

Standard Terms Determination for Chorus’ Unbundled Copper Low Frequency Network Backhaul (Telephone Exchange to Interconnect Point) Service

Being a standard terms determination that applies to the service described in subpart 1 of Part 2 of Schedule 1 of the Telecommunications Act 2001 as Chorus’s unbundled copper local loop network backhaul (telephone exchange to interconnect point), as supplied for the purposes of providing access to and interconnection with Chorus’ unbundled copper low frequency service

Schedule 2: UCLF Backhaul Price List

Date of determination: 27 June 2008

Updated to incorporate Commerce Commission decisions, amendments, and clarifications through to 16 December 2024

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1. Introduction

- 1.1 This schedule sets out the Charges¹ for the UCLF Backhaul Service and provides a mechanism to make adjustments to the Charges for Service Components.²
- 1.2 References to clauses or sections are references to clauses or sections in this UCLF Backhaul Price List unless expressly provided otherwise. The definitions set out in the UCLF Backhaul General Terms and the UCLF Backhaul Operations Manual apply to the extent that they are not expressly modified by, or inconsistent with, the context of this UCLF Backhaul Price List.

2. Charges

- 2.1 All Prices³ are listed under the “Charge” column for each Service Component.
- 2.2 Charges for UCLF Backhaul 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 UCLF Backhaul Service.
- 2.4 Sundry Charges are for other components of the UCLF Backhaul 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 UCLF Backhaul General Terms relating to invoicing and payment of Charges apply.

¹ **Charge** is defined in the UCLF Backhaul General Terms as “all or (as the context requires) any amounts payable by the Access Seeker under the UCLF Backhaul Terms.” Charges in this schedule exclude GST.

² **Service Component** means a component of the UCLF Backhaul Service, described in the rows of tables 1-3 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.

- 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. UCLF Backhaul Connection and Monthly Charges

- 3.1 The following clauses provide a detailed explanation about connection Charges (Service Components 1.1 and 1.2) and monthly Charges (Service Components 2.1 to 2.12):
- 3.1.1 For the purposes of this UCLF Backhaul Price List:
- (a) A primary link means that part of the UCLF Backhaul Service between the Local Exchange Handover Point and the Parent POI Site (**Primary Link**). A secondary link means that part of the UCLF Backhaul Service between the Parent POI Site and the ASNAPOI Handover Point (**Secondary Link**). A Link means a Primary Link and/or a Secondary Link; and
 - (b) **Local Exchange End** means the end located at the Local Exchange. **ASNAPOI End** means the end located at the ASNAPOI. **One End** refers to either the Local Exchange End or the ASNAPOI End, as the context requires. **Two Ends** refers to the Local Exchange End and the ASNAPOI End.
- 3.1.2 The connection Charge for the UCLF Backhaul Service (Service Components 1.1 and 1.2) varies depending on whether the Access Seeker requires connection at One End or Two Ends. The application of these Charges is not dependent on the distance groups in Appendix A or the applicable transmission capacities for the UCLF Backhaul Service. Service Component 1.1 applies where the Access Seeker requires a new UCLF Backhaul connection for Two Ends. In contrast, Service Component 1.2 applies where the Access Seeker requires a rearrangement involving a new UCLF Backhaul connection for One End of a Link.
- 3.1.3 For the avoidance of doubt:
- (a) a Parent POI Site does not qualify as an End unless that Parent POI Site is an ASNAPOI;
 - (b) where an Access Seeker has more than one link ending at an ASNAPOI, a Two Ends connection Charge is payable by the Access Seeker for each Link; and

- (c) the Access Seeker may purchase more than one Secondary Link between the same POI Site and the same ASNAPOI – see example 4 in Appendix B.

3.1.4 The monthly Charges for the Primary Link and the Secondary Link (Service Components 2.1 to 2.12) vary depending on the radial distance of the Link and the transmission capacity. There are six distance groups for each transmission capacity for the UCLF Backhaul Service. The distance groups are set out in Appendix A and the radial distances are set out in Schedule 5 to the UCLF Backhaul General Terms. A list of the radial distances must also be made available to the Access Seekers via a secure Chorus web portal and must be regularly updated by Chorus.

