

Enable Networks UFB Services Agreement Service Description for Tail Extension Service

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DRAFT

Document Version History

Version	Date	Author	Description of Change
1.0	March 2026	Tim Kerr	Launch of Enable TES

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1. Interpretation

- 1.1 This Service Description is part of the Agreement as that term is defined in the Enable Reference Offer.
- 1.2 The purpose of this Service Description is to detail the terms and conditions under which Tail Extension Service (TES) will be provided.
- 1.3 References to clauses or sections are references to clauses or sections in this Service Description unless expressly provided otherwise. The definitions set out in the General Terms and the Operations Manual apply to this Service Description unless expressly provided otherwise.
- 1.4 Except to the extent modified by this Service Description, the following Enable Reference Offer documents apply to the provision of the TES:
 - 1.4.1 General Terms; and
 - 1.4.2 Bitstream Services – Operations Manual.
- 1.5 The General Terms in the Enable Reference Offer are modified:
 - 1.5.1 As set out in clause 1.6 below; and
 - 1.5.2 To the extent that is necessary to ensure the General Terms are appropriate to the provision of the TES as notified by the LFC to the Service Provider on 40 Business Days' notice.
- 1.6 The TES:
 - 1.6.1 may be withdrawn by the LFC on 12 months' notice. Clauses 5.2 (a) and 5.2 (b) of the General Terms do not apply to the withdrawal of the TES. Any instance of the TES that is subject to a Minimum Service Term that expires after the 12-month notice of withdrawal, shall continue to be provided by the LFC on the terms of the relevant Service Order until the expiry of that Minimum Service Term; and
 - 1.6.2 the Charges may be changed, added to, deleted or replaced by Enable by giving the Service Provider at least 60 Business Days' notice and the consultation under clause 24.4 (a) of the General Terms shall not apply.
- 1.7 This Service Description may be changed by the LFC using the process for Agreement Changes set out in the General Terms except that:
 - 1.7.1 the Change Management Forum's prior approval of any such proposed Agreement Change under clauses 24.1 and 25 of the General Terms is not required; and
 - 1.7.2 the Service Provider may not propose any Agreement Change in relation to this Service Description in accordance with clause 24.1(b) of the General Terms.
- 1.8 The following terms shall have the following meaning:
 - 1.8.1 UFB Handover Connection means the POI where the E-NNI is located and the Bitstream Service is handed over from Enable to the Service Provider.

2. The Tail Extension Service

- 2.1 Is an Ancillary Service that allows a Service Provider to aggregate UFB Bitstream Services from multiple UFB Coverage Areas on a single UFB Handover Connection.

- 2.2 A diagram of the configuration for the TES is set out in Appendix A. The TES extends a UFB ATA Voice or Bitstream Service to a valid UFB Handover Connection Service that enables a Service Provider to access and interconnect with the LFC Network.
- 2.3 TES supports the following OVC types:
 - 2.3.1 A-EVPL, as defined in the Bitstream 2a service Description;
 - 2.3.2 A-EPL, as defined in the Bitstream 3, Bitstream 3a, Bitstream 3b Service Descriptions; and
 - 2.3.3 Voice-EVPL, as defined in the ATA Voice Service Description.
- 2.4 The TES is an input service which a Service Provider can combine with other LFC services to provide fibre-based telecommunications services to End Users.
- 2.5 The TES has the following key characteristics:
 - 2.5.1 Acts as an additional service attribute to ATA Voice, Bitstream 2a, 3, 3a, 3b, 4, and Hyperfibre 2 and 3 variants; and
 - 2.5.2 Transparently retains the bandwidth and service characteristics of the service being extended; and
 - 2.5.3 Applies to all existing private and public UFB Service Templates for the above services; and
 - 2.5.4 Is an Ancillary Service that allows a Service Provider to aggregate services from multiple UFB Coverage Areas on a single UFB Handover Connection.

