COMMERCE COMMISSION

CLARIFICATION OF THE STANDARD TERMS DETERMINATION ON TELECOM'S UNBUNDLED BITSTREAM ACCESS BACKHAUL SERVICE

DECISION NO. 654

Clarification under section 58 of the Telecommunications Act 2001 (the **'Act'**) of Decision 627

The Commission:	Dr Ross Patterson
Summary of Application and Initiation:	The Commission received an application for clarification from Telecom to Decision 627 under section 58 of the Act.
Date of clarification:	19 September 2008

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 of Telecom's unbundled bitstream access service backhaul ('**UBA Backhaul**').

3. On 19 August 2008 Telecom applied under section 58 of the Act for the Commission to clarify the UBA Backhaul STD.[1]

4. On 27 August 2008 the Commission invited submissions from interested parties, including the Telecommunications Carriers' Forum ('**TCF**'), on Telecom's requested clarification of the UBA Backhaul STD.

5. On 10 September 2008, the Commission received a letter from the TCF submitting that:

> The TCF UBA working party held a meeting on 4 September to discuss the proposed Clarification. This meeting was attended by Orcon, TelstraClear, Telecom and Vodafone.
>
> All the parties listed above agreed with the proposed Clarification. CallPlus were not present at the meeting, but they have advised the TCF that they also agree with it.

Jurisdiction

6. 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.

7. 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.

Decision

8. In making this decision the Commission has considered the original request for clarification made by Telecom under section 58, the subsequent submission received from the TCF, and the purpose set out in section 18 of the Act. The Commission has also considered whether any consequential changes need to be made as a result of Telecom's request for clarification.

9. The Commission considers that the clauses of the UBA Backhaul STD set out in column 1 of the attached Schedule 1 (**'References'**) require amendment and qualify as clarifications under section 58 of the Act. Further, it notes that no appeal is pending in respect of the determination.

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[1] A copy of the Application is available on the Commission's website at: http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/StandardTermsDeterminations/UnbundledBitstreamBackhaulService/DecisionsList.aspx.

10. The Commission clarifies the References by making the amendments identified in column 2 of the attached Schedule 1 (**'Amendments'**). The reasons for the Commission's clarifications are set out in column 3 of the attached Schedule 1.

11. The Commission considers that the clarifications set out in Schedule 1 are likely to best give effect to the purpose set out in section 18 of the Act because in general they will promote efficient delivery of the UBA Backhaul Service.

DATED at Wellington this 19th day of September 2008

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Dr Ross Patterson
Telecommunications Commissioner
Commerce Commission

Schedule 1

Reference	Amendment	Reason
STD Decision Report		
Paragraph 79	**Delete:** ASNAPOI Handover Point – the Access Seeker side of the OFDF in the ASNAPOI; FDS Handover Point – the Access Seeker side of the OFDF in the FDS. **Replace with:** ASNAPOI Handover Point – the Access Seeker side of the data switch in the ASNAPOI; and FDS Handover Point – the Access Seeker side of the data switch in the FDS.	Clarifications to ensure definitions reflect where handover of the UBA Backhaul Service will occur in Telecom's network.
Paragraph 80	**Delete:** Diagram below paragraph 80 **Replace with:** Attached diagram in Annex One to this Schedule.	Consequential changes to ensure diagram reflects where handover will actually occur in Telecom's network, reflecting changes to definitions of Access Seeker's Network, Telecom's Network and ASNAPOI Handover Point, and the introduction of the definition of Network Demarcation Point.
Appendix B – Definitions	**Delete:** **ASNAPOI Handover Point** means the Access Seeker side of the OFDF in the ASNAPOI **Replace with:** **ASNAPOI Handover Point** means the Access Seeker side of the data switch in the ASNAPOI **Delete:** **FDS Handover Point** means the Access Seeker side of the OFDF in the FDS **Replace with:** **FDS Handover Point** means the Access Seeker side of the data switch in the FDS	Clarifications to ensure definitions reflect where handover of the UBA Backhaul Service will occur in Telecom's network.

Reference	Amendment	Reason
Appendix G – Example 3	**Delete:** Total Connection Charge (A, C, D, C): $16,118 (one-off ie 2 x $8,059) **Replace with:** Total Connection Charge (A, C, D): $12,089 (one-off)	This clarification ensures that clauses 2.2.3(b) and (c) of the Price List are both applied . It also ensures that Example 3 does not appear to be inconsistent with these clauses.
Appendix G – new Example 4	**Insert:** New Example 4 attached as Annex Two to this Schedule.	Clarification to illustrate that where an Access Seeker purchases multiple primary links, all to be associated with a single secondary link, the Access Seeker is able to request the most cost effective billing combination.
General Terms		
Section 1 – Definitions	**Delete:** **Access Seeker's Network** means the telecommunications system whether fixed, mobile or wireless from time to time of the Access Seeker which the Access Seeker uses to provide services including all transmission media, equipment and related support systems but excluding anything on Telecom's side of the Handover Point between the Access Seeker's Network and Telecom's Network. For the purposes of this definition, Access Seeker includes every Related Company of the Access Seeker. **Replace with:** **Access Seeker's Network** means the telecommunications system whether fixed, mobile or wireless from time to time of the Access Seeker which the Access Seeker uses to provide services including all transmission media, equipment and related support systems; but excluding anything on Telecom's side of the Network Demarcation Point. For the purposes of this definition, Access Seeker includes every Related Company of the Access Seeker.	Clarification to provide that Telecom's Network includes everything up to the Access Seeker side of the OFDF.
	Delete: **Telecom's Network** means the telecommunications system whether fixed, mobile or wireless from time to time of Telecom which Telecom uses to provide services including all transmission media, equipment and related support systems; but excluding Telecom Owned Equipment or anything on the Access Seeker's side of the Handover Point between Telecom's Network and the	Consequential change to reflect changes to definitions of Access Seeker's Network and ASNAPOI Handover Point, and the introduction of the definition of Network Demarcation Point.

