

SERVICE DESCRIPTION: HIGH SPEED RESIDENTIAL MASS MARKET BITSTREAM SERVICE

This Service forms part of SE's existing product catalogue approved by the Telecommunications Regulatory Authority ('TRA') pursuant to the Reference Offer Order dated 18 August 2016.

Pursuant to Article 40(bis)(a) and 40(bis)(b) of the Telecommunications Law promulgated by Legislative Decree No.48 of 2002, the Special Temporary Measure ('STM') and the Fixed Telecommunications Infrastructure Network Licence to be granted to the SE (as defined in the STM), this Service will be offered by the SE.

Subject to the TRA's approval, the SE may consider to amend, enhance, reduce, phase out or stop this Service where the SE consider that another SE service or product can reasonably fulfil the objectives and scope of this Service.

1. THE SERVICE

The Bitstream product as detailed in Schedule 2-12 of SE's Reference Offer, is an access product which enables the Access Seeker to provide high speed products and services to End Users via Connections over a digital pathway across the Access Provider's network. The Bitstream Plus Service is an add on to the existing Bitstream Service, enabling the Access Seeker to provide superfast (speeds above 20Mbit/s) products and services to its residential mass market End Users via Connections over a digital pathway across the Access Provider's GPON network. The digital pathway consists of one or more Connections, involving one or more Access Links between End User premises and one or more Aggregation Links.

Available To: Holders of an appropriate Individual Telecommunications or Class License.

Traffic: Traffic permitted by the licenses held by Access Seekers.

Reciprocal Service: Not required.

Further to the "Determination of Significant Market Power and Determination of Dominant Position in the Markets for Provision of Broadband Internet Access Services from a Fixed Location" dated 27 March 2014, Bitstream Service packages for mass market are no longer regulated however Bitstream Service packages for business continue to be regulated.

2. DEFINITIONS

Capitalised terms not defined in this Service Description are defined in the Dictionary. Terms defined in this Service Description are specific to it.

Access Seeker means a Licensed Operator.

Access Link means the digital point-to-point communications between an End User Premises and the OLT nearest to that End User Premises.

Aggregation Link means the logical or physical link between an Aggregation Point and an Access Seeker's Point Of Presence. For the avoidance of doubt, an Access Seeker must have SE establish at least one Aggregation Link before the implementation of the first Service Request.

Aggregation Point means the point on SE's network where the Aggregation Link is connected.

SE Exchange (BE) means an exchange which has OLTs installed at the time of the Service Request.

Bitstream Plus Service Request means the request by the Access Seeker for a Bitstream Service.

Cancellation Request means a Service Request for discontinuing a Bitstream Service.

Connection means the digital pathway that provides one end-to-end connection between one specific End User premises and the Access Seekers POP.

End User means an existing residential customer paying a direct exchange line rental to SE in connection with a Useable Line.

End User Consent means the written consent of an End User to receive a service by means of a Bitstream Plus Service supplied to the Access Seeker in accordance with a Bitstream Plus Service Request, which consent is provided to SE by or on behalf of the End User.

End User Management means all aspects of interface with the customer product support and billing of the End User by the Access Seeker in relation to each End User contracting with the Access Seeker for using the Bitstream Plus Service and first line support by the Access Seeker in relation to maintenance issues related to the End User.

End User Premises Equipment means a splitter and modem, or other equivalent technology, necessary to support the End User ability to use a Bitstream Plus Service.

Exceptional Delivery Date means the date defined at paragraph 4.1.

Gaining Operator means an Access Seeker who presents SE a valid End User Consent and Bitstream Plus Service Request.

GPON means gigabit passive optical networks, an access technology used by SE to provide a fiber based asymmetric connection at a fixed location.

Implementation Date means the date set out in a Bitstream Plus Service Request, which shall be determined in accordance with the timescales set out in clause 11.11 of the Supply Terms.

Incompatibility (and the cognate term **Incompatible**) means a circumstance in which a Bitstream Plus Service cannot reasonably be provided over the SE network, whether by reason of a technology block or a product or for any other technical or product-related reason. Incompatibilities may include but are not limited to: PABX, hunting lines, ISDN, key telephone systems and fixed wireless systems

Invalid Transfer means a Service Request:

- (a) where the End User (or its/her/his agent) did not request the services that the Access Seeker intended to supply via a Bitstream Plus Service;
- (b) where a valid written End User Consent cannot be produced by the Access Seeker to support the Service Request;
- (c) which resulted from a processing error; or
- (d) where only a copper Connection is available to the End User

IP means Internet protocol.

