BT Ethernet Connect Global

Service Annex to the General Service Schedule (Doc Ref: 13.1 July 2013)

1 Definitions

The following definitions apply, in addition to those in the General Terms and Conditions and the General Services Schedule.

"**ATD**" means BT's supplier's Access Terminating Device.

"BT NTE" means a device where the Service is terminated at a Site.

"Ethernet Access" means the connectivity between a Site and the BT Network.

"Ethernet Virtual Connection or EVC" means a data transmission path across the BT Network connecting selected Customer Sites.

"**In/Out of Contract**" means that traffic which is within the contracted bandwidth for that Class of Service and marked "In Contract" will be carried. Traffic that exceeds the contracted bandwidth for that Class of Service is marked "Out of Contract" and will be dropped if the BT Network is congested.

"**Standard**" means (for the purposes of the Order) that one Ethernet Access will be provided from the BT PoP to the Customer Site. The Ethernet Access may be either Port Based or VLAN Based.

"**Standard Cable(s)"** mean the standard connecting cables provided with BT NTE which connect the BT NTE to the ATD.

"VPN" means Virtual Private Network.

2 Service Description

BT Ethernet Connect ("the Service") is a private, global Ethernet based VPN service based on Ethernet industry standards allowing the Customer to establish dedicated or any-to-any communication between Customer Sites and to prioritise the associated data traffic. The Service enables the Customer to interconnect its Sites to form an Ethernet VPN over Ethernet Access Lines, which connect the Sites to the BT Network. The Service has the following components; Ethernet Access, Ethernet Virtual Connection, Class of Service and Service Interface. As part of the Service, BT will install BT NTE(s) at the Customer Sites to be exclusively used by BT to deliver the Service. No other equipment will be provided by BT. Ethernet Connect is offered in two options, E-Line and E-LAN, as described in clause 2.1.3, or as a combination of the two options. The Customer's selection will be shown on the Order.

2.1 Service Components

2.1.1 Ethernet Access

Ethernet Access to the Service is provided at speeds of 10Mbps, 100Mbps and 1Gbps, or sub-rates if available, as specified on the Order. Not all speeds are available in all locations Customer Sites can be connected to the BT Network using the following access options; Standard, Diverse and Diverse+. The Customer's selection will be shown on the Order.

"**Standard**" means that one Ethernet Access will be provided from the BT Point of Presence (PoP) to the Customer Site.

"**Diverse**" means that two Ethernet Accesses are delivered to the same BT PoP. The Ethernet Accesses may be of different bandwidths.

"**Diverse +"** means that two Ethernet Accesses are delivered to different BT PoPs (where different BT PoP's are available). The Ethernet Accesses may be of different bandwidths.

2.1.2 Service Interface

The Service Interface is the point where the Ethernet Access is connected to the BT Network. The Service Interface is provided at speeds of 10Mbps, 100Mbps and 1Gbps The Ethernet Access speed used may not exceed the Service Interface speed. The Customer may order only one of the following two types of Service Interface configurations at each Site.

a) "VLAN Based" in which multiple EVCs can route over the Service Interface. The EVCs are separated logically by VLAN tags in accordance with IEEE 802.1q, as specified in the IEEE 802.1q definition. The Customer Equipment must be capable of supporting this feature. The Customer can choose the VLAN identities (VLAN IDs) for each EVC or can request that these be allocated by BT. The total of the EVC bandwidth at a Site cannot exceed the Service Interface speed at that Site.

b) "Port Based" in which only a single EVC can route over the Service Interface. This configuration does not require the Customer Equipment to provide VLAN tags.

2.1.3 Ethernet Virtual Connection

The following Service configuration options are available:-

a) E-Line

This allows the Service to be used to provide as Ethernet Private Line (EPL - single point to point connection) or an Ethernet Virtual Private Line (EVPL - hub and spoke arrangement) between Customer Sites.

b) E-LAN

This allows the Service to be used to provide any-to any connectivity between Customer sites. EVCs connecting to an E-LAN must all be VLAN-Based or Port-Based only; there cannot be any mixing of VLAN-Based and Port based configurations.