Reference	Amendment	Reason
	Access Seeker's Network. For the purposes of this definition, Telecom includes every Related Company of Telecom. **Replace with:** **Telecom's Network** means the telecommunications system whether fixed, mobile or wireless from time to time of Telecom which Telecom uses to provide services including all transmission media, equipment and related support systems; but excluding Telecom Owned Equipment or anything on the Access Seeker's side of the Network Demarcation Point. For the purposes of this definition, Telecom includes every Related Company of Telecom.	
	Insert: **Network Demarcation Point** means, at any relevant Exchange, the Access Seeker's side of Telecom's optical fibre distribution frame at the ASNAPOI, as described in the UBA Backhaul Service Description.	Clarification to the demarcation point between Telecom's Network and the Access Seeker's Network, reflecting changes to definitions of Access Seeker's Network, Telecom's Network and ASNAPOI Handover Point.
UBA Backhaul Service Description		
Clause 1.3	**Delete:** **Aggregated** means where an Access Seeker's traffic is collected from multiple points (DSLAMs) and is transmitted across the same Handover Connection. **Insert:** **DSLAM Aggregation** means the process where an Access Seeker's UBA Backhaul Service is collected from one or more DSLAMs and is merged at the FDS. **Primary Link Aggregation** means the process where an Access Seeker's UBA Backhaul Service is collected from one or more FDSs and is merged at the Parent POI.	Deletion of existing definition and insertion of new definitions needed to reflect changes to clause 3.5 of the Service Description below.
Clause 1.3	**Delete:** **ASNAPOI Handover Point** means the Access Seeker side of the OFDF in the ASNAPOI. **Replace with:** **ASNAPOI Handover Point** means the Access Seeker side of the data switch in the ASNAPOI.	Clarifications to ensure definitions reflect where handover will occur in Telecom's network.

Reference	Amendment	Reason
	Delete: **FDS Handover Point** means the Access Seeker side of the OFDF in the FDS. **Replace with:** **FDS Handover Point** means the Access Seeker side of the data switch in the FDS.	
Clause 3.3	**Delete:** For the avoidance of doubt, an Access Seeker may use a Handover Fibre already installed for another Telecom-supplied service for the purpose of using the UBA Backhaul Service. **Replace with:** For the avoidance of doubt, an Access Seeker may use an unused fibre pair in Handover Fibre cable already installed for another Telecom-supplied service for the purpose of using the UBA Backhaul Service.	Clarification to reflect that while Telecom cannot be required to combine UBA Backhaul Service with other services, the Access Seeker may be able to, and may use, the same Handover Fibre provided that there is an unused fibre pair in that Handover Fibre.
Clause 3.5	**Delete:** Telecom must provide Aggregated transmission capacity between each FDS at which the Access Seeker requires the UBA Backhaul Service and the ASNAPOI. **Replace with:** Telecom must provide transmission capacity between the FDS at which the Access Seeker requires the UBA Backhaul Service and the ASNAPOI using where required DSLAM Aggregation at the FDS and Primary Link Aggregation at the relevant Parent POI Site. For the avoidance of doubt, Aggregation of Secondary Links does not occur at the ASNAPOI.	Clarification to reflect that Telecom is required to aggregate UBA Backhaul Traffic at the FDS and/or Parent POI, but not at the ASNAPOI.
Appendix A diagrams	**Delete:** Diagrams A, B and C **Replace with:** Attached diagrams A, B and C in Annex Three to this Schedule.	Consequential changes to ensure diagrams reflect where handover will actually occur in Telecom's network, reflecting changes to definitions of Access Seeker's Network, Telecom's Network and ASNAPOI Handover Point, and the introduction of the definition of Network Demarcation Point.
Appendix B: Characteristic 3 – Upstream Traffic Management – FDS	**Delete:** When the UBA Backhaul traffic is Aggregated at the FDS, it must be subject to Traffic	Consequential change clarifying treatment of traffic at the FDS.

Reference	Amendment	Reason
	Management to the relevant Transmission Capacity Where the traffic, at any time, offered to the UBA Backhaul Service exceeds the Transmission Capacity, traffic must be admitted to the UBA Backhaul Service based on (IEEE 802.1p) priority values as set out in characteristic 8 set out below. Traffic marked with lower priority values must be discarded first. **Replace with:** Where the UBA Backhaul Service traffic passes through DSLAM Aggregation at the FDS, it must be subjected to Traffic Management to the relevant Transmission Capacity. Where the traffic, at any time, offered to the UBA Backhaul Service exceeds the Transmission Capacity, traffic must be admitted to the UBA Backhaul Service based on (IEEE 802.1p) priority values as set out in characteristic 8 set out below. Traffic marked with lower priority values must be discarded first. All UBA Backhaul Service traffic at the FDS may be subjected to Traffic Policing to the relevant Transmission Capacity. Telecom may encapsulate all packets in the UBA Backhaul Service for the purposes of transmission over Primary Links.	
Appendix B: Characteristic 4 – Traffic treatment within the UBA Backhaul Service	**Delete:** Traffic within the UBA Backhaul Service must be handled as a single class, in accordance with the Latency and Jitter specifications set out below. Once the UBA Backhaul traffic has been accepted into the UBA Backhaul Service at the FDS it must not be subjected to any further Traffic Management up to the Handover Link (or other backhaul service). **Replace with:** Traffic within the UBA Backhaul Service may be handled as a single class, however must remain in accordance with the Latency and Jitter specifications set out below.	Clarification that traffic within the UBA Backhaul Service may be handled as a single class but it is not required to be. In any event, the traffic must always remain within the Latency and Jitter specifications set out in the Service Description.
Appendix B: Characteristic 5 – Upstream Traffic Management – Parent POI Site	**Delete:** Traffic will be managed to 1 Gbit/s (the handover rate) in accordance with Traffic Management. Traffic Management does not occur at a Parent POI Site for traffic from an associated FDS. Traffic from a FDS located in the Parent POI will be subject to Traffic Management in accordance with its priority value as set out above in characteristic 3 of Appendix B.	Consequential change clarifying treatment of traffic at the Parent POI Site.

