whether the relevant party operates a telecommunications network with the characteristics set out in the definition of 'cellular mobile telephone network' in the Mobile Co-location General Terms.

5. The Commission's determination regarding the Access Providers, and eligible Access Seekers, of the Mobile Co-location Service as at the date of release of the Mobile Co-location STD was as follows:

<b>Company</b>	<b>Access Provider</b>	<b>Access Seeker eligibility</b>
Vodafone	Yes	Yes
Telecom	Yes	Yes
NZ Communications	Yes	Yes
Woosh	Yes	Yes
TeamTalk	No	No

6. The Commission noted that there is potential for entry into and exit from the cellular mobile telecommunications market throughout the term of the STD. Specifically, the Commission noted that parties that are not currently Access Providers may in the future utilise technologies that are consistent with the definition of cellular mobile telephone network, and will therefore become Access Providers of the service.<sup>3</sup>

*Kordia's KorKor Network*

7. On 18 February 2009, Kordia released a statement regarding the launch of its new 'KorKor' digital two-way radio network.<sup>4</sup> The Commission understands that this network is based on TETRA technology, which is a form of Private Mobile Radio ('PMR').
8. On 23 February 2009, the Commission wrote to Kordia requesting further details about its KorKor network. The Commission noted that, in the Mobile Co-location STD, PMR was included in an indicative list of technologies that have the characteristics of a Cellular Mobile Telephone Network.<sup>5</sup> Accordingly, the Commission requested that Kordia explain in detail whether the KorKor network meets the definition of Cellular Mobile Telephone Network set out in the Mobile Co-location STD (and consequently, whether Kordia is now an access provider of the Mobile Co-location Service).

<sup>2</sup> *ibid*, Decision Report, p 19, para 91.

<sup>3</sup> Commerce Commission, *Decision No. 661: Standard Terms Determination for the Specified Service Co-location on Cellular Mobile Transmission Sites*, 11 December 2008, p 20, para 97.

<sup>4</sup> See <http://www.kordia.co.nz/media-centre?q=node/1295&media=Press%20Releases>

<sup>5</sup> Commerce Commission, *Decision No. 661: Standard Terms Determination for the Specified Service Co-location on Cellular Mobile Transmission Sites*, 11 December 2008, p 83, para B3.

9. On 29 April 2009, Kordia wrote to the Commission noting that due to the “expansive nature” of the definition of Cellular Mobile Telephone Network, “it seems that the KorKor network would be caught by the definition”. However, Kordia noted that its KorKor network is a trunk mobile radio service, rather than a cellular mobile service and that these are distinct and different in several important ways.
10. Consequently, Kordia suggested that in attempting to address co-location issues for cellular networks, the Commission has unintentionally captured digital trunk radio networks. Kordia stated that by taking a more “sites based” approach, the Commission would be more correctly focused on the types of sites that are at issue for cellular co-location.
11. The correspondence between the Commission and Kordia on this matter is available on the Commission’s website at the following location:

<http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/StandardTermsDeterminations/MobileColocationserviceStandardTermsDet/DecisionsList.aspx>

### *Consultation*

12. Although Kordia’s KorKor network appears to comply with the definition of Cellular Mobile Telephone Network contained in the STD, the Commission considers that there is likely to be little benefit in determining that Kordia is an access provider of service if the differences between digital trunk radio networks and cellular mobile networks mean that Kordia’s sites are not suitable for co-location (if, for example, they are typically much larger, higher altitude sites). Such differences in sites are implied in Kordia’s letter of 29 April 2009.
13. Furthermore, during the Mobile Co-location STD process TeamTalk raised concerns regarding PMR networks, and in particular, in relation to the inclusion of PMR in the indicative list of technologies that comply with the definition of cellular mobile telephone network. As the Commission noted in the final STD:<sup>6</sup>

TeamTalk submitted that PMR is a very general term, and includes many technologies (such as P25, TETRA, MPT1327, DMR, Smartnet, EDACS, Bluesky, and Mototurbo). TeamTalk submitted that although some of these PMR technologies may fit the proposed definition of cellular mobile telephone network, in reality PMR services are radically different to a cellular service, both in scale and infrastructure, and should be removed from the list of technologies above.

...the Commission intends to assess each potential Access Provider on a case-by-case basis, and *may use its discretion if a strict interpretation of the definition of cellular mobile telephone network result in an outcome that is inconsistent with the Act* [emphasis added]. Therefore, the Commission has retained PMR in the indicative list of technologies provided in paragraph B3.

14. The Commission notes that the treatment of Kordia’s KorKor network in relation to the Mobile Co-location STD is likely to set a precedent for other TETRA networks. Accordingly, the Commission is interested in parties’ views on whether Kordia’s

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<sup>6</sup> Commerce Commission, *Decision No. 661: Standard Terms Determination for the Specified Service Co-location on Cellular Mobile Transmission Sites*, 11 December 2008, p 84.

TETRA-based KorKor network should be considered to be cellular mobile telephone network for the purposes of the Mobile Co-location STD.

15. Specifically, the Commission invites submissions on whether:
- co-location on sites used as part of Kordia's KorKor network is practicable for a mobile network operator; and
  - Kordia should be included as an Access Provider of the Mobile Co-location Service.

*Submissions*

16. The Commission invites parties to submit in writing on this issue by 5pm on Thursday 18 June 2009. Submissions should be forwarded to Matthew Bailey at [Matthew.Bailey@comcom.govt.nz](mailto:Matthew.Bailey@comcom.govt.nz).

Yours sincerely



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