SERVICE DESCRIPTION 2-18: WHOLESALE LOCAL ACCESS SERVICE (WLA)

This Service forms part of Batelco’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 fulfill the objectives and scope of this Service.

1. THE SERVICE

The Wholesale Local Access (WLA) Service is an active wholesale product providing symmetric and guaranteed data connectivity within the Kingdom of Bahrain between a Point of Presence of an Access Seeker and an End User Premises / Point of Presence.

Available To: Licensed Operators holding an appropriate licence.

2. DEFINITIONS

Capitalised terms not defined in this Service Description are defined in Schedule 8 Part 1 (Dictionary). Terms defined in this Service Description are specific to it.

Aggregation Link means the connectivity established between a Point of Presence of the Access Seeker and a SE access node, as further detailed in Annex 5 and Annex 6.

End User Premises means a permanent physical location in Bahrain owned or controlled by a person or organisation that is neither a licensee, nor affiliated to or controlled by a licensee, and from which location that person or organisation conducts business and receives telecommunication services.

Connection means the connection from the End User Premises / Point of Presence to the Aggregation Link as indicated in Annex 8.

Ethernet Automatic Protection means automatic switching of data traffic to the secondary end-to-end WLA Connection within milliseconds when both primary and secondary end-to-end WLA Connections are delivered on the same CPE.

Exceptional Delivery Date means the date defined at paragraph 3.2(c).

Minimum Service Period means an applicable minimum period of twelve (12) calendar months for which the WLA Service will be provided, such period commencing from the Service Commencement Date.

Order means a written request by the Access Seeker in the format specified by SE in Annex 2 (subject to change from time to time) for a WLA Service.

Point of Handover means the port on the CPE (customer premise equipment provided by SE) at the End User Premises and the port on the CPE at the Point of Presence.

Point of Presence means a permanent physical location in Bahrain where an Aggregation Link or a Connection is terminated at premises owned or shown to be leased by the Access Seeker for WLA Service (a), (b) and (c) (at one end) and a Licensed Operator for WLA Service (c) (at the other end) 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 by SE.
Ready for Test (RFT) Date means the date when all elements to the WLA Service have been successfully installed and ready for end-to-end testing by SE and the Access Seeker, such testing to be carried out in accordance with Annex 7.

Renewed Minimum Service Period means an applicable minimum period of one (1) calendar month for which the WLA Service will be provided, such period commencing from the expiry of a Service Period.

Service Commencement Date for each Order for the WLA Service will be the date of successful implementation and notified handover (as further described in Annex 7) of the WLA Service by SE to the Access Seeker.

Service Credit means one per cent (1%) of the applicable monthly recurring charge for the Connection.

Service Levels means the set of parameters defining the minimum performance expected from the Wholesale Local Access product and its services. Service Levels include Service Level Terms, and Service Level Penalties.

Service Period means the Minimum Service Period or Renewed Minimum Service Period.

Service Level Terms means the set of defined performance targets that must be met by SE in relation to the request, delivery, quality management and fault management of the Wholesale Local Access product and its services.

Upgrade means an increase in the throughput of the Connection following an Upgrade Request.

WLA Service Agreement means an agreement to provide WLA Service formed by the acceptance by SE of an Order submitted by the Access Seeker.

WLA Amended Service means a WLA Service that is amended by the relocation within the Kingdom of Bahrain of the End User Premises/ Point of Presence or by a change in throughput of the Connection.

WLA Service means an active wholesale product providing symmetric and guaranteed data connectivity within the Kingdom of Bahrain (more particularly specified at Annex 1) between:

(a) two of the Access Seeker's Points of Presence;
(b) an Access Seeker's Point of Presence and its End User Premises; and
(c) an Access Seeker's Point of Presence and the Point of Presence of another Licensed Operator (not being SE).

3. TERMS

3.1 Forecasting

At the beginning of each calendar month, the Access Seeker shall supply a non-binding forecast of the WLA Service the Access Seeker anticipates that it will require in each month of the twelve month period following the date of the forecast, in the form required by SE from time to time. The Access Seeker shall use all reasonable endeavours to forecast accurately given SE is placing reliance on those forecasts. If the number of Connections requested in any given quarter exceed the forecast provided by the Access Seeker, then the Service Level Terms and Service Penalties for Service Requests and Service delivery shall not apply.

3.2 Supply of Service

(a) Subject to the terms and conditions of this Service, the WLA product comprises one of the following formal requests forming part of the Service:
- New Connection Request;
- Transfer Request;
• Upgrade/Downgrade Request;
• Migration Request;
• Reconfiguration Request; and
• Cancellation Request.

(b) The Access Seeker must submit an Order to SE to request supply of the WLA Service in accordance with the WLA Service Agreement and in the form shown at Annex 2.

(c) SE shall within two (2) Working Days advise the Access Seeker if the Order form is rejected and where applicable, state the required corrections.

(d) In the event an Order form is rejected more than twice then SE shall provide the Access Seeker with the reasons for the rejection within two (2) Working Days of the third rejection and identify the changes required to enable the Order to be accepted.

(e) If the Access Seeker submits a Cancellation Request three or more Working Days after the notice of Expected RFT and RFS Dates and where this is not related to delay in the Actual RFT Date and Actual RFS Date by SE, the OLO shall be liable to pay one (1) monthly recurring charge to SE.

(f) Within five (5) Working Days from the date of the acceptance of the Order form, SE shall advise the Access Seeker in writing of the applicable Maximum Delivery Time. For the avoidance of doubt, SE reserves the right to reject the Order form during this stage if it is found that the WLA Service is not supported or if SE’s point to point fibre network does not extend to the requested area within the Kingdom of Bahrain.

(g) Subject to the exceptions, limitations and conditions specified by this Service Description and Supply Terms, SE shall endeavour to provision and deliver the WLA Service on or before the standard time scales summarised in Annex 4. 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 clause 3.5 below or otherwise under these Supply Terms.

