

Draft

**STANDARD TERMS DETERMINATION FOR CHORUS'
UNBUNDLED COPPER LOCAL LOOP AND UNBUNDLED
COPPER LOW FREQUENCY NETWORK CO-LOCATION
SERVICE**

**SCHEDULE 2
UCLL AND UCLF CO-LOCATION PRICE LIST
PUBLIC VERSION**

7 November 2007

Updated to incorporate Commerce Commission decisions, amendments, and clarifications through to
10 April 2017

Table of contents

1	Introduction	1
2	Charges	1
3	UCLL and UCLF Co-location Types	1
4	Adjustment to Charges	2
	Tables of UCLL and UCLF Co-location Charges	3
1	UCLL and UCLF Co-location Transaction Charges	3
2	UCLL and UCLF Co-location Recurring Charges	7
3	UCLL and UCLF Co-location Cancellation Schedule	8
4	Electrical Supply and Air Conditioning Transaction Charges	8
5	Network Services Transaction Charges	9
6	Wireless Network Services Transaction Charges.....	9
7	Chorus Acting as Bank.....	10
8	Geographic Property Rental Price Zones.....	11

1 Introduction

- 1.1 This schedule sets out Charges¹ for the UCLL and UCLF Co-location Service and provides a mechanism to make adjustments to the Charges for Service Components².
- 1.2 References to clauses or sections are references to clauses or sections in this UCLL and UCLF Co-location Price List unless expressly provided otherwise. The definitions set out in the UCLL and UCLF Co-location General Terms and the UCLL and UCLF Co-location Operations Manual apply to the extent that they are not expressly modified by or inconsistent with the context of this UCLL and UCLF Co-location Price List.

2 Charges

- 2.1 All Prices³ are listed under the "Charge" column for each Service Component.
- 2.2 Charges for UCLL and UCLF Co-location Service Components are described as being either a Core ('C') or Sundry ('S') Charge.
- 2.3 **Core Charges** are for the core components of the UCLL and UCLF Co-location Service.
- 2.4 **Sundry Charges** are for other components of the UCLL and UCLF Co-location Service.
- 2.5 Prices for Service Components are either:
- 2.5.1 fixed; or
 - 2.5.2 calculated; or
 - 2.5.3 expressed as "Price on application" (**POA**). Prices that are POA must reflect the underlying cost of providing the resources and project management skills required to provide the Service Component.
- 2.6 For all Service Components that are POA, Chorus must, if requested by the Access Seeker, use all reasonable endeavours to provide the Access Seeker with two or more competitive quotes.
- 2.7 Charges will become due and payable and will be invoiced in the manner described in the "Charge invoiced" column for each Service Component.
- 2.8 The provisions in the UCLL and UCLF Co-location General Terms relating to invoicing and payment of Charges apply.
- 2.9 All adjustments to Prices must be done in accordance with the relevant Price Change Mechanism listed in the "Price Change Mechanism" column for each Service Component.
- 2.10 Any adjustments to Charges for Service Components must be approved by the Commission.

3 UCLL and UCLF Co-location Types

- 3.1 Chorus is offering Access Seekers a standard Footprint for the various co-location configuration types as set out in the UCLL and UCLF Co-location Service Description and the UCLL and UCLF Co-location Operations Manual. The relevant Service Components will therefore vary. This will depend on the specific requirements of each Access Seeker.
- 3.2 The Price for the set up of a new instance of an exchange co-location and expansion of existing exchanges is set out in Service Components 1.1 and 1.2 below.
- 3.3 The Prices for a Footprint are set out in the Price List under Service Components 2.1, 2.2 and 2.3. There may be additional Service Components required by the Access Seeker. These are also identified below.
- 3.4 An Access Seeker will incur initial and ongoing Charges for Initial and Full site Audits (1.4 and 1.5), training and access accreditation (1.6 and 1.7), and Operational licence fees for OO&T (1.10) and OFM (1.11).
- 3.5 In addition there are further Services Components that may be applicable which will depend on the circumstances.

¹ **Charge** is defined in the UCLL and UCLF Co-location General Terms as "all or (as the context requires) any amounts payable by the Access Seeker under the UCLL and UCLF Co-location Terms." Charges in this schedule exclude GST.