Reference	Amendment	Reason
	Replace with: Traffic will be managed to 1 Gbit/s (the handover rate) in accordance with Traffic Management. Traffic Management may at Telecom's discretion occur at a Parent POI Site for traffic from an associated FDS, such traffic will be treated as high priority. Traffic from a FDS located in the Parent POI will be managed based on (IEEE 802.1p) priority values as set out in characteristic 8 set out below. Traffic marked with lower priority values must be discarded first. Primary Link Aggregation occurs at the Parent POI Site for the UBA Backhaul Service traffic. All UBA Backhaul Service traffic at the Parent POI may be subjected to Traffic Policing to the relevant Transmission Capacity.	
Appendix B: Characteristic 6 – Downstream Traffic Policing – Handover Link	**Delete:** UBA Backhaul Service traffic is subject to Traffic Policing to the handover line rate (ie 1 Gbit/s). Telecom must not act on priority values. For the avoidance of doubt, there will be no downstream Traffic Management at the Handover Link. **Replace with:** There will be no downstream Traffic Management at the Handover Link. UBA Backhaul Service traffic will be accepted up to the line rate of the Handover Link.	Clarification to reflect fact that it is not technically possible for Telecom to police traffic up to the line rate of the Handover Link.
Appendix B: Characteristic 11 – Latency	**Delete:** For a Link that comprises a Primary Link only or a Secondary Link only: < 5msec For a Link that comprises a Primary Link and a Secondary Link: < 25msec **Replace with:** For a Link that comprises a Primary Link only: < 5msec For a Link that comprises a Primary Link and a Secondary Link, or a Secondary Link only: < 25msec	Clarification that the Latency standard for a Secondary Link only should be < 25msec.

Reference	Amendment	Reason
Appendix B: Characteristic 12 – Jitter	**Delete:** For a Link that comprises a Primary Link only or a Secondary Link only: < 1msec For a Link that comprises a Primary Link and a Secondary Link: < 2msec **Replace with:** For a Link that comprises a Primary Link only: < 3msec For a Link that comprises a Primary Link and a Secondary Link, or a Secondary Link only: < 7msec	Clarification that the Jitter standard for a Primary Link only should be < 3msec. Clarification that the Jitter standard for a Secondary Link only should be the same as for a Primary Link and a Secondary Link, and that this should be < 7msec.
UBA Backhaul Price List		
Appendix B – Example 3	**Delete:** Connection Charge (D, C): Service component 1.1: UBA Backhaul Service New Connection – Two Ends **Replace with:** Connection Charge (D): Service component 1.2: UBA Backhaul Service New Connection – One End	Clarification to ensure that clauses 2.2.3(b) and (c) of the Price List are both applied and Example 3 is not inconsistent with these clauses.
Appendix B – new Example 4	**Insert:** New Example 4 attached as Annex Four to this Schedule.	Clarification to illustrate that where an Access Seeker purchases multiple primary links, all to be associated with a single secondary link, the Access Seeker is able to request the most cost effective billing combination.
UBA Backhaul Operations Manual		
Clause 9.11.3(a)	**Delete:** Handover Point ID	Clarification that the appropriate term here is “Handover Link ID”, not “Handover Point ID”