(h) If a SE technician must be present at the end-user site to install a connection, and if, for any reason, the Access Seeker and/or end-user cannot be available on the Expected RFT Date for such installation, the Access Seeker must give SE a minimum written notice of two (2) working days. The new dates for RFT and RFS are then set following the below principles:
a. SE should propose the next earliest dates for which a SE technician would be available for the installation. The earliest proposed date(s) may exceed the Maximum Delivery Date if SE has no other availability until such date.

b. The Access Seeker is to choose one of the proposed dates which becomes the applicable Expected RFT Date.

c. The Expected RFS Date is also modified and is set apart from the Expected RFT Date by the Maximum Validation Time (see paragraph Error! Reference source not found. above). The Maximum RFS Date is then set equal to the Expected RFS Date.

d. SE shall send the Access Seeker a notice of the applicable Expected RFT Date, Expected RFS Date, and Maximum RFS Date.

If at least one of the following two conditions is met (i) the Access Seeker does not provide SE a minimum written notice of two working days to inform of its unavailability; or (ii) SE sends a technician who is not able to access the end-user site to install the service, then the Access Seeker is liable to pay the installation and configuration charge for the requested service as specified in the relevant RO service description. In such case, the modification and notification of the Expected RFT Date, the Expected RFS Date, and the Maximum RFS Date follow the same principles as described in the above paragraph Error! Reference source not found.. For the avoidance of doubt, the Access Seeker will, in this case, be liable to pay two (2) or more installation and configuration charges when the RFS Certificate is issued by SE, depending on the number of times the above instance/s may occur.

(i) Subject to the Access Seeker fulfilling all of its obligations, SE shall provide and the Access Seeker shall acquire the WLA Service either within the standard time scales or by the Exceptional Delivery Date as appropriate which shall include actual orders not greater/below 30% of the forecast Order supplied in accordance with clause 3.1. For the avoidance of doubt, the Service Level Terms and Service Level Penalties shall not apply for actual Service Requests exceeding the forecast parameters specified in clause 3.1 and Annex 4 para 1.

(j) If an OLO submits New Connection Request in a service area where the WLA product is not yet supported and SE agrees to accept the order, SE shall be under the obligation to extend support of the WLA product to that service area before the date set in Annex 8 only if the requested WLA Connections represent a combined capacity of greater than or equal to 2 Gbps. SE shall use reasonable endeavours to deliver the New Connection Request on or before the Maximum Delivery Date of 60 Working Days (i.e. the same maximum delivery time that is applicable for cases where new ducts must first be installed before deploying a new fibre access cable) however the Service Level framework shall not apply in such cases.

(k) The WLA Service is available at the speeds and prices set out in Schedule 3 of this Reference Offer.

(l) Where SE has accepted an Order which requires the deployment of fibre access in a particular area, SE may also seek to recover the costs of such deployment through a non-recurring charge (NRC) when the additional passive infrastructure required would be
for the **Access Seeker's exclusive use in the foreseeable future**. Such instances shall be determined on an ad hoc basis and include, but are not limited to, the following examples:

<table>
<thead>
<tr>
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<th>Further details</th>
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| 1 | A small business building (3 floors or less) is not connected with fibre. OR A radio site is not connected with fibre. | Deploying a new fibre access cable  
(In addition, construction of new ducts and other underground infrastructure may be required in some sections).  
SE shall recover the costs incurred in building the portion of fibre access which corresponds to the path from the building (or radio site) to the nearest street/road where an existing duct is available. The costs that are recoverable exclude any additional underground infrastructure (e.g. handhole or manhole) built on the main duct path in the street/road and used to connect to the building (or radio site).  
The recoverable portion of civil works per fibre access shall be limited to a maximum NRC of BD1,000  
Payment by the Access Seeker should be made against SE's submission of an itemised invoice and a map detailing the work performed. |
| 2 | Deployment of fibre access protection (i.e. path redundancy) | Deploying a redundant fibre path to a location  
(In addition, construction of a new duct lead-in, new ducts and other underground infrastructure may be required in some sections).  
SE shall be able to fully recover the costs incurred in deploying a new fibre protection path by charging the Access Seeker a NRC.  
Payment by the OLO should be made against SE's submission of an itemised invoice and a map detailing the work performed. |
| 3 | Deployment of fibre access within privately owned property. | Deployment of fibre access within privately owned property (in addition to the fibre access cable, construction of new ducts and other infrastructure may be required e.g. distribution panel and boxes, fibre cables in risers etc.).  
SE shall be able to fully recover, on a time and material basis, the costs incurred in deploying a fibre access within a privately owned property by charging the Access Seeker a NRC.  
Payment by the OLO should be made against SE's submission of an itemised invoice (broken down by time and materials) and, if available, a map detailing the work performed. |

(m) Withdrawal of a speed as a result of any amendments to this Service Description approved by the Regulator will not affect the unexpired portion of any Service Period of a WLA Service unless SE is willing to Upgrade the product for the same Charge.

(n) **SE shall provide to the the Access Seekers a performance monitoring tool, known as "SE Net View" (BNV) which shall enable the Access Seeker to monitor the performance of MPLS-based data connections against the following quality of service parameters, 24 hours a day, 7 days a week:**

- Link availability
- Bandwidth utilization
- Device performance
The BNV system is a performance monitoring tool, whose capabilities are not extended to testing procedures. More detailed information on the BNV system, including how to access, consult, and generate reports is set out in the user guide found within the BNV portal at the following URL: http://netview.SE.com:58080/BNV/.

(o) The technical specifications of the WLA service and protection options available for the WLA Service to Access Seekers are set out in Annex 5 to this Service Description.

(p) Upon request from an Access Seeker and where a second ingress port is available on the CPE, SE will allow an Access Seeker to ingress its traffic on a second ingress port of the CPE (free of charge) provided for a WLA Connection or WLA Aggregation Link.

3.3 Termination

(a) Where the Minimum Service Period has not expired, the Access Seeker shall be entitled to terminate such WLA Service Agreement on at least one (1) month’s written notice to SE and will be liable to pay Liquidated Damages as calculated by the following formula.

