

## **APPENDIX 3**

### **REQUIRED MODIFICATIONS TO SCHEDULE 2 NON-RESIDENTIAL END-USER CONNECTION**

**SCHEDULE 2**

**NON-RESIDENTIAL END-USER CONNECTION**

**Note: Unless otherwise specified in IDA’s Directed Modifications in the Explanatory Memorandum and other IDA Directed Modifications in other parts of the Direction (including Schedule 2 – Non-Residential End-User Connection), NetLink Trust’s proposed modifications to Schedule 2 – Non-Residential End-User Connection are approved.**

**IDA Directed Modifications: IDA refers NetLink Trust to Section 1 of the Explanatory Memorandum. Accordingly, IDA directs NetLink Trust to propose, for IDA’s approval, modifications to Schedule 2 – Non-Residential End-User Connection to (a) limit the Timeframe for which NetLink Trust can claim exemption from the applicable SLGs for BM Delays to 10 Business Days, whereby the additional time taken beyond the Timeframe would be considered as a delay for which NetLink Trust would be liable for SLGs under its ICO (subject to any delays caused by third parties outside of the NetLink Trust’s reasonable control despite its best endeavours to resolve such delays); (b) clarify that for those circumstances that NetLink Trust is unable to resolve the delays caused by third parties beyond its reasonable control despite its best endeavours to resolve such delays, the onus shall be on NetLink Trust to, in claiming exemption from SLGs, provide clear explanations to its RLs on the circumstances surrounding the delays, the efforts it made to resolve the said delays, and the expected timeframe for resolution of the said delays; and (c) clarify that where an RL disagrees with NetLink Trust’s claim for exemption from the applicable SLGs, the parties continue to have the option to avail themselves of the existing dispute resolution process provided for in the ICO to resolve the matter. Further, IDA directs NetLink Trust to propose, for IDA’s approval, necessary consequential modifications to Schedule 2 – Non-Residential End-User Connection arising from NetLink Trust’s Further Proposed Modifications to effect the above.**

## SCHEDULE 2

### NON-RESIDENTIAL END-USER CONNECTION

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## **SCHEDULE 2**

### **NON-RESIDENTIAL END-USER CONNECTION**

#### **1. SCOPE**

This Schedule 2 sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with a licence for:

- (i) Layer 1 Service (a service provided by OpenNet for the use of passive optical fibre cable) from OpenNet's designated Central Office (or "CO") to (a) the First Termination Point of a Non-Residential Premise (subject to clauses 6.3 and 6.4) or (b) to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or (c) to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends, for the purpose of the Requesting Licensee providing GPON services; or
- (ii) Layer 1 Service from OpenNet's designated CO to (a) the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or (b) to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or (c) to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends, for the purpose of the Requesting Licensee providing OE services.

#### **(Non-Residential End-User Connection).**

- 1.1 The Non-Residential End-User Connection is a service provided by OpenNet to the Requesting Licensee for the purpose of delivering GPON or OE services over the Layer 1 Services highlighted above at a Non-Residential Premise. For the avoidance of doubt, OpenNet is only obliged to provide Non-Residential End-User Connections through the 1<sup>st</sup> fibre strand in the First Termination Point. OpenNet may, on a case-by-case basis, provide a Non-Residential End-User Connection via a 2<sup>nd</sup> fibre strand in the First Termination Point, and such Non-Residential End-User Connection via the 2<sup>nd</sup> fibre strand shall be provided upon the same terms and conditions as the 1<sup>st</sup> fibre strand.
- 1.2 This Schedule only applies to Requesting Licensees who are FBOs.

#### **2. SERVICE LEVEL GUARANTEES**

- 2.1 OpenNet will provide the Service Level Guarantees in respect of the Non-Residential End-User Connection as set out in this Schedule. If OpenNet fails to meet any service activation

period, Mean Time To Recovery or service level availability (collectively called the **Service Level Guarantees**) applicable to this Schedule and the failure to meet the Service Level Guarantees is solely caused by OpenNet, its contractors and/or suppliers, OpenNet will provide a remedy in the form of a rebate to the Requesting Licensee in accordance with:

- (i) Clause 6.12 and any terms and conditions contained in this Schedule in respect of request and provisioning timeframes;
- (ii) Clause 11.14 and any terms and conditions contained in this Schedule in respect of fault rectification timeframes; and
- (iii) Clause 12.1 and any terms and conditions contained in this Schedule in respect of service level availability.

2.2 A claim by the Requesting Licensee shall be made in writing within thirty (30) Calendar Days of the completion of the relevant calendar month on which the Service Level Guarantees are measured. The amount in respect of any claim shall be paid to the Requesting Licensee in the form of a rebate. The Requesting Licensee acknowledges that a failure to make a claim within the specified timeframes under this paragraph means that the Requesting Licensee waives any entitlement to the Service Level Guarantee payment in respect of that claim. OpenNet will respond within (30) Calendar Days from date of claim stating whether the claim by Requesting Licensee is: (a) valid for rebates; or (b) is an invalid claim. Where OpenNet assessed that the Requesting Licensee's claim is invalid, OpenNet will explain its basis or require the Requesting Licensee to provide additional information. For valid claims submitted within the timeframe, OpenNet shall provide the rebate in its next Invoice.

2.3 If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, then the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by OpenNet and will be reflected in OpenNet's bill to the Requesting Licensee in accordance with OpenNet's billing cycle.

2.4 The guarantee and rebates provided by OpenNet are:

- (i) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
- (ii) subject to this Schedule.

2.5 Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim, OpenNet shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies for a claim or as to the quantum of the

claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17 of the ICO Agreement, or in the case of a Billing Dispute, in accordance with Schedule 16 of the ICO Agreement.

## **CLAUSE 2.6 – MODIFICATION REQUIRED**

2.6 In addition to the specific terms and conditions of the Service Level Guarantees, the Service Level Guarantees shall not apply in any of the following circumstances:

- (a) the Non-Residential End-User Connection is disconnected and/or reconnected by reason of it being suspended under the terms and conditions of this Schedule or ICO Agreement, except where the suspension is due to OpenNet's fault;
- (b) fault due to any equipment, wiring and/or cabling owned or operated by the Requesting Licensee, building owners or End-Users or on behalf of the Requesting Licensee, building owners or End-Users;
- (c) provision or restoration of the Non-Residential End-User Connection where any site-coordination meeting, Joint Investigation Meeting or fault identification coordination meeting is involved, except where (a) the fault was caused by OpenNet; and (b) the Requesting Licensee has not contributed to any delay in setting up the meeting. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken from the start of arranging any site-coordination meeting, Joint Investigation Meeting or fault identification coordination meeting up to the end of the meeting, shall always be excluded;
- (d) OpenNet is unable to obtain or maintain any licence or permission necessary to the provision or restoration of the Non-Residential End-User Connection despite using its best endeavours to obtain expeditiously or maintain such licence or permission. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken by OpenNet to obtain or maintain any licence or permission necessary to the provision or restoration of the Non-Residential End-User Connection shall always be excluded. Provided that in the event the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to obtain or maintain the licence/permission, OpenNet will provide evidence that it has used such best endeavours;
- (e) OpenNet has difficulty accessing to or working in the building or Non-Residential End-User's Premise due to the building or premise being inaccessible, in unsafe working condition or in any other inadequate or deficient state despite using its best endeavours to expeditiously remedy the building access difficulties, provided always

that in the event that the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to expeditiously remedy the building access difficulties, OpenNet will provide evidence that it has used such best endeavours;

- (f) delay in the provision or restoration of the Non-Residential End-User Connection caused by events beyond the reasonable control of OpenNet and its suppliers and contractors;
- (g) OpenNet network outages for which the Requesting Licensee has not reported a fault;
- (h) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by OpenNet;

### **CLAUSES 2.6(i) AND 2.6(j) – MODIFICATION REQUIRED**

- (i) OpenNet is required to carry out service interruption and the Requesting Licensee has been informed in accordance with clause 9.5 or 9.6 or 9.7;
- (j) OpenNet is required to carry out fibre diversion at the request of the Government Agencies, private developers or other relevant parties and the Requesting Licensee has been informed in accordance with clause 9.5 or 9.6 or 9.7;

***IDA Directed Modifications: An industry respondent commented that the reference to clause 9.7 in clauses 2.6(i) and 2.6(j) should be removed as clause 9.7 merely sets out the details of the notification to RLs and does not deal with service interruption. IDA agrees with the comment provided and accordingly directs NetLink Trust to propose, for IDA's approval, modifications to clauses 2.6(i) and 2.6(j) to remove NetLink Trust's proposed reference made to clause 9.7.***

- (k) Where there is a request received from End-User or Requesting Licensee for repair and replacement (at the request of Requesting Licensee only, and not as part of OpenNet's fault resolution process) as well as relocation (within the same premise or to a new premise), but such exclusion shall only be limited to the time taken for the Termination Point to be repaired and replaced or to be relocated; or
- (l) Where the End-User or Requesting Licensee or MCST (of the development where the End-User is located) requires customised arrangements (eg. non-standard or customised installation) or conditions to be fulfilled (eg. the MCST requires the End-User to enter into customised arrangement or the MCST requires non-standard installation within the End-User's premises and requires End-User to bear the cost



accordingly or the MCST requires End-User to provide access or the requisite equipment like boomlift, scaffolding, cherry picker etc. for installations or the MCST requires End-User's endorsement as part of the approval process to grant access to OpenNet) before access is granted to OpenNet or before OpenNet can provision its services, but such exclusion shall only be limited to the time taken for access to be granted to OpenNet or condition is suitable for OpenNet to provision its services.

Where the applicable event described above is not resolved within two (2) months from the date of submission of the Request for Non-Residential End-User Connection, OpenNet shall consult the Requesting Licensee before OpenNet rejects the Request for Non-Residential End-User Connection.

***IDA Directed Modifications: IDA refers NetLink Trust to Section 1 of the Explanatory Memorandum. IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 2.6 to (a) limit the Timeframe for which NetLink Trust can claim exemption from the applicable SLGs for BM Delays to 10 Business Days, whereby the additional time taken beyond the Timeframe would be considered as a delay for which NetLink Trust would be liable for SLGs under its ICO (subject to any delays caused by third parties outside of NetLink Trust's reasonable control despite its best endeavours to resolve such delays); (b) clarify that for those circumstances that NetLink Trust is unable to resolve the delays caused by third parties beyond its reasonable control despite its best endeavours to resolve such delays, the onus shall be on NetLink Trust to, in claiming exemption from SLGs, provide clear explanations to its RLs on the circumstances surrounding the delays, the efforts it made to resolve the said delays, and the expected timeframe for resolution of the said delays; and (c) clarify that where an RL disagrees with NetLink Trust's claim for exemption from the applicable SLGs, the parties continue to have the option to avail themselves of the existing dispute resolution process provided for in the ICO to resolve the matter.***

***IDA further refers NetLink Trust to Section 2, paragraph 29 of the Explanatory Memorandum. Accordingly, IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 2.6 to clarify that (a) NetLink Trust shall exercise its best endeavours to resolve any delays before rejecting orders delayed for more than two (2) months; (b) NetLink Trust shall provide clear explanations to RLs on the circumstances surrounding the delays and NetLink Trust's efforts made to resolve the said delays when it consults the RLs before rejecting such orders; (c) NetLink Trust shall consider valid feedback received from an RL prior to any rejection, and where there is any objection from the RL and the RL is able to substantiate the objection with appropriate documentary***

**evidence, NetLink Trust must provide the RL with the additional time necessary to close the order; and (d) the parties continue to have the option to avail themselves of the existing dispute resolution process provided for in the ICO to resolve any dispute regarding NetLink Trust's decision to reject cases delayed beyond two (2) months.**

- 2.7 If the Requesting Licensee disputes OpenNet's reason for rejection, its records and/or the amount of rebate, the Requesting Licensee shall not be entitled to be credited with any rebate until and unless the dispute has been resolved.
- 2.8 A failure by OpenNet to meet any Service Level Guarantee does not constitute a breach of the ICO Agreement or this Schedule.
- 2.9 The Requesting Licensee acknowledges that the relevant remedy provided under clause 2.1 is a genuine pre-estimate of the Requesting Licensee's loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant Service Level Guarantees for the Non-Residential End-User Connection and shall be OpenNet's sole and exclusive liability to the Requesting Licensee for such failure.