² **Service Component** means a component of the UCLL and UCLF Co-location Service, listed in the "Service Component" column of the tables 1-6 below. Each Service Component has a description of the service, a Price Change Mechanism, invoicing detail and a Charge, which is identified as either Core or Sundry Individual Service Components are referred to by the numerical reference number at the start of the row in which the Service Component is described.

³ **Price** in this document means the dollar amount(s) attributed to a Service Component. A Price becomes a Charge when the Access Seeker requests/receives the Service. Prices in this schedule exclude GST.

4 Adjustment to Charges

- 4.1 At the request of a Party the Commission will undertake a review of the geographic property rental price zone prices (set out in section 8) used to calculate the Price under Service Component 2.1.
- 4.2 Chorus must, subject to the approval of the Commission, pass through changes in costs by increasing or decreasing Prices as follows:
- 4.2.1 Each year, on 1 November, Chorus must calculate adjustments to the Prices:
- 4.2.1.1 relating to those Service Components where this clause 4.2.1.1 is the prescribed Price Change Mechanism. Those adjustments must be by an amount equivalent to the percentage change (up or down) for the previous year in the Labour Cost Index (All sectors, Salary and Ordinary Time Wage Rates, All industries combined) Series Reference LCIQ.SG51Z9 as published by Statistics New Zealand, or such successor index as may be designated by Statistics New Zealand from time-to-time.
- For the purpose of this clause 4.2.1.1, the annual percentage change between the previous year's June index number and the current year's June index number must be used.
- 4.2.1.2 relating to the Service Components where this clause 4.2.1.2 is the prescribed Price Change Mechanism below. Those adjustments must be by an amount equivalent to the percentage change (up or down) for the previous year in the Producer Price Index (Outputs, Electricity and Gas Supply) Series Reference PPIQ.SUDD1100 as published by Statistics New Zealand, or such successor index as may be designated by Statistics New Zealand from time-to-time.
- For the purpose of this clause 4.2.1.2, the percentage change should be calculated as the percentage difference between the sum of quarterly PPIs for the year ended in the June quarter and the sum of the quarterly PPIs for the previous year.⁴
- 4.2.2 Where:
- 4.2.2.1 the cost of providing one of the Service Components (with the prescribed Price Change Mechanism "clause 4.2.2") increases or decreases; and
- 4.2.2.2 that increase or decrease is due to changes in input costs charged to Chorus pursuant to contractual obligations by its field service company contractors,
- Chorus must immediately calculate an adjustment the Price relating to that Service Component to reflect the increase or decrease in costs.
- 4.2.3 When adjusting the Prices under clause 4.2, Chorus must review all Service Components which are POA and calculate a fixed Price where this is practicable.
- 4.3 Once an adjustment or new fixed Price has been calculated under clause 4.2, Chorus must give notice to the Commission of the adjustment. The notice must include:
- 4.3.1 the figures used in the calculation for the adjustment;
- 4.3.2 the calculations undertaken for the adjustment;
- 4.3.3 a description of the adjustment made; and
- 4.3.4 the reasons for the increase or decrease.
- 4.4 After an adjustment has been approved by the Commission, Chorus must:
- 4.4.1 notify Access Seekers of the adjustment; and then,
- 4.4.2 activate the new Charge arising from the adjustment in its billing system within 30 Working Days of the Commission notifying Chorus of its approval.

⁴ As per Annual Adjustment of Charges April 2009 Letter of Approval (21 April 2009).

Tables of UCLL and UCLF Co-location Charges

1 UCLL and UCLF Co-location Transaction Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
1.1 UCLL and UCLF Co-location new exchange	<p>Set up of a new instance of exchange UCLL and UCLF Co-location and expansion of existing exchanges</p> <p>The set up of a new UCLL and UCLF Co-location site for Access Seeker will vary for each exchange and will include the following components:</p> <ul style="list-style-type: none"> - Power feeds enhancement (DC) - Air Conditioning enhancement - Seismic Rack mounts - Cable tray and rack construction - Exchange entry point breakout - Room construction including items such as demolition and reconstruction of rooms; refurbishment of floor, wall and ceiling surfaces; construction of caging; installation of security systems; obtaining necessary permits and approvals; design; project management 	C	On notification by Chorus of completion of new co-location site set up	None	<p>Price based on actual time and materials incurred carrying out the Build. The Access Seeker shall pay Chorus a sum calculated as follows:</p> $A = B \times C$ <p>where</p> <p>A = the sum payable</p> <p>B = the modern equivalent value of the asset</p> <p>C = the proportion of the asset used by the Access Seeker</p> <p>The Access Seeker will pay Chorus' capital costs for that Build, calculated in accordance with section 7</p> <p>Chorus will pay the cost of providing caging or separate rooms in exchanges where Access Seeker Equipment must be separated from Chorus' equipment</p>