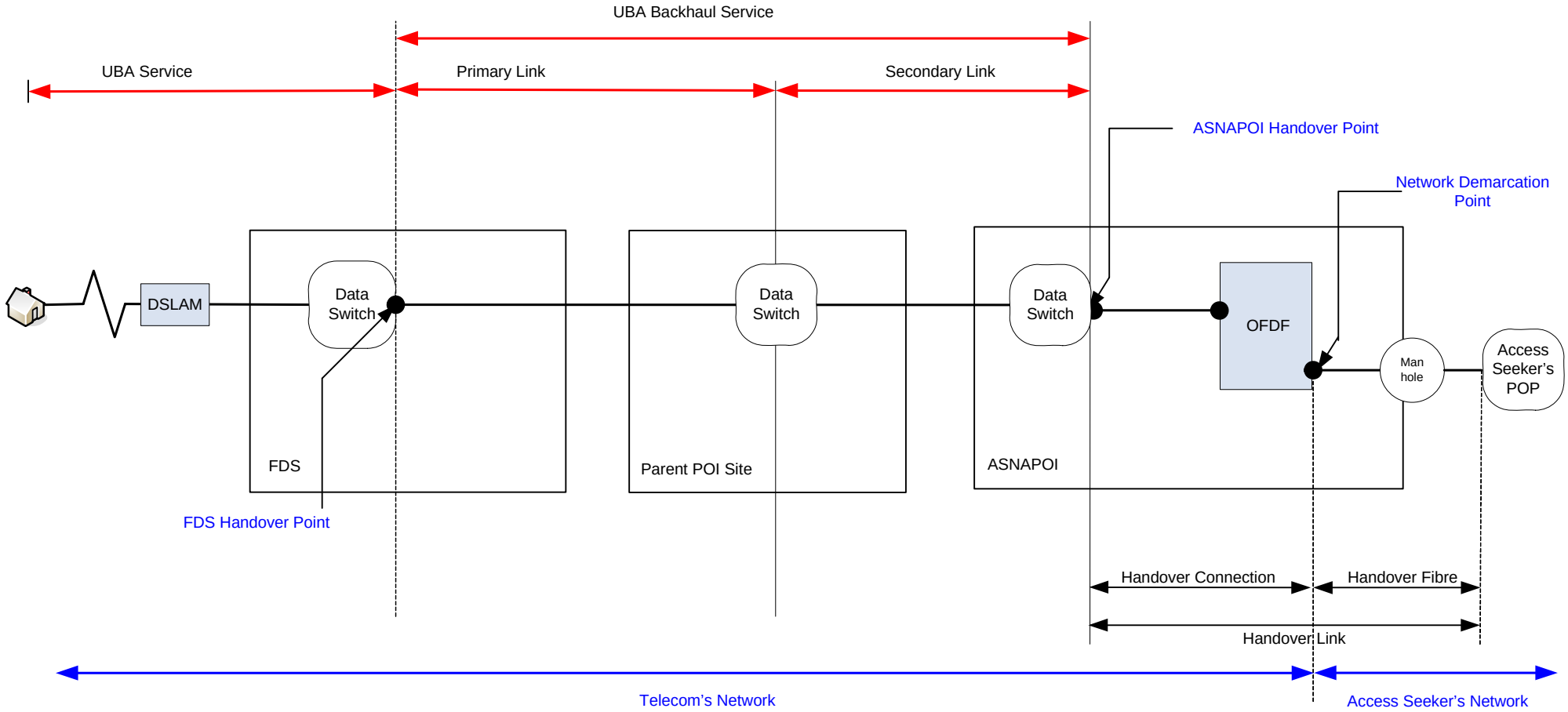
Reference	Amendment	Reason
	Replace with: Handover Link ID	
Appendix A - Glossary	**Delete:** **ASNAPOI Handover Point** means the Access Seeker side of the OFDF in the ASNAPOI as described in the UBA Backhaul Service Description. **Replace with:** **ASNAPOI Handover Point** means the Access Seeker side of the data switch in the ASNAPOI as described in the UBA Backhaul Service Description. **Delete:** **FDS Handover Point** means the Access Seeker side of the OFDF in the FDS. **Replace with:** **FDS Handover Point** means the Access Seeker side of the data switch in the FDS as described in the UBA Backhaul Service Description. **Delete:** **Handover Point ID** means a unique alphanumeric identifier assigned by Telecom to a Handover Point. **Replace with:** **Handover Link ID** means a unique alphanumeric identifier assigned by Telecom to a Handover Point.	Clarifications to ensure definitions reflect where handover will actually occur in Telecom's network, and clarification that the appropriate term here is "Handover Link ID", not "Handover Point ID".
UBA Backhaul Implementation Plan		
Clause 3.1	**Delete:** Telecom and any Participating Access Seekers must meet the Key Milestone dates by completing the actions within the specified timeframes set out in clause 3.10. In particular, Telecom must deliver the UBA Backhaul Service to Access Seekers no later than 150 Working Days after Day Zero (Delivery Date).	Consequential changes that flow from the changes to clause 3.10.

Reference	Amendment	Reason
	Replace with: Telecom and any Participating Access Seekers must meet the Key Milestone dates by completing the actions within the specified timeframes set out in clause 3.10. In particular, Telecom must deliver the UBA Backhaul Service to Access Seekers no later than +198 Working Days after Day Zero (Delivery Date).	
Clause 3.8	**Delete:** To participate in the Soft Launch, Access Seekers must place valid New Connection Orders in accordance with the Soft Launch plan by +35 Working Days. Telecom will make the UBA Backhaul Service available for the purposes of the Soft Launch by +95 Working Days. **Replace with:** To participate in the Soft Launch, Access Seekers must place valid New Connection Orders in accordance with the Soft Launch plan by +35 Working Days Telecom will make the UBA Backhaul Service available for the purposes of the Soft Launch by +144 Working Days.	Consequential changes that flow from the changes to clause 3.10.
Clause 3.10	**Delete:** Clause 3.10 **Replace with:** New Clause 3.10 attached as Annex Five to this Schedule.	Changes to reflect delays in Telecom's ability to deliver on the milestone "Telecom completes design stage" in the Implementation Plan while Service Description changes addressed in this clarification were being considered, with consequential impacts on other milestones, and to provide for seasonal shutdown / brown out period for Telecom and Access Seekers.
Clause 4.2	**Delete:** 4.2 Telecom must meet the following KPIs: 4.2.1 all changes to OSS necessary for the UBA Backhaul Service must be completed by +95 Working Days; 4.2.2 the Soft Launch for the UBA Backhaul Service must be completed by +130 Working Days; 4.2.3 the UBA Backhaul Service Level Terms must be complied with during the	Consequential changes that flow from the changes to clause 3.10.

Reference	Amendment	Reason
	Implementation Period for the UBA Backhaul Service; and 4.2.4 the UBA Backhaul Service must be delivered on the Delivery Date (+150 Working Days) to Access Seekers who request access under the UBA Backhaul Terms. **Replace with:** 4.2 Telecom must meet the following KPIs: 4.2.1 all changes to OSS necessary for the UBA Backhaul Service must be completed by +144 Working Days; 4.2.2 the Soft Launch for the UBA Backhaul Service must be completed by +178 Working Days; 4.2.3 the UBA Backhaul Service Level Terms must be complied with during the Implementation Period for the UBA Backhaul Service; and 4.2.4 the UBA Backhaul Service must be delivered on the Delivery Date (+198 Working Days) to Access Seekers who request access under the UBA Backhaul Terms.	
Clause 4.3	**Delete:** 4.3 Telecom must provide the following written reports to the Commission and Access Seekers confirming compliance or otherwise with the KPIs set out in clause 4.2: 4.3.1 a report to be provided by +110 Working Days advising whether Telecom has implemented all changes to OSS necessary for the UBA Backhaul Service; 4.3.2 a report to be provided by +140 Working Days setting out the results of the Soft Launch and identifying any material risks which may impact on delivery of the UBA Backhaul Service; and 4.3.3 a report to be provided by +165 Working Days setting out the results of the implementation of UBA Backhaul under this Implementation Plan. **Replace with:** 4.3 Telecom must provide the following written reports to the Commission and Access Seekers confirming compliance or otherwise with the KPIs set out in clause 4.2: 4.3.1 a report to be provided by +158 Working Days advising whether Telecom has implemented all changes to OSS necessary for the UBA Backhaul Service; 4.3.2 a report to be provided by +188 Working Days setting out the results of the Soft	Consequential changes that flow from the changes to clause 3.10.