### **3. SERVICE DESCRIPTION AND ACCESS POINTS**

- 3.1 (A) Where the Requesting Licensee requests for Non-Residential End-User Connection for the purpose of providing GPON services to the End-User, OpenNet will provide a licence for Non-Residential End-User Connection of 1:16 Split Ratio to the Requesting Licensee with the following:
- (a) one (1) fibre strand from OpenNet's Fibre Distribution Frame (**FDF**) at the Central Office designated by OpenNet to OpenNet's splitter at the Building MDF Room for each group of sixteen (16) Non-Residential Premises (or portion thereof);
  - (b) one (1) dedicated fibre strand from the splitter to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends;
  - (c) one (1) Patching Service at OpenNet's FDF at the Building MDF Room; and
  - (d) where necessary, one (1) Patching Service at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

Where the fibre terminated into the End-Users' premise can be provisioned from the existing splitter from the same rack in the MDF room, OpenNet shall utilise at least 90% of the connections in each splitter assigned to the Requesting Licensee in each of the FDF in the MDF room before an additional splitter is provisioned for the Requesting Licensee in that MDF Room.

3.1 (B) Where the Requesting Licensee requests for Non-Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet will provide a licence for Non-Residential End-User Connection of 1:16 Split Ratio to the Requesting Licensee with the following:

- (a) two (2) fibre strands from OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room for each group of thirty two (32) Non-Residential Premises (or portion thereof);
- (b) one (1) dedicated fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends; and
- (c) where necessary, up to three (3) Patching Services at OpenNet's FDF in the Building MDF Room; and
- (d) where necessary, two (2) Patching Services at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

3.2 For a Non-Residential End-User Connection of 1:1 Split Ratio to the End-User, OpenNet will not provide any splitter at the Building MDF Room. OpenNet will provide:

- (a) one (1) dedicated fibre strand from OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room;
- (b) one (1) dedicated fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends;
- (c) one (1) Patching Service at OpenNet's FDF in the Building MDF Room; and

- (d) one (1) Patching Service at OpenNet's FDF in the Central Office and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).
- 3.3 Where the Requesting Licensee elects to use the building owner's in-building cabling within the building and Patching Service, in addition to those already provided in clause 3.1 or 3.2 (as the case may be), is required to connect OpenNet's Network to the building owner's in-building cabling, the Requesting Licensee may acquire the additional Patching Service in accordance with Schedule 13 (Patching Service). For the avoidance of doubt, it shall be the Requesting Licensee's sole responsibility to obtain permission from the building owner/management to install the in-building cabling or to use the existing building owner's in-building cable for the purposes aforesaid.
- 3.4 (A) Where the Requesting Licensee requests for Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing GPON services to the End-User or Non-Residential End-User Connection of 1:1 Split Ratio, the Requesting Licensee shall access the Non-Residential End-User Connection:
- (a) at OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet; and
  - (b) at the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise at the FTTB Node of the Non-Residential Premise where OpenNet's Network ends.
- 3.4 (B) Where the Requesting Licensee requests for Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee shall access the Non-Residential End-User Connection at:
- (a) OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet;
  - (b) OpenNet's FDF at the Building MDF Room; and
  - (c) the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise at the FTTB Node of the Non-Residential Premise where OpenNet's Network ends.
- 3.5 Where the Requesting Licensee acquires a Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee

shall ensure the Non-Residential End-User Connection is connected to active Optical Ethernet equipment.

#### 4. ORDERING AND PROVISIONING PROCEDURE

4.1 (A) Some locations within a Non-Residential building is classified by OpenNet as an NBAP instead of a Non-Residential End-User Premise. If in doubt whether a requested location is eligible for a Non-Residential End-User Connection request, the Requesting Licensee can refer to the classification guidelines which are published on OpenNet Public Website. If there are further doubts, Requesting Licensee may submit its request to OpenNet via the OpenNet Public Website →NBAP enquiry tool with photographs of the location and Termination Point's proposed location. OpenNet shall respond to the Requesting Licensee on the classification of a particular location within two (2) Business Days of receipt of such query subject to a maximum of ten (10) queries daily from all Requesting Licensees. If Requesting Licensee disputes OpenNet's decision on classification of the premise, the Requesting Licensee may raise a dispute and the parties shall use their best endeavours to resolve the disputes within five (5) Business Days or adopt such other process or timeframe as mutually agreed by the parties.

4.1 (B)(i) The Requesting Licensee shall submit its request for Non-Residential End-User Connection (**Request**) to OpenNet on a Business Day in the form of Annex 2A stating, but not limited to the following information:

- (a) the End-User's name, telephone number and installation address of the Non-Residential Premise where the Termination Point is to be installed;
- (b) the Split Ratio required;
- (c) whether the Requesting Licensee requires OpenNet to install the in-building enclosure, ducting and cabling. OpenNet shall install cable tray(s) where required; and
- (d) the term of the licence required, either one (1) month or twelve (12) months; or

(B)(ii) As an alternative to submitting a Request under the form set out in Annex 2A under clause 4.1(B)(i), the Requesting Licensee may also submit its Request for Non-Residential End-User Connection (**Request**) to OpenNet via the OpenNet Platform stating, but not limited to the following information:

- (a) the End-User's name, telephone number and installation address of the Non-Residential Premise where the Termination Point is to be installed;

- (b) the Split Ratio required;
- (c) whether the Requesting Licensee requires OpenNet to install the in-building enclosure, ducting and cabling. OpenNet shall install cable tray(s) where required; and
- (d) the term of the licence required, either one (1) month or twelve (12) months.

For Request submitted via the Service Portal, the Requesting Licensee shall submit a feasibility check for the address of the Non-Residential Premise to verify the coverage status. The Requesting Licensee shall select an available date and appointment time for activation. Upon successful submission of the Request via the Service Portal, it will provide a Request acknowledgement.

Alternatively, for Request submitted via the OpenNet Platform APIs, the Requesting Licensee shall perform the feasibility check for verifying the coverage status by supplying the postal code of the Non-Residential Premise whichever is applicable. The Requesting Licensee shall also query the available time slots for that particular Request. The Requesting Licensee shall use the address details returned by OpenNet and the applicable timeslot related to the status of the feasibility check for submission of the Request. Upon successful submission of the Request via the OpenNet Platform APIs, it will provide a Request acknowledgement.

(C) Following clause 4.1(B)(ii), for Request submitted via the OpenNet Platform, the Requesting Licensee is able to modify the contact details of End-User and additional two (2) contact persons subject to the requirement that the date of modification is more than five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required before the requested service activation date. The OpenNet Platform will notify the Requesting Licensee if the contact details have been successfully modified. If the Requesting Licensee mistakenly entered the wrong installation address, the Requesting Licensee must amend the installation address by entering the correct installation address after completion of the site survey failing which, OpenNet may reject the Request. On the other hand, where the mistakenly entered installation address and the amended correct installation address are in different buildings, OpenNet may reject the Request.

4.2 Relocation of the Non-Residential End-User Connection is allowed. The Requesting Licensee may submit a request with the relevant ORI via manual means or the OpenNet Platform when available (which OpenNet shall inform the industry when the above feature

will be available on OpenNet Platform) to relocate the Termination Point within the same Non-Residential Premise, subject to the follow terms and conditions:

#### **CLAUSE 4.2(a) – MODIFICATION REQUIRED**

- (a) The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable if, despite its best endeavours to resolve any obstruction, there is any delay caused by the obstruction from the building owner, building management, home owner or End-User during the relocation or any of the circumstances described in clauses 2.6(e) and 2.6(f) above; or if there is any damage or repainting works required;

***IDA Directed Modifications: It is necessary for this clause 4.2(a) to be correspondingly modified and aligned to NetLink Trust’s Further Proposed Modifications to clause 2.6 of this Schedule 2 – Non-Residential End-User Connection, arising from IDA’s Directed Modification to clause 2.6 of this Schedule 2. Accordingly, IDA directs NetLink Trust to propose, for IDA’s approval, the necessary consequential modifications to clause 4.2(a).***

- (b) Subject to clauses 5.2, 5.3(A)(b), 5.3(A)(d), and 5.3(B)(ii)(a) and 5.3(B)(i)(b) , OpenNet shall provide the relocation service by the end of three (3) Business Days from the receipt of a valid request for relocation from the Requesting Licensee;
- (c) The Requesting Licensee will have to bear the charge for installation of the relocated Termination Point in accordance to Schedule 15 (Charges); and
- (d) The cancellation charge as set out in accordance to Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the request for relocation after acceptance by OpenNet.

#### **CLAUSE 4.3 – MODIFICATION REQUIRED**

4.3 Where a premise was classified as a Residential Premise during the rollout of the NGNBN but has since undergone a change of premise type or the End-User claims the premise as a Non-Residential Premise, the Requesting Licensee shall obtain from the End-User and keep a record of the necessary documentary evidence as proof of such change of premise type. Such documentary evidence must consist of documents from at least two of the following categories of documents:

- (a) Telecommunication / Internet bill (of fixed line subscription only);

- (b) Service and Conservancy bill from town council ;
- (c) Utilities bill from Singapore Power;
- (d) Cable TV bill;
- (e) Tenancy agreement for residence; or
- (f) Change of address as indicated on a copy of the Business Profile Information issued by ACRA.

Items (a) to (d) and (f) should be dated within the last three (3) months from the date of Request for Non-Residential End-User Connection submitted in the End-User's name. Where the Requesting Licensee has the documentary evidence, as above, to demonstrate that the End-User is entitled to a Non-Residential End-User Connection, the Requesting Licensee can request for reclassification of premise via the OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform. OpenNet will by default accept the request for reclassification without any verification. For avoidance of doubt, reclassification of a Residential Premise, having an active Residential End-User Connection at time of submission, to a Non-Residential Premise is not allowed. However, reclassification of a defined area within a Residential Premise (regardless of whether the Residential Premise have or do not have an active Residential End-User Connection at time of submission) into a Non-Residential Premise is permissible and must be done through a reclassification of premise request.

Where the Request is accepted, OpenNet will provision the Non-Residential End-User Connection based on 1:24 split ratio in ten (10) Business Days or the preferred installation date which the Requesting Licensee have requested for, whichever is later. Notwithstanding the aforementioned, where OpenNet has deployed its Network to the Distribution Point, Final Distribution Point or First or Additional Termination Points of the premise, OpenNet shall provision the Non-Residential End-User Connection in five (5) Business Days where handover point to the Requesting Licensee is at the FTTB Node in the same building, seven (7) Business Days where OpenNet provides the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or ten (10) Business Days where the handover point to the Requesting Licensee is in the Non-Residential Premise or the preferred installation date requested by the Requesting Licensee, whichever is later. Such Non-Residential End-User Connection shall be provisioned on a splitter used for Non-Residential End-User Connections only. For the avoidance of doubt, where OpenNet provisions the service earlier than the preferred installation date, OpenNet shall treat the preferred installation date as the date the service commences.



The Standard Installation Charge in Schedule 15 shall apply and if a Termination Point installation is required, the Installation of Network charge in Schedule 15 shall apply accordingly.

Where OpenNet requests for additional documentary evidence due to non-compliance with clause 4.3 and the Requesting Licensee is unable to provide the additional evidence to support the change in premise type to a Non-Residential Premise, or where OpenNet conducts a site survey and the proposed Non-Residential Premise is not normally used for non-residential purposes, OpenNet reserves the right to maintain or re-classify the premise type as a Residential Premise and bill the Requesting Licensee charges applicable to a Residential End-User Connection as per Schedule 15 (Charges) retrospectively. If Requesting Licensee disputes OpenNet's decision to classify the premise as a Residential Premise, the Requesting Licensee may raise a dispute and the parties shall use their best endeavours to resolve the disputes within five (5) Business Days or adopt such other process or timeframe as mutually agreed by the parties.

Where the OpenNet Platform is experiencing technical problems, OpenNet shall inform the Requesting Licensee how it should request for reclassification via manual means or offer alternative solutions.

***IDA Directed Modifications: IDA refers NetLink Trust to Section 6 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 4.3 in the manner specified therein.***

4.4 For the avoidance of doubt, switching from GPON to OE or from OE to GPON is allowed via the OpenNet Platform subject to the Requesting Licensee paying the applicable charges for Patching Service in accordance to Schedule 15 (Charges).

For the switching from GPON to OE or from OE to GPON, the Requesting Licensee shall perform a check order status by providing the unique reference number provided by OpenNet or a similar form of identification for the existing connection, before submitting its request for the switch. For avoidance of doubt, switching from GPON to OE or vice versa is only applicable for connections that are active. OpenNet will provide a unique reference number or a similar form of identification in the notification upon successful submission of a GPON to OE or from OE to GPON request.

Information of the estimated timeframe for the switch will be provided to the Requesting Licensee through OpenNet Platform during the switch. OpenNet shall use its best endeavours to minimise any service disruption to the Requesting Licensee during the switch.