The frame size of the Maximum Transmission Unit ("MTU") depends on the selected configuration, the network domain(s) of the Service and access supplier limitations. The actual data throughput depends on the MTU and the customer's own services attached to the underlying Ethernet Protocol.

2.1.4 Class of Service (Class or CoS)

Class of Service (CoS) is a means of providing differentiated service across a network which allows the Customer to prioritise its traffic across the Service. CoS is available on E-Line and E-LAN Services.

Five (5) types of CoS are available:

High Class

This CoS is for time-critical data traffic. The Customer must specify the amount of High Class traffic ("contract rate") required. There is no bursting capability for High Class traffic and any traffic above the contract rate will be dropped. .

Medium Class (In-Contract)

This Cos is used for business critical data traffic. The Customer must specify the amount of Medium Class traffic ("In-Contract") bandwidth within an EVC. All this "In-Contract" bandwidth traffic will be carried.

Medium Class (Out-of-Contract)

This CoS is used for business critical data traffic. Traffic which has burst above the Medium Class In-Contract bandwidth will be marked as Out of Contract traffic. Out-of-contract traffic may be dropped if congestion occurs in the BT Network.

Low Class (In- Contract)

This CoS is used for standard business data traffic. The Customer must specify the amount of Low Class traffic ("In-Contract") bandwidth within an EVC. All this In-Contract bandwidth traffic will be carried.

Low Class ((Out-of-Contract)

This CoS is used for standard business data traffic. Traffic which has burst above the Low Class In-Contract bandwidth will be marked as Out-of-Contract traffic. Out of contract traffic may be dropped if congestion occurs in the BT Network. The Customer must mark its traffic using the Ethernet Priority bit (P-bit) using IEEE (802.1p Standard) prior to sending the traffic into the BT Network. The BT Network will then put the traffic into the selected CoS. Any traffic not identified as part of a CoS will be marked Low Class (Out-of-Contract).

The Customer must specify the CoS bandwidth required at the time of Order.

The access line and the Service Interface must have greater bandwidth than the total contracted Service bandwidth.

2.1.5 Performance Reports

Standard Performance Reports and Near Real Time Reports are available upon on request and are included in the Charges.

Site to Site Reports are available at an additional Charge as specified on the Order.

2.1.6 Proactive Incident Management

The Service is continuously monitored in real time. BT will perform initial diagnostics and commence action on any incidents within fifteen (15) minutes of BT registering the incident.

3 Service Delivery

On the Order for any Site, the Customer may request a delivery date (the "Customer Requested Date" or "CRD"). After the Customer has signed the Order BT will provide an Indicative Delivery Date and (where applicable) BT will then conduct a Site survey. Subject to there being no issues arising from the Site survey and subject to BT receiving appropriate confirmation from its suppliers, BT will provide a Customer Commit Date ("CCD"), which is the date on which BT agrees to deliver the Service. Notwithstanding Clause 5.2 of the General Service Schedule, if the Customer delays Service delivery, the Customer agrees that it shall pay (i) BT's invoice for Charges which would have become due on the last CCD agreed in writing by BT and (ii) BT's invoices for recurring Charges, which are due monthly in advance. In these circumstances the Service Levels on Service delivery after the CCD as set out in paragraph 7.1.2 of the General Service Schedule shall not apply.

The Operational Service Date occurs on successful completion of the BT Service turn up tests which are compliant with IETF RFC 2544.

4 BT Service Management Boundary ("SMB")

The SMB is the physical Ethernet interface on the Customer side of the BT NTE of the associated Ethernet Access. This includes provisioning, maintenance and management of all elements up to this SMB.

If the Service is physically extended as set out in section 5.1.5 or 5.1.6 below, any interruptions in Service will not be treated as a Qualifying Incident for the purposes of section 7 of the General Service Schedule, nor will BT be liable for any Service impairment caused by the physical extension.