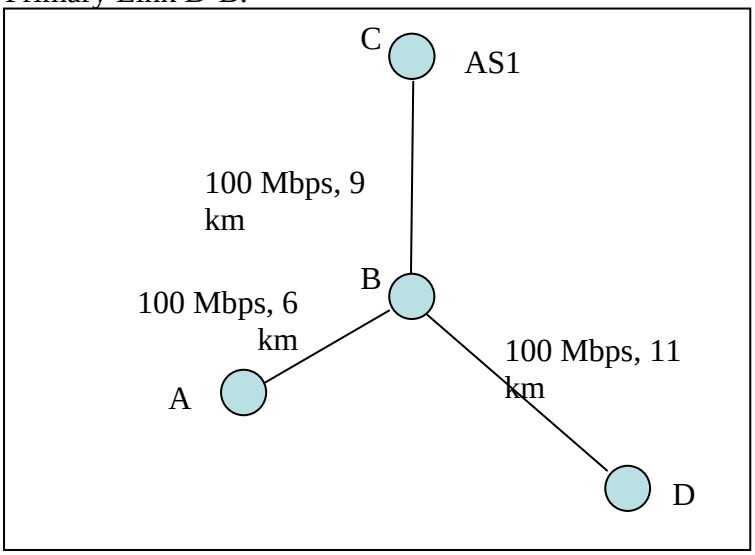
Reference	Amendment	Reason
	Launch and identifying any material risks which may impact on delivery of the UBA Backhaul Service; and 4.3.3 a report to be provided by +213 Working Days setting out the results of the implementation of UBA Backhaul under this Implementation Plan.	
Clause 5.1.1	**Delete:** in respect of Telecom, identifying any defects in the UBA Backhaul Service or the systems and processes supporting it that may prevent delivery by +150 Working Days; and **Replace with:** in respect of Telecom, identifying any defects in the UBA Backhaul Service or the systems and processes supporting it that may prevent delivery by +198 Working Days; and	Consequential change that flows from the changes to clause 3.10.

Annex One: Replacement Diagram for below paragraph 80 of UBA Backhaul STD Decision Report



Annex Two: New Example for Appendix G of UBA Backhaul STD Decision Document

Example 4:
In this example, the Access Seeker requires the same capacity on both the Primary and the Secondary Link of the UBA Backhaul Service. The Access Seeker *initially* purchases a Primary Link A-B together with a Secondary Link from B-C, and *subsequently* purchases a Primary Link D-B.



Note: The radial distances from A – B and B – C must be calculated separately and added together (as these are the links that were first purchased) to determine the applicable distance group for the Links from A – C. The radial distance from D-B is then used to determine the applicable distance group for the Link from D - B.

Access Seeker 1
Access Seeker 1 (AS1) initially receives a EUBA Service at FDS A with Telecom as the Access Provider. The Parent POI Site is at B and C is an ASNAPOI for AS1. The Access Seeker subsequently receives a EUBA Service at a second FDS, located at D. In this example, the applicable monthly rental rates and connection charges are calculated as follows:

Monthly Rental Rate A-C (100Mbps, 15kms):	$2,181 per month
Monthly Rental Rate D-B (100Mbps, 11kms):	$2,181 per month
Total Monthly Rental Rate:	$4,362 per month
Initial Connection Charge (A, C):	$8,059 (one-off)
Subsequent Connection Charge (D):	$4,030 (one-off)
Total Connection Charge (A, C, D):	$12,089 (one-off)

Contemporaneous Purchase
If the Access Seeker purchased the above two Primary Links A-B and D-B and the Secondary Link B-C contemporaneously[2], submitted under clause 9.2 of the UBA Backhaul Operations Manual, (and where all Links are of the same bandwidth), the Monthly Rental Rate shall be calculated so as to minimise the monthly cost to the Access Seeker. The calculation and selection of the Primary Link and Secondary Link combination that minimises cost to the Access Seeker will be the responsibility of the Access Seeker. Telecom Wholesale will implement the link combination as specified on the order forms.

[2] The two links to be combined must be included on the same order form and the third link should be submitted on a separate order form in accordance with the UBA Backhaul Operations Manual. We note that updates to Orders may be made in accordance with clause 9.10 of the UBA Backhaul Operations Manual.

In the above example, the Primary Link D-B would be combined with the Secondary Link B-C, with the Primary Link A-B priced incrementally.

Monthly Rental Rate D-C (100Mbps, 20kms):	$2,586 per month
Monthly Rental Rate A-B (100Mbps, 6kms):	$1,683 per month
Total Monthly Rental Rate:	$4,269 per month
Total Connection Charge (A, C, D):	$12,089 (one-off)

Annex Three: Replacement Diagrams for Appendix A of UBA Backhaul Service Description

The UBA Backhaul Service is illustrated in the diagrams below.