The Requesting Licensee may approach OpenNet for specific requirements to the switching process, which will be on a Cost-Oriented Basis.

Where the OpenNet Platform is experiencing technical problems, OpenNet shall inform the Requesting Licensee how it should request for the switch via manual means or offer alternative solutions.

- 4.5 Where the Requesting Licensee has not requested OpenNet to install the in-building enclosure, ducting, cabling (under clauses 6.3 and 6.4) and cable tray(s) (where required) at the time it acquires the Non-Residential End-User Connection and wishes to request the installation of the in-building enclosure, ducting, cabling and cable tray at a later date, it may submit a new Request in accordance with clause 4.1. For the avoidance of doubt, the Requesting Licensee would not be liable for pre-mature termination charges (under clause 8.3) for the existing Non-Residential End-User Connection.
- 4.6 OpenNet shall at its sole discretion determine the serving CO and Building MDF Room from which the Non-Residential End-User Connection will be provided. Subject to clause 4.7, the Requesting Licensee is able to query the OpenNet Platform at no cost for the serving CO and Building MDF by providing the postal code for the Non-Residential Premise.
- 4.7 Information relating to the Mandated Services will be available on OpenNet Platform, for access by the Requesting Licensee through secured means. The secured access to OpenNet Platform will require the payment of a Per User Account Charge (specified in clause 14 of Schedule 15 (Charges)) for each user account created. Information relating to network outages will be sent to the Requesting Licensee via email or OpenNet Platform. The information relating to the Mandated Services and the information relating to network outages is made available on the OpenNet Platform.

For information related to network outages, OpenNet shall include the following details in the written notification or via OpenNet Platform APIs to the Requesting Licensee:

- (a) Affected location;
- (b) Date of occurrence;
- (c) Time of occurrence (start & approximate end timings);
- (d) Cause of outage;
- (e) Steps taken to remedy the outage;

- (f) Steps (if any) required by Requesting Licensee to assist with rectification of outage;
- (g) Order Request Identifier of the affected orders; and
- (h) OpenNet's Network Operations Centre Contact Number.

For the avoidance of doubt, where OpenNet has imposed a Per User Account Charge on the Requesting Licensee for each user account created to allow the Requesting Licensee to access OpenNet Public Website, such Per User Account Charge shall not be re-imposed when the information relating to Mandated Services is made available on the OpenNet's Service Portal.

#### **CLAUSE 4A – MODIFICATION REQUIRED**

##### **4A. VERIFICATION OF COVERAGE STATUS**

- 4A.1 Where Requesting Licensee obtain a “address not found” message from OpenNet Platform, the Requesting Licensee may submit an Address Not Found Request via manual means using the form Annex 2C.
- 4A.2 OpenNet shall notify the Requesting Licensee the acceptance or rejection of its Request within three (3) Business Days of the Request Date, and provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification. Where the Request is accepted, OpenNet shall provision the Non-Residential End User Connection within forty (40) Business Days of such acceptance. Where there is a delay in provisioning, the SLG shall be computed starting from the forty-first (41<sup>st</sup>) Business Day after the date of Request, if applicable.
- 4A.3 The Cancellation Charge as set out in accordance to Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the request for installation of the requested address after acceptance by OpenNet.
- 4A.4 Only after OpenNet has covered the Non-Residential Building and notified the Requesting Licensee of the same will the Requesting Licensee be required to submit the same Request via OpenNet Platform and select the preferred installation date. Should the Requesting Licensee fail to submit the said Request via OpenNet Platform within two (2) weeks of OpenNet's notification, the Request shall be deemed cancelled and the Requesting Licensee shall be liable for the Cancellation Charge as set out in accordance with Schedule 15 (Charges).

4A.5 The SLG will not apply in the following events :-

- (a) the period after OpenNet had accepted the Request and before the Requesting Licensee had selected the preferred installation date;
- (b) delay in the grant of permission or permission is not granted by the building owners/management or house owner or End-User to install the required Network to the Non-Residential Building or Premise within the said building, despite OpenNet using its best endeavours to obtain expeditiously such permission, provided that in the event that the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to obtain the permission, OpenNet will provide evidence that it has used such best endeavours;
- (c) OpenNet has difficulty accessing or working in the building or Non-Residential End-User's Premise due to the building or premise being inaccessible, in unsafe working condition or in any other inadequate or deficient state despite using its best endeavours to expeditiously remedy the building access difficulties, provided always that in the event that the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to remedy the building access difficulties, OpenNet will provide evidence that it has used such best endeavours;
- (d) before the Requesting Licensee has selected the preferred installation date; or
- (e) the occurrence of any of the events described in clause 2.6 above.

***IDA Directed Modifications: IDA refers NetLink Trust to Section 8 of the Explanatory Memorandum to this Direction. Accordingly, IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 4A to (a) align the terms and conditions of the process for "Address Not Found" cases with all the relevant provisioning processes for Non-Residential End-User Connections in the ICO (including the relevant SAPs under the ICO (i.e., 10 business days for Non-Residential End-User Connection service orders) and the process for service delivery with insufficient capacity); and (b) propose modifications to streamline its proposed manual process for "Address Not Found" cases.***

## 5. NON-RESIDENTIAL END-USER CONNECTION REQUEST

### **CLAUSES 5.1 AND 5.2 FOR THE LONG-TERM APPROACH AND THE ENHANCEMENT TO CURRENT APPROACH – MODIFICATION REQUIRED**

[Long-Term Approach]

- 5.1 OpenNet shall process all Requests received for Non-Residential End-User Connection on a ‘first come, first served’ basis.
- 5.2 Requesting Licensee shall submit a three months forward-looking forecast of the Daily Request for Non-Residential End-User Connection (“Demand Forecast”) for the period starting three months later on 15<sup>th</sup> of every month.

Example -

<b>Date of Submission</b>	<b>Demand Forecast For Period</b>
15 January	May – July
15 February	June – August
15 March	July – September
15 April	August – October
15 May	September – November
15 June	October – December
15 July	November – following January
15 August	December – following February
15 September	following January – following March
15 October	following February – following April
15 November	following March – following May
15 December	following April – following June

The Demand Forecast shall be in the form of Daily Request for each week over a three months period. An example below illustrates a submission on 15<sup>th</sup> April 2014 for August to October 2014.

<b>Week</b>	<b>Schedule</b>	<b>Daily Request</b>
4 Aug 14 to 8 Aug 14	Schedule 2	30 / Business Day
11 Aug 14 to 15 Aug 14	Schedule 2	50 / Business Day
...		
27 Oct 14 to 31 Oct 14	Schedule 2	45 / Business Day

The review of the Daily Request shall only be adjusted on 15th of the following month. The adjustment of the Daily Request shall not exceed or decrease by 5% of the Daily Request submitted the previous month.

Requesting Licensee shall commit to at least 90% of their latest Daily Request (“Minimum Commitment”). An assessment will be made on every month to compare the number of daily slots utilised by the Requesting Licensee for the previous month versus the Minimum Commitment. Any cancelled or rejected orders will not be considered as utilised slot and shall not be included in the assessment.

<b>Month of Assessment</b>	<b>Period</b>	<b>Based on the Demand Forecast made on</b>
January	Previous December	Previous August
February	January	Previous September
March	February	Previous October
April	March	Previous November
May	April	Previous December
June	May	January
July	June	February
August	July	March
September	August	April
October	September	May
November	October	June
December	November	July

In the event where Requesting Licensee fails to meet Minimum Commitment, Requesting Licensee shall be liable for the Work Slot Charge set out in Schedule 15 (Charges) per unused work slot up to the Minimum Commitment.

In the event where OpenNet fails to meet Requesting Licensee's Daily Request, OpenNet shall be liable to compensate the Requesting Licensee for each unfulfilled work slot at the rate of the Work Slot Charge set out in Schedule 15 (Charges) per work slot up to the Requesting Licensee's Daily Request for that Business Day.

An example of the Demand Forecast assessment is set out in Annex 2D.

[Enhancement to Current Approach – will eventually be replaced by the Long-Term Approach]

- 5.1 OpenNet shall process all Requests received for Non-Residential End-User Connection on a 'first come, first served' basis.
- 5.2 For each Business Day, OpenNet shall process a combined total of no more than 40 or such other number (as may be revised from time to time in accordance with clause 5.2(i)) of Requests for Basic Mandated Services and Layer 1 Redundancy Services associated with Non-Residential End-User Connection (**Non-Residential End-User Connections Quota**) from all Requesting Licensees. For avoidance of doubt, Requesting Licensee is able to select such dates made available from the OpenNet Platform and for which the Request is to be fulfilled except such Business Day where the Non-Residential End-User Connections Quota has been reached. OpenNet will process all Requests on a 'first come, first served' basis. The Non-Residential End-User Connections Quota is not applicable to requests for deactivation of any Connection.
  - (i) The Non-Residential End-User Connections Quota is subject to the review mechanism as described as follows. If OpenNet finds that, on the average, more than 95% of the quota has been used over a period of twelve (12) weeks preceding the review month (namely February , May , August and November ), OpenNet shall increase its daily quota for the quarter in which the review month occurs and the new quota shall be no less than 110% of the average demand over the preceding twelve (12) weeks.. If OpenNet finds that, on the average, less than 80% of the quota has been used over a period of twelve (12) weeks preceding the review month (namely February , May , August and November ), OpenNet may decrease its daily quota for the quarter in which the review month occurs and the new quota shall be no less than 110% of the average demand over the preceding twelve (12) weeks. Where applicable, in accordance with the foregoing, the revised prevailing Non-Residential End-User Connections Quota will take effect upon its publication on the Service Portal following the conclusion of each review. The review mechanism will be revised regularly subject to the Authority's approval.

**IDA Directed Modifications: IDA refers NetLink Trust to Section 4 of the Explanatory Memorandum to this Direction. IDA has considered NetLink Trust’s proposed CFA (i.e., the “Long-Term Approach”) to manage its service provisioning capacity and is of the view that NetLink Trust has not demonstrated to IDA how forecasted demand from the CFA can be effectively managed as part of NetLink Trust’s quota system to better meet the industry’s needs and on a non-discriminatory basis. IDA is of the view that the QAM, together with NetLink Trust’s proposed enhancements in this ICO review, would be able to effectively assist NetLink Trust in sizing its service provisioning capacity and on a non-discriminatory basis. IDA therefore considers it reasonable to remove the requirement for RLs to provide rolling forecasts as per the CFA. Accordingly, IDA directs NetLink Trust to propose, for IDA’s approval, modifications to clause 5 to remove the Long-Term Approach and to retain the Enhancements to Current Approach.**

- 5.3 (A) Within one (1) Business Day of the date on which OpenNet receives the request for Non-Residential End-User Connection (**Request Date**) and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected for any one of the following reasons:
- (a) the Request for Non-Residential End-User Connection is not in the prescribed form;
  - (b) the Request does not contain all the required information or the information provided is inaccurate or misleading;
  - (c) the service activation date requested is less than five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required from the date of receipt of a Request;
  - (d) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule; or
  - (e) where either the first or second fibre (if provided) of the First Termination Point are not in use, the request to install an Additional Termination Point will be rejected. Where the first and second fibre (if provided) of the First Termination Point are in



use, OpenNet will offer to install an Additional Termination Point in accordance with the charges stated in Schedule 15; or

(B)(i) As an alternative to clause 5.3(A), where OpenNet receives the request for Non-Residential End-User Connection (Request Date) via the OpenNet Platform, OpenNet will validate and notify the Requesting Licensee, so that the Requesting Licensee is able to make the necessary corrections in real time, if the request does not meet one of the following reasons:

- (a) Data entered for the fields does not meet the required format;
- (b) the Request does not contain all the required information or the information provided is inaccurate or misleading; or
- (c) the service activation date requested is less than five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required from the date of receipt of a Request;

(B)(ii) Following clause 5.3 (B)(i), within one (1) Business Day of the date on which OpenNet receives the request via the OpenNet Platform for Non-Residential End-User Connection (**Request Date**) and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected for any one of the following reasons:

- (a) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule; or
- (b) where either the first or second fibre (if provided) of the First Termination Point are not in use, the request to install an Additional Termination Point will be rejected. Where the first and second fibre (if provided) of the First Termination Point are in use, OpenNet will offer to install an Additional Termination Point in accordance with the charges stated in Schedule 15.

Where the OpenNet Platform is experiencing technical problems, OpenNet shall inform the Requesting Licensee to submit the Requests through fax/email or offer alternative solutions.

