

Bitstream Ethernet Connection Service (BECS) Product Description

Version Control

| Version | Status | Update | Effective Date |
|-------------|--------|--|----------------|
| Version 4.0 | | Rebranded | 13/11/2015 |
| V5.0 | Final | This document is based on V4.0 Implementation of Standardised Change Control. | 13/06/2017 |

This document follows change control procedure:

Proposed is defined as a document status when the approved document is uploaded to Proposals Section of open eir Website.

Final is defined as a document status when the approved document is uploaded to the relevant section of the open eir Website following the publication period.

For information:

- Historical Document History Table located at end of Document.
- Publish means the action of uploading a document to the website regardless of status or location.
- **If there are changes to the document between 'Proposed' and 'Final', change control operates.**



Table of Contents

| | | |
|-----|--|----|
| 1 | Introduction..... | 4 |
| 2 | Service Overview | 4 |
| 3 | Product Features and Availability | 4 |
| 3.1 | Physical Elements of the Service | 4 |
| 3.2 | Order Handling Process | 6 |
| 3.3 | Service Installation and Testing | 6 |
| 4 | Service Responsibility | 6 |
| 5 | Service Management..... | 7 |
| 6 | Service Levels..... | 7 |
| 7 | Migrations..... | 7 |
| 8 | Price..... | 8 |
| 9 | Terms and Conditions..... | 8 |
| 10 | Appendix 1: open eir ADSL Regions and Regional POPS..... | 9 |
| 11 | Appendix 2: Bitstream Ethernet Connection Service Interface Options..... | 10 |
| | Version Control History | 11 |

1 Introduction

The purpose of this document is to define the Bitstream Ethernet Connection Service. The Bitstream Ethernet Connection Service is provided to allow Bitstream Access Seekers to connect to the open eir ADSL Bitstream Service (hereafter referred to as Bitstream). This document should be read in conjunction with the ADSL / ADSL2+ Bitstream Service Product Description.

2 Service Overview

Bitstream Ethernet Connection Service (BECS) provides access and transport services for Access Seekers from the open eir ADSL Regional POPs (i.e., handover points for the Bitstream service) to the Access Seeker's premises.

(See Appendix 1 for a diagram of the open eir ADSL Regional POPs.) The BECS is specifically used to deliver the ADSL Bitstream Service products with an IP interface, as defined in the ADSL / ADSL2+ Bitstream Service Product Description.

3 Product Features and Availability

3.1 Physical Elements of the Service

- The BECS provides physical connectivity from an open eir ADSL POP to the Access Seeker's premises.
- This connectivity is provided from open eir's ADSL network to the Access Seeker's home gateway via a 10Gb/s, 1 GB/s, 500Mb/s, 250Mb/s, or 100Mb/s VLAN, or virtual circuit, depending on the bandwidth purchased.
- The service termination points for the BECS are the open eir ADSL Regional POP location and the BECS NTU located in the Access Seeker's premises.
- The BECS circuit may be provided from any of the open eir Bitstream handover points, subject to availability.

- A BECS from any open eir ADSL handover point may service all exchanges in the ADSL rollout area, as defined in the Deployment Plan.¹ Therefore, an Access Seeker may access their Bitstream traffic for applicable products for the entire ADSL / ADSL2+ rollout area using a BECS circuit connected to any one of the open eir Regional POP locations.