IP Addresses means the Internet addressing information, in compliance with the relevant standard which describes the address of all devices physically located within the global Internet.

Losing Operator means an Access Seeker whose End User is subject to a Bitstream Plus Service Request given to SE by a Gaining Operator.

MPLS means multi-protocol label switching.

Network Boundary means for a fiber based Access Link, the ONT at the End User Premises.

New Connection Request means a Service Request for establishing a new Bitstream Connection for the provision of services to an End User at the premises of such End User.

Non-SE Equipment means any End User Premises Equipment which is not supplied and supported and maintained by SE and all equipment used by the Access Seeker.

OLT means optical line terminal, network equipment in SE Exchange used in the provision of a Bitstream Connection when the Access Link is based on GPON technology(fiber based access).

ONT means optical network terminal, network equipment in the End User Premises used in the provision of a Bitstream Connection when the Access Link is based on GPON technology(fiber based access). The ONT is supplied, supported and maintained by SE and SE reserves the right to change or replace the ONT at any given time.

Point of Presence (POP) means an aggregation or network connection point in the Access Seeker's Network located at premises owned or shown to be leased by the Access Seeker or at a SE collocation facility, but for the avoidance of doubt cannot be at an End User Premises, cable station, earth station, manhole, power room, lead-in pipe, duct, outdoor cabinet, MDF, riser room or anywhere not on the main island of Bahrain unless connected by a permanent physical connection above sea level and accessible the Access Provider.

Reconfiguration Request means a Service Request for reconfiguring the technical parameters of an existing Connection.

Reversal Request means a Service Request for returning a Bitstream Plus Service to its setup or configuration prior to the most recent Service Request. For the avoidance of doubt this type of Service Request can either be made by the OLO (on behalf of the End User) to SE or by the End User directly to SE.

Service Qualification means the analysis carried out by SE via the Internet or manually to confirm whether the Bitstream Plus Service can be provided on the SE network by checking:

- (a) line loss;
- (b) infrastructure availability;
- (c) interference; and
- (d) incompatibility.

Service Request means a formal request for a service of the Bitstream product. Service Requests for the Bitstream product include New Connection Request, Change Request, Reversal Request, Transfer Request, and Cancellation Request.

Transfer Request means a Service Request for transferring an existing connection from one operator to another operator. For the avoidance of doubt, the existing connection may be provided as retail broadband service by SE and transferred as Bitstream Connection to an OLO.

Upgrade/Downgrade Request means a Service Request to upgrade/downgrade the speed of an existing Connection, where a Connection is already provided by an OLO for the provision of services to an End User at the same location.

Useable Line means the fiber access line to the End User over which the End User is acquiring a standard suite of telephone services provided by SE.

3. SERVICE TERMS

- 3.1 The Bitstream Plus Service shall only be made available to residential mass market End Users and not business customers, identified by way of application using commercial

registration or having premises located in a business area or of a business nature. In this regard, SE reserves the right to inspect the End User premises to ensure the Connection is being provisioned in accordance with the terms of this paragraph 3.1.