5.4 Within five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required of the Request Date and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) whether its Request is accepted, or if rejected, for any one of the following reasons, except where there is insufficient capacity, OpenNet must also notify the Requesting Licensee within five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required of the Request Date that there is insufficient capacity and the timeframe to notify the acceptance or rejection of the Request shall be extended to within ten (10) or forty (40) Business Days of the Request Date:

- (a) the equipment or services that the Requesting Licensee proposes to use or to provide interfere with, or cause deterioration to services supplied by OpenNet;
- (b) there is obstruction from building owner, building management, home owner or End-User to OpenNet installation or installation schedule. OpenNet shall use its best endeavours to resolve such obstructions;
- (c) the Transmission Tie Cable (installed pursuant to Co-location Service in Schedule 12) for connection to the Non-Residential End-User Connection is yet to be operational at the point in time of OpenNet's provisioning of the Non-Residential End-User Connection; or
- (d) there are security and confidentiality requirements or restrictions imposed on OpenNet by Government Agencies.

5.5 If there is sufficient capacity to provide the Non-Residential End-User Connection pursuant to clause 6.1, OpenNet shall advise the Requesting Licensee within five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required whether the Non-Residential End-User Connection has been successfully set up. In the event that there is

insufficient capacity to provide the Non-Residential End-User Connection pursuant to the Request due to sudden surge of orders in a short period of time at a location or multiple Requesting Licensees serving the same location giving rise to rapid exhaustion of fibres for that location or OpenNet's Network has not been rolled out to that location, clause 6.2 shall apply and OpenNet shall inform the Requesting Licensee accordingly within five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required and advise the Requesting Licensee that the RFS of the Non-Residential End-User Connection will be extended to within ten (10) Business Days if there is insufficient capacity from FTTB Node of the Non-Residential End-User Connection to the Termination Point or within forty (40) Business Days if there is insufficient capacity from CO to the Termination Point. Upon receipt of OpenNet's notification of insufficient capacity, the Requesting Licensee has an option to either select a new appointment date or cancel the Request without charges within three (3) Business Days, through OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform. The status of the Request shall be made available to the Requesting Licensee on the OpenNet Platform updated on a daily basis each time the status of the Request changes.

- 5.6 The Requesting Licensee shall pay OpenNet the applicable Installation Charge and Patching Charge specified in Schedule 15 (Charges) for provisioning the Non-Residential End-User Connection.
- 5.7 Where OpenNet rejects the Request for Non-Residential End-User Connection, OpenNet shall provide reasons explaining the basis for rejection promptly.
- 5.8 Where it is subsequently determined by OpenNet that a valid Non-Residential End-User Connection Request submitted by the Requesting Licensee is for a Residential Premise (due to an error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers), then OpenNet shall duly inform the Requesting Licensee of the nature of such error, and commence to deliver the service after the Requesting Licensee confirms that it wishes to proceed with the order; however, any charges imposed by OpenNet will follow the rates for a Residential End-User Connection (i.e. the entire clause 1 of Schedule 15).
- 5.9 Where it is subsequently determined by OpenNet that a valid Non-Residential End-User Connection Request submitted by the Requesting Licensee is for a Non-Residential Premise that is not a covered site (due to an error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers), then OpenNet shall duly inform the

Requesting Licensee of the nature of the error, and have the right to reject the Non-Residential End-User Connection Request; however OpenNet shall credit the Requesting Licensee with a one (1) month rebate of the Monthly Recurring Charge. For the avoidance of doubt, this clause 5.9 shall also be applicable to a rejection under clauses 5.4(b) or 5.4(d). The rebates, where applicable will be shown in the next Invoice.

5.10 For the avoidance of doubt:

- (a) where OpenNet discovers any error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, OpenNet shall inform the Requesting Licensee of the error and the correct Mandated Services Information within one (1) Business Day of OpenNet's discovery of the error;
- (b) where OpenNet is informed of an error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, OpenNet shall inform the Requesting Licensee of the error and the correct Mandated Services Information within three (3) Business Days of being informed of the error;
- (c) the timeframe to inform the Requesting Licensee of an error in the Mandated Services Information or the correct Mandated Services Information indicated under clauses 5.10(a) and 5.10(b) shall exclude any delays caused by third parties such as building owners and/or management or end-user, who obstructs OpenNet during OpenNet's site survey or related checks;
- (d) where the Requesting Licensee wishes to cancel the Non-Residential End-User Connection Request due to the error in the Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, or to change any parameter in the Non-Residential End-User Connection Request for the same reason, OpenNet shall not require the Requesting Licensee to bear the Cancellation Charge specified in Schedule 15 (Charges) or any additional charges in relation to the cancellation or change in parameter(s). The Requesting Licensee shall submit the cancellation request due to the error in the Mandated Services Information via manual means or the OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform; and
- (e) where OpenNet fails to meet its Service Level Guarantees due to the error in Mandated Services Information which is caused solely by OpenNet, its contractors or suppliers, the Requesting Licensee is entitled to make a claim for the remedy provided by OpenNet pursuant to clause 2 of this Schedule; however, the Service Level Guarantees shall not apply during the time taken by the Requesting Licensee to

consider whether to proceed with the order. For avoidance of doubt, the service activation period for such Request shall be deemed to start from the date of the Request.

- (f) where OpenNet has successfully changed the classification of a premise type from a Residential premise to a Non-Residential premise upon the request of the Requesting Licensee, any error in the Mandated Services Information shall not apply. For the avoidance of doubt, OpenNet shall update the classification of the premise to Non-Residential Premise in its Mandated Services Information after the change of classification has taken effect.

## **6. DELIVERY**

- 6.1 Subject to clauses 5.2, 5.3, 5.4 and 6.2, OpenNet shall provide the Non-Residential End-User Connection by the end of five (5) Business Days where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise, seven (7) Business Days where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or ten (10) Business Days where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required or, where applicable, a later date selected by the Requesting Licensee from the receipt of a valid Request from the Requesting Licensee, where OpenNet has deployed its Network to the FTTB Node of the Non-Residential Premise. OpenNet shall use its reasonable endeavours to install the First or, where necessary, the Additional Termination Point of the Non-Residential Premise, if applicable, during the Requesting Licensee's preferred session.
  
- 6.2 (A) Where there is insufficient capacity to provide the Non-Residential End-User Connection, OpenNet shall subject to clause 5.2 provide the Non-Residential End-User Connection:
  - (a) within ten (10) Business Days from the receipt of a valid Request from the Requesting Licensee if additional capacity is required to be installed between the FTTB Node of the Non-Residential Premise and the First or Additional Termination Point of the Non-Residential Premise; or
  - (b) within forty (40) Business Days from the receipt of a valid Request from the Requesting Licensee if additional capacity is required to be installed between the designated Central Office and the First or Additional Termination Point of the Non-Residential Premise.

OpenNet shall use its reasonable endeavours to install the First or Additional Termination Point of the Non-Residential Premise, if applicable, during the Requesting Licensee's preferred session.

#### **CLAUSE 6.2(B) – MODIFICATION REQUIRED**

(B) Where there is a delay during service provisioning, the reasons for the delay and the estimated/revised timeframe required to complete service provisioning will be made available on the OpenNet Platform. In certain instances, OpenNet may through the OpenNet Platform, request the Requesting Licensee to arrange with the End-User a reappointment after the delay is resolved. The Requesting Licensee may either arrange the reappointment or cancel the Request without charges within three (3) Business Days in the event of insufficient capacity, through the OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform.

***IDA Directed Modifications: IDA has received feedback from the industry that the reasons for delay and the estimated/revised resolution timeframes that NetLink Trust publishes on the NetLink Trust Platform are often too generic and non-informative. As a result, the information provided by NetLink Trust through the NetLink Trust Platform does not help RLs, or their respective RSPs, by providing informative updates as to the status of their delayed cases. Further, it was commented that the estimated/revised timeframes provided by NetLink Trust for delayed cases were often non-indicative and far from the actual time taken for resolution, to the extent that RLs and/or RSPs were unable to rely on such timeframes to appropriately explain the delay to their customers. IDA is of the view that it is not acceptable for NetLink Trust to provide RLs with ambiguous information, as this causes confusion on the ground and the RLs and/or RSPs would face challenges when answering their customers, i.e., the end-users, on the service provisioning delays. Further, it is within IDA's expectation and NetLink Trust's ability to provide prompt and to-date updates with regard to the service provisioning status, so that the end-users could better manage their time in preparing for NBN service readiness. Accordingly, IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 6.2(B) to clarify that NetLink Trust shall, through the NetLink Trust Platform and/or via other forms of communication such as emails, provide regular updates to the affected RL on the resolution of delayed cases, on each Business Day or more frequently as appropriate, until NetLink Trust resolves the delay and completes the service provisioning.***

- 6.3 Where requested by the Requesting Licensee, OpenNet will install in-building cabling to be terminated at the First Termination Point inside the Requesting Licensee's Non-Residential Premise. However, OpenNet is not liable to provide in-building ducting and cabling due to the following reasons:
- (a) the Non-Residential Building may already have in-building ducting and cabling; or
  - (b) building owners may have their own preferences, requirements and constraints for in-building ducting and cabling.
- 6.4 If the Requesting Licensee requests OpenNet to install the in-building enclosure, ducting, cable tray and cabling, an additional one-time charge as stated in Schedule 15 (Charges) will be applicable.
- 6.5 Where the owner of a Non-Residential Premise requires the use of deployment technique other than open ducting (for the avoidance of doubt, such deployment shall be provided by a third party), OpenNet shall inform the Requesting Licensee, and both parties shall mutually agree to a revised implementation timeline.
- 6.6 Unless otherwise stated, OpenNet shall retain the responsibility for working at OpenNet's FDF at the Central Office and Building MDF Room, FTTB Node and First Termination Point, including Patching Service at OpenNet's FDF at the Central Office, Building MDF Room and FTTB Node in accordance with Schedule 13 (Patching Service). The Requesting Licensee shall bear the Charges for such work carried out by OpenNet.
- 6.7 Where the Requesting Licensee requests Non-Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet will provide the necessary Patching Service at OpenNet's FDF in the Building MDF Room using Patch Cable of not exceeding ten (10) metres in length. The Requesting Licensee shall provide its own Patch Cable if it requires a longer Patch Cable. For the avoidance of doubt, where the Requesting Licensee provides its own Patch Cable, OpenNet will not offer and Requesting Licensee shall not request for any rebate or discount over the Patching Service or the Non-Residential End-User Connection.
- 6.8 OpenNet will only use optical fibre cable based on the ITU-T G.652D standard for outdoor installations and the ITU-T G.657A standard for in-building installations (where applicable) to deliver the Non-Residential End-User Connection.
- 6.9 OpenNet will test the optical fibre cable from OpenNet's FDF at its designated Central Office or the Requesting Licensee's FDF at the Central Office designated by OpenNet to the First Termination Point at the Non-Residential Premise (subject to clauses 6.3 and 6.4) or

otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends, to ensure that the Non-Residential End-User Connection falls within the specified optical performance. Testing will be conducted at wavelengths of 1310nm, 1490nm and 1550nm.

6.10 OpenNet shall ensure that the optical power loss:

- (a) of any Non-Residential End-User Connection for the purpose of provision of GPON services does not exceed -28dB; and
- (b) of any Non-Residential End-User Connection for the purpose of provision of OE services does not exceed -20 dB from OpenNet's FDF in the CO or the Requesting Licensee's FDF at the Central Office designated by OpenNet to OpenNet's FDF in the Building MDF Room, and does not exceed -20dB from OpenNet's FDF in the Building MDF Room to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends.

6.11 OpenNet shall promptly notify the Requesting Licensee upon the completion of the Non-Residential End-User Connection.