5 The Customer's Responsibilities

5.1.1 The Customer is responsible for managing the configuration of its Customer Equipment at its Site(s).

5.1.2 If the Customer allocates its VLAN ID(s), it must provide the VLAN ID(s) at the time of placing the Order and must inform BT before any changes to the VLAN ID(s) are made at any time. Failure to do

so will result in a loss of Service and the Customer agrees that section 7 Service Levels in the MSA General Service Schedule shall not apply.

5.1.3 The Customer will provide the appropriate electrical power supplies (AC or DC supply) to support the Ethernet Access equipment, the BT NTE and any other equipment required to support the Service.

5.1.4 The Customer is responsible for the cable connecting the BT NTE to the Customer Equipment.

5.1.5 The Customer must provide adequate space at its Site to install the BT NTE and the ATD. The space for the BT NTE must be within reach of the ATD. Standard Cable lengths provided by BT are 3 metres for optical cable and 10 metres for electrical cable. If the Standard Cables are not long enough to connect the BT NTE to the ATD, the Customer is responsible for providing appropriate cabling to connect the BT NTE to the ATD. The Customer must advise BT if the distance between the BT NTE and the ATD exceeds the distance supported by the standard Access Interface; in these circumstances the Customer must order the Access Interface as specified by BT

5.1.6 Where the Service is delivered to a third party host site, the Customer is responsible for arranging the extension of the connectivity of the Ethernet Access from the third party room to the Customer Equipment location in the Site where the BT NTE is installed.

5.1.7 Where the Service is delivered as Diverse or Diverse+, the Customer is responsible for any reconfiguration required to enable data traffic to be re-routed in the event of failure of either of the two Ethernet Accesses.

6 Charges and Payment Terms

The Charges for the Service will comprise of some or all of the following components, depending on the option selected on the Order:

Service Component	One-time Charge	Recurring Charge	Notes
Ethernet Access	Install/ De-install	Monthly Charge	Charges vary by speed and location
Service Interface (Port)	Not Applicable	Monthly Charge	Charges vary by speed and location
EVC	Install/ De-install	Monthly Charge	Charges vary by bandwidth speed, location and Class of Servcie (if applicable)
Performance Reports Standard	Not Applicable	Not Applicable	Available upon request via GS Portal
Performance Reports Near Real Time	Not Applicable	Not Applicable	Available upon request via GS Portal In-Tariff
Site to Site Performance Reports	Install/ De-install	Monthly Charge	Specify on Order; available on request per EVC basis on E-Line option only.

If the Customer requests any of the following work, additional Charges will apply and the following provisions relating to Termination Charges apply in addition to the Termination Charges set out in section 6 of the MSA General Service Schedule.

Requested work	**One-time Charge**	**Recurring Charge**	**Notes**
Service Interface **Upgrade**	One-Time Charge Applicable	New Monthly Recurring Charge for each Service component changed.	
Service Interface **Downgrade**	One-Time Charge Applicable	New Monthly Recurring Charge for each Service component changed.	Early Termination Charge is the difference in Charges between the old and new speeds for the remaining months of the old service Minimum Period of Service
Increase of **EVC** Speed	One-Time Charge Applicable	New Monthly Recurring Charge for each link changed.	
Decrease of **EVC** Speed	One-Time Charge Applicable	New Monthly Recurring Charge for each Service component changed.	Early Termination Charge is the difference in Charges between the old and new speeds for the remaining months of the old service Minimum period of Service.
Increase of COS Speed	One-Time Charge Applicable	New Monthly Recurring Charge for each COS SPEED changed.	
Decrease of COS Speed	One-Time Charge Applicable	New Monthly Recurring Charge for each Service component changed.	Early Termination Charge is the difference in Charges between the old and new speeds for the remaining months of the old service Minimum period of Service.

7 Service Levels

Service Levels are set out in section 7 of the PSA General Service Schedule. No additional Service Levels are provided.