3.1.5 The application of the monthly Charges for the Primary Link and the Secondary Link (Service Components 2.1 to 2.12) is illustrated in the following clauses.

3.1.6 Where the Access Seeker has:

- (a) a Primary Link that ends at the Parent POI Site;
- (b) a Secondary Link that starts at the same Parent POI Site; and
- (c) each of those Links has the same transmission capacity,

the Access Seeker pays a monthly Charge at that applicable capacity. The applicable radial distance is the sum of the radial distance from the Local Exchange to the Parent POI Site and the radial distance from the Parent POI Site to the ASNAPOI.

3.1.7 Where the Access Seeker has:

- (a) a Primary Link that ends at the Parent POI Site;
- (b) a Secondary Link that starts at the same Parent POI Site; and
- (c) the Secondary Link has a different transmission capacity to the Primary Link,

the Access Seeker pays the applicable monthly Charge for each Link at the applicable capacity. The radial distance for the Primary Link is the radial distance from the Local Exchange to the Parent POI Site and the radial distance for the Secondary Link is the radial distance from the Parent POI Site to the ASNAPOI.

3.1.8 Appendix B outlines examples relating to the application of the connection Charges (Service Components 1.1 and 1.2) and monthly Charges (Service Components 2.1 to 2.12).

3.1.9 In addition to the above requirements, Service Components 2.11 and 2.12 must be charged in accordance with the following formula: price = $\exp\{4.6300 + (0.5071 \times \ln(\text{radial distance})) + (0.3858 \times \ln(\text{transmission capacity}))\}$ where “ln” means the natural log.⁴

⁴ This formula can be calculated in Excel, using the exp() function with the ln(x) values of distance and transmission capacity.

4. Adjustment to Charges

4.1 Chorus must, subject to the approval of the Commission, increase or decrease Prices as follows:

4.1.1 Each year, on or before 1 November, or such other date approved by the Commission in a particular year, Chorus must calculate adjustments to the Prices relating to those Service Components where this clause 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 Consumers Price Index (All Groups) Series Reference CPIQ.SE9A as published by Statistics New Zealand.⁵

For the purpose of this clause 4.1.1 the annual percentage change between the previous year's September index number and the current year's September index number must be used.⁶

4.1.2 When adjusting Prices under clause 4.1, Chorus must review all Service Components which are POA and calculate a fixed Price where this is practicable.

4.2 Once an adjustment or new fixed Price has been calculated under clause 4.1, Chorus must give notice to the Commission of the adjustment. The notice must include:

4.2.1 the figures used in the calculation for the adjustment; and

4.2.2 the calculations undertaken for the adjustment.

4.3 The Commission must approve or decline a proposed adjustment notified by Chorus under clause 4.1.2 within 20 Working Days.

4.4 After an adjustment has been approved by the Commission, Chorus must:

4.4.1 notify Access Seekers of the adjustment; then

4.4.2 activate the new Charge arising from the adjustment in its billing systems as at 16 December of the applicable year.

⁵ As required by s 69AG of the Telecommunications Act 2001. This requirement was inserted in the Telecommunications (New Regulatory Framework) Amendment Act 2018.

⁶ Under the Act, an **annual CPI adjustment** means, in relation to a price, an annual adjustment to the price that is equal to any percentage movement in the CPI as measured between— (a) the CPI for the quarter that ended most recently before the price adjustment; and (b) the CPI for the equivalent quarter in the preceding year.