3. TES and implementation activities

Core Tail Extension Service

- 3.1 The TES is available as an additional service attribute within the UFB family of services as identified below:

Attribute		Bitstream 2a	Bitstream 3, 3a, 3b	ATA Voice	Hyperfibre 2	Hyperfibre 3	BS4
OVC Type		A-EVPL	A-EPL	A-EVPL	A-EVPL	A-EPL	A-EPL
Tail Extension		Yes	Yes	Yes	Yes	Yes	Yes

**Bandwidth options for each Bitstream Service are detailed in each Bitstream Service Description and further options can be developed using the Product Development Process*

- 3.2 TES can be requested through an Add, Modify or Transfer service request as follows:
 - 3.2.1 TES can be requested for a Primary template.
 - 3.2.2 TES is requested by selecting the desired UFB Handover Connection Service for each service as part of the Add, Modify, Transfer, or Move service request;
 - (a) If this UFB Handover Connection Service is in the local POI, then Tail Extension will not apply; or
 - (b) If this UFB Handover Connection Service is in a remote POI, then Tail Extension with the appropriate distance step will apply.

3.2.3 A multi-OVC Service Template may have the TES applied per OVC, e.g. for Service Templates that include both a Bitstream and an ATA Voice service, 0-2 Tail Extensions may apply:

Option	Extend Bitstream	Extend Voice	Tail Extension
1	x	x	-
2	x	✓	1 x Voice Tail Extension
3	✓	x	1 x Bitstream Tail Extension
4	✓	✓	1 x Voice Tail Extension 1 x Bitstream Tail Extension

3.3 TES will be available for any additional Service Templates requested by the Service Provider using combinations of one or more standard building blocks, as defined in the relevant Bitstream Service Description.

UNI – NNI characteristics

3.4 All Bitstream Services (A-EVPLs, A-EPLs or Voice-EVPL) on a UNI must belong to the Same Service Provider and must connect to an E-NNI belonging to that Service Provider.

3.4.1 However, each Bitstream Service can connect to a different E-NNI at the same or different POI;

3.4.2 The E-NNI must be associated with a valid UFB Handover Connection for that location, i.e. a valid local UFB Handover Connection.

3.5 The sum of High and Low Priority traffic profiles of all local or remote services delivered at a UFB Handover Connection Service can exceed the UFB Handover Connection Service line rate. If there is insufficient line rate to deliver the traffic then frames will be randomly discarded, based on their Class of Service precedence, and Service Levels for that Class of Service do not apply for all services on that UFB Handover Connection Service. It is therefore the Service Provider’s responsibility to shape and queue traffic appropriately. See 3.2.7 of UFB Handover service description.

Service Requirements

3.6 To use the TES, the Service Provider must have the capability to access and interconnect with it, by one of the following:

3.6.1 co-locating Service Provider equipment at the UFB Handover Connection using the UFB Handover Connection Service and the Central Office and POI Co-location Service;

3.6.2 connecting to third party co-location space at the UFB Handover Connection using the UFB Handover Connection Service, and with the third party taking the Central Office and POI Co-location Service;

3.6.3 connecting to a backhaul service at the UFB Handover Connection; or

3.6.4 by using the Direct Fibre Access Service to connect the UFB Handover Connection to Service Provider equipment at a remote location within the UFB Handover Central Office area. See 3.5 of UFB Handover service description