Formula for calculating liquidated damages:

\[ LD = WC \times (12-M) \]

where:

LD = liquidated damages to be paid

WC = Relevant wholesale charge defined as the maximum WLA monthly service charge paid since the Actual RFT Date

M = Number of months between the Actual RFT Date and the removal order date rounded-up to the next full month.

The Access Seeker expressly acknowledges that liquidated damages as calculated above form a reasonable pre-estimate of the loss which SE would suffer as a result of early termination by the Access Seeker. Such liquidated damages shall be SE’s sole and exclusive damages or monetary remedy for such early termination.

(b) Following the expiry of any Minimum Service Period the WLA Service Agreement shall be automatically renewed for a Renewed Minimum Service Period unless terminated by the Access Seeker, provided that the Access Seeker supplies SE with a termination notice at least one (1) month prior to the expiry of the current Service Period.

3.4 Amendment to the WLA Service

(a) The Access Seeker shall be entitled to amend a WLA Service Agreement by requesting a WLA Amended Service where this is an Upgrade by providing an Upgrade Request to SE. The Access Seeker shall only be entitled to downgrade the throughput of a Connection when the Minimum Service Period has expired. Where the Access Seeker requests a WLA Amended Service, then the Order procedure at paragraph 3.2 shall apply to that request. Where the Access Seeker requests a WLA Amended Service that requires any new network resources and/or facilities then a new Minimum Service Period
shall commence and SE shall provide a WLA Amended Service for the new Service Period.

(b) The Access Seeker shall not be liable for any termination or additional recurring charges in respect of a request for a WLA Amended Service which is for Migration Request. SE shall charge a once off charge for the relocation unless the Access Seeker requires both Connections to be operational in parallel. For the avoidance of doubt, SE shall not terminate the Connection which is subject to relocation until the Service Commencement Date of the new Connection.

3.5 Access Seeker Obligations

(a) The Access Seeker must provide SE with suitable space for, and access at all reasonable times to, any SE Equipment required to be located in any building in which the WLA Service is located within the control of the Access Seeker. If consent is required from a third party, in this case the End User or building owner, the Access Seeker shall procure such consent. SE is not required to pay the Access Seeker for the preparation or use of, or access to, space provided pursuant to this sub-paragraph.

(b) Where an End User Premises is a VIP location in the Kingdom of Bahrain which is not subject to the exemption under the second article of the Telecommunications Law, the Access Seeker may request use of the SE VIP team (free of any additional charge), if the Access Seeker can provide to SE a written valid official justification for the need for such services from the Regulator or an equivalent authority. On or before receipt by SE of the written valid official justification, the Order shall be suspended pending receipt of a written confirmation of the approval or if is not received within 30 days of the Order, a cancellation.

(c) If the Access Seeker requests to cancel a Service Request three or more working days after the notice of Expected RFT and RFS Dates (and SE has not exceeded the Maximum RFS by more than 2 months), the Access Seeker shall be liable to pay one (1) Monthly Recurring Charge to SE.

(d) If SE's Equipment requires electricity supply and electricity connection points, they shall be supplied, in the location specified by SE, to the Access Seeker at the Access Seeker's expense according to the equipment specification. Such electricity shall be available at the same level of supply, protection and continuity as that available to the Access Seeker’s or End User’s Equipment, as appropriate.

(e) The Access Seeker shall be solely responsible for any loss, theft or destruction of, or damage (reasonable wear and tear excepted) to SE’s Equipment required to be located in the building in which the WLA Service is located within the control of the Access Seeker or End User, howsoever caused (unless caused by SE or its agents), occurring at any time while such SE Equipment is so located.

(f) The Access Seeker must provide SE and any authorised employee, agent, affiliate or contractor of SE with all information and assistance that person may reasonably require to design, test, commission and maintain the WLA Service (which may include, without limitation, participation in testing procedures as and when reasonably requested by SE).

(g) For the avoidance of doubt the Access Seeker may require their agent to be present during the installation, testing or commissioning done by SE but not so as to affect the Service Commencement Date.

3.6 Variation or Withdrawal

(a) SE may upon providing three (3) months' written notice to the Access Seeker and subject to the approval of the Regulator, vary the WLA Service or withdraw the WLA Service
relating to these terms and Annexes 4, 6, 7 and 8, or any part thereof, by issuing a revised Service Description. Annexes 1, 2, 3 and 5 (circuit speeds, order form, pre-sales process and technical characteristics) can be varied in writing by SE upon issuing 10 Working Days written notice to the Access Seeker.

(b) Notwithstanding paragraph (a) above, unless SE and Access Seeker agree otherwise at the time, any withdrawal or variation of the WLA Service, or any amendment to the Charges payable for the WLA Service in accordance with this Service Description and Schedule 3 of this Reference Offer, shall also apply to existing WLA Service Agreements which shall continue in force in accordance with its terms and conditions until renewed or terminated in accordance with this Service Description or the Supply Terms.

(c) Notwithstanding the above, SE may suspend any WLA Service in order to carry out planned or emergency maintenance.

(d) In the case of planned maintenance, this will be carried out as far as possible during the night or at weekends or other quiet periods. SE will give ten (10) Working Days notice of each planned maintenance activity affecting a particular WLA Service or group of WLA Services. This will include the circuits affected, the date and time of the suspension and the likely duration of the suspension.

(e) In the case of emergency maintenance SE will advise the Access Seeker as soon as possible after the emergency suspension of the service and in any case no more than five (5) hours after the emergency suspension. This advice will include the circuits affected and an estimate of the likely period of emergency suspension and in the case that the suspension is over then the reason for the emergency maintenance.

(f) In cases of emergency maintenance SE will advise the Access Seeker within five (5) hours after service is restored with a report of the cause of the fault.

3.7 Maintenance

(a) SE shall provide maintenance and support services in respect of the WLA Service in accordance with Annex 4.