Diagram A: Primary Link and Secondary Link required

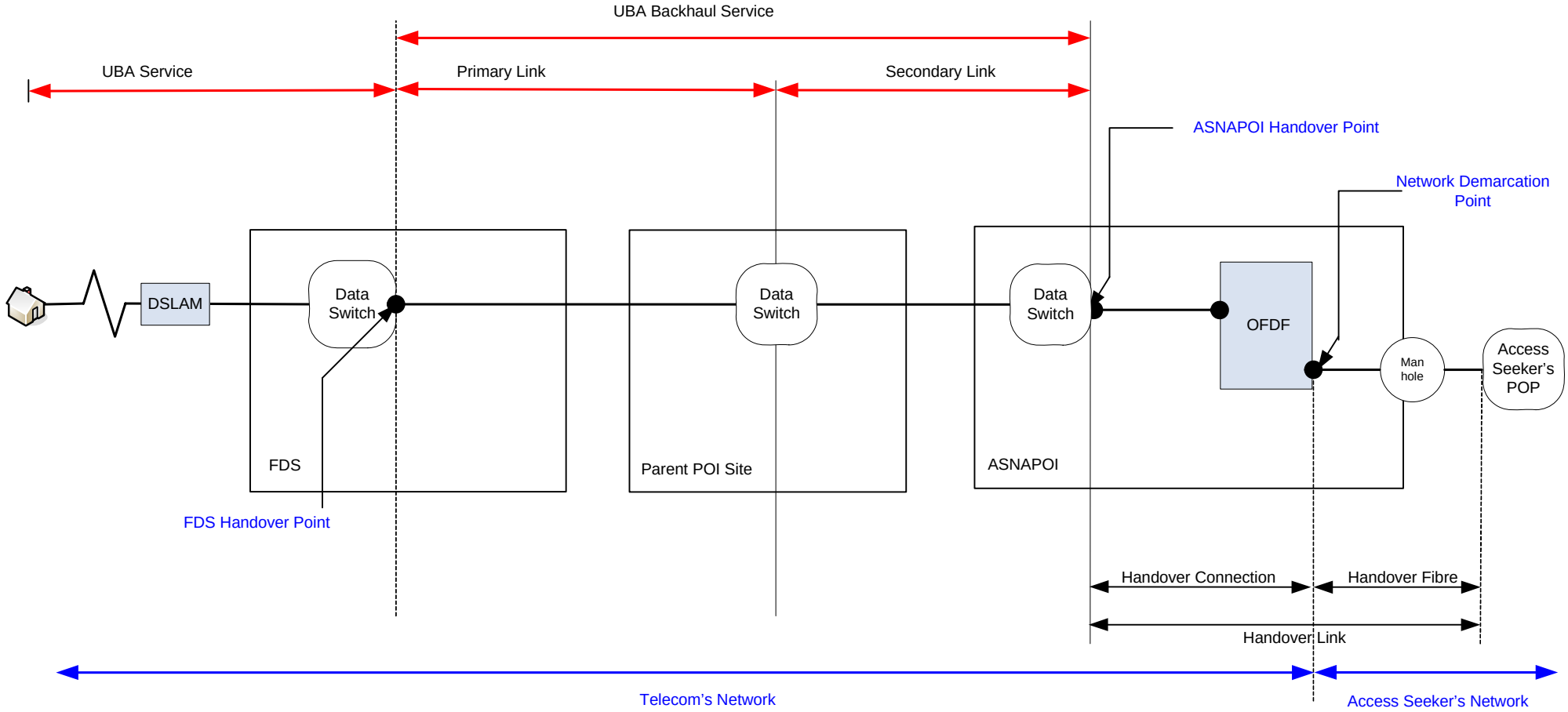


Diagram B: Primary Link only required (ie Parent POI Site is ASNAPOI)