Additional Service Characteristics

- 3.7 The technical specification of the TES is set out in Appendix B.
- 3.8 The TES specifically excludes:
 - 3.8.1 The Bitstream Service being extended;
 - 3.8.2 the UFB Handover Connection Service;
 - 3.8.3 provision or maintenance of any cabling or connection or active device;
 - 3.8.4 configuration, monitoring, operation, on-going support or maintenance of Service Providers' or End User's applications, equipment or networks; and
 - 3.8.5 Supply of AC mains & UPS power, accommodation space, heating, ventilating, and air conditioning and facilities at the POI or End User Premises or End User Tenancy or NBAP (as applicable).
- 4. **Service Demarcation Point**
 - 4.1 The Service Demarcation Point at the UFB Handover Connection is:
 - 4.1.1 Physically, the MOFDF in the UFB Handover Connection, which is part of the UFB Handover Connection Service; and
 - 4.1.2 Logically, the VLAN per service on the Standard UFB Handover Connection located at the UFB Handover Connection.
 - (a) For Access-EVPLs, a single 802.1ad VLAN (S-VID/C-VID);
 - (b) For Access-EPLs, a transparent VLAN (S-VID);
 - (c) For Voice-EVPLs, a single 802.1ad VLAN (S-VID/C-VID).
 - 4.2 The local Candidate Area Service Demarcation Point where the access Bitstream Service logically terminates and the TES logically commences is the middle of the Enable Aggregation Network. There is no physical demarcation point and the TES is provisioned as part of the logical connection between the UNI and the E-NNI.
- 5. **Service Prerequisites**
 - 5.1 The UFB Handover Connection Service is a separate service and is a prerequisite to the supply of the TES i.e. Service Providers must first purchase and then continue to maintain a UFB Handover Connection Service at all times while taking the TES.
- 6. **LFC and Service Provider Responsibilities**
 - 6.1 Other LFC and Service Provider responsibilities are detailed in the UFB General Terms and the Operations Manual.
- 7. **Price List**
 - 7.1 The recurring charges for the TES are available in the Enable Price List on the Enable website at www.enable.net.nz/about-enable/corporate-publications
 - 7.2 No transactional charges apply specifically to the TES as the service is always provisioned, changed, or relinquished contemporaneously with an Access (Bitstream, ATA or Hyperfibre) Service.

8. Tail Extension Service Levels

Access Bitstream Service Levels

8.1 The Bitstream Services levels for the access Bitstream Service will continue to apply to that access Bitstream Service, with any applicable Service Levels applying between the Demarcation Points for that access Bitstream Service.

Tail Extension Service Levels

8.2 TES Service Levels for performance apply between the Service Demarcation Points set out in clauses 4.1 and 4.2.

Tail Extension Service Layer 2 Traffic Service Levels

8.3 Each End User’s traffic for point-to-point services will be delivered to the POI within the following Benchmark Service Levels, measured over each five-minute interval (24 hours per day):

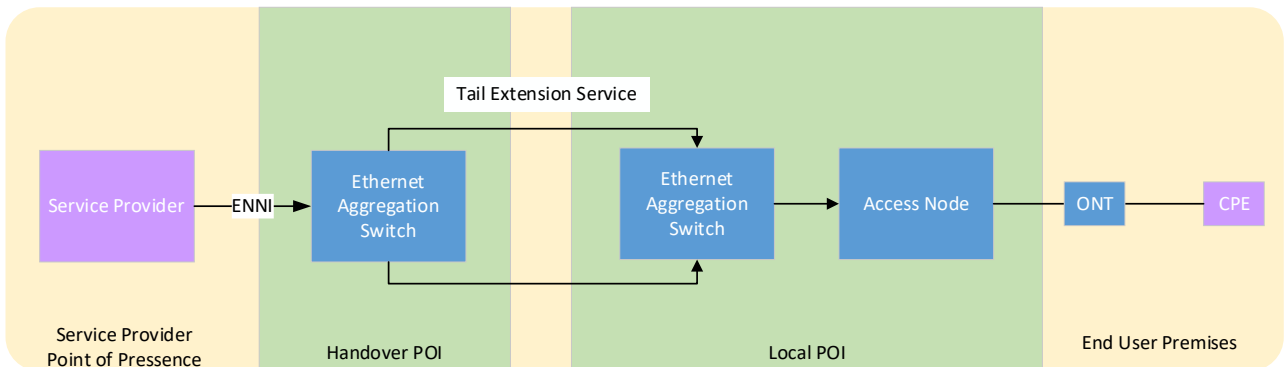
Distance	Benchmark		High-Priority Path			High-Secondary Path			Low		
	POI 1	POI 2	FD	FDV	FL	FD	FDV	FL	FD	FDV	FL
A	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC

Note: The TBC values will inserted once the service is live and an updated Service Description will be provided.