(b) The Access Seeker will report a fault to the SE nominated contact point which shall be available twenty-four (24) hours per day every day. SE will record the fault using a unique reference which it shall pass to the Access Seeker and both parties will agree the time of the report. SE will commence repair of the fault within:
   (a) 2 working hours during working hours; or
   (b) 4 hours outside of working hours,

from the time of receiving the report and will restore the service within 6 hours of the report. SE will advise the Access Seeker nominated contact point once the fault is clear and both parties will record the time of this clearance.

3.8 Protection

(a) The Access Seeker may request an optional level of protection for the access network part of the WLA Connections and WLA Aggregation Links, as further detailed in Annex 5 at Charges set out in Schedule 3. If the Access Seeker opts for protection of a particular WLA Connection then SE shall also provide free of charge premium support (Premium Support) services for that Connection, the details of which are set out in Annex 4.

(b) Maximum level of protection is available for a WLA Connection (that is, full end-to-end physical path redundancy coupled with logical protection), at a Charge of 30% premium in addition to the applicable MRC.
(c) When an Access Seeker submits a request for protection, SE shall configure the WLA Connection with two distinct VLANs:

(i) a first VLAN for the primary end-to-end WLA Connection which will be active all the time; and

(ii) a second VLAN for the secondary end-to-end WLA Connection which will be set in stand-by mode.

(d) Ethernet Automatic Protection switching is applied in case of failure of the primary end-to-end WLA Connection if both primary and secondary end-to-end WLA connections are configured on the same CPE.

(e) When the primary and secondary end-to-end WLA Connections are delivered on different CPEs, the secondary end-to-end WLA Connection shall be activated by SE upon request of the Access Seeker.

(f) SE shall provide the Access Seeker with the following technical details for protection solution if requested by the Access Seeker during the provisioning of a WLA connection:

i. the VLAN configuration;

ii. a detailed geographic map of the duct path used by the access fibre cable of the primary and the secondary WLA Connections (from the End User Premise or POP to SE's Service Node); and

iii. all the relevant service acceptance tests for both the primary and secondary end-to-end WLA Connections at RFS (after provisioning). The tests shall also include a simulation of the failure of the primary Connection.

(g) If an Access Seeker has more than one WLA Aggregation Link and requires a WLA Connection with protection, the Access Seeker should indicate for such WLA Connection:

(i) the WLA Aggregation Link that will be the primary Aggregation Link;

(ii) the WLA Aggregation Link that will be the secondary Aggregation Link (in stand-by mode); and

(iii) the capacity that should be reserved on the secondary WLA Aggregation Link. This capacity will be guaranteed in case of failure of the primary WLA Connection.

### 3.3 Pre-Sales Process and access to Centralised Database

(a) SE shall provide to the Access Seeker a temporary free of charge pre-sales service more particularly specified at Annex 3 for the purpose of identifying fibre availability and access until such time as access to an online database is available.

(b) The online database currently under development by SE will contain information on SE's access fibre network including planned deployments and a deployment roadmap which will document the data fields that will become available to OLOs for consultation.

(c) The online database is intended to cover all access networks, including copper and fibre in the following form:

- information on the copper access network shall be provided on a best effort basis; and
- Information on the fibre access network shall be accurate and up-to-date (physical address, access type (GPON/point-to-point), total number of fibres (used and available fibres), planned coverage date (if no fibre access), and presence of redundant fibre protection cable (used and available fibres))

(d) The target date for initial access to the online database is on or before 31 December 2016 however it is noted that information contained within the database at this time may not be complete and/or accurate. The provisional availability date as required by the Regulator has been specified as before the end of June 2017.

4. CHARGES

The Access Seeker shall pay to SE the relevant Charges determined in accordance with Schedule 3 of this Reference Offer.

5. SERVICE LEVEL AGREEMENT

SE shall provide the WLA Services in accordance with the Service Level framework at Annex 4 to this Service Description.
### ANNEX 1 - CIRCUIT SPEEDS, DEFINED INTERFACES, MEDIA AND TOPOLOGY

<table>
<thead>
<tr>
<th>Service element</th>
<th>Speed</th>
<th>Interface</th>
<th>Connector</th>
<th>Topology</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection terminating at End-User Premises / Point of Presence</td>
<td>64 kbit/s to 2 Mbit/s</td>
<td>Ethernet 10/100 BASE-TX</td>
<td>RJ45</td>
<td>Ethernet service point-to-point</td>
<td>Copper</td>
</tr>
<tr>
<td>Connection terminating at End-User Premises / Point of Presence</td>
<td>4 Mbit/s to 1 Gbit/s</td>
<td>gigabit Ethernet 1000BASE-LX gigabit Ethernet 1000BASE-SX</td>
<td>SC/LC</td>
<td>Ethernet service point-to-point</td>
<td>Fibre</td>
</tr>
<tr>
<td>Aggregation Link terminating at the Point of Presence of the Access Seeker</td>
<td>1 Gbit/s</td>
<td>gigabit Ethernet 1000BASE-LX gigabit Ethernet 1000BASE-SX</td>
<td>SC/LC</td>
<td>Ethernet service point-to-point</td>
<td>Fibre</td>
</tr>
</tbody>
</table>
ANNEX 2 - WLA ORDER FORM

Please see attached excel file "WLA Order Form".

Wholesale Access
Order Form.xls
ANNEX 3 – PRE-SALES PROCESS

The interim free of charge pre-sales process for the WLA Service shall be performed as follows:

1. The Access Seeker is required to send SE a fibre feasibility request by way of letter, email or fax, containing at a minimum, the following information:
   
   a) the full physical address of the required location/s; and
   
   b) the contact details of the concerned party/ies at the location/s.

2. Upon receipt of the information stated above, SE shall carry out a field inspection and advise the Access Seeker within 2 Working Days of the following:

   (a) whether the location/s is already connected by way of a fibre cable and any relevant information relating to access redundancy (e.g. business ring);

   (l) whether a spare active (or redundant, if required) fibre is or may soon become available at the location/s for the provisioning of a new WLA service; and

       (b) if no fibre is available, the estimated time required to deploy a new fibre access.