Tables of UCLF Backhaul Service Charges

1. UCLF Backhaul Service Transaction Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
1.1 UCLF Backhaul Service New Connection – Two Ends	The establishment of a UCLF Backhaul Service new connection at Two Ends. Connection only. For the avoidance of doubt this Service Component is separate from Service Component 1.4.	C	Following notification by Chorus of completion of Order	Clause 4.1.1	\$9,928.33
1.2 UCLF Backhaul Service New Connection – One End	The establishment of a UCLF Backhaul Service new connection at One End. Connection only. For the avoidance of doubt this Service Component is separate from Service Component 1.4.	C	Following notification by Chorus of completion of Order	Clause 4.1.1	\$4,964.79
1.3 Handover Fibre Installation	Chorus installing the Access Seeker's Handover Fibre between the exchange manhole and the OFDF. (See full requirements in UCLF Backhaul Operations Manual)	S	Following notification by Chorus of completion of Order	None	Price on Application (POA) Based on cost of time and materials (including a 10% contribution towards common costs, unless already recovered)
1.4 UCLF Backhaul Connection Installation	Installation of UCLF Backhaul Connection located at the Local Exchange or the ASNAPOI. Copper tie cable from footprint in co-location room in Local Exchange to Relevant Distribution Frame with Chorus or Access Seeker supplying the required cable Fibre tie cable from footprint in co-location room in Local Exchange to Relevant Distribution Frame, with	S	On completion of installation	None	Price on Application (POA) Based on cost of time and materials (including a 10% contribution towards common costs unless already recovered)

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
	Chorus or Access Seeker supplying the required cable Copper, Coax or fibre cable from footprint in co-location room to external footprint in wireless network antenna, with Chorus or Access Seeker supplying the required cable				
1.5 Relinquishment of Access Seeker Handover Fibre or UCLF Backhaul Connection	Relinquishment of an existing Access Seeker Handover Fibre or UCLF Backhaul Connection. Covers time and materials to remove existing Handover Fibre or UCLF Backhaul Connection and cables and equipment	S	On completion of relinquishment	None	Price on Application (POA) Basis for determining the charge is based on recovery of costs incurred (including 10% contribution towards common costs, unless already recovered)
1.6 UCLF Backhaul Service Network Change Order	Charge for project management and coordination of Network Change Orders. Where necessary, the Access Seeker will also be responsible for any relevant new connection or relinquishment	S	At completion of escorted access	Clause 4.1.1	\$148.30 per hour Pricing reflects the fully allocated cost of project management
1.7 UCLF Backhaul Service Speed Change Order	Changing the transmission capacity of an existing connection when only a reconfiguration is required	S	At completion of escorted access	Clause 4.1.1	\$368.42
1.8 UCLF Backhaul Service Connection Relinquishment	Relinquishment of supply of an existing UCLF Backhaul Service connection	C	Following notification by Chorus of completion of Order	None	\$0.00

2. UCLF Backhaul Service Recurring Charges

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
2.1 UCLF Backhaul Service - 100Mbps – Distance Group 1*	UCLF Backhaul Service - 100Mbps – Distance Group 1*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$1,187.61
2.2 UCLF Backhaul Service - 1Gbps – Distance Group 1*	UCLF Backhaul Service - 1Gbps – Distance Group 1*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$2,887.70
2.3 UCLF Backhaul Service - 100Mbps – Distance Group 2*	UCLF Backhaul Service - 100 Mbps – Distance Group 2*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$2,073.39
2.4 UCLF Backhaul Service – 1Gbps – Distance Group 2*	UCLF Backhaul Service – 1Gbps – Distance Group 2*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$5,039.94
2.5 UCLF Backhaul Service – 100Mbps – Distance Group 3*	UCLF Backhaul Service – 100Mbps – Distance Group 3*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$2,686.90
2.6 UCLF Backhaul Service – 1Gbps – Distance Group 3*	UCLF Backhaul Service – 1Gbps – Distance Group 3*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$6,530.60
2.7 UCLF Backhaul Service – 100Mbps – Distance Group 4*	UCLF Backhaul Service – 100Mbps – Distance Group 4*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$3,185.83
2.8 UCLF Backhaul Service – 1Gbps – Distance Group 4*	UCLF Backhaul Service – 1Gbps – Distance Group 4*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$7,745.30
2.9 UCLF Backhaul Service – 100Mbps – Distance Group 5*	UCLF Backhaul Service – 100Mbps – Distance Group 5*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$3,619.49