#### **CLAUSE 6.12 – MODIFICATION REQUIRED**

6.12 Subject to clause 6.13 and only applicable to a Service Request with twelve (12) months minimum contract term, in the event OpenNet fails to meet the applicable service activation period for a Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the SAP Rebate for the Non-Residential End-User Connection, subject to a maximum of 90 times the SAP Rebate for the Non-Residential End-User Connection, where:

$$\text{SAP Rebate} = \text{Monthly recurring charge} \times 12 / 90$$

***IDA Directed Modifications: IDA refers NetLink Trust to Section 3 of the Explanatory Memorandum to this Direction. IDA directs NetLink Trust to propose, for IDA's approval, modifications to clause 6.12 to amend its Revised Mechanism by reducing the period in which the SAP rebate is applicable from 90 days to 60 days, while keeping the rebate cap at 12 times MRC.***

Subject to clause 6.13 and only applicable to a Service Request with one (1) month minimum contract term, in the event OpenNet fails to meet the applicable service activation period for a Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the daily recurring charge for the Non-Residential End-User



Connection, subject to a maximum of 50% of the monthly recurring charge for the Non-Residential End-User Connection, where

Daily Recurring Charge = Monthly Recurring Charge (1 month contract) / 30

6.13 OpenNet shall not be required to compensate the Requesting Licensee under any of the following circumstances:

- (a) Delay in the granting of permission from or permission is not granted by the building owners/management or End-User to install the required Network to the Non-Residential Premise within the said building, despite OpenNet using its best endeavours to obtain expeditiously such permission, provided that in the event that the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to obtain expeditiously the permission, OpenNet will provide evidence that it has used such best endeavours;
- (b) The owner of a Non-Residential Premise requires the use of a deployment technique other than open ducting;
- (c) The Requesting Licensee requests the deferment of the service activation date; or
- (d) In the event of any obstruction from building owner or building management to OpenNet's installation or installation schedule or any of the circumstances described in clauses 2.6(e) and 2.6(f) above, OpenNet shall use its best endeavours to remedy it expeditiously. The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays upon OpenNet's best endeavours in attempting to resolve expeditiously any obstruction from building owner or building management. In the event the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to resolve expeditiously such obstruction, OpenNet will provide evidence that it has used such best endeavours;
- (e) The building which was initially under network coverage has been reconstructed and OpenNet has to reinstall its Network to the building.

For the avoidance of doubt, where the service activation date has been revised pursuant to any of the circumstances contemplated in this clause 6.13 or elsewhere in the ICO Agreement (unless otherwise stated), OpenNet shall nevertheless be required to compensate the Requesting Licensee if it fails to meet the revised implementation timeline.

6.14 The Requesting Licensee may submit a Request for express service activation period of one (1) Business Day for the provision of a Non-Residential End-User Connection via manual

means or OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform. The OpenNet Platform will provide the available slots for express service which will be distinguishable from slots available for normal service. All Requests for express service activation shall be subject to the following conditions:

- (a) OpenNet's fibre network has already been rolled out from the Central Office to the Building MDF Room and from the Building MDF Room to the First Termination Point in the Non-Residential Premise (which must already been installed and where the location of the First Termination Point remained unchanged) or to the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located. Where the Request is submitted via the OpenNet Platform, when available, the OpenNet Platform will also indicate if the particular premise is eligible for express service. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform;
- (b) The maximum number of Requests for express service activation of both Residential End-User Connections and Non-Residential End-User Connections is limited to a total of forty (40) Requests per Business Day from all Requesting Licensees. Each Request for express service activation of Non-Residential End-User Connection fulfilled by OpenNet will be counted towards OpenNet's fulfilment of its Non-Residential End-User Connections Quota;
- (c) Express service for 2<sup>nd</sup> Fibre activation applies only if there are available fibres in all segments from CO to the 2<sup>nd</sup> port of the First Termination Point. Where the Request is submitted via the OpenNet Platform, when available, the OpenNet Platform will also indicate if the particular premise is eligible for express service. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform;
- (d) There is a daily cut off-time of 12 noon for the Requesting Licensee to submit Requests for express service activation. All Requests for express service activation received by 12 noon daily will be provisioned by the next Business Day. Any Requests for express service activation received after 12 noon daily will be provisioned two (2) Business Days later;
- (e) The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays where OpenNet has exercised its best endeavours in its attempt to remedy expeditiously any obstructions from building owner, building management, home owner or End-User to OpenNet's installation or installation schedule or any of the circumstances described in clauses 2.6(e) and 2.6(f) above

during the express service activation. Provided that in the event the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to remedy expeditiously the obstruction, OpenNet will provide evidence that it has used such best endeavours ;

- (f) OpenNet shall only provision Requests for express service activation which meet the conditions stated in (a), (b) and (c) above, and will reject the Request for express service activation if any of the conditions in (a), (b) and (c) above or, if applicable, as specified in clauses 5.3 and 5.4 above are not met. The Requesting Licensee shall pay the applicable charges for Request for express service activation in accordance with Schedule 15 (Charges);
- (g) The Cancellation Charge set out in accordance with Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the Request for express service activation after acceptance by OpenNet of such Request; and
- (h) The provisioning of the Request for express service activation will only cover patching in Building MDF Room/FTTB Node and/or Central Office by OpenNet. The power meter measurement will be performed during patching at Central Office (from Central Office to MDF). For the avoidance of doubt, OpenNet shall comply with clause 6.10.

6.15 Where the Requesting Licensee submits the order via the OpenNet Platform, when available, the OpenNet Platform will provide the available slots for express service which will be distinguishable from the slots available for normal service for Requesting Licensee to order. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform. The Request for express service activation is also applicable for Non-Residential Connections where internal wiring is not required (as set out in clause 3.3) provided that the following conditions have been met:

- (a) The Requesting Licensee undertakes to maintain the network and troubleshoot in the event of faults;
- (b) The maximum number of Requests for express service activation of both Residential End-User Connections and Non-Residential End-User Connections is limited to a total of forty (40) Requests per Business Day from all Requesting Licensees. Each Request for express service activation of Non-Residential End-User Connection fulfilled by OpenNet will be counted towards OpenNet's fulfilment of its Non-Residential End-User Connections Quota;

- (c) Express service for 2<sup>nd</sup> Fibre activation applies only if there are available fibres in all segments from CO to the 2<sup>nd</sup> port of the First Termination Point. Where the Request is submitted via the OpenNet Platform, when available, the OpenNet Platform will indicate if the particular premise is eligible for express service. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform:
- (d) There is a daily cut off-time of 12 noon for the Requesting Licensee to submit Requests for express service activation. All Requests for express service activation received by 12 noon daily will be provisioned by the next Business Day. Any Requests for express service activation received after 12noon daily will be provisioned two (2) Business Days later;
- (e) The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays where OpenNet has exercised its best endeavours in its attempts to remedy expeditiously any obstructions from building owner, building management, home owner or End-User to OpenNet's installation or installation schedule or any of the circumstances described in clauses 2.6(e) and 2.6(f) above during the express service activation. Provided that in the event the Requesting Licensee raises a dispute as to whether OpenNet has used its best endeavours to remedy expeditiously the obstruction, OpenNet will provide evidence of that it has used such best endeavour ;
- (f) OpenNet shall only provision Requests for express service activation which meet the conditions stated in (a), (b) and (c) above, and will reject the Request for express service activation if any of the conditions in (a), (b) and (c) above or, if applicable, as specified in clauses 5.3 and 5.4 above are not met. The Requesting Licensee shall pay the applicable charges for Request for express service activation in accordance with Schedule 15 (Charges); and
- (g) The cancellation charge set out in accordance to Schedule 15 (Charges) shall be applicable should the Requesting Licensee cancel the Request for express service activation after acceptance by OpenNet of such Request.
- (h) In the event, OpenNet is unable to provision the express service within one (1) Business Day due to OpenNet's fault, OpenNet will not charge the additional applicable charges for express service activation, but impose charges applicable for normal installation service as stated in Schedule 15 (Charges) and shall provision the Request within five (5) Business Days (where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise), seven (7) Business Days (where OpenNet provides the Termination Point at the vertical telecommunication riser on

the same floor where the Non-Residential Premise is located) or ten (10) Business Days (where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required). Where the provisioning delay persists beyond five (5) Business Days (where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise), seven (7) Business Days (where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located) or ten (10) Business Days (where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required), the SLG shall apply starting from the fifth (5th) Business Day (where OpenNet provides the service up to the FTTB Node of the Non-Residential Premise), seventh (7th) Business Day (where OpenNet provides the Termination Point at the vertical telecommunication riser on the same floor where the Non-Residential Premise is located) or tenth (10th) Business Day (where in-building enclosure, ducting and cabling up to the Termination Point inside the Non-Residential Premise are required) from the date of Request.

- 6.16 (a) Should OpenNet encounter any events described in clause 2.6 above which prevents the fulfilment of the Request within the stipulated service activation period, OpenNet shall inform the Requesting Licensee accordingly and provide information on (i) cause of delay, (ii) actions taken or to be taken, (iii) tentative revised RFS date including further revisions, if any and (iv) suspension of any relevant Service Level Guarantee. OpenNet shall provide the Requesting Licensee with the status of the affected orders on a periodic basis until completion. However, OpenNet may not be able to provide revised RFS date for delays outside OpenNet's control which includes but not limited to, RFS dependent on the response from Building Management, Requesting Licensee and/or End-User.
- (b) For avoidance of doubt, OpenNet shall use its best endeavours to resolve any obstructions and/or access issues but will not be responsible for the resolution or removal of such events described in clause 2.6 above which prevent the fulfilment of the Request within the stipulated service activation period and OpenNet shall not be liable for any such delays.
- (c) Where there is a delay during service provisioning, the OpenNet Platform will provide the reasons for the delay and the estimated/revised timeframe required to complete service provisioning. In certain instances, OpenNet may request the Requesting Licensee to arrange with the End-User a reappointment after the delay is resolved. OpenNet will notify the Requesting Licensee via the OpenNet Platform, when available for such requests. The Requesting Licensee is able to arrange the reappointment via the OpenNet Platform, when available. For the avoidance of doubt,

OpenNet shall inform the industry when the above feature will be available on OpenNet Platform.

- (d) If there is an undue delay for more than two (2) weeks after service activation date (as stipulated under clauses 6.1 or 6.2), the Requesting Licensee shall be allowed to cancel without incurring cancellation charges.

## **7. RESPONSIBILITY AT DP AND OPENNET FDF**

- 7.1 The Requesting Licensee shall not, and shall ensure that its employees, agents and contractors do not, at any time access OpenNet's FDF at the Central Office and Building MDF Room, the FTTB Node and the Distribution Point.
- 7.2 Where the Requesting Licensee wishes to change the existing patching connection at OpenNet's FDF at the Central Office, Building MDF Room or FTTB Node, the Requesting Licensee shall submit an application for the termination of existing Patching Service and order for a new Patching Service at the Central Office, Building MDF Room or FTTB Node in accordance with Schedule 13 (Patching Service).

## **8. DEACTIVATION**

- 8.1 Subject to the minimum contract term, the Requesting Licensee may deactivate the Non-Residential End-User Connection by giving OpenNet a Request not less than ten (10) Business Days before the date of deactivation.
- 8.2 The cancellation of the Request for deactivation shall be submitted to OpenNet at least one (1) Business Day before the date of the deactivation of the Non-Residential End-User Connection.
- 8.3 If the Non-Residential End-User Connection service is terminated by the Requesting Licensee pursuant to clause 8.1 before the expiry date of the minimum contract term, the Requesting Licensee must pay OpenNet one hundred percent (100%) of the Monthly Recurring Charge for the remainder of the minimum contract term.
- 8.4 Where any Patching Service is no longer required as a result of the termination of the Non-Residential End-User Connection, OpenNet shall remove the Patching Service at all the relevant access points and the Requesting Licensee shall be liable for the termination charges for removing the Patching Service at the Central Office designated by OpenNet in accordance with Schedule 15 (Charges). Notwithstanding the above, the Requesting Licensee shall not be liable to pay any Charges for the removal of Patching Service related to or in connection with

the termination of the Non-Residential End-User Connection, if such termination is the result of OpenNet's fault.

## **9. STANDARD TERMS AND CONDITIONS**

- 9.1 OpenNet shall at its sole discretion determine its network deployment, including but not limited to the access points, fibre cable routing and location of the Central Office, Building MDF Room, FTTB Node, Distribution Point and Termination Point from which the Non-Residential End-User Connection is provided. Prior to installation of the Termination Point, OpenNet will assess the suitability of the location for the deployment of active equipment, such that there will be adequate ventilation and power within the reach of active equipment. Notwithstanding, OpenNet's assessment and recommendation on the location of the Termination Point, OpenNet shall defer to the agreement or instructions of the End-User. The Requesting Licensee, its agents or sub contractors shall not tamper with, modify, remove or re-locate any Termination Point or any part of the Network in any way or take steps to repair any Termination Point or any part of the Network.
- 9.2 OpenNet shall be responsible for the maintenance of the Non-Residential End-User Connection, excluding all in-building enclosure, ducting, cabling and cable tray provided by building owner installed under this Schedule.
- 9.3 Except to the extent strictly necessary to accurately describe the service to actual or potential Customers, the Requesting Licensee shall not use OpenNet's name, any of OpenNet's trademarks or the fact that any service is supplied using OpenNet's Network in promoting the Requesting Licensee's service.
- 9.4 The Parties shall in good faith co-operate with each other and take reasonable measures to ensure that there is no interference with or deterioration to OpenNet's existing services or those of a Third Party as a result of the Requesting Licensee's use of the Non-Residential End-User Connection.