3. The pre-sale process shall be validated with a joint-survey (at SE’s cost) at the request of the OLO if SE advises the OLO that there is no fibre available. The ability for an OLO to request a joint-survey SE shall continue to apply even after the planned full launch of the online database on or before end June 2017.
ANNEX 4 – SLA

The Service Levels for the WLA 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 below or in clause 2 above or in Schedule 8 (dictionary).

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Service Request Acknowledgement*</th>
<th>Service Request Confirmation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The OLO receives a notice from SE acknowledging receipt of the OLO’s Service Request.</td>
<td>The OLO receives a notice from SE informing that SE either accepts a Service Request or rejects it because insufficient or incorrect information is provided by the OLO in the Service Request Form.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Actual measure of performance</th>
<th>Actual Time for Service Request Acknowledgement</th>
<th>Actual Time for Service Request Confirmation</th>
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<tbody>
<tr>
<td>means the time period between the following events:</td>
<td></td>
<td>means the time period between the following events:</td>
</tr>
<tr>
<td>a. the OLO sends a Service Request to SE, and</td>
<td>a. the OLO receives a notice from SE acknowledging that the Service Request has been received; and</td>
<td></td>
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<tr>
<td>b. the OLO receives a notice from SE acknowledging that the Service Request has been received.</td>
<td>b. one of the following events, whichever happens the soonest:</td>
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<tr>
<td></td>
<td>i. the OLO receives a notice from SE indicating that the information provided by the OLO in the Service Request Form is incorrect and/or insufficient to progress the Service Request to the service delivery process; or</td>
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<tr>
<td></td>
<td>ii. Accepted Service Request (explicit acceptance from SE) which happens when the OLO receives a notice from SE confirming that the information provided by the OLO in the Service Request Form is correct and sufficient to progress the Service Request to the service delivery process.</td>
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<table>
<thead>
<tr>
<th>Service Level Terms</th>
<th>Maximum Time for Service Request Acknowledgement</th>
<th>Maximum Time for Service Request Confirmation</th>
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<tbody>
<tr>
<td>means the maximum Actual Time for Service Request Acknowledgement that SE should meet at all times.</td>
<td>means the maximum Actual Time for Service Request Confirmation after which SE is subject to Penalties for Service Request Confirmation</td>
<td></td>
</tr>
<tr>
<td>Service Request Acknowledgement*</td>
<td>Service Request Confirmation</td>
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<tr>
<td><strong>Penalties for Service Request Acknowledgement</strong></td>
<td><strong>Penalties for Service Request Confirmation</strong></td>
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<tr>
<td>There are currently no penalties for failure to meet the <em>Maximum Time for Service Request Acknowledgement</em>. When the OLO does not get an acknowledgment notice from SE within the <em>Maximum Time for Service Request Acknowledgement</em>, the OLO should follow up/escalate its request directly with its SE wholesale account manager.</td>
<td>means the penalties due by SE for not meeting the <em>Maximum Time for Service Request Confirmation</em>.</td>
<td></td>
</tr>
</tbody>
</table>

* Absent receipt of an acknowledgement notice from SE within the *Maximum Time for Service Request Acknowledgement*, the OLO should follow up its Service Request directly with its SE wholesale account manager. The escalation matrix to be followed in this instance is set out below:

<table>
<thead>
<tr>
<th>Escalation Level</th>
<th>Contact</th>
</tr>
</thead>
</table>
| 1                | Duty Controller  
Service Management Centre |
| 2                | Account Manager  
SE Wholesale |
| 3                | Manager Wholesale National P&S  
SE Wholesale |
| 4                | Head Of Wholesale and Carrier Services  
SE Wholesale |
Please find below an illustrative diagram which sets out the Service Request process:

The Service Levels for the WLA Service delivery 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 below or in clause 2 above or in Schedule 8 (dictionary).

<table>
<thead>
<tr>
<th>Service Level</th>
<th>Notification of Expected RFT and RFS Dates</th>
<th>Service Level for RFS Date</th>
</tr>
</thead>
</table>
| Deliverable   | OLO receives a notice from SE of the dates that SE expects the connection to be Ready For Test ("RFT") and then Ready For Service ("RFS"). In such notice, SE also indicates the Maximum RFS Date, the Maximum Delivery Time and the Maximum Delivery Date. The Maximum RFS Date must be set no later than the Maximum Delivery Date. | OLO receives a RFS Certificate from SE confirming that: | a. the connection has been provisioned and tested by SE;  
b. the connection is properly registered in all of SE’s systems (e.g. OSS/BSS, service level monitoring platform, fault reporting system etc.);  
c. the connection is ready for service and the OLO will be invoiced accordingly. |
<p>| Actual measure of performance | Actual Time for Notification of Expected RFT and RFS Dates means the time period between the following events: a. Accepted Service Request, and | Actual Delivery Time means the time period between the following events: a. Accepted Service Request, and |</p>
<table>
<thead>
<tr>
<th>Service Level</th>
<th>Notification of Expected RFT and RFS Dates</th>
<th>Service Level for RFS Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. the OLO receives a notice from SE indicating the Expected RFT Date, the Expected RFS Date, the Maximum Delivery Time; and the Maximum Delivery Date.</td>
<td>a. <strong>Actual RFS Date</strong> which happens when the OLO receives the RFS Certificate from SE. SE may only issue the RFS Certificate to the OLO after one of the following events, whichever happens the soonest:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. the OLO sends a notice to SE confirming that the connection has been correctly provisioned and can be considered RFS; or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. the end of the <strong>Maximum Validation Time</strong> i.e. the OLO has not explicitly raised any issue and the <strong>Maximum Validation Time</strong> lapsed.</td>
</tr>
</tbody>
</table>

**Maximum Validation Time**

means the maximum Actual Validation Time after which, absent formal notice from the OLO, SE may issue the RFS Certificate

**Actual Validation Time**

means the time period(s) between the following events:

- a. **Actual RFT Date** which happens when the OLO receives a notice from SE confirming that the connection has been provisioned the same day and is ready for test; and
- b. one of the following two events, whichever happens the soonest:
  - i. the OLO sends a notice to SE confirming that the connection is performing in accordance with the Acceptance Criteria;
  - ii. the end of the **Maximum Validation Time**.