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
2.10 UCLF Backhaul Service – 1Gbps – Distance Group 5*	Backhaul Service – 1Gbps – Distance Group 5*	C	Monthly in advance from completion of Order	Clause 4.1.1	\$8,798.61
2.11 UCLF Backhaul Service – 100Mbps – Distance Group 6*	UCLF Backhaul Service – 100Mbps – Distance Group 6*	C	Monthly in advance from completion of Order	Clause 4.1.1	1.2268 * Exponential of [4.6300 + (0.5071 x ln(radial distance)) + (0.3858 x ln(100))]
2.12 UCLF Backhaul Service – 1Gbps – Distance Group 6*	UCLF Backhaul Service – 1Gbps – Distance Group 6*	C	Monthly in advance from completion of Order	Clause 4.1.1	1.2268 * Exponential of [4.6300 + (0.5071 x ln(radial distance)) + (0.3858 x ln(100))]
[Original 2.13 -2.14 deleted?]					
2.13 Handover Fibre or UCLF Backhaul Connection Space Rental	Monthly space rental for Handover Fibre or UCLF Backhaul Connection co-located on Chorus property	C	Monthly in advance from completion of Order	Clause 4.1.1	\$33.39

* The Distance Groups are defined in Appendix A –UCLF Backhaul Recurring Charges.

⁷ Decision No 690 (8 April 2010).

3. UCLF Backhaul Ancillary Services

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
3.1 No Fault Found	Fault call that is closed 'no Chorus fault found'	S	Following completion of fault investigation	Clause 4.1.1	\$164.33
3.2 Additional OO&T Training	Access Seeker staff training (at Access Seeker's site) on the operation and use of OO&T. Maximum of ten persons per course	S	Following completion of training	Clause 4.1.1	\$148.30 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
3.3 Additional OFM Training	Access Seeker staff training (at Access Seeker's site) on the operation and use of OFM. Maximum of ten persons per course	S	Following completion of training	Clause 4.1.1	\$148.30 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
3.4 OO&T Licence Fee	Monthly software licence fee for OO&T	S	Monthly in advance	Clause 4.1.1	\$29.57 per Access Seeker per month
3.5 OFM Licence Fee	Monthly software licence fee for OFM	S	Monthly in advance	Clause 4.1.1	\$29.57 per Access Seeker per month

Service Component	Description	Core or Sundry	Charge invoiced	Price Change Mechanism	Charge (excl. GST)
3.6 Additional Copies of Invoice	Additional hardcopies of invoices as requested by Access Seeker	S	Following provision of additional copies of invoice	Clause 4.1.1	\$148.30 per invoice Based on per line itemisation and average forecast invoice length plus estimated time and materials of person to prepare and courier charge
3.7 Additional Billing Information	Providing any additional billing information requested by the Access Seeker	S	On provision of the additional billing information	None	Price on Application (POA) Based on time and material of analyst to prepare and deliver information
3.8 Order cancellation (Pre Truck Roll)	Cancellation of an Order after RFS date notified to Access Seeker but before truck roll confirmed	S	Upon cancellation	Clause 4.1.1	\$6.52 Pricing reflects administration costs and time plus a 10% mark-up to cover common costs unless already recovered
3.9 Order cancellation (Post Truck Roll)	Cancellation of an Order after RFS date notified to Access Seeker and after truck roll confirmed	S	Upon cancellation	Clause 4.1.1	\$132.44
3.10 Handover Fibre and UCLF Backhaul Connection Repair	Repair of the Handover Fibre or UCLF Backhaul Connection	S	Following completion of work	None	\$0.00
3.11 Fixing fault where Access Seeker has 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, unless already recovered)

Appendix A - UCLF Backhaul Service Recurring Charges

Table of Distance Groupings

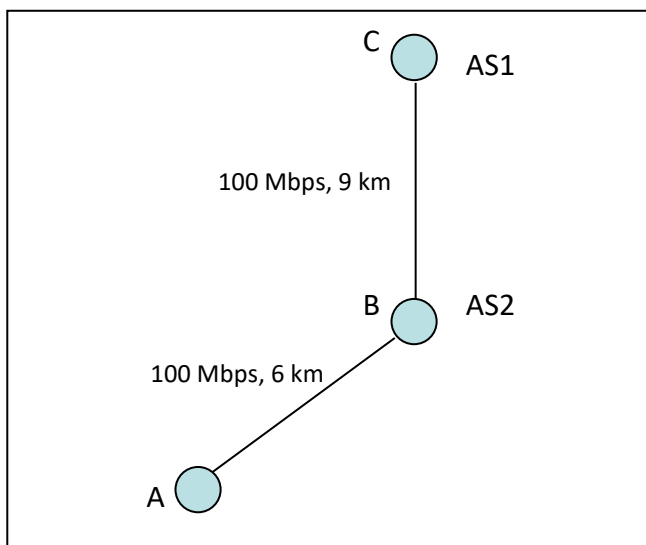
Distance Group	Radial Distance
1	0 km < radial distance ≤ 5 km
2	5 km < radial distance ≤ 10 km
3	10 km < radial distance ≤ 15 km
4	15 km < radial distance ≤ 20 km
5	20 km < radial distance ≤ 25 km
6	radial distance > 25 km