### ***CLAUSES 9.5 & 9.6 – MODIFICATION REQUIRED***

- 9.5 If it is necessary to carry out any planned service interruption, including but not limited to planned repair, or replacement or upgrade to any equipment or facility forming part of the Non-Residential End-User Connection, OpenNet shall provide the Requesting Licensee with at least two (2) weeks' notice in advance of such interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. In the event the planned service interruption has to be changed, OpenNet shall provide the Requesting Licensee with no less than twenty-four (24) hours' notice. OpenNet shall take reasonable measures to minimise any service disruption to the Requesting Licensee.

9.6 If it is necessary to carry out any urgent service interruption, including but not limited to planned repair, or replacement or upgrade to any equipment or facility forming part of the Non-Residential End-User Connection, OpenNet shall notify the Requesting Licensee as soon as practicable, including after the carrying out of the service interruption and shall inform Requesting Licensees of the period of service interruption. OpenNet shall take reasonable measures to minimise any service disruption to the Requesting Licensee.

***IDA Directed Modifications: IDA refers NetLink Trust to Section 5 of the Explanatory Memorandum to this Direction. IDA directs NetLink Trust to propose, for IDA's approval, modifications to clauses 9.5 and 9.6 to (a) revert the notification period for all Planned Interruptions to one (1) month; (b) clarify that NetLink Trust shall provide at least one-week's notice to RLs for any postponement of Planned Interruptions; and (c) clarify that should NetLink Trust be restricted to a shorter notification period due to corresponding short notices provided by third parties, NetLink Trust shall use the same principle in the process for Unplanned Interruptions to inform the RLs as soon as practicable of such unforeseen postponement of Planned Interruptions.***

***IDA further directs NetLink Trust to propose, for IDA's approval, modifications to both clauses 9.5 and 9.6 to reflect that NetLink Trust shall take best endeavours to minimise any service disruption to the RL in cases of service interruptions described in clauses 9.5 and 9.6.***

9.7 OpenNet shall include the following details in the written notification or via OpenNet Platform APIs to the Requesting Licensee:

- (a) Affected Location;
- (b) Date of occurrence;
- (c) Time of occurrence (start & end timings);
- (d) Cause of Planned Disruption;
- (e) Order Request Identifier of the affected orders; and
- (f) OpenNet's Network Operations Centre Contact Number.

9.8 If the planned service interruption affects Non-Residential End-User Connections, OpenNet will endeavour to carry out the planned service interruption between 1am and 6am, unless it is not feasible for OpenNet to do so.



- 9.9 Subject to Requesting Licensee acquiring redundancy service, OpenNet shall, where technically feasible, provide assistance to the Requesting Licensee to divert its Non-Residential End-User Connection to the redundancy service before commencing the planned service interruption.
- 9.10 Where there are available resources, OpenNet will, where possible, first divert critical links to alternative routings before commencing the planned service interruption.
- 9.11 Subject to clause 9.5 or 9.6 or 9.7, OpenNet shall not be liable for any loss caused by such service interruption, except for any Service Level Guarantee that arises from OpenNet carrying out the service interruption outside of the stipulated period and the Requesting Licensee has reported the fault in accordance to clause 11.
- 9.12 The Requesting Licensee shall be responsible to the Requesting Licensee's Customers for all aspects of the Requesting Licensee's services including but not limited to the operations and maintenance of the Requesting Licensee's service and the maintenance and availability of in-building enclosure, ducting, cabling and cable tray provided by the building owner.
- 9.13 The Requesting Licensee must procure and maintain at its own cost:
- (a) any equipment or software needed to implement, receive or use the Non-Residential End-User Connection (including but not limited to any configuration of the NTE at the Non-Residential Premise);
  - (b) co-location at the designated Central Office and Building MDF Room; and
  - (c) access to the Non-Residential Premise.
- 9.14 Upon receipt by OpenNet of any request from Requesting Licensee for Removal, OpenNet shall check if the Termination Point is in use by any Requesting Licensee. OpenNet will reject the request if the Termination Point is in use, otherwise OpenNet shall perform such Removal which shall not include removal of any part of the Network, surface trunking and/or Termination Point that are concealed either by a false ceiling, within any furniture or rendered inaccessible. OpenNet shall be responsible for obtaining the relevant approvals or consent from the relevant building owner or authorities such that OpenNet and/or its contractors have ease of access to perform such Removal. Where it is necessary for OpenNet to seek the Requesting Licensee's assistance in order to obtain such approvals or consent, the Requesting Licensee shall render all necessary assistance, and all Parties shall cooperate in good faith to secure the approvals or consent. The Requesting Licensee will have to bear the charge for Removal of the Termination Point in accordance with Schedule 15 (Charges). OpenNet shall use its best endeavours to minimize damage to the wall and/or other fittings save that

OpenNet shall not be responsible or liable to move or shift any furniture or items belonging to End-User, re-plaster the wall, perform any painting works or reinstate the wall and/or other fittings accordingly.

- 9.15 Nothing in this Schedule vests in the Requesting Licensee any right, title or proprietary interest in the optical fibre cable, equipment or facilities forming part of the Non-Residential End-User Connection.
- 9.16 Onsite charges are applicable whenever Requesting Licensee requests for OpenNet to be onsite other than for provisioning of Non-Residential End-User Connection or for reasons caused by OpenNet's fault or error.
- 9.17 Upon receipt by OpenNet of any request from Requesting Licensee for relocation or repair and replacement of Termination Point within the same premise, OpenNet shall perform such relocation or repair and replacement of Termination Point. For relocation of Termination Point, it shall not include removal of any part of the Network, surface trunking and/or Termination Point that are concealed either by a false ceiling, within any furniture or rendered inaccessible. The Requesting Licensee will have to bear the charge for relocation or repair and replacement of the Termination Point in accordance to Schedule 15 (Charges). End-User shall ensure that OpenNet and/or its Contractor has ease of access to perform such relocation or repair and replacement of Termination Point. OpenNet shall use its best endeavours to minimize damage to the wall and/or other fittings save that OpenNet shall not be responsible or liable to move or shift any furniture or items belonging to End-User, re-plaster the wall, perform any painting works or reinstate the wall and/or other fittings accordingly.

## **10. ACCESS AND APPROVALS REQUIRED**

- 10.1 The Parties shall comply with clause 15.5 of the main body of this ICO Agreement in relation to the obtaining of all licences, permits, consents, waivers, authorisations and intellectual property or other rights required for the provision of the Non-Residential End-User Connection.

## **11. FAULT REPORTING AND CLEARING**

- 11.1 Each Party must have or establish a Fault Reporting and Control Centre (**FCC**) to act as a single point of contact for the reporting, management and clearing of faults. The FCC must be available twenty-four (24) hours a day, seven (7) days a week.
- 11.2 It is the Requesting Licensee's responsibility to determine the source of the fault at its own cost and to ensure that the fault does not lie within its network before reporting the fault to OpenNet. The Requesting Licensee shall pay OpenNet according to Schedule 15 (Charges)

for cancellation of any fault reported regardless of the response or stage of investigation by OpenNet.

11.3 Where the fault is reported via the OpenNet Platform, the Requesting Licensee shall indicate the following:

- (a) Order Request Identifier
- (b) Requesting Licensee Incident ID
- (c) Incident type
- (d) Description of fault ticket
- (e) End-User contact details

Upon successful submission of the fault, the OpenNet Platform will provide a fault acknowledgement.

Upon receipt of a fault report from the Requesting Licensee under clause 11.2, OpenNet shall investigate the cause of the fault experienced by the Requesting Licensee in a diligent and responsible manner as would be expected of a competent service provider. OpenNet shall provide periodic updates to the Requesting Licensee on the status of the fault rectification and also updates when there is a change in status of the fault investigation/rectification work through OpenNet Platform, when available or via manual means. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform. Where a fault is reported via manual means, Requesting Licensee shall submit information as required above. OpenNet may also provide the updates and status via Email.

11.4 If, following investigation, OpenNet determines that the fault is at the Transmission Tie Cable at the Central Office, OpenNet will patch the Non-Residential End-User Connection to another available Transmission Tie Cable Port and charge the Requesting Licensee a Patching Charge in accordance with Schedule 15 (Charges) if the Requesting Licensee was responsible for the fault at the Transmission Tie Cable at the Central Office.

11.5 If, following investigation, OpenNet determines that the fault is at the Patch Cable at the Building MDF Room, OpenNet will replace with another Patch Cable(s) and charge the Requesting Licensee a Patching Charge(s) in accordance with Schedule 15 (Charges) if the Requesting Licensee was responsible for the fault at the Patch Cable at the Building MDF Room.

11.6 If, following investigation, OpenNet determines that no fault is found or the fault is not due to the OpenNet Network or equipment, then OpenNet shall charge the Requesting Licensee a No Fault Found Charge for the fault report in accordance with Schedule 15 (Charges).

11.7 The process for fault investigation shall be as follows:

(a) For each of the three (3) wavelengths of 1310nm, 1490nm and 1550nm, the optical where applicable, power shall be measured in accordance with clause 6.10 above , and the findings shall be clearly recorded using the "Fault Rectification Service Report" (Annex 2B).

(b) if the power loss do not exceed the limit specified in clause 6.10 then the following steps shall be carried out before a finding of "no fault found" will be recorded:

- determine that the patching at CO/MDF room and the patch cord are properly installed
- determine the optical power at the output of splitter port, for GPON is within acceptable limits

Or determine the optical power at the output of the OE to OpenNet's FDF in the Building MDF room is within the acceptable limits

- determine that no macro bending that produces high loss
- determine that no dirty/damaged connector
- determine that no fibre cut or damaged Termination Point
- determine that there is no wrong patching
- measurements of the following shall also be taken :
  - optical time-domain reflectometer
  - power loss

(c) Upon completion of any fault investigation where both OpenNet and Requesting Licensee are present, OpenNet will hand over the Termination Point to the Requesting Licensee and both Parties shall jointly sign off on the "Fault Rectification Service Report" (Annex 2B), which will state the outcome of the investigation. For fault investigation where Requesting Licensee is not required to be present, OpenNet shall

conclude the investigation on-site and inform the Requesting Licensee of the outcome accordingly. OpenNet shall provide periodic updates to the Requesting Licensee on the status of the investigation and also updates when there is a change in status of the investigation through OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above features will be available on OpenNet Platform.

11.8 If OpenNet is unable to identify any fault, OpenNet will call for a fault identification coordination meeting between OpenNet and the Requesting Licensee to identify the fault. OpenNet will notify the Requesting Licensee on the request for fault identification. The Requesting Licensee shall provide all reasonable assistance requested by OpenNet. Each Party is to bear its own cost for attending such fault identification coordination meeting as well as any testing or trouble-shooting activities required as a result of such a meeting. For the avoidance of doubt, save as provided below, each party shall bear its own costs for the purpose of any fault investigation:

- (a) In the event that a particular fault is due to OpenNet or its contractors, OpenNet shall not impose any charge on the Requesting Licensee for access to the Co-Location Space (where applicable), regardless of whether it is an OpenNet-initiated fault identification coordination meeting or a Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall not impose the joint investigation charge on the Requesting Licensee even if the fault identification process is initiated by the Requesting Licensee.
- (b) In the event that a particular fault is due to the Requesting Licensee or its contractors or its End-Users, OpenNet shall be entitled to impose a charge on the Requesting Licensee for access to the Co-Location Space (where applicable), regardless of whether it is an OpenNet-initiated fault identification coordination meeting or a Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall also be entitled to impose the joint investigation charge on the Requesting Licensee if the fault identification process is initiated by the Requesting Licensee.
- (c) In the event that it is agreed that a particular fault is not due to OpenNet (or its contractors) or the Requesting Licensee (or its contractors or End-Users), OpenNet shall be entitled to impose a charge on the Requesting Licensee for access to the Co-Location Space (where applicable) only if it is an Requesting Licensee-initiated joint investigation process. In addition, OpenNet shall also be entitled to impose the joint investigation charge on the Requesting Licensee if the process was initiated by the Requesting Licensee.