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
1.2 UCLL and UCLF Co-location New Row	Installation and set up of a new row within an existing UCLL and UCLF Co-location exchange	C	On completion of installation and set up of row	None	<p>Price based on actual time and materials incurred carrying out the Build. The Access Seeker shall pay Chorus a sum calculated as follows:</p> $A = B \times C$ <p>where</p> <p>A = the sum payable</p> <p>B = the modern equivalent value of the asset</p> <p>C = the proportion of the asset used by the Access Seeker</p> <p>The Access Seeker will pay Chorus' capital costs for that Build, calculated in accordance with section 7</p> <p>Chorus will pay the cost of providing caging or separate rooms in exchanges where Access Seeker Equipment must be separated from Chorus' core network</p>
1.3 UCLL and UCLF Co-location Room Works within existing room	Miscellaneous work on existing equipment excluding work to Building Services	S	On notification by Chorus of completion of co-location room works	None	<p>Price on Application (POA)</p> <p>Price based on actual time and materials incurred plus a 10% contribution towards common costs</p>
1.4 Initial Audit	Initial Audit of exchange where UCLL and UCLF Co-location is not currently provided to Access Seeker	S	On completion of initial audit	Clause 4.2.1.1	<p>\$1,136.79</p> <p>Per audit</p> <p>Per Access Seeker</p> <p>Per exchange</p>
1.5 Full Audit	<p>Full audit of exchange where UCLL and UCLF Co-location is not currently provided to Access Seeker; or</p> <p>A survey for capacity upgrade; or</p> <p>Intra-exchange cable installation; or</p> <p>Audit of exchange infrastructure to determine work for wireless network antenna installation</p>	S	<p>On notification by Chorus of completion of full audit</p> <p>Or survey</p>	None	<p>Price on Application (POA)</p> <p>Price based on actual time and materials incurred plus a 10% contribution towards common costs</p>
1.6 Accreditation training	Accreditation training (excluding the provision of an Access Card)	S	On completion of training	Clause 4.2.1.1	\$271.83/participant

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
1.7 Security Access Card	Security Access Card including replacement for lost/stolen/damaged card	S	On issuance of security access card	None	\$35.00 per card Basis for determining the Price is the actual costs Chorus incurs in actual card purchase, printing and encoding, delivery and activation costs (\$20.00) plus \$15.00 to cover common costs related to operational security
1.8 Additional OO&T Training	Access Seeker staff training (at Access Seeker's site) on the operation and use of OO&T. Maximum of 10 persons per course	S	Following completion of training	Clause 4.2.1.1	\$113.72 per hour plus actual travel costs (as applicable the costs of airplane flights, public transport fares, taxi fares and standard mileage rates for motor vehicles as published by Inland Revenue) to Access Seeker's site. Hourly rate reflects fully loaded cost of skilled employee to run training
1.9 Additional OFM Training	Access Seeker staff training (at Access Seeker's site) on the operation and use of OFM. Maximum of 10 persons per course	S	Following completion of training	Clause 4.2.1.1	\$113.72 per hour plus actual travel costs (as applicable the costs of airplane flights, public transport fares, taxi fares and standard mileage rates for motor vehicles as published by Inland Revenue) to Access Seeker's site. Hourly rate reflects fully loaded cost of skilled employee to run training
1.10 OO&T License Fee	Monthly software license fee for OO&T	S	Monthly in advance	None	\$24.00 per Access Seeker per month
1.11 OFM License Fee	Monthly software license fee for OFM	S	Monthly in advance	None	\$24.00 per Access Seeker per month
1.12 Additional copies of invoice	Additional hardcopies of invoices as requested by Access Seeker	S	Following provision of additional copies of invoice	Clause 4.2.1.1	\$113.72 per invoice Based on per line itemisation and average forecast invoice length plus time and materials of person to prepare and courier cost
1.13 Additional billing information	Providing any additional billing information requested by the Access Seeker over and above that reasonably required to assist Access Seekers in interpreting invoices	S	On provision of the additional billing information Monthly	None	Price on Application (POA) Based on time and material of person to prepare and deliver information
1.14 Escorted Access	Escorted Access during business Hours	S	At completion of escorted access	Clause 4.2.2	\$111.06 per hour