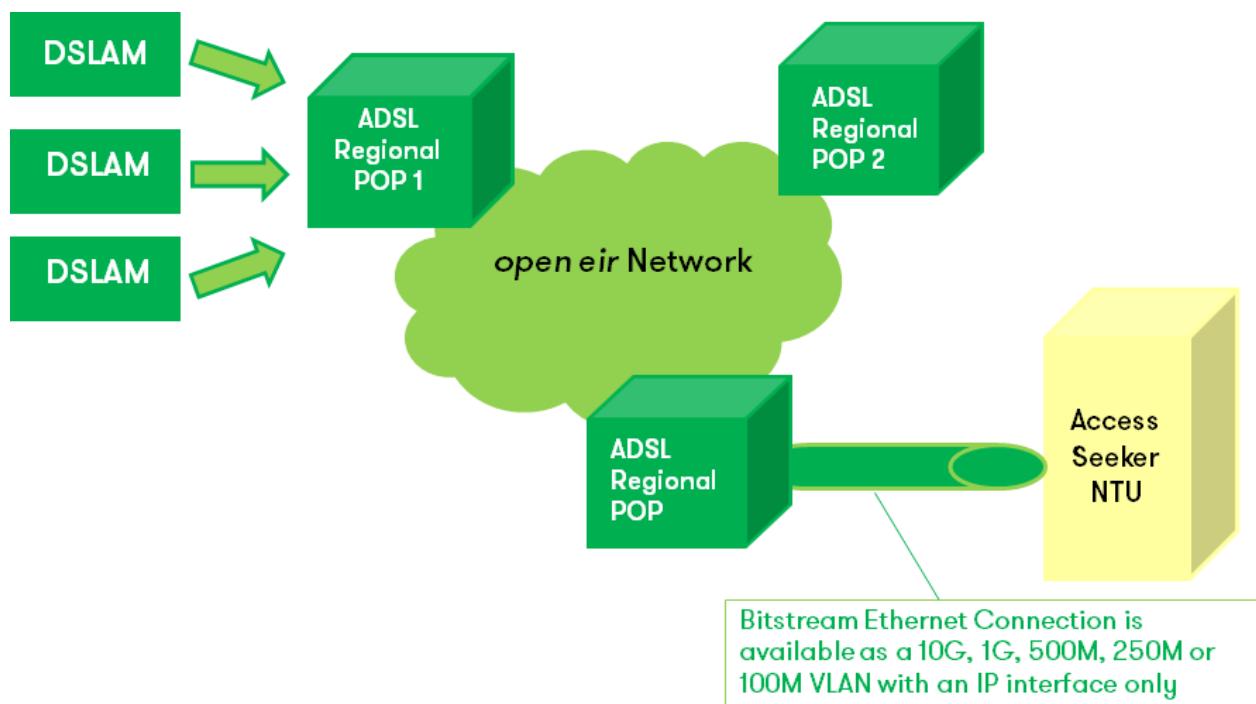


Figure 1: Bitstream Ethernet Connection Service

¹ An up to date Deployment Plan with the full list of available exchanges can be obtained from the Access Seeker's Account Manager

3.2 Order Handling Process

Access Seekers must complete a Bitstream Ethernet Connection Service Order Form and a Radius Profile Form and submit both to their open eir Account Manager. The Order Form for this service can be obtained from the Access Seeker's open eir Account Manager.

A desktop survey will be conducted to assess each BECS order on a case-by-case basis. Subject to availability in the requested handover location, a forecasted delivery date will be provided after the order is assessed. At this stage the order may be accepted by open eir and open eir may proceed to delivery of the BECS.

3.3 Service Installation and Testing

The Access Seeker will be advised by their open eir Account Manager that their order is completed. This order status will also be available to them on the Unified Gateway.

4 Service Responsibility

open eir has responsibility for the provision, repair, and maintenance of the Bitstream Ethernet Connection Service from the open eir Bitstream handover points (i.e., open eir Regional POPs) to the BECS NTU located at the Access Seeker's handover point.

The Access Seeker is responsible for connecting from the BECS NTU to their own equipment, and for any end-to-end testing of the service. The Access Seeker must ensure that adequate space is available to install the NTU, and enable access to their handover location for open eir to install and maintain the NTU. The Access Seeker is also responsible for any services that run over the BECS circuit.



5 Service Management

The Bitstream Ethernet Connection Service may be made available as per the ADSL / ADSL2+ Bitstream service availability. The service will be rolled out on a regional basis, and may be available from the open eir Regional POPs to the Access Seeker's premises. (See Appendix 1 for a diagram of the open eir Regional POPs. An up to date Deployment Plan can be obtained from the Access Seeker's open eir Account Manager.) Availability of Bitstream Ethernet Connection Service is subject to assessment on a case-by-case basis

6 Service Levels

Service levels are as per the SLA for Bitstream Connection Service and Bitstream Ethernet Connection Service, which is available on the open eir website at www.openeir.ie.

7 Migrations

Where an Access Seeker wishes to move between the Bitstream Ethernet Connection Service and one of the Bitstream Connection Service products (available at 2M, 45M, or STM-1), the following Migration options are available:

Access Seekers must submit a Bitstream Ethernet Connection Service Order Form to their open eir Account Manager requesting a Migration Order and specifying the service they are currently on and the service to which they wish to migrate. The Order Form may be obtained from the Access Seeker's open eir Account Manager. The Migration Order will be assessed on a case-by-case basis and, subject to availability, a forecasted delivery date will be provided after the order is assessed.

| Service Migrating From | Service Migrating To |
|---|--|
| 2Mb, 45Mb, or STM-1 Bitstream Connection Service ² | Bitstream Ethernet Connection Service |
| Bitstream Ethernet Connection Service | 45Mb or STM-1 Bitstream Connection Service |