Where:

- 8.3.1 These are design targets, to provide guidance for Service Providers to develop services using TES. The Benchmark sites are examples based on long paths within each step;
 - 8.3.2 Frame Delay and Frame Delay Variation apply to Tail Extension only and are incremental to the Access Service, i.e. apply between the Local and the Handover POI;
 - 8.3.3 Frame Loss is cumulative with the Access Service, i.e. applies between the UNI and the Handover POI;
 - 8.3.4 The High Primary measures apply unless the primary backhaul link between the Local and the Handover POI has failed, and the traffic has been transferred to a secondary link in which case the High Secondary measures apply.
 - 8.3.6 Enable operates a Congestion Free Network, and Low Traffic Class Frame Loss is expected to be much lower than this target.
- 8.4 The traffic will be within these Service Levels for at least 99% of the time within the five-minute measurement interval, otherwise the service is to be considered unavailable for that five-minute interval.
- 8.5 Compliance will be verified using the Service Performance measurement and reporting regime for the access Bitstream Service.

Appendix A – Diagram



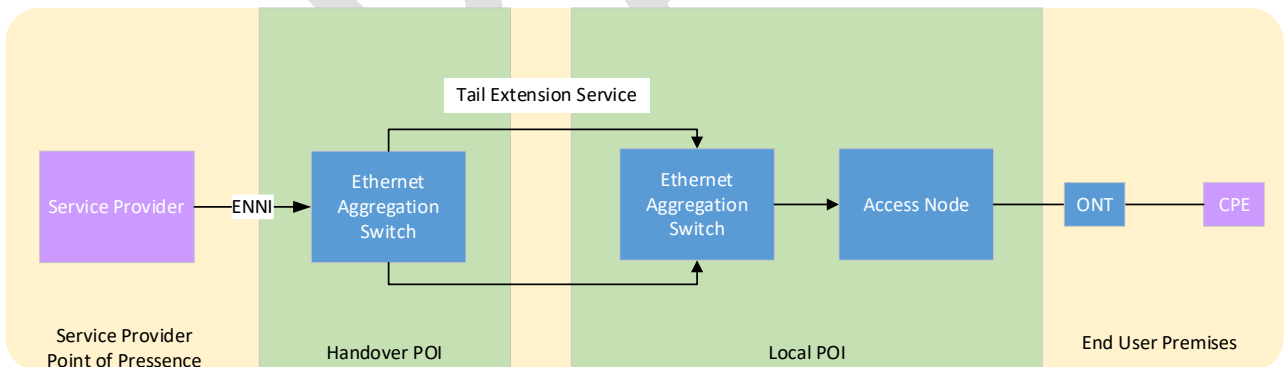
This diagram illustrates the typical configuration and service demarcation points for access with Tail Extension. It does not cover all scenarios or specific physical architectures. Note the following points:

- TES Service Levels and Charges are applicable when a POI is located in a different Coverage Area from the local Bitstream Service Coverage Area;
- To meet Service Level requirements, interconnection between the Local POI and the Handover POI uses redundant links.

Bitstream Services enable the simultaneous delivery of multiple Service Templates, as outlined in the Bitstream Service Descriptions.

Appendix B – Technical Specification

This section describes the technical specifications needed to connect End User or Service Provider equipment to TES.



Technical Interfaces

ATA and UNI Interfaces are as defined in the relevant Bitstream 2, Bitstream 3, Bitstream 4, Hyperfibre or ATA Voice Service Descriptions.

The E-NNI Interfaces are as defined in the relevant 10Gbps or 100Gbps UFB Handover Connection Service Descriptions.