- 3.2 SE will implement Bitstream Plus Service Requests from the Access Seeker and requests for configuration and provision of connections from other Licensed Operators and from itself with respect to any SE Exchange in batches of up to 10 Service Requests.
- 3.3 If SE terminates this service in whole, then each Bitstream Plus Service will terminate.
- 3.4 For the avoidance of doubt, a minimum service period of 12 months per Connection (Minimum Service Period) shall be required for the Bitstream Plus Service. In the event of termination cancellation, or move of any Connection to another speed/package, or default on payment before the end of the Minimum Service Period or any further fixed service period, the Access Seeker shall be liable to pay to SE liquidated damages calculated as the cumulative total of the full rental Charges that would otherwise have been payable from the date of early termination up until the end of the Minimum Service Period or subsequent fixed service period as identified.
- 3.5 If a regulatory obligation to support or supply any specific Bitstream Plus Service no longer applies, SE may cease to supply the Bitstream Plus Service to an Access Seeker on 12 months prior written notice. Following the giving of a notice under this clause, the Access Seeker will not request the Bitstream Plus Service for any further End Users. The Access Seeker will also inform each existing End User that the Bitstream Plus Service will terminate at the end of the 12 month period. The Access Seeker shall be the only party responsible for informing End Users if their existing service will be migrated to another network at the end of the notice period.
- 3.6 Where SE has reasonable objective grounds to consider that the Access Seeker is in breach of an obligation under paragraphs 3.1 and 3.5, SE may:
- (a) suspend implementation by the Access Seeker of the Bitstream Plus Service and/or
 - (b) take any other step contemplated by the Supply Terms to protect SE's network or other interests.
- 3.7 In respect of a breach of an obligation under paragraph 3.1 and where an End User has been determined as a business customer, SE shall immediately terminate the Bitstream Plus Service Connection and penalty charges shall be applied, equal to the relevant monthly charge for the WLA speed for that Bitstream Plus Service for the Minimum Service Period.
- 3.8 In the event of two or more breaches by the Access Seeker of paragraphs 3.1 and 3.7, SE reserves the right to terminate the Bitstream Plus Service in its entirety, including all related Connections to the Access Seeker's End Users.

4. END USER ACCESS

Useable Line

- 4.1 The Access Seeker acknowledges that SE only supplies a Bitstream Plus Service where SE supplies operational (already active fixed line number over GPON) standard telephone services to the same End User over the same Useable Line as may be used with the Bitstream Plus Service by the Access Seeker to provide services to the End User and accordingly:
- (a) SE will only provide the Bitstream Plus Service to the Access Seeker for so long as the End User continues to acquire that standard telephone service from SE using that Useable Line;

- (b) where the End User ceases to have a standard telephone service from SE using that Useable Line, SE will terminate the provision of the Bitstream Plus Service over that Useable Line at the same time.

Installation or Transfer of End User Access

4.2 For each Bitstream Plus Service Request the Access Seeker warrants that it has informed the End User that:

- (a) the installation and operation of the Bitstream Plus Service may require changes to the placement of existing telecommunications devices or changes of equipment; and
- (b) the installation and operation of a Bitstream Plus Service may mean that other Incompatible services cannot be supplied to the End User using the Useable Line.

4.3 In respect of each Bitstream Plus Service, the Access Seeker releases SE from all liability to the End User or the Access Seeker, and indemnifies SE, subject to SE using all reasonable endeavours to mitigate against the effect of the occurrence of the indemnified event, against all costs, expenses, liability, loss or damage incurred or suffered by SE in conjunction with any claims, actions or proceedings against SE (including third party claims or claims by an End User) arising out of the following (to the extent that the liability is caused by the testing, qualification, enquiry regarding, provision, transfer or cancellation of a Bitstream Plus Service):

- (a) disruption in PSTN services;
- (b) suspension or cancellation of the Bitstream Plus Service;
- (c) suspension of the provision with the Bitstream Plus Service of particular IP Addresses;
- (d) cancellation of, or inability to provide, other Incompatible services;
- (e) termination in accordance with Section 3 of this Service Description; and
- (f) in relation to any matter set out in paragraph 4.1 of this Service Description.

4.4 Data transport using the Bitstream Plus Service between an OLT and a SE Aggregation Point are available for the range of products identified in Annex 2.

4.5 Maximum attainable Bitstream Plus speed shall be subject to the physical distribution of the bandwidth of the splitter and the contention ratio set out at Annex 2 shall be applied. Multiple VLANs and multicasting features are not currently offered as part of the Bitstream Plus Service.

4.6 The Access Provider reserves the right to reject an order if the Useable Line cannot support the requested speed or the operational line is copper based.

5. MAINTENANCE

5.1 SE will provide network maintenance and support services to ensure that all of the network elements used to provide the Bitstream Plus Service are provided to the Access Seeker at the same level of quality of service and availability as SE provides to itself for the same or equivalent network elements.

6. EQUIPMENT

- 6.1 The provision of a Bitstream Plus Service or the implementation or transfer of the Bitstream Plus Service does not include the provision of any cabling or any customer premises equipment.
- 6.2 The Access Seeker must ensure that Non-SE Equipment connected to the Bitstream Plus Service:
- (a) meets the specifications and requirements defined by relevant international telecommunications and engineering standards; and
 - (b) is approved equipment.