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
	Escorted Access outside business Hours Minimum charge of 4 hours plus call out fee	S	At completion of escorted access	Clause 4.2.2	\$111.06 per hour
1.15 Security Guard call out	Security Guard call out due to Access Seeker's acts or omissions	S	Following call out	None	\$50.00 for call outs to metropolitan exchanges plus travel mileage for call outs to non-metropolitan exchanges as published by Inland Revenue
1.16 Fixing fault which Access Seeker no right of access	Fixing of fault by Chorus, at Access Seeker's request, where Access Seeker is responsible for the fault, but has no right of access	S	On completion of fault rectification	None	Price on Application (POA) Based on cost of time and materials (including a 10% contribution towards common costs)
1.17 No fault found	Fault call that is closed no Chorus fault found	S	Following completion of fault investigation	Clause 4.2.2	\$124.13
1.18 UCLL and UCLF Co-location new Tie cable and HDP build in exchange	The set up of additional Tie cables and block at a UCLL and UCLF Co-location site for Access Seeker including the following components: <ul style="list-style-type: none"> - Supply of HDP blocks - Optional supply of tie cables - Installation and termination of cables (Note this excludes the following items which are covered by item 1.1; <ul style="list-style-type: none"> - Cable tray and rack construction - Footprint construction - Room construction including items such as demolition and reconstruction of rooms; refurbishment of floor, wall and ceiling surfaces; construction of caging; installation of security systems; obtaining necessary permits and approvals; design; project management) 	C	On notification by Chorus of completion of new co-location site set up	Clause 4.2.2	Chorus supplied cable: 16 pair cable up to 40 metres \$424.22 then \$406.94 per additional 16 pair multiple then \$41.56 per 16 pair per additional 5 metres Access Seeker supplied cable; 16 pair cable up to 40 metres \$254.51 then \$240.23 per additional 16 pair multiple then \$32.28 per 16 pair per additional 5 metres

2 UCLL and UCLF Co-location Recurring Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
2.1 UCLL and UCLF Co-location floor space	<p>UCLL and UCLF Co-location Services space. Footprint includes:</p> <ul style="list-style-type: none"> - floor space (600mm x 300mm) - rental for Footprint space on or around the exchange for Access Seekers Equipment 	C	Monthly in advance	None	<p>Price based on Commission set geographic property m² rate multiplied by the area occupied by the Access Seeker calculated as follows:</p> $A = B \times [(C \times E) + D]$ <p>where</p> <p>A = the sum payable</p> <p>B = geographic property m² rate (set out in section 8)</p> <p>C = internal Footprint area (600mm x 300mm)</p> <p>D = external Footprint area</p> <p>E = common area multiplier (3.85)</p>
2.2 16A -48V DC Power Capacity	48V DC Power Final Distribution Rental per 16A increment per month (includes Air-conditioning loading)	S	Monthly in advance	Clause 4.2.1.2	<p>Rural Exchange: \$920.74</p> <p>Suburban Exchange: \$479.58</p> <p>Urban Exchange: \$393.20</p> <p>Metro Exchange: \$380.31</p> <p>Large CBD Exchange: \$373.87</p>
2.3 UCLL and UCLF Co-location cable space	Rental for Chorus-provided Cable Space including Cable Trays, racks and ducts	C	Monthly in advance	None	<p>Price based on Commission set cable rates multiplied by the number of Access Seeker cables calculated as follows:</p> $A = [B \times C] + [D \times E]$ <p>where</p> <p>A = the sum payable</p> <p>B = internal cable rate (\$3.86)</p> <p>C = number of internal tie cables</p> <p>D = external cable rate (\$27.09)</p> <p>E = number of external tie cables</p>

3 UCLL and UCLF Co-location Cancellation Schedule

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
3.1 Missed appointment	Missed appointments by Access Seeker for either an escort technician or testing personnel	S	At end of scheduled appointment	Clause 4.2.2	\$412.53
3.2 Cancellation of UCLL and UCLF Co-location or preliminary order	Cancellation of preliminary order	S	On cancellation of co-location order	None	Price on Application (POA) Price based on actual time and materials plus a 10% contribution towards common costs
3.3 Cancellation of full UCLL and UCLF Co-location order	Cancellation of full order	S	On cancellation of co-location order	None	Price on Application (POA) Price based on actual time and materials plus a 10% contribution towards common costs