The **Actual Validation Time** is suspended between the following events, if such events occur:

- a. the OLO sends a notice to SE indicating that the connection is not performing in accordance with the Acceptance Criteria; and
<table>
<thead>
<tr>
<th>Service Level</th>
<th>Notification of Expected RFT and RFS Dates</th>
<th>Service Level for RFS Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Maximum Time for Notification of Expected RFT and RFS Dates</strong> means the maximum Actual Time for Notification of Expected RFT and RFS Dates after which SE is subject to Penalties for Notification of Expected RFT and RFS Dates.</td>
<td><strong>Maximum RFS Date</strong> means the last day on which the OLO should receive the RFS Certificate for SE not to be subject to Penalties for RFS Date. <strong>Actual RFS Date = Maximum RFS Date</strong>. The Maximum RFS Date corresponds to the Expected RFS Date, if the latter has never been modified after the notice of Expected RFT and RFS Dates. If the Actual RFS Date happens after the Expected RFS Date, SE shall be subject to Penalties for RFS Date.</td>
</tr>
<tr>
<td>Service Level Terms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Level Penalties</td>
<td><strong>Penalties for Notification of Expected RFT and RFS Dates</strong> means the penalties due by SE for not meeting the Maximum Time for Notification of Expected RFT and RFS Dates as specified in the relevant RO service description.</td>
<td><strong>Penalties for RFS Date</strong> means the penalties due by SE for not meeting the Maximum RFS Date as specified in the relevant RO service description.</td>
</tr>
</tbody>
</table>

Please find below illustrative diagrams of the various Service Delivery process scenarios:

**Scenario B1 (service delivery process)**

1. **The RFT Date is met by Basico (i.e., Actual RFT Date = Expected RFT Date).**
2. Before the end of the Maximum Valuation Time, the OLO sends Basico a notice confirming that the connection has been properly provisioned (i.e., in accordance with the Acceptance Criteria). **No time penalties.**
3. The OLO receives the RFS Certificate from Basico. The Service Request is completed before the Maximum RFS Date.

---

[Diagram of the Service Delivery process]

WHOLESALE LOCAL ACCESS (WLA) SERVICE - 20161017
Scenario B2 (service delivery process)

1. The RFT Date is met by Batelco (i.e. Actual RFT Date = Expected RFT Date).
2. The OLO does not send Batelco any notice during the Maximum Validation Time.
3. The OLO receives the RFS Certificate from Batelco on the Expected RFS Date. The Service Request is completed on the Maximum RFS Date.

\[ \text{Maximum Delivery Time} \quad \text{Maximum Delivery Date} \]
\[ \text{Maximum Time for Notification of Expected RFT and RFS Dates} \]
\[ \text{Expected RFT Date} \quad \text{Expected RFS Date} \]
\[ \text{Maximum RFS Date} \]
\[ \text{Actual Time for Notification of Expected RFT and RFS Dates} \]
\[ \text{Provisioning Time} \quad \text{Actual Validation Time} \]
\[ \text{Actual Delivery Time} \]

- Accepted Service Request
  - The OLO receives a notice from Batelco indicating:
    - the Expected RFT Date.
    - the Expected RFS Date.
    - the Maximum RFS Date.
    - the Minimum Delivery Time, and
    - the Maximum Delivery Date.

- Actual RFT Date
  - The OLO receives a notice from Batelco confirming that the connection has been provisioned and is RFT.

- Actual RFS Date
  - the OLO receives a RFS Certificate from Batelco. The Service Request is completed.

Scenario B3 (service delivery process)

1. The Expected RFT Date (initial) is not met by Batelco. A new revised Expected RFT Date is set at a later stage. The Expected RFS Date is shifted accordingly. However, the Maximum RFS Date remains the same.
2. The OLO does not send Batelco any notice during the Maximum Validation Time.
3. The OLO receives the RFS Certificate from Batelco at the end of Maximum Validation Time. The Service Request is completed after the Maximum RFS Date.

\[ \text{Maximum Delivery Time} \quad \text{Maximum Delivery Date} \]
\[ \text{Maximum Time for Notification of Expected RFT and RFS Dates} \]
\[ \text{Expected RFT Date (actual)} \quad \text{Expected RFT Date (revised)} \]
\[ \text{Expected RFS Date} \quad \text{Maximum RFS Date} \quad \text{Expected RFS Date (revised)} \]
\[ \text{Actual Time for Notification of Expected RFT and RFS Dates} \]
\[ \text{Provisioning Time} \quad \text{Actual Validation Time} \]
\[ \text{Actual Delivery Time} \]

- Accepted Service Request
  - The OLO receives a notice from Batelco indicating:
    - the Expected RFT Date.
    - the Expected RFS Date.
    - the Minimum RFS Date.
    - the Minimum Delivery Time, and
    - the Maximum Delivery Date.

- Actual RFT Date
  - The OLO receives a notice from Batelco confirming that the connection has been provisioned and is RFT.

- Actual RFS Date
  - the OLO receives a RFS Certificate from Batelco. The Service Request is completed.

WHOLESALE LOCAL ACCESS (WLA) SERVICE - 20161017
Scenario B4 (service delivery process)

1. The RFT Date is met by Batelco (i.e., Actual RFT Date = Expected RFT Date).
2. The OLO sends Batelco a notice indicating that the connection is not performing in accordance with the Acceptance Criteria. The clock for Maximum Validation Time stops.
3. The OLO receives a notice from Batelco indicating that the connection has been re-provisioned. The clock for Maximum Validation Time starts again.
4. The OLO does not send Batelco any notice during the rest of the Maximum Validation Time.
5. The OLO receives the RFS certificate from Batelco at the end of Maximum Validation Time. The Service Request is completed after the Expected RFS Date.