7. CONNECTION

- 7.1 SE will use its reasonable endeavours to connect the Bitstream Plus Service by the relevant Implementation Date. SE will notify the Access Seeker when the connection has been effected in accordance with the Bitstream Plus Service Request procedures set out in Annexure 1 to this Service Description. Except for any service credit specified in this Service Description, SE will not be liable for any inconvenience, loss or damage suffered by Access Seeker or an End User if SE does not connect the Bitstream Plus Service by the Implementation Date.
- 7.2 The Access Seeker releases SE from all liability to the End User or the Access Seeker, and indemnifies SE, subject to SE using all reasonable endeavours to mitigate against the effect of the occurrence of the indemnified event, against all costs, expenses, liability, loss or damage incurred or suffered by SE in connection with any claims, actions or proceedings against SE (including third party claims) arising out of the allocation of IP Addresses or allocation and management of domain names.

8. BITSTREAM TRANSFER

Bitstream Transfer Process

- 8.1 SE and the Access Seeker must comply with this clause 8 and Annex 1 of this Service Description when carrying out any Bitstream Plus Service Request.
- 8.2 The Access Seeker must establish robust procedures to ensure an appropriate End User Consent is received and properly recorded before any Bitstream Plus Service Request is notified to SE.
- 8.3 The Access Seeker must provide SE with a copy of the End User Consent.

Charges

- 8.4 The Access Seeker must pay to SE the relevant Charges set out in Annex 3.

Responsibilities

- 8.5 From the time of the completion of the Bitstream Transfer Process, the relevant End User will no longer be a customer of SE for those services supplied by the Access Seeker using the Bitstream Plus Service, but instead the customer of the Access Seeker for those services.
- 8.6 From the time of completion of the Bitstream Transfer Process, the Access Seeker must provide End User Management to support the Bitstream Plus Services. However, if requested by an End User or the Access Seeker, SE will provide technical support in relation to problems End Users may report with services supplied to End Users using the

Bitstream Plus Service, including fault management, and support and maintenance for which the Access Seeker must pay the charges set out in Annex 3.

- 8.7 The Access Seeker will contact SE for all maintenance replacement or repair of the Bitstream Plus Service and the network on the Access Provider's side of the Network Boundary and will pay SE the Charges at the rate specified (or if not specified, on a time and materials basis) for all such work.
- 8.8 The Access Seeker is responsible for billing the customer for the services supplied to End Users using the Bitstream Plus Services provided since the date of the completion of the Bitstream Plus Service Request.
- 8.9 In relation to any SE service:
- (a) SE will continue to bill the End User for any outstanding SE charges and other SE services; and
 - (b) the End User remains liable to pay any outstanding charges to SE and remains subject to standard SE debt enforcement policies,

Notwithstanding that the End User an Access Seeker Customer also.

- 8.10 In respect of each Bitstream Plus Service Request submitted by the Access Seeker to SE, Access Seeker must ensure that:
- (a) the Access Seeker has a valid End User Consent authorizing the transfer or implementation (which consent is not more than 30 days old from the date the Bitstream Plus Service Request was submitted to SE);
 - (b) the Access Seeker retains records of the End User Consent and the retention is in accordance with the reasonable requirements notified to the Access Seeker by SE from time to time;
 - (c) the Access Seeker has used its reasonable endeavors to ensure that the information in the Bitstream Plus Service Request is complete and correct;
 - (d) the processing of each Bitstream Plus Service Request, at the time it is lodged, does not breach any party's contractual or other rights (but, for the avoidance of doubt, a valid End User Consent shall be deemed to be a valid notice to SE to terminate the relevant SE services);
 - (e) the Access Seeker has used its reasonable endeavors to provide the End User with sufficient information to make an informed choice about transferring the End User's internet service provider, including informing the End User that:
 - (i) the End User remains liable for the amount of any pre-existing charges and possible termination expenses; and
 - (ii) the Access Seeker has complied with any relevant legislation or other industry code of practice.

- 8.11 SE may investigate whether the Access Seeker has acted in compliance with the warranties given under this Service Description. On reasonable request, the Access Seeker must provide SE with evidence that the Access Seeker has acted in compliance with this Service Description.