- (d) Except for (a) above, if it is discovered that any part of the Network located in the Non-Residential Premise is damaged, OpenNet shall impose the relevant charges in accordance to Schedule 15 (Charges) accordingly to the End-User and charge the End-User directly unless the damage is caused by the Requesting Licensee.
- 11.9 The Non-Residential End-User Connection is deemed to be restored when OpenNet has tested and confirmed to the Requesting Licensee that the Non-Residential End-User Connection has been restored. OpenNet will notify the Requesting Licensee with the cause of fault.
- 11.10 Where the Requesting Licensee has lodged with OpenNet a fault report and OpenNet is in the process of investigating the fault or where the Requesting Licensee has not lodged a fault report but suspect that there is a fault on the Non-Residential End-User Connection, the Requesting Licensee may request OpenNet for a joint investigation. The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges), if the fault is not due to OpenNet. If the fault is due to OpenNet, OpenNet will waive the Joint Investigation Charge. The process for a joint investigation shall be as described in clause 11.7. Clauses 11.8(a) to (c) will also apply to joint investigations under clause 11.10. Additionally, where the Requesting Licensee disputes OpenNet's findings, the Requesting Licensee may request OpenNet for a fault identification coordination meeting.
- 11.11 Where the joint investigation shows that the fault is not due to the Requesting Licensee's network, OpenNet shall delay the billing start date for such Non-Residential End-User Connection to the time such fault is rectified. In the event that the joint investigation team encounters a delay in fault rectification due to the applicable circumstances stated in clause 2.6 above, the billing start date shall be adjusted to exclude the delays attributable to the applicable circumstances in clause 2.6. For the avoidance of doubt, this clause 11.11 shall only apply to faults reported by the Requesting Licensee when the Requesting Licensee's installation of its equipment takes place within seven (7) calendar days (excluding Sundays and Public Holidays) from OpenNet's handover of the First Termination Point to the Requesting Licensee.
- 11.12 The Requesting Licensee acknowledges that OpenNet may temporarily disconnect the Requesting Licensee's Non-Residential End-User Connection to perform reasonable fault analysis and line testing on the Non-Residential End-User Connection. OpenNet shall conduct such disconnection only as it reasonably considers necessary. OpenNet shall notify the Requesting Licensee at least thirty (30) minutes before the temporary disconnection and provide its reasons for the temporary disconnection.

11.13 Each Party shall maintain and store its own records of faults and repairs.

**Mean Time To Recovery**

11.14 OpenNet shall restore any fault within a standard Mean Time To Recovery (MTTR) of eight (8) hours.

11.15 Subject to clause 2.6, the MTTR shall be the average time OpenNet took to restore service for all fault incidents for all Non-Residential End-User Connections acquired by the Requesting Licensee under this Schedule during a month, measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet’s control. For the avoidance of doubt, the MTTR is calculated as follows:

$$\frac{\sum X}{Y}$$

Where X = Time taken to restore fault incidents for each Non-Residential End-User Connection during a month as described above

Y = Total number of affected Non-Residential End-User Connections in the same month

11.16 In the event OpenNet fails to meet the standard MTTR for a particular month, OpenNet shall compensate the Requesting Licensee an MTTR Rebate equal to the difference between the MTTR experienced by the Requesting Licensee and the standard MTTR in terms of number of days, multiplied by the number of services affected, multiplied by the Weekly Recurring Charge for the Non-Residential End-User Connection, subject to a maximum of 30 times the Weekly Recurring Charge for the Non-Residential End-User Connection. This shall not apply to Non-Residential End-User Connections with one (1) month minimum contract term.

11.17 Where the service affected is on a one (1) month minimum contract term, OpenNet shall compensate the Requesting Licensee an MTTR Rebate equal to the difference between the MTTR experienced by the Requesting Licensee and the standard MTTR in terms of number of days, multiplied by the number of one month short term services affected, multiplied by the daily recurring charge for the Non-Residential End-User Connection, subject to a maximum of 50% of the monthly recurring charge for the Non-Residential End-User Connection, where

$$\text{Daily Recurring Charge} = \text{Monthly Recurring Charge (1 month contract)} / 30$$

For the avoidance of doubt, the standard MTTR of eight (8) hours in clause 11.14 and the MTTR calculation in clause 11.15 shall apply.

## **12. SERVICE LEVEL AVAILABILITY**

12.1 OpenNet shall offer a service level availability of 99.99% per month for the Non-Residential End-User Connection. OpenNet shall offer to rebate the Requesting Licensee ten percent (10%) of the Monthly Recurring Charge if OpenNet fails to meet the service level availability for that month.

12.2 Service level availability for the Non-Residential End-User Connection is calculated as follows:

$$\frac{(A - B)}{(A)} \times 100\%$$

Where A = 24 hours x number of days for the month (in hours); and

B = total network outage time for the Non-Residential End-User Connection in the same month (in hours)

12.3 Subject to clause 2.6, the total network outage time is the sum of all minutes for which the Requesting Licensee Non-Residential End-User Connection is unavailable measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control.

## **13. PROTECTION AND SAFETY**

13.1 Each Party is responsible for the safe operation of its Network and in particular the safe operation of any equipment within its Network on its side of the connection at the designated Central Office and the Non-Residential Premise.

13.2 Each Party shall, so far as reasonably practicable, take all necessary steps to ensure that the licence of the Non-Residential End-User Connection, its operations and its implementation of this Schedule:



- (a) do not endanger the safety or health of any person, including the employees and contractors of the Parties; and
- (b) do not damage, interfere with or cause any deterioration in the operation of the OpenNet Network.

#### **14. TERM OF LICENCE**

- 14.1 The minimum contract term for a Non-Residential End-User Connection shall be one (1) month or twelve (12) months, as the case may be, starting from the service activation date of the Non-Residential End-User Connection.

#### **15. SUSPENSION**

- 15.1 OpenNet may suspend the Requesting Licensee's licence to the Non-Residential End-User Connection at any time until further notice to the Requesting Licensee if the Non-Residential End-User Connection licence causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of OpenNet or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the OpenNet Network. If the suspension is the result of the Requesting Licensee's fault, the Requesting Licensee shall continue to pay the Monthly Recurring Charge during the period of suspension.
- 15.2 Without limiting the exclusions or limitations of liability in this ICO Agreement, OpenNet shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of a Non-Residential End-User Connection licence under this clause 15.

#### **16. TERMINATION OF LICENCE**

##### ***CLAUSES 16.1 & 16.2 – MODIFICATION REQUIRED***

- 16.1 On a fortnightly basis, the Requesting Licensee shall keep OpenNet informed of the Requesting Licensee's utilisation of each Non-Residential End-User Connection that was :
- (a) service activated for the End-User within fourteen (14) days prior to the submission of the report;
  - (b) terminated by the End-User within fourteen (14) days prior to submission of the report.

16.2 The Requesting Licensee must use or activate a service to a Retail Service Provider using the Non-Residential End-User Connection within two (2) weeks from the service activation date of the Non-Residential End-User Connection. If the Requesting Licensee fails to do so, OpenNet shall, at its sole discretion, deactivate the Non-Residential End-User Connection upon giving the Requesting Licensee ten (10) Business Days prior notice, and the Requesting Licensee did not dispute such written notice given by OpenNet. The Requesting Licensee must pay OpenNet the Monthly Recurring Charges for the remainder of the minimum contract term. Where an End-User had terminated a Non-Residential End-User Connection, the Requesting Licensee shall terminate the Non-Residential End-User Connection accordingly within two (2) weeks of such termination by the End-User. If the Requesting Licensee fails to do so, OpenNet shall, at its sole discretion, deactivate the relevant Non-Residential End-User Connection upon giving the Requesting Licensee two (2) Business Days prior notice.

***IDA Directed Modifications: IDA refers NetLink Trust to Section 10 of the Explanatory Memorandum to this Direction. IDA directs NetLink Trust to propose, for IDA's approval, modifications to clauses 16.1 and 16.2 to clarify that (a) the six-month timeframe for the activation of an EUC from the service activation date of the Non-Residential End-User Connection should be retained; (b) the RLs shall release any unused fibre strands back to NetLink Trust within one (1) Business Day from the date that end-users cease to subscribe to services provided over these fibre strands; (c) NetLink Trust shall make available the released and unused fibre strands to its other RLs within another one (1) Business Day from the date an OpCo releases an unused fibre strand; and (d) the RL shall keep NetLink Trust informed on the RL's utilisation of each service connection six (6) months from the service activation date and when there are changes to the utilisation.***

16.3 OpenNet may immediately terminate a licence of Non-Residential End-User Connection under this Schedule if:

- (a) the Requesting Licensee is no longer an FBO;
- (b) the OpenNet ICO is revoked by the Authority under clause 12.8 of the ICO Agreement;
- (c) the Authority removes the requirement for OpenNet to supply Non-Residential End-User Connection under the OpenNet ICO or exempts OpenNet from supplying Non-Residential End-User Connection under the ICO Agreement, provided that the date of termination shall not be earlier than the effective date of the Authority's decision;

- (d) in OpenNet's reasonable opinion, the Requesting Licensee is using the Non-Residential End-User Connection in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Government Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
- (e) in OpenNet's reasonable opinion, the Requesting Licensee is using the Non-Residential End-User Connection in a manner which places or allows a Third Party to act in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Government Agencies that the Third Party is in contravention of the applicable law, licence, code, regulation or direction;
- (f) the Non-Residential End-User Connection is used other than the purposes specified in clause 1;
- (g) the licence in respect of Co-Location Space to which the Non-Residential End-User Connection is connected has been terminated or has expired;
- (h) the Non-Residential End-User Connection has become unsafe for its purpose; or
- (i) OpenNet's right to own, maintain or operate the Non-Residential End-User Connection has been revoked or terminated or has expired.

16.4 Either Party (**Terminating Party**) may terminate the Non-Residential End-User Connection:

- (a) if the other Party is in breach of this Schedule other than failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains unremedied for a period of sixty (60) Calendar Days after receiving notice from the Terminating Party;
- (b) if the Requesting Licensee's Non-Residential End-User Connection licence has been suspended pursuant to clause 15.1, and the cause of such suspension has not been remedied or rectified for a period of sixty (60) Calendar Days from the date of the suspension; or
- (c) if the Requesting Licensee is in breach of this Schedule by its failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains unremedied for a period of fourteen (14) Calendar Days after receiving notice from the Terminating Party. For the avoidance of doubt, this sub-clause shall not apply

pending the resolution of any Billing Dispute in accordance with the provisions of Schedule 16 (Billing).

16.5 Upon termination of the licence of Non-Residential End-User Connection:

- (a) the Requesting Licensee must immediately discontinue the use of the Non-Residential End-User Connection; and
- (b) the Requesting Licensee must without undue delay disconnect all equipment connected to the Non-Residential End-User Connection; and
- (c) OpenNet shall be responsible for removing all necessary Patching Services at the Requesting Licensee's cost in accordance with Schedule 15 (Charges). Notwithstanding the above, the Requesting Licensee will not be liable for OpenNet's costs of removing all necessary Patching Services, if the termination is the result of OpenNet's fault.

16.6 If the licence of a Non-Residential End-User Connection is terminated as a result of the Requesting Licensee's fault, the Requesting Licensee shall be liable to OpenNet for the Monthly Recurring Charges for the remainder of the minimum contract term.

16.7 If the Requesting Licensee fails to disconnect its equipment from the Non-Residential End-User Connection under clause 16.5(b), OpenNet may at its sole discretion remove and/or dispose of the Requesting Licensee's equipment. The Requesting Licensee shall pay to OpenNet all reasonable costs associated with the work undertaken by OpenNet including the cost of disposing the Requesting Licensee's equipment. The Requesting Licensee shall have no claim whatsoever against OpenNet in connection with the removal and/or disposal of the Requesting Licensee's equipment from the Non-Residential End-User Connection.

## **17. REDUNDANCY SERVICE**

17.1 The Requesting Licensee may acquire:

- (a) for a Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing GPON services, one separate fibre strand from OpenNet's splitter at the Building MDF Room to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends;

- (b) for a Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing OE services, one separate fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends; or
- (c) for a Non-Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from OpenNet's FDF at the CO to the First Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends

**(Redundancy Service)** at the same prices, terms and conditions as the Non-Residential End-User Connection, through a request in the form of Annex 2A either via manual means or OpenNet Platform, unless stipulated otherwise in this clause 17.

