



COMMERCE COMMISSION

**CLARIFICATION OF THE STANDARD TERMS DETERMINATION ON
TELECOM'S UNBUNDLED COPPER LOCAL LOOP NETWORK BACKHAUL
(TELEPHONE EXCHANGE TO INTERCONNECTION POINT) SERVICE**

DECISION NO. 681

Clarification under section 58 of the Telecommunications Act 2001 (the 'Act')
of Decision 626

The Commission:

Dr Ross Patterson
Anita Mazzoleni
Gowan Pickering

Summary of Application and Initiation:

The Commission received an application for clarification from Telecom (Chorus) to clarify Decision 626 by modifying Schedule 1 of the UCLL Backhaul Standard Terms Determination and the Commission has initiated a clarification for the purpose of making certain consequential amendments

Date of clarification:

9 September 2009

Background

1. The Commerce Commission (the '**Commission**') is a body corporate established under the Commerce Act 1986 having its head office at Wellington. The Commission has various functions and powers under the Telecommunications Act 2001 (the '**Act**').
2. On 27 June 2008, the Commission issued a standard terms determination ('**STD**') under section 30M of the Act in respect of the designated access service: Telecom's unbundled copper local loop network backhaul (telephone exchange to interconnection point) service ('**UCLL Backhaul**').¹ The UCLL Backhaul STD has subsequently been clarified by Decision 665 dated 5 March 2009.²
3. On 12 May 2009 Telecom (Chorus) wrote to the Commission requesting an amendment to Appendix B of the UCLL Backhaul Service Description which is contained in Schedule 1 to the UCLL Backhaul STD's General Terms, ('**Appendix B**'). At present, the following two versions of the interface description are inconsistent:
 - Appendix B; and
 - Appendix D of the UCLL Backhaul Operations Manual which is contained in Schedule 4 to the UCLL Backhaul STD's General Terms ('**Appendix D**').
4. Telecom (Chorus) presented the proposed change of the UCLL Backhaul Service Description to members of the Telecommunications Carriers' Forum ('**TCF**') Working Party on 28 April 2009.
5. On 10 June 2009 the **TCF** wrote to the Commission advising that the TCF working party supported Telecom (Chorus)'s proposed change to the UCLL Backhaul Service Description. The TCF Working Party members were Telecom (Chorus), Telecom (Wholesale), TelstraClear, Vodafone, and Orcon (who were not present at the meeting but subsequently agreed by email).
6. Copies of the two letters supporting Telecom (Chorus)'s proposed amendments to the UCLL Backhaul STD are available on the Commission's website.³
7. On 20 August 2009, Telecom (Chorus) requested a withdrawal of its earlier clarification request of 12 May 2009 because the clarification that was originally proposed would not fully align Appendix B and Appendix D. The TCF and its members were advised of the matter and the majority of members confirmed that they supported the approach. No objections were received.
8. After discussing the matter with the Commission, Telecom confirmed on 25 August 2009 that the inconsistency could be resolved by removing the words "for GigE interface connection" from Appendix D and adding the word "interface" after the words "Handover Fibre". The Commission wishes to address the technical issue raised by Telecom

¹ Commerce Commission, *Decision 626: Standard Terms Determination for the designated service Telecom's unbundled copper local loop network backhaul service (telephone exchange to interconnect point)*, 27 June 2008. Decision 626 is available on the Commission's website at: <http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/StandardTermsDeterminations/UnbundleLocalLoopService/DecisionsList.aspx>.

² Decision 665 is available on the Commission's website at the link in note 1.

³ Both letters are available on the Commission's website at the link noted above.

(Chorus) and has decided to amend Appendix D in the manner proposed by Telecom for the purpose of clarifying Appendix D.

Jurisdiction

9. Under section 58 of the Act the Commission may amend a determination for the purpose of making a clarification if:
 - at any time the Commission, on its own initiative or on the application of any person, considers that a determination requires clarification; and
 - no appeal is pending in respect of the determination.
10. Under section 19(c) of the Act, the Commission is required to make a decision that best gives, or is likely to best give, effect to the purpose set out in section 18 of the Act.

Submissions

11. The Commission has not called for submissions and has decided to issue a clarification decision on the basis that there is a degree of acceptance to the change of the Service Description in Appendices B and D by members of the TCF, that the proposed amendment is not price-related.
12. The Commission considers that making the amendments to Appendices B and D in this case will ensure that the schedules to the UCLL Backhaul STD are internally consistent. Technical consistency between the UCLL Backhaul Service Description and the UCLL Backhaul Operations Manual will create certainty amongst the industry about the terms of supply of the UCLL Backhaul Service. This approach is consistent with the efficiency objectives of section 18 of the Act.

Analysis

The UCLL Backhaul Service Description Clarification

13. The Commission notes that Appendix B defines the interface characteristics as:

Interface: Optical GigE

Transmission capacity: 100Mbit/s and 1 Gbit/s.