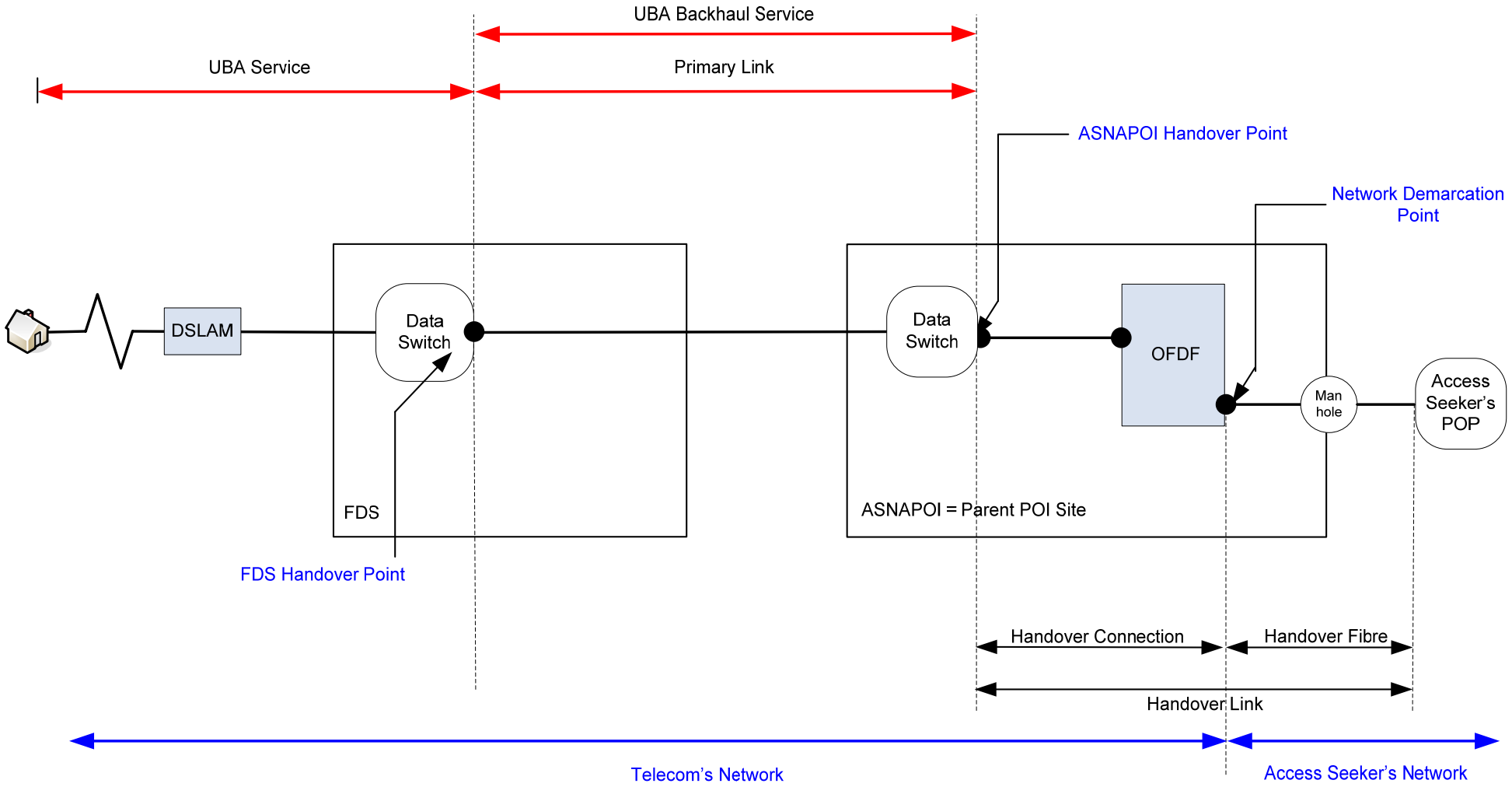
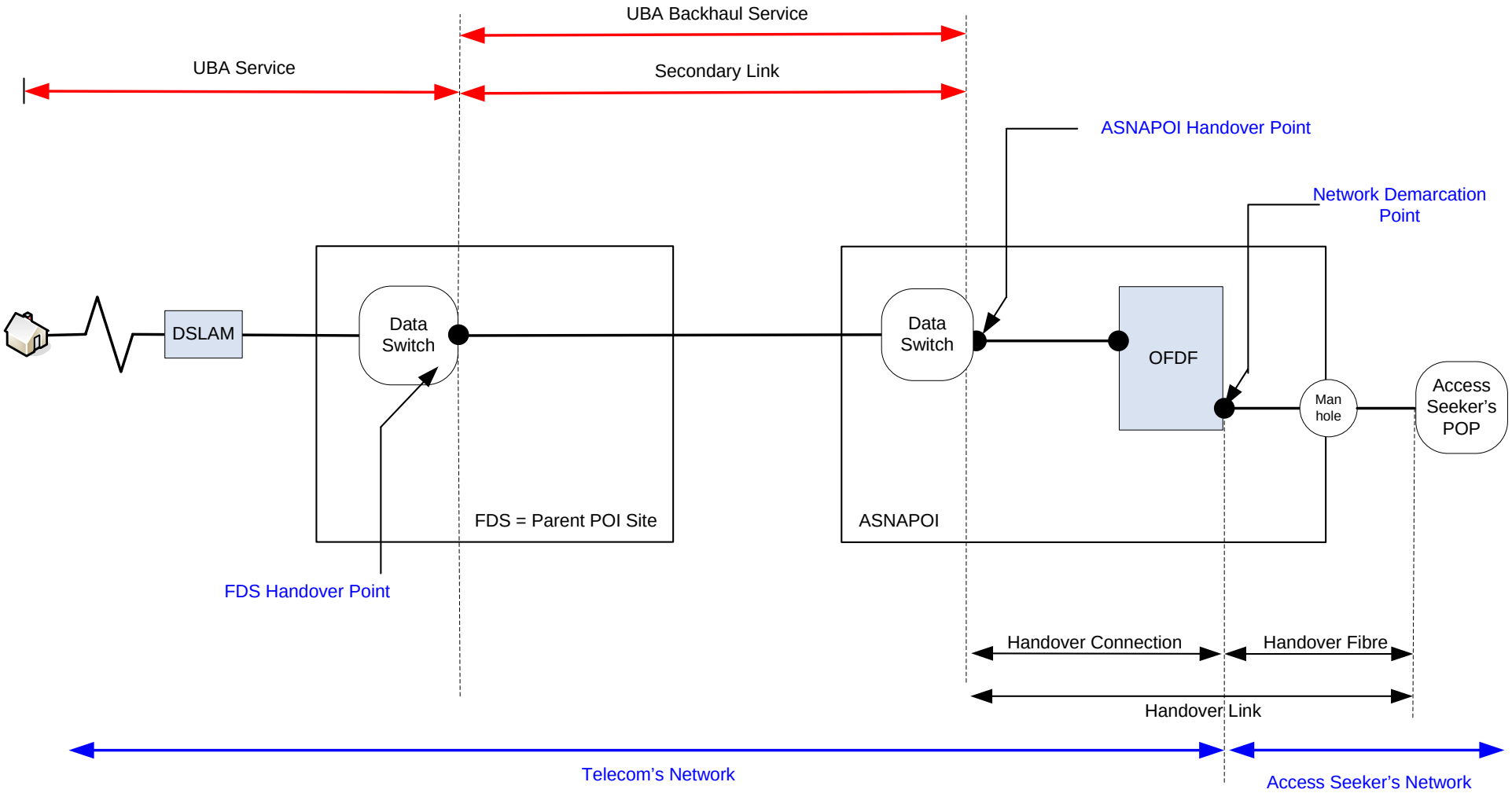
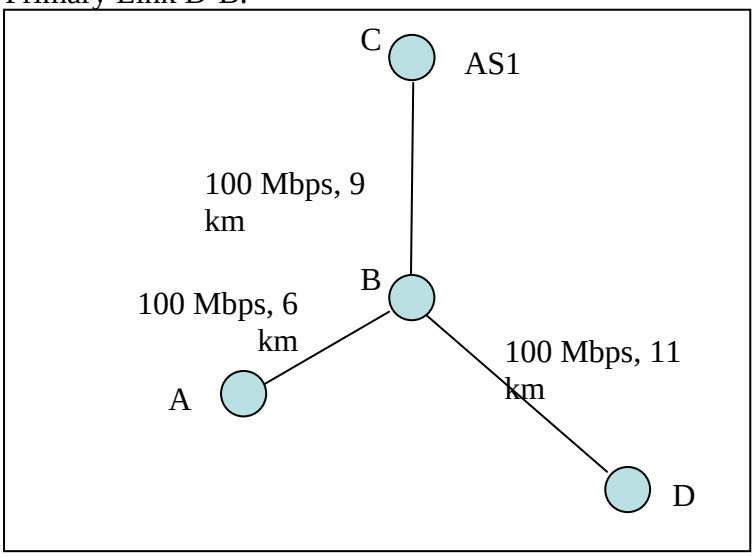