The Service Levels for the WLA Service fault management process 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 below or in clause 2 above or in Schedule 8 (dictionary).

<table>
<thead>
<tr>
<th>Service Level</th>
<th>Fault Acknowledgment Time</th>
<th>Response Time</th>
<th>Restoration Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliverable</td>
<td>The OLO receives a trouble ticket after having reported a fault to SE.</td>
<td>The OLO receives a notice confirming that SE has started troubleshooting the fault (either remotely or on site).</td>
<td>The OLO receives a notice from SE indicating the connection has been restored and the trouble ticket closed.</td>
</tr>
</tbody>
</table>

WOULSALE LOCAL ACCESS (WLA) SERVICE - 20181017
<table>
<thead>
<tr>
<th>Service Level</th>
<th>Fault Acknowledgment Time</th>
<th>Response Time</th>
<th>Restoration Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual measure of performance</td>
<td>Actual Fault Acknowledgment Time means the time period between the following events: c. the OLO reports a fault to SE, and d. the OLO receives a trouble ticket from SE for the reported fault.</td>
<td>Actual Response Time means the time period between the following events: e. the OLO reports a fault to SE, and f. the OLO receives a notice from SE confirming that the troubleshooting of the fault has started (either remotely or on site). Once a SE technician has started troubleshooting the fault, SE is required to regularly update the OLO of the progress made to restore the connection, and to provide an indication of the anticipated restoration time.</td>
<td>Actual Restoration Time means the time period between the following events: g. the OLO reports a fault to SE, and h. the OLO receives a notice from SE indicating the connection has been restored and the trouble ticket closed. SE is allowed to close a trouble ticket only if one of the following conditions is met: i. SE provides a proof (i.e. test results) that the connection is performing in accordance with the QoS Parameters; or j. SE has received a confirmation from the OLO that the service is performing in accordance with the QoS Parameters.</td>
</tr>
<tr>
<td>Service Level Terms</td>
<td>Maximum Fault Acknowledgment Time means the maximum Actual fault Acknowledgment Time that SE should meet at all times.</td>
<td>Maximum Response Time means the maximum Actual Response Time that SE should meet at all times.</td>
<td>Maximum Restoration Time means the maximum Actual Restoration Time after which SE is subject to Penalties for Restoration Time.</td>
</tr>
<tr>
<td>Service Level Penalties</td>
<td>Penalties for Fault Acknowledgment Time There are currently no penalties for failure to meet the Maximum Fault Acknowledgment Time.</td>
<td>Penalties for Response Time There are currently no penalties for failure to meet the Maximum Response Time.</td>
<td>Penalties for Restoration Time means the penalties due by SE for not meeting the Maximum Restoration Time as specified in the relevant RO service description.</td>
</tr>
</tbody>
</table>
The Service Level framework for the WLA Service is set out in the summary table below:

<table>
<thead>
<tr>
<th>Service Levels</th>
<th>Service Level Terms</th>
<th>Service Level Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service request process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Request Acknowledgment</td>
<td>Maximum Time for Service Request Acknowledgment: During working hours: 15 minutes following receipt of the Service Request Outside working hours: 15 minutes after the start of the first working hour following receipt of the Service Request</td>
<td></td>
</tr>
<tr>
<td>Service Request Confirmation</td>
<td>Maximum Time for Service Request Confirmation: 2 WD</td>
<td></td>
</tr>
<tr>
<td><strong>Service delivery process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notification of Expected RFT and RFS Dates</td>
<td>Maximum Time for Notification of Expected RFT and RFS Dates Transfer Request, Upgrade/Downgrade Request, Reconfiguration Request, and Cancellation Request: 2 WD 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. New Connection Request and Migration Request: 6 WD</td>
<td>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.</td>
</tr>
<tr>
<td>RFS Date</td>
<td>Maximum Delivery Time: Transfer Request, Upgrade/Downgrade Request, and Reconfiguration Request: 10 WD New Connection Request, Migration Request: - when a fibre is available for a new Connection: 10 WD - when a fibre is not available for a new Connection but there is sufficient duct space to pull an additional fibre access cable: 30 WD - when new ducts must first be installed before deploying a new fibre access cable: 60 WD Cancellation Requests do not have a Maximum Delivery Time: the Maximum RFS Date (i.e. expected cancellation date) must be defined to take into account the one-month notice period required for cancellation. In cases of Transfer Requests and Migration Requests, SE shall coordinate the deactivation and activation of the Connection on the same day to ensure minimum service disruption.</td>
<td>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. Maximum Penalty Cap: 500SCs (5 MRCs)</td>
</tr>
</tbody>
</table>

*planned or emergency Outages are excluded from the WLA Service Availability uptime*
<table>
<thead>
<tr>
<th>Service Levels</th>
<th>Service Level Terms</th>
<th>Service Level Penalties</th>
</tr>
</thead>
</table>
| Acceptance Criteria               | For Ethernet traffic: the provisioning test shall be based on the ITU Y.1564 standard
For other traffic types: to be defined by SE                                      |                                                                                        |
| Service Quality Management        |                                                                                      |                                                                                        |
| QoS Parameters                    | For WLA Connections (fibre-based):                                                   |                                                                                        |
|                                  | - Round Trip Delay (Frame Transfer Delay): 2 ms                                      |                                                                                        |
|                                  | - Jitter (Frame Delay Variations): 0 ms                                               |                                                                                        |
|                                  | - Frame Loss Ratio: 0%                                                               |                                                                                        |
| Fault Management Process          |                                                                                      |                                                                                        |
| Fault Acknowledgment Time         | Maximum Fault Acknowledgment Time: 15 min                                            |                                                                                        |
| Response Time                     | Maximum Response Time                                                                |                                                                                        |
|                                  | For Standard Support: 2 working hours during working hours and 4 hours outside working hours |
|                                  | For Premium Support: 1 hour                                                          |                                                                                        |
| Restoration Time                  | Maximum Restoration Time                                                              |                                                                                        |
|                                  | For Standard Support: 8 hours                                                       |                                                                                        |
|                                  | For Premium Support: 2 hours                                                         |                                                                                        |
|                                  | Penalties for Restoration Time                                                       |                                                                                        |
|                                  | For Standard Support: 10 SC for failure to meet the Maximum Restoration Time and 5 SC for each hour exceeding the Maximum Restoration Time |
|                                  | For Premium Support: 20 SC for failure to meet the Maximum Restoration Time and 10 SC for each hour exceeding the Maximum Restoration Time |
|                                  | Maximum Monthly Penalty Cap                                                          |                                                                                        |
|                                  | For Standard Support: 300 SC per Connection and per month                            |
|                                  | For Premium Support: 800 per Connection and per month                               |                                                                                        |