14. The Commission acknowledges that Appendix B is inconsistent with Appendix D where the technical interface specifications are defined as:

For GigE interface connection the Handover Fibre must comply with the following:

For 1 Gbps rate:

- 1000Base-LX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;

For 100 Mbps rate:

- 100Base-FX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;

15. The Commission also notes that Telecom (Chorus) states that it is unable to provision a 100Mbit/s Backhaul solution as per the current terms of Appendices B and D. Telecom (Chorus) has requested that the description of the physical interface be amended to remove any reference to a GigE interface connection and that such an amendment would provide certainty to Chorus, Access Seekers and the Telecom Business Units.⁴ The Commission agrees that the proposed amendments will create further certainty concerning the technical terms of supply of the UCLL Backhaul Service. Accordingly, the Commission determines that the interface characteristics for the UCLL Backhaul service in Appendix D are defined as:

The Handover Fibre interface must comply with the following:

For 1 Gbps rate:

- 1000Base-LX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;

For 100 Mbps rate:

- 100Base-FX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;

16. The Commission has considered:

- the original request for the UCLL Backhaul Service Description Clarification made by Telecom (Chorus) under section 58 by way of a letter dated 12 May 2009;
- the TCF's advice that the proposed change in the Service Description of the UCLL Backhaul STD as set out in Telecom's original request of 12 May 2009 was unanimously agreed to. (Orcon was not present at the time that the proposed amendment was discussed but has subsequently conveyed to the TCF that the amendment is acceptable); and
- the inconsistencies between the existing specification at Appendix B and the specification at Appendix D;
- Correspondence between the Commission and Telecom between 20 to 25 August 2009 concerning the need to remove references to "Gig E interface connection" in Appendix D; and
- the purpose set out in section 18 of the Act; and
- the requirement in section 19 to make a decision that the Commission considers best gives, or is likely to best give, effect to the purpose set out in section 18.

⁴

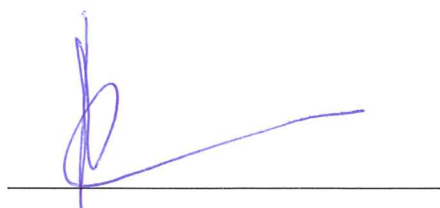
Letter from Telecom (Chorus) to the Commission dated 20 August 2009 requesting withdrawal of the clarification and an email from Telecom (Chorus) to the Commission dated 21 August 2009 confirming the request for withdrawal and further explaining the technical issues. On 25 August 2009, Telecom (Chorus) confirmed that the technical matters could be resolved if the Commission clarified Appendix D by removing the reference to "Gig E interface connection" and adding the word "interface" after the words "the Handover Fibre".

17. The Commission has also considered whether any consequential changes need to be made as a result of the request for clarification and has made such changes to Appendix D only using its powers under s.58 of the Act.
18. Accordingly, the Commission's view is that all changes proposed by Telecom (Chorus) to Appendices B and D are appropriate and are likely to best give effect to section 18.

Decision

19. The Commission considers that the Service Description of the UCLL Backhaul STD as set out in Appendix B – Specification for the UCLL Backhaul Service be amended by replacing certain text of the Service Description relating to the “interface” with the new wording outlined in Schedule 1 attached to this Decision.
20. Further, the Commission considers that the Technical Interface Specification of the UCLL Backhaul STD as set out in Appendix D – Technical Interface Specification for the UCLL Backhaul Service be amended by deleting the reference to “for GigE interface connection” under “cable specification” and replacing it with reference to “the Handover Fibre interface ...” as outlined in Schedule 1 attached to this Decision.
21. Further, the Commission notes that no appeal is pending in respect of the determination, satisfying section 58(1)(c) of the Act.
22. The Commission considers that the clarification set out in this Decision is likely to best give effect to the purpose set out in section 18 of the Act. In particular, in regard to section 18(2), the clarification will promote efficient delivery of the UCLL Backhaul Service.

DATED at Wellington this 9th day of September 2009



Dr Ross Patterson
Telecommunications Commissioner
Commerce Commission

Schedule 1:UCLL Backhaul Service Description

Appendix B - Specification for the UCLL Backhaul Service – Schedule 1 to the General Terms of the UCLL Backhaul

The characteristics of Telecom's UCLL Backhaul Service available under this service description are:

Protocol:	Ethernet: IEEE 802.1 ad ² with a maximum packet size of 1600 bytes. (It is the responsibility of the Access Seeker to manage and police the UCLL Backhaul Service to its service specifications.)
Interface:	<p><u>For 1 Gbps rate:</u></p> <ul style="list-style-type: none"> • 1000Base-LX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range; <p><u>For 100 Mbps rate:</u></p> <ul style="list-style-type: none"> • 100Base-FX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;
Transport:	Basic layer 2 transmission (non-intrusive transport)
Transmission capacity:	100Mbit/s and 1Gbit/s
Attributes:	Point to point only
Tagging:	Access Seekers must be responsible for ensuring the end-to-end uniqueness of their VLAN tags
Latency:	<p>For a Link that comprises a Primary Link only: < 5msec</p> <p>For a Link that comprises a Primary Link and a Secondary Link, or a Secondary Link only: < 25msec</p>
Jitter:	<p>For a Link that comprises a Primary Link only: <3msec</p> <p>For a Link that comprises a Primary Link and a Secondary Link, or a Secondary Link only: < 7msec</p>
Availability:	99.5% measured over a twelve month period

Schedule 4 – UCLL Backhaul Operations Manual⁵

Appendix D – Technical Interface Specification

Backhaul Connection and Handover Fibre optical fibre specification

Cable Specification

The Handover Fibre interface must comply with the following:

For 1 Gbps rate:

- 1000Base-LX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;

For 100 Mbps rate:

- 100Base-FX over single mode fibre – 1310nm or 1550nm centre frequency, depending on range;
- Typical ideal receive power level for circuits less than 100km is between -3 dBm and -20dBm.
Where required, optical signal attenuation or amplification is the Access Seeker's responsibility;
- Deployment of backhaul services will require collaboration between Telecom and Access Seeker technical specialists.

Cable Standards

The preferred lead-in cable is the fire-retardant eight fibre mono tube that can be run directly to the relevant distribution frame.

Alternatively an eight fibre building cable can be used but runs off this to outside access joints should be limited to less than 300m.

If more than eight fibres are required then standard outside plant cables can be used, but must not be run more than 10 metres inside a building without being converted to a fire-retardant cable.

⁵ This schedule replaces the text of Schedule 4. The chart at the beginning of the Schedule remains unchanged.