- 17.2 OpenNet shall provide the Redundancy Service via the same duct and along the same path as the existing Non-Residential End-User Connection, without Duct Diversity and without Path Diversity. OpenNet may provide the Redundancy Service using a separate fibre strand from the same fibre cable that carries the existing Non-Residential End-User Connection.
- 17.3 The Requesting Licensee is eligible to acquire a Redundancy Service for the Non-Residential End-User Connection provided that the Requesting Licensee has acquired or is acquiring an equivalent Non-Residential End-User Connection to the same Non-Residential Premise. The Requesting Licensee may request OpenNet to reject the Request for the Non-Residential End-User Connection in the event that OpenNet is unable to provide the Redundancy Service, but such Requests for the Non-Residential End-user Connection and the Redundancy Service must be submitted together to OpenNet.
- 17.4 The Requesting Licensee shall be responsible, at its own cost and equipment, for the implementation of diversity or redundancy for its services using the Redundancy Service provided by OpenNet.
- 17.5 OpenNet shall make the Redundancy Service available to the Requesting Licensee, except where OpenNet is unable to build the requisite infrastructure (other than fibre) to provide the Redundancy Service or due to any of the reasons stated in clause 5.4.

## 18. RELOCATION SERVICE

18.1 The Requesting Licensee may request to relocate the End-User Connection for an End-User to the End-User's new or other non-residential address (**Relocation Service**) via manual means or OpenNet Platform when available (which OpenNet shall inform the industry when the above feature will be available on OpenNet Platform), giving, amongst others, the following information:

- (i) The Order Request Identifier of existing connection at old Non-Residential Premise
- (ii) Service activation date at new Non-Residential Premise
- (iii) All applicable supporting documents evidencing that the request for Relocation is at the request of or for the benefit of one End-User.

18.2 Subject always to the terms of this Schedule, OpenNet shall provide the Relocation Service by installing (where applicable) and activating a new Non-Residential End-User Connection at the new Non-Residential Premise in accordance to clause 6, followed by deactivation of the existing Non-Residential End-User Connection at the former premise. The expiry date of the minimum contract term which will be computed from the initial Request remains unchanged.

18.3 For the avoidance of doubt, each request for Relocation Service shall constitute one (1) Request for Non-Residential End-User Connection of which must fall within the Non-Residential End-User Connections Quota.

18.4 The Requesting Licensee shall make payment of the applicable charges for every request for Relocation Service which includes charges for Relocation Service, Installation and activation of Patching in the CO (where applicable) and deactivation of Patching in the CO and MDF Room in accordance to Schedule 15 (Charges), where applicable. A Cancellation Charge as set out in Schedule 15 (Charges) shall be applicable if the Requesting Licensee cancels the request for Relocation Service after acceptance by OpenNet. A change in the End-User's new Non-Residential Premise address constitutes a cancellation.

18.5 At all times, the Requesting Licensee shall be solely responsible for the relocation of its services to the End-User arising from the request for Relocation Service.

## 19. ADDITIONAL TERMINATION POINTS

19.1 (A) Subject to paragraphs (B) and (C) below and clause 19.2, the Requesting Licensee may request, and OpenNet shall install additional termination point, by providing:

- a. for a Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing GPON services, one separate fibre strand from OpenNet's splitter at the Building MDF Room to the Additional Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Additional Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends;
- b. for a Non-Residential End-User Connection of 1:16 Split Ratio for the purpose of providing OE services, one separate fibre strand from OpenNet's FDF at the Building MDF Room to the Additional Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Additional Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends; or
- c. for a Non-Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from OpenNet's FDF at the CO to the Additional Termination Point of the Non-Residential Premise (subject to clauses 6.3 and 6.4) or to the Additional Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located or otherwise to the FTTB Node of the Non-Residential Premise where OpenNet's Network ends,

on the same terms and conditions as the Non-Residential End-User Connection. The Requesting Licensee's request may be submitted via manual means, or OpenNet Platform when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform.

(B) OpenNet will only install an Additional Termination Point within a Non-Residential Premise if all the fibre of the First Termination Point in that Non-Residential Premise is in use.

(C) Notwithstanding paragraph (B), where not all the fibre of the First Termination Point in a Non-Residential Premise is in use, the Requesting Licensee may request for the installation of an Additional Termination Point in the vertical telecommunications riser and/or the FTTB Node.

19.2 The Requesting Licensee shall pay OpenNet the applicable Installation Charges for Additional Termination Point specified in Schedule 15 (Charges) for provisioning the Non-Residential End-User Connection for each Additional Termination Point.

**20. Termination Point in the Vertical Telecommunication Riser**

- 20.1 Where the Requesting Licensee elects to initiate the Non-Residential End-User Connection starting from the Termination Point in the vertical telecommunication riser on the same floor where the Non-Residential Premise is located, the Requesting Licensee shall perform all the necessary work to provision its services and be responsible from the Termination Point in the vertical telecommunication riser to the Non-Residential Premise served. For avoidance of doubt, this Termination Point in the vertical telecommunication riser can only be used to serve a Non-Residential Premise. OpenNet shall retain the responsibility for all works at OpenNet's FDF at the Central Office, Building MDF Room and FTTB Node, including Patching Service at each of the aforesaid location in accordance with Schedule 13 on Patching Services. The Requesting Licensee shall bear the Charges for such works carried out by OpenNet.
- 20.2 Where the Requesting Licensee requests for Non-Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet shall provide the necessary Patching Service at OpenNet's FDF in the Building MDF Room using Patch Cable of not exceeding ten (10) metres in length. The Requesting Licensee shall provide its own Patch Cable if it requires a longer Patch Cable. For the avoidance of doubt, where the Requesting Licensee provides its own Patch Cable, OpenNet will not offer and Requesting Licensee shall not request for any rebate or discount over the Patching Service or the Non-Residential End-User Connection.



**ANNEX 2A : REQUEST FORM FOR NON-RESIDENTIAL END-USER CONNECTION**

**Request Form for Non-Residential End-User Connection**

<b>Requesting Licensee</b>	Please Tick only one option: <input type="checkbox"/> Relocation Service from one Non-Residential Address to another Non-Residential Address <input type="checkbox"/> New End-User Connection			
	<i>For request for Relocation Service from one Non-Residential Address to another Non-Residential Address, please provide:</i> Order Identification Number (ORI) of existing connection: _____			
	Date of Application: _____ Requested Date of Activation: _____ Preferred Installation Session*: AM/PM (if applicable)	Application _____	Reference _____	Number: \
	Non-Residential End-User Name: _____	Non-Residential End-User Telephone Number: _____		
	Non-Residential End-User Installation Address: _____			
	<i>For NEW connection, please select:</i>			
	Split Ratio: _____ 1:1 / 1:16  Technology: GPON / OE (only applicable for 1:16 Split Ratio)  (Change of Split ratio is not allowed for <i>Relocation Service from one Non-Residential Address to another Non-Residential Address</i> )	Option: (a) In-building wiring to Termination Point: self provide / request OpenNet to install  (b) Termination Point in the vertical telecommunication riser		
Term of Licence : <input type="checkbox"/> One (1) month / <input type="checkbox"/> Twelve (12) months				
Any other info: _____ <input type="checkbox"/> Redundancy Service is required <input type="checkbox"/> Request for Non-Residential End-User Connection to be rejected if Redundancy Service is not available				

For and on Behalf of Requesting Licensee

<b>Requesting Licensee</b>	Sign: _____	Company Stamp: _____
	Name: _____	Company Name: _____
	Designation: _____	
	Contact Number, Fax and email address _____	


Part 1: Date: \_\_\_\_\_

<b>OpenNet</b>	<input type="checkbox"/> Application accepted: Circuit Identification Number: _____ Tentative Provision Date : _____ _____ Able to provide in-building wiring to Termination Point (Y/N)	
	<input type="checkbox"/> Application rejected Reason for rejection: _____	
	OpenNet Name / Signature: _____	Queue Status: _____

Part 2: Date: \_\_\_\_\_

<b>OpenNet</b>	<input type="checkbox"/> Circuit Provision: Reason: _____ Revised Provision Date (where applicable): _____ _____ Any other reason: _____	
	<input type="checkbox"/> Application rejected Reason for rejection: _____	
	OpenNet Name / Signature: _____	

**ANNEX 2B: FAULT RECTIFICATION SERVICE REPORT**

 <b>Fault Rectification Service Report</b>		Serial No: _____			
Appointment Date: _____		Arrival Time: _____			
Time: _____		Completion Time: _____			
Trouble Ticket No: _____		<input type="checkbox"/> 1 hour activation <input type="checkbox"/> Maintenance Fault Rectification <input type="checkbox"/> Follow up end-user appointment			
<b>END-USER INFORMATION</b>					
<b>Authorised Person Name:</b> _____		*Mr/Mrs/Miss/Mdm/Dr			
<b>Contact no:</b> _____		<b>(HP):</b> _____			
<b>Company:</b> _____		_____			
<b>Registered Address:</b>		Blk/House: _____ Unit No: # _____ - _____			
		Street Name: _____			
		Building Name: _____ Postal code: S( _____ )			
<b>LOCATION OF INSTALLATION</b>					
<b>A-END (CO/MDF)</b>		<b>B-END (CO/MDF, End-User's Premise)</b>			
Blk/House: _____ Unit No: # _____ - _____		Blk/House: _____ Unit No: # _____ - _____			
Street Name: _____		Street Name: _____			
Building Name: _____ Postal code: S( _____ )		Building Name: _____ Postal code: S( _____ )			
<b>End-User Declaration (check only one box)</b>					
<input type="checkbox"/> I am the owner of the above premises <input type="checkbox"/> I, Name: _____, am authorised by the owner of the premise and/or the above-stated company to sign this form and permit OpenNet Pte Ltd or its contractor to enter the premises and conduct the fault rectification work. I will bear full responsibility if the owner should dispute (a) my authority, or (b) any action taken by OpenNet Pte Ltd at my instructions.					
Company Stamp (if applicable): _____					
<b>For Official Use Only</b>					
<b>OPTICAL MEASUREMENTS, WHERE POSSIBLE(Measured by RL)</b>					
<b>Fault description:</b> _____					
<b>Test Measurement (CO to Serving Cabinet):</b>	1310nm	1490nm	1550nm	Distance (m)	
<b>Test Measurement (CO to 1<sup>st</sup> TP):</b>	1310nm	1490nm	1550nm	Distance (m)	
<b>Test Measurement (Segment Services A-END to B-END)</b>	1310nm	1490nm	1550nm	Distance (m)	
<b>Certified by ON:</b>					
Technician Name: _____			Date: _____		
Technician Signature: _____			Time: _____		

**ANNEX 2B: FAULT RECTIFICATION SERVICE REPORT**

OPTICAL MEASUREMENTS, WHERE POSSIBLE(Measured by ON)							
<b>Fault description:</b>							
<b>Test Measurement (CO to Serving Cabinet):</b>	1310nm		1490nm		1550nm		Distance (m)
<b>Test Measurement (CO to 1<sup>st</sup> TP):</b>	1310nm		1490nm		1550nm		Distance (m)
<b>Test Measurement (Segment Services A-END to B-END)</b>	1310nm		1490nm		1550nm		Distance (m)
<b>Certified by :</b>							
RL Name:				Date:			
RL Signature:				Time:			
<b>Fault Root Cause Description</b>							
<b>ACTION TAKEN/ADDITIONAL REMARKS</b>							
<b>CUSTOMER ACKNOWLEDGEMENT AND ACCEPTANCE</b>							
Remarks/Comments:							
<b>This is to acknowledge that the fibre fault rectification has been attended and the fault resolution is effective</b>							
<b>Fault Attended by:</b>				<b>Resolution Accepted by End-User:</b>			
Technician Name:		End-User Signature:					
Technician Signature:							
<b>Resolution Verified and Accepted by RL (Only applicable for <u>1 hour activation</u>) :</b>							
RL Name:		RL Signature:					

*End-Users can refer to their retail service providers for more information to address and resolve any end user service related issues.*

\*Please delete where inapplicable.

## ANNEX 2C : REQUEST FOR ADDRESS NOT FOUND

### Request for Address not Found

#### Section 1: Application *(To be filled up by Requesting Licensee)*

<u>Date of Application:</u>	<u>Application Reference Number:</u>
<u>Non-Residential End-User Name:</u>	<u>Non-Residential End-User Telephone Number:</u>
<u>Non-Residential End-User Address:</u>	

For and on Behalf of Requesting Licensee

<u>Name:</u>	<u>Company Name:</u>
<u>Designation:</u>	<u>Contact Number:</u>
<u>Email Contact:</u>	

#### Section 2: Acceptance of application *(for official use)*

<u>Date of Receipt to RL:</u>
<u>Application accepted/rejected:</u>  <i>For accepted request</i> <u>Request Identification Number:</u> ANF-DDMMYY (of submitted request)-XX(QP code)-01  <i>For rejected request</i> <u>Reason(s) for rejection:</u>
<u>OpenNet Name:</u>

#### Section 3: Verification of address *(for official use)*

<u>Date of notification to RL:</u>
<i>For valid address</i> <u>Estimated RFA (if available):