² Note this migration is available only for Bitstream products with an IP interface

8 Price

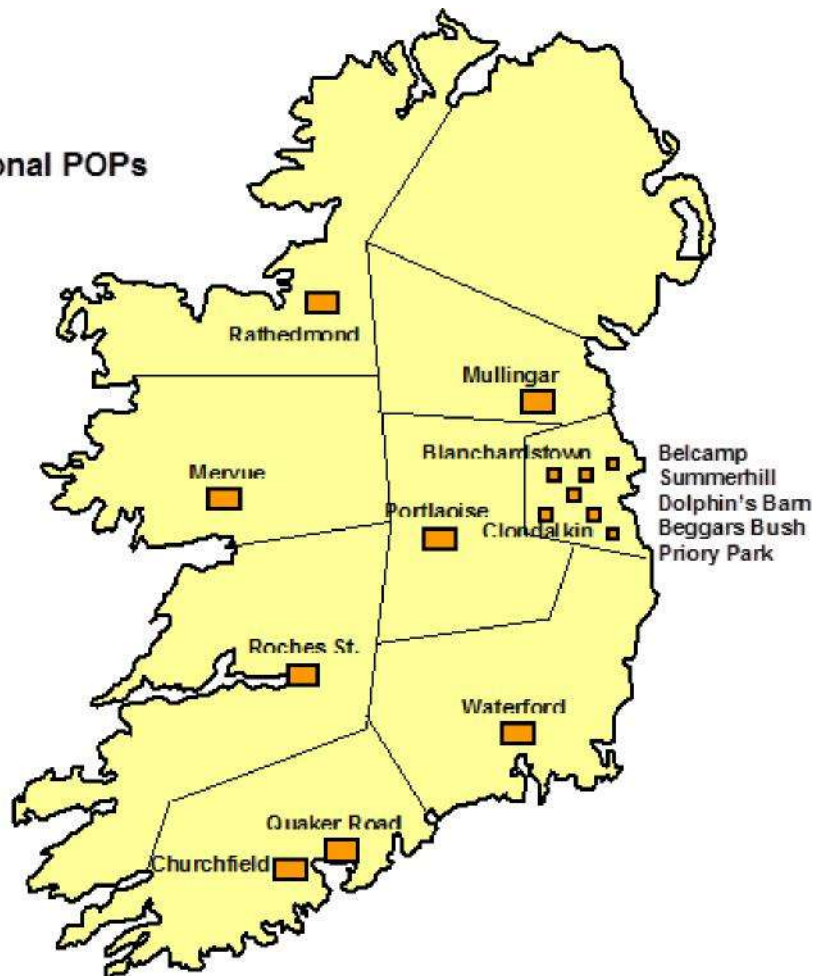
Please contact your open eir Account Manager for Bitstream Ethernet Connection Service pricing.

9 Terms and Conditions

Terms and Conditions are as per the Standard open eir Terms and Conditions for the Provision of Bitstream Ethernet Connection Service.

10 Appendix 1: open eir ADSL Regions and Regional POPs

ADSL Regional POPs



The Bitstream Ethernet Connection Service is subject to availability and may not be available at all ADSL Regional POP locations. Please contact your open eir Account Manager for further details.

11 Appendix 2: Bitstream Ethernet Connection Service Interface Options

| Customer Data Rate | Interface Data Rate | Functional Interface | Physical Interface | Plug Type |
|---|----------------------------|----------------------|--|-----------|
| As per bandwidth purchased ³ | As per bandwidth purchased | G.703 | Electrical | RJ45 |
| As per bandwidth purchased | As per bandwidth purchased | G.957/958 | Single Mode Fibre/ Multi Mode fibre | LC / PC |

³ BECS is available at the following bandwidth options: 10Gb/s, 1Gb/s, 500Mb/s, 250Mb/s and 100Mb/s

Version Control History

| Version | Status | Update | Effective Date |
|-------------|--------|--|----------------|
| Version 2.0 | | Introduction of new 100Mb/s and 250Mb/s bandwidth options | December 2006 |
| Version 3.0 | | Addition of details regarding the 1Gb/s backhaul option | September 2008 |
| Version 4.0 | | Introduction of new 10Gb/s bandwidth option | October 2010 |
| Version 4.0 | | Rebranded | 13/11/2015 |
| V5.0 | Final | This document is based on V4.0 Implementation of Standardised Change Control. | 13/06/2017 |