9. INDEMNITY

- 9.1 The Access Seeker indemnifies SE, subject to SE using all reasonable endeavors to mitigate against the effect of the occurrence of the indemnified event, in respect of any

loss, liability or cost incurred by SE (including third party claims or claims by any End User) in connection with a breach by the Access Seeker of the warranties given under this Service Description.

10. BILLING PERIOD

- 10.1 The Billing Period in respect of the Service shall be 30 days. The Billing Period shall commence on the date of the first billing date of the SE billing cycle after installation and may include billing on a pro rata time basis for the period between the Bitstream Plus Service Request to the next billing cycle to ensure compatibility with the SE billing cycle

11. AGGREGATION LINK

- 11.1 Existing Bitstream Service Access Seekers shall place a Service Request for the new Bitstream Plus Aggregation link.
- 11.2 Following receipt of the complete Service Request and subject to network availability, SE shall deliver the new 10Gbit/s Aggregation link to the Access Seeker's identified POP. The non-recurring Charges for the Bitstream Plus Service Aggregation Link shall be based on time and materials as set out in Schedule 3 of SE's reference offer.
- 11.3 Each Access Seeker shall be eligible for only one Bitstream Plus Aggregation Link at Charges set out in Annex 3. Any additional Bitstream Plus Aggregation Link(s) may be provided at the discretion of the Access Provider if the existing Aggregation Link(s) consistently exceed 80% utilisation. In this event, Charges shall also be applied in line with those set out in Annex 3.

ANNEX 1 – BITSTREAM PLUS SERVICE REQUEST PROCESS

- 1. Bitstream Plus Service Request for existing or new Bitstream Plus Services**
- 1.1 The Access Seeker must make a Bitstream Plus Service Request for the provision of a Bitstream Plus Service to allow the Access Seeker to supply a new or existing service to an End User.
- 1.2 SE shall send the Access Seeker an acknowledgement of the Service Request within 15 minutes of receipt of the Service Request. If the Service Request is done outside working hours, SE shall acknowledge the service request within 15 minutes following the start of the first working hour after receipt of the Service Request.
- 1.3 A Bitstream Plus Service Request must be in the format notified by SE from time to time and be submitted by the means and to the address notified by SE from time to time.
- 1.4 SE will, within 1 Working Day of receipt of any Bitstream Plus Service Request, notify the Access Seeker whether the Bitstream Plus Service Request is:
 - (a) accepted; or
 - (b) rejected.
- 1.5 SE may reject a Bitstream Plus Service Request if it:
 - (a) is incomplete or incorrect or illegible or cannot reasonably be understood;
 - (b) does not properly identify the End User (including such identification in line with paragraph 3.1 of Section 3), or provide information which does not enable SE to identify the Useable Line;
 - (c) is not submitted in accordance with paragraph 3 of this Annex 1;
 - (d) requests the Transfer of a Bitstream Plus Service which has different transmission characteristics from any existing Bitstream Plus Service being provided (if any), without also requesting a Service Qualification with regard to the Useable Line over which the new Bitstream Plus Service is to be provided; or
 - (e) requests the Bitstream Plus Service for provision of services to a customer or potential customer of the Access Seeker who is not an End User at the date of submission of the Bitstream Plus Service Request; or
 - (f) has any other defect notified by SE to the Access Seeker at the time of rejection.
- 1.6 SE may in its sole discretion elect to accept any Bitstream Plus Service Request notwithstanding that there is any defect in that Bitstream Plus Service Request if SE considers that such defect does not have a material effect on SE's ability to process the Bitstream Plus Service Request and provide the Bitstream Plus Service.
- 1.7 SE will within 2 Working Days from the acceptance of the Service Request provide the Access Seeker with notice of the expected RFT and RFS Dates.
- 2. Bitstream Change Request**
- 2.1 The Access Seeker must, to initiate a Bitstream Change to an existing Bitstream Plus Service used by the Access Seeker to supply a service to an End User, provide SE with a properly completed Bitstream Change Request, in the format notified by SE

from time to time, submitted by the means and to the address notified by SE from time to time.