Diagram C: Secondary Link only required (ie FDS is Parent POI Site)



Annex Four: New Example for Appendix B of UBA Backhaul Price List

Example 4:
In this example, the Access Seeker requires the same capacity on both the Primary and the Secondary Link of the UBA Backhaul Service. The Access Seeker *initially* purchases a Primary Link A-B together with a Secondary Link from B-C, and *subsequently* purchases a Primary Link D-B.



Note: The radial distances from A – B and B – C must be calculated separately and added together (as these are the links that were first purchased) to determine the applicable distance group for the Links from A – C. The radial distance from D-B is then used to determine the applicable distance group for the Link from D - B.

Access Seeker 1
Access Seeker 1 (AS1) initially receives a EUBA Service at FDS A with Telecom as the Access Provider. The Parent POI Site is at B and C is an ASNAPOI for AS1. The Access Seeker subsequently receives a EUBA Service at a second FDS, located at D. In this example, the applicable monthly rental rates and connection charges are calculated as follows:

Monthly Rental Rate A-C (100 Mbps, 15 km):	Service component 2.10: UBA Backhaul Service – 100 Mbps – Distance Group 3
Monthly Rental Rate D-B (100 Mbps, 11 km):	Service component 2.10: UBA Backhaul Service – 100 Mbps – Distance Group 3
Connection Charge (A, C):	Service component 1.1: UBA Backhaul Service New Connection – Two ends
Connection Charge (D):	Service component 1.2: UBA Backhaul Service New Connection – One end

Contemporaneous Purchase
If the Access Seeker purchased the above two Primary Links A-B and D-B and the Secondary Link B-C contemporaneously[3], submitted under clause 9.2 of the UBA Backhaul Operations Manual, (and where all Links are of the same bandwidth), the Monthly Rental Rate shall be calculated so as to minimise the monthly cost to the Access Seeker. The calculation and selection of the Primary Link and Secondary Link combination that minimises cost to the

[3] The two links to be combined must be included on the same order form and the third link should be submitted on a separate order form in accordance with the UBA Backhaul Operations Manual. We note that updates to Orders may be made in accordance with clause 9.10 of the UBA Backhaul Operations Manual.

Access Seeker will be the responsibility of the Access Seeker. Telecom Wholesale will implement the link combination as specified on the order forms.

In the above example, the Primary Link D-B would be combined with the Secondary Link B-C, with the Primary Link A-B priced incrementally.

Monthly Rental Rate D-C (100 Mbps, 20 km):	Service component 2.14: UBA Backhaul Service – 100 Mbps – Distance Group 4
Monthly Rental Rate A-B (100 Mbps, 6 km):	Service component 2.6: UBA Backhaul Service – 100 Mbps – Distance Group 2
Connection Charge (D, C):	Service component 1.1: UBA Backhaul Service New Connection – Two ends
Connection Charge (A):	Service component 1.2: UBA Backhaul Service New Connection – One end

Annex Five: Replacement UBA Backhaul Timeline for UBA Backhaul Implementation Plan

UBA Backhaul Timeline

3.10 Telecom and Participating Access Seekers must comply with the timeline for the Soft Launch and delivery of the UBA Backhaul Service. This includes Telecom and the Participating Access Seekers meeting the following key milestones (**Key Milestones**):

Key milestones (Working Days)	**Action**
+10	Telecom completes initiation stage, which requires: • Project members confirmed; • Scope of the project confirmed; and • High level requirements and a Telecom high level solution design developed.
+62	Telecom completes design stage.
+25	Telecom makes draft technical user guides available to Access Seekers.
+30	Telecom sends Soft Launch plan to the Commission and Access Seekers.
+35	Access Seekers wanting to participate in the Soft Launch place New Connection Orders in accordance with the Soft Launch plan.
+144	Telecom completes OSS build, which requires: • Changes made to fulfil, assure and bill mechanisms; • Telecom's online ordering and tracking processes and systems enhanced; • Telecom's online faults management processes and systems enhanced; • Internal testing carried out; and • Production deployment completed in preparation for Soft Launch.
+144	Telecom and Access Seekers start Soft Launch, which requires: • End to end testing of the UBA Backhaul Service. This will test the end to end solutions in a live environment, combining the processes of both Telecom and Access Seekers; and

Key milestones (Working Days)	**Action**
	• Identifying and rectifying issues arising from the Soft Launch.
+158	Telecom sends OSS report to the Commission and Access Seekers.
+178	Telecom and Access Seekers complete Soft Launch.
+188	Telecom sends Soft Launch report to the Commission and Access Seekers, which requires: • Analysis of outcomes/results; and • Consultation with Access Seekers and identification and rectification of issues.
+198	Delivery of UBA Backhaul Service to new and existing Access Seekers, which requires: • Implementation of Soft Launch report recommendations; and • Bedding down, including consequential changes to Telecom's processes and systems.
+198	Telecom makes final technical user guides available to Access Seekers.
+213	Telecom sends report on implementation to the Commission and Access Seekers.