4 Electrical Supply and Air Conditioning Transaction Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
4.1 Capacity upgrade	Work to upgrade infrastructure to provide additional capacity For example, additional 16A feed to a rack	S	On completion of capacity upgrade	None	Price on Application (POA) Price based on actual time and materials incurred plus a 10% contribution towards common costs

5 Network Services Transaction Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
5.1 Tie Cable installation	<p>Installation of Tie Cables</p> <p>Inter-Exchange Tie Cable - Copper tie cable from Footprint in co-location room in exchange to HDP on exchange MDF, Chorus or Access Seeker provided cable</p> <p>Remote Tie Cable - Copper tie cable from HDP on exchange MDF to Access Seeker cable adjacent to Chorus exchange entry point, Chorus or Access Seeker provided cable</p> <p>Backhaul Tie Cable - Fibre tie cable from Footprint in co-location room in exchange to Access Seeker cable adjacent to Chorus exchange entry point, Chorus or Access Seeker provided cable</p> <p>Copper, Coax or fibre from Footprint in co-location room to external Footprint in wireless network antenna, Chorus or Access Seeker provided cable</p>	S	On completion of installation	None	<p>Price on Application (POA)</p> <p>Price based on actual time and materials incurred plus a 10% contribution towards common costs</p>

6 Wireless Network Services Transaction Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
6.1 Audit for wireless network antenna installation	Audit of exchange infrastructure to determine work for wireless network antenna installation	S	On completion of audit	None	<p>Price on Application (POA)</p> <p>Price based on actual time and materials incurred plus a 10% contribution towards common costs</p>

7 Chorus Acting as Bank

The Chorus Build and associated capital cost arrangement (as set out below) is subject to section 16 (Quote) of the UCLL and UCLF Co-location Operations Manual.

The Commission has set the provisional rate of return (r) equal to 10.0%⁵. This rate of return must be used in the capital cost calculation (set out below).

The cost of access paid to Chorus = $(\alpha)(voa)$

If less than 100% of the asset is taken by the Access Seeker than an annual payment will be charged to Chorus equal to the foregone return of Chorus on the asset. This will be charged according to the following formula and will apply to all Access Seekers on the anniversary of the first Access Seeker using the asset.

$$\text{Annual Payment to Chorus} = (1 - \varpi)(voa)(r) \times \frac{1}{\varpi} \times \lambda$$

If the second or subsequent Access Seeker joins after the anniversary date of the annual billing period and amount is returned to the existing Access Seeker(s).

Return to existing Access Seekers = $(1 - \phi)(voa)[(1 + r)^T - 1] \times \frac{1}{\varpi} \times \alpha$ paid to the existing Access Seekers on the basis of their proportion of the asset.

If the second or subsequent Access Seeker joins within the same annual billing period and additional amount is returned.

Return to existing Access Seekers₂ = $(1 - \phi)(voa)(r) \times \frac{1}{\varpi} \times \alpha$ also paid to the existing Access Seekers on the basis of their proportion of the asset.

The proportion returned to the individual Access Seekers already using the asset is calculated as follows:

For AS_x the proportion is based on $\frac{\lambda}{\varpi - \alpha}$

Where:

voa is the value of the asset.

α is the amount of access to the asset sought by the new Access Seeker.

ϕ is the sum of the proportions of all existing Access Seekers including the original Access Seeker.

r is the rate or return on the asset as set out above.

λ is the amount of access to the asset of the Access Seeker.

ϖ is the amount of access to the asset of any other existing Access Seekers, including the new Access Seeker.

T is the number of complete years that the asset has been in use before the new Access Seeker uses the asset.

⁵ For the avoidance of doubt, the use of the benchmark rate of return (10%) is confined to the UCLL and UCLF Co-location Service. The Commission notes that the appropriate rate of return on capital would be reconsidered as part of any application for a pricing review.

8 Geographic Property Rental Price Zones

UCLL and UCLF Co-location Floor Space Rental Prices		
Zone	Geographic Region ⁶	Monthly Price (\$ / m ²)
A	Auckland and Wellington	20
B	Canterbury, Waikato, and Hawkes Bay	14
C	All Other Regions	11

⁶ Regions align to Statistics New Zealand "Regional Council" geographical boundaries
<http://www2.stats.govt.nz/domino/external/omni/omni.nsf/wwwglsry/Regional+Council>