- 2.2 SE will, within 1 Working Days of receipt of any Bitstream Change Request, notify the Access Seeker whether the Bitstream Change Request is:
- (a) accepted; or
 - (b) rejected.
- 2.3 SE may reject a Bitstream Change Request if it:
- (a) is incomplete or incorrect or illegible or cannot reasonably be understood;
 - (b) does not properly identify the End User, or provide information which does not enable SE to identify the Useable Line;
 - (c) is not submitted in accordance with paragraph 3 of this Annex 1;
 - (d) requests a Bitstream Change which cannot reasonably be provided for practical or operational reasons; or
 - (e) has any other defect notified by SE to Access Seeker at the time of rejection.
- 2.4 SE may in its sole discretion elect to accept any Bitstream Change Request notwithstanding that there is any defect in that Bitstream Change Request, if SE considers that such defect does not have a material effect on SE's ability to process the Bitstream Change and provide the Bitstream Plus Service.

3. Batches

- 3.1 The Access Seeker must submit Bitstream Plus Service Requests to SE in batches of no more than 10 Service Requests. Batches must be:
- (a) submitted to the address notified by SE from time to time;
 - (b) submitted by authorised personnel of the Access Seeker;
 - (c) made up of only Bitstream Plus Service Requests that comply with the requirements of this Service Description and the Supply Agreement;
 - (e) identified by a unique batch number generated by the Access Seeker.
- 3.2 SE will only accept batches of Bitstream Plus Service Requests that:
- (a) are delivered to SE during business hours;
 - (b) comply with the requirements set out in paragraphs 1 and 2;
 - (c) do not exceed the maximum number of two (2) batches per day.
- 3.3 If any batch of Bitstream Plus Service Requests contains one or more Requests that contains one or more defects, SE will:
- (a) reject the defective Bitstream Plus Service Requests by returning them to Access Seeker; and
 - (b) continue to process the valid Bitstream Plus Service Requests within the same batch.

4. Completion of Request

- 4.1 If SE notifies the Access Seeker that the Bitstream Plus Service Request is accepted, then SE shall subject to the exceptions, limitations and conditions specified by this

Service Description and/or Supply Terms, endeavour to provision and deliver the Bitstream Plus Service on or before the standard time scales summarised below in Clause 7.. The Parties acknowledge and accept that exceptional circumstances, such as those set out below, may give rise to delays in any stage of the acceptance, provisioning and delivery of a Service Request. If the occurrence of any of the events below takes place, SE shall communicate the Exceptional Delivery Date to the Access Seeker and shall not be held liable for the Service Level Penalties or for damages under these Supply Terms. The exceptional circumstances shall comprise:

- (i) a Force Majeure Event or a Regulatory Event (Schedule 9 clause 16);
- (ii) planned maintenance (Schedule 6 para 6);
- (iii) events either caused by or which are under the reasonable control of the Access Seeker or its retail end-customer; and
- (iv) any breach of the Access Seeker's obligations under this Service Description or otherwise under these Supply Terms.

4.2 SE shall not be obliged to further process a Bitstream Plus Service Request where:

- (a) the relevant Bitstream Plus Service cannot meet Service Qualification;
- (b) there exists any Incompatibility;
- (c) SE is not able to process the number of Bitstream Plus Service Requests made due to resourcing constraints without having to deploy more staff or other resources; or
- (d) an authorised person from the End User or the Access Seeker is not available to provide further information when requested.

5. Notification of Completion of Request

5.1 SE must, within 2 Working Days of completion of a Bitstream Plus Service Request or a Bitstream Change Request, notify the Access Seeker of completion.

5.2 SE is entitled to rely on a Request as evidence that the relevant End User:

- (a) in the case of a Bitstream Plus Service Request:
 - i) has given a valid End User Consent in relation to the requested Bitstream Plus Service Request; and
 - ii) understands and is aware of the End User's continuing liability to pay any charges to SE when due; and
- (b) in the case of a Bitstream Change Request understands and has requested the Bitstream Change.

6. Reversal of a Bitstream Plus Service Request

6.1 At any time following the successful completion of a Bitstream Plus Service Request, either:

- (a) the relevant End User; or
- (b) the Access Seeker;

may make a request to SE to reverse the Bitstream Plus Service Request.

6.2 SE will, within 2 Working Days of completion of a Reversal Request notify the Access Seeker that the Reversal Request has been processed.