Appendix B – Application of UCLF Backhaul connection Charges and monthly rental Charges

This Appendix sets out a number of examples explaining how the connection Charges (Service Components 1.1 and 1.2) and monthly Charges (Service Components 2.1 to 2.12) will be applied under this STD.

Example 1:

In this example, the Access Seeker requires the same capacity on both the Primary Link and the Secondary Link of the UCLF Backhaul Service.



Note: The radial distances from A – B and B – C must be calculated separately and added together to determine the applicable distance group for the Links between A -- C.

Access Seeker 1

Access Seeker 1 (AS1) has a DSLAM located in Local Exchange A and doesn't require access to links at Local Exchange B. The Parent POI Site is at B and C is an ASNAPOI for AS1. In this example, the applicable monthly rental Charges and connection Charges are as follows:

Monthly Rental Rate A-C (100 Mbps, 15 km):
Total Connection Charge (A, C):

Service Component 2.5: UCLF Backhaul Service – 100 Mbps – Distance Group 3
Service Component 1.1: UCLF Backhaul Service New Connection – Two ends

Access Seeker 2

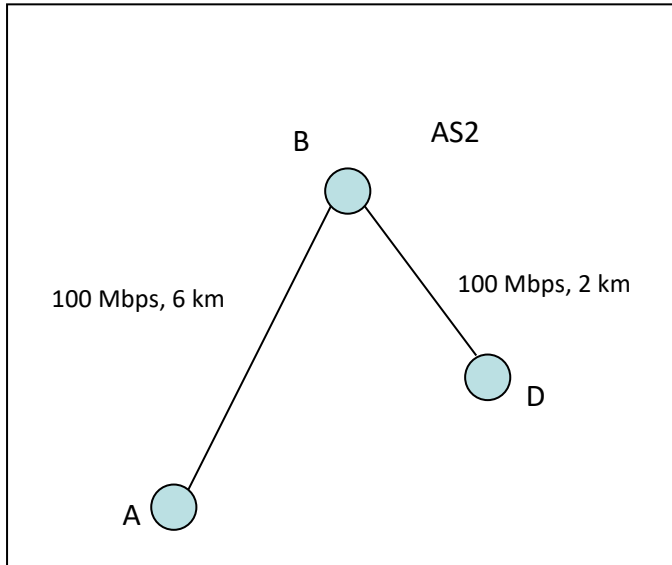
Access Seeker 2 (AS2) has a DSLAM located in Local Exchange A. The Parent POI Site is at B and B is an ASNAPOI for AS2. In this example, the applicable monthly rental Charges and connection Charges are as follows:

Monthly Rental Rate A-B (100 Mbps, 6 km):
Total Connection Charge (A, B):

Service Component 2.3: UCLF Backhaul Service – 100 Mbps – Distance Group 2
Service Component 1.1: UCLF Backhaul Service New Connection – Two Ends

Example 2:

In this example, the Access Seeker is able to purchase two regulated UCLFS Backhaul Services, as both links A-B and D-B are end-to-end services for AS2.