Additional information:

1. Service Level Terms and Service Credits shall not apply if:
   (a) The Access Seeker does not submit a forecast in accordance with clause 3.1; or
   (b) The actual numbers of circuits ordered are
       (i) less than 70% of the forecasted circuits; or
       (ii) greater than or equal to 30% over the number of circuits forecasted by the Access Seeker, provided the total number of forecasted circuits in a calendar month is greater than four (4).

In the case of (a) or (b) (i) above, the Service Credit shall be disappplied completely and in the case of (b) (ii) above it shall be disappplied in respect of the circuits ordered in excess of the forecast.
ANNEX 5 – Technical Characteristics

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Service Attribute</th>
</tr>
</thead>
</table>
| **Interface** | Copper Access: Ethernet 10/100 BASE-TX  
Fibre Access: gigabit Ethernet 1000BASE-LX or  
1000BASE-SX |
| **Connector** | Copper Access: RJ45  
Fibre Access: SC/LC |
| **Speed** | Please refer to ANNEX 1 |
| **Mode** | Duplex |
| **MAC Layer Supported** | Yes |
| **MAC Address Learning** | Yes |
| **Frame Size** | 512 (Jumbo not supported)* |
| **Class of Service** | 100% Best Effort. No Over Utilisation |
| **Maximum Number of CE-VLANs** | 4096 |
| **CE-VLAN - PE-VLAN ID Map** | Two VLAN per Connection |
| **CE-VLAN ID Preservation** | Yes |
| **CE-VLAN COS Preservation** | Yes |
| **Unicasts Traffic Limit** | None |
| **Multicast Traffic Limit** | None |
| **Broadcast Traffic Limit** | None |

**Protocol Treatment**

- Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSP)
- Pause 802.3x
- Link Aggregation Protocol (LAPCD)
- Marker Protocol
- Authentication (802.1x)
- All IAN Bridge Management Group Block of Protocols
- Generic Attribute Registration Protocol (GARP) Block of Protocol
- Cisco Delivery Protocol (CDP)
- Cisco VLAN Trunking Protocol (VTP)
- OAM CM/Y1731 PDUs

WHOLESALE LOCAL ACCESS (WLA) SERVICE - 20181017
* Frame sizes 64 bytes and 128 bytes are supported by the WLA service but may experience reduced performance.

Information relating to existing CPEs used for provision of the WLA Connection:

Vendor: Huawei
Model: AR1220E

Technical Specifications:

- WAN speed with services (IMIX): 400Mbps
- Fixed port: 8xGE (can be configured as WAN interfaces), 2xGE Combo
- Slot: 2xSIC
  Dimensions (H x W x D): 44.5mm x 390 mm x 220 mm
Optional Levels of Protection available for the WLA Service:

SE provides below a summary of the various levels of protection available for the WLA Service:

<table>
<thead>
<tr>
<th>Simple Connection/Aggregation Link (i.e. no protection)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No protection</td>
<td>X</td>
</tr>
<tr>
<td>Very high level of protection</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Logical protection</th>
<th>CPE</th>
<th>Service Node</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No CPE redundancy at the End User Premises/Point of Presence</td>
<td>Service card redundancy on CPE at the End User Premises/Point of Presence</td>
<td>Full redundant CPE at the End User Premises/Point of Presence</td>
<td>No redundancy at Service Node</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical protection</th>
<th>No redundancy</th>
<th>Service card redundancy in the same duct path</th>
<th>Dual path redundancy to the same Service Node (with or without redundant duct lead-in)</th>
<th>Dual path redundancy to a different Service Node (with or without redundant duct lead-in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

SE may also consider a request from an Access Seeker for a full end-to-end physical path redundancy that requires delivery of a secondary Connection/Aggregation Link in a different lead-in duct to the building, where this is reasonable and practicable to supply. In such cases, the applicable NRC shall be determined in accordance with the provisions of clause 3.2 (I) above.
Aggregation Link (technical specifications): fibre link(s) with optical interface / gig Ethernet / modular / LC connector at the CPE. The Access Seeker will need to provide VLAN tag to SE service team in order to ensure the correct mapping between SE CPE and the Access Seeker's equipment.

Upon request from an OLO, SE shall provide quotations for higher-grade CPEs that may be used for the WLA Aggregation Link.
<table>
<thead>
<tr>
<th><strong>Provisioning Validation Test</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Testing Methodology</strong></td>
</tr>
<tr>
<td><strong>Testing Mode</strong>[1]</td>
</tr>
<tr>
<td><strong>Parameters tested</strong></td>
</tr>
<tr>
<td><strong>Tester Speed Setting</strong></td>
</tr>
<tr>
<td><strong>Tester Frame Size</strong></td>
</tr>
<tr>
<td><strong>Acceptance criteria</strong></td>
</tr>
<tr>
<td><strong>Test Results</strong></td>
</tr>
</tbody>
</table>

* The default frame size for the service configuration test is 512 octets

[1] Layer 1-2 contains MAC layer and data

WHOLESALE LOCAL ACCESS (WLA) SERVICE - 20181017
Annex 8 – WLA Service Diagrams

WLA/CAT

WLA

WLA (Connection – Aggregation Link)