6.3 The Access Seeker must render a final bill to the End User within 10 Working Days of receipt of a notice from SE under paragraph 6.2 of this Annex.

7. Service Level Agreement

7.1 SE shall provide the Bitstream Plus Service in accordance with the Service Level framework set out below.

The Service Levels for the Bitstream Plus Service Requests are defined and described in the table below with the associated deliverables, actual measures of performance, Service Level Terms and Service Level Penalties. Defined terms are capitalised and italicised in the table below or in Schedule 8 (dictionary).

Service Levels	Service Level Terms	Service Level Penalties
◆ Service request process		
◆ Service Request Acknowledgment	<p><u>Maximum Time for Service Request Acknowledgment:</u></p> <p>During working hours: 15 minutes following receipt of the Service Request</p> <p>◆ Outside working hours: 15 minutes after the start of the first working hour following receipt of the Service Request</p>	◆
◆ Service Request Confirmation	◆ <u>Maximum Time for Service Request Confirmation:</u> 3 WD	<p><u>Penalties for Service Request Confirmation:</u></p> <p>◆ 5 Service Credits ('SC') for each WD after the Maximum Time for Service Request Confirmation until such time as the OLO receives the confirmation.</p>
◆ Service delivery process		
◆ Notification of Expected RFT and RFS Dates	<p><u>Maximum Time for Notification of Expected RFT and RFS Dates:</u> 2 WD</p> <p>For a Cancellation Request, SE shall only provide the Maximum RFS Date, which shall be the expected date of cancellation, taking into account the required notice period for cancellation.</p>	◆ Penalties for Notification of Expected RFT and RFS Dates: 5 Service Credits ('SC') for each WD after the Maximum Time for Notification of Expected RFT and RFS Dates until such time as the OLO receives the notice.
◆ Service Level for RFS Date	<p>◆ <u>Maximum Delivery Time:</u> 7 WD</p> <p>◆</p> <p>◆ In cases of Transfer Requests, SE shall coordinate the deactivation and activation of the Connection on the same day to ensure minimum service disruption.</p>	◆ Penalties for RFS Date: 20 SC for failure to meet the Maximum RFS Date and 10 SC for each additional working day thereafter until the OLO receives the RFS Certificate.

Service Levels	Service Level Terms	Service Level Penalties
	♦ <u>Maximum Validation Time: 2 WD</u>	
♦ Acceptance Criteria	♦ To be defined by SE	♦
♦ Service quality management		
♦ QoS Parameters	♦ To be defined by SE	♦
♦ Fault management process		
♦ Fault Acknowledgment Time	♦ <u>Maximum Fault Acknowledgment Time: 1 hour</u>	♦
♦ Response Time	♦ <u>Maximum Response Time: 5 working hours during working hours and 12 hours outside working hours</u>	♦
♦ Restoration Time	♦ <u>Maximum Restoration Time: 48 hours</u>	♦ Penalties for Restoration Time: 10 SC for failure to meet the Maximum Restoration Time + 5 SC for every 4 hours exceeding the Maximum Restoration Time
		♦ Maximum Monthly Penalty Cap: 300 SC per Connection and per month

ANNEX 2 – BITSTREAM PLUS PRODUCT LIST

Bitstream Plus products are defined for residential mass market End users with the packet access contention ratio as shown in the table below.

Bitstream Plus Access Speeds
Residential (Contention Ratio 1:15)
20Mbit/s downstream / 2.048Mbit/s upstream
30Mbit/s downstream / 5.048Mbit/s upstream
40Mbit/s downstream / 5.048Mbit/s upstream
80Mbit/s downstream / 10.048Mbit/s upstream
100Mbit/s downstream / 10.048Mbit/s upstream

Data Type Handling

The data type handling capability provided over the Bitstream Plus Service is a Layer 2 MPLS service. End User services provided by the Access Seeker will be limited only by the capability of the Access Seekers themselves within the boundaries of the Access Providers network.

ANNEX 3 – BITSTREAM CHARGES

The Access Seeker shall pay the relevant Charges for the Bitstream Plus Service as specified under the Bitstream Plus Service in Schedule 3 of this Reference Offer.

ANNEX 4 – Bitstream Service / Bitstream Plus Service – Technical Diagram