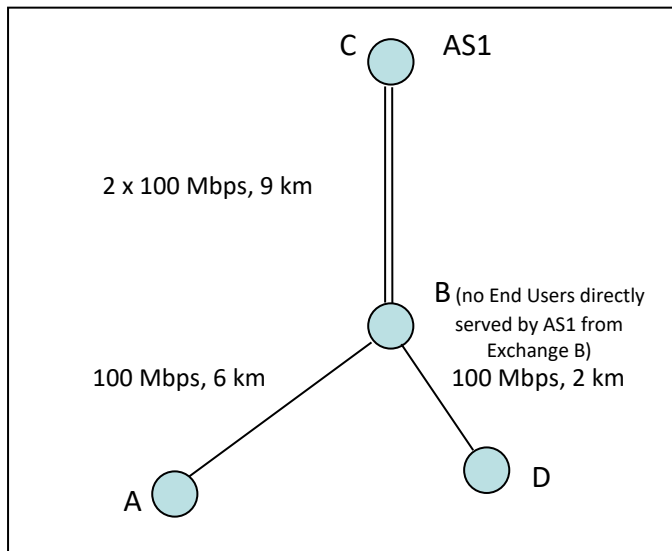
Access Seeker 2

Access Seeker 2 (AS2) has DSLAMs located at Exchanges A and D. The Parent POI is at B, and AS2 is also located near B (ie B is the ASNAPOI for AS2). In this example, the applicable monthly rental Charges and connection Charges are as follows:

- | | |
|---|---|
| Monthly Rental Charge A-B (100 Mbps, 6 km): | Service Component 2.3: UCLFS Backhaul Service – 100 Mbps – Distance Group 2 |
| Monthly Rental Charge D-B (100 Mbps, 2 km): | Service Component 2.1: UCLFS Backhaul Service – 100 Mbps – Distance Group 1 |
| Connection Charge (A, B): | Service Component 1.1: UCLFS Backhaul Service New Connection – Two Ends |
| Connection Charge (B, D): | Service Component 1.1: UCLFS Backhaul Service New Connection – Two Ends |

Example 3:

In this example, the Access Seeker requires the same capacity on the Primary Links and the Secondary Links of the UCLFS Backhaul Service. As the Access Seeker does not have any End Users that it serves at Local Exchange B, the Access Seeker is not able to locate aggregation equipment at Local Exchanges B under the UCLFS Co-location STD (although the Access Seeker could locate aggregation equipment at Local Exchange B under a commercial co-location arrangement with Chorus).



Access Seeker 1

Access Seeker 1 (AS1) has DSLAMs located at Local Exchanges A and D and doesn't require DSLAMs at exchange B, as it is not serving any End Users from that Local Exchange.

The Parent POI is at B, and AS1 is located near C (ie C is the ASNAPOI for AS1). In this example, AS1 purchases Links between A-C and D-C, which would have the following prices:

Monthly Rental Charge A-C (100 Mbps, 15 km):	Service Component 2.5: UCLL Backhaul Service – 100 Mbps – Distance Group 3
Monthly Rental Charge D-C (100 Mbps, 11 km):	Service Component 2.5: UCLL Backhaul Service – 100 Mbps – Distance Group 3
Connection Charge (A, C):	Service Component 1.1: UCLL Backhaul Service New Connection – Two Ends
Connection Charge (D, C):	Service Component 1.1: UCLL Backhaul Service New Connection – Two Ends

As example 4 is comprised solely of regulated UCLFS Backhaul Services, it cannot be directly compared to example 3, which contains a mix of the regulated UCLFS Backhaul Service and commercial unbundled copper local loop backhaul service.

AS1 will, however, face trade-offs between the regulated and commercial prices for monthly rental and connection Charges, and in particular:

<p>Example 3 The monthly charges of a regulated, higher capacity 1Gbps Secondary Link, two regulated connection Charges and commercial Charges for the remaining links, plus the opportunity to aggregate further links in the future at Local Exchange B.</p>	<p>compared to</p>	<p>Example 4 The regulated monthly Charges for the regulated Links, lower capacity end-to-end Primary and Secondary Links, four regulated connection Charges, and the inability to aggregate links at Local Exchange B.</p>
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The optimal configuration of Primary and Secondary Links for AS1, and whether they are regulated, commercial or a combination, will depend on AS1's expectations about the amount of capacity required at Local Exchange B (ie the number of unbundled exchanges it will serve from the Parent POI) and AS1's ability to locate aggregation equipment at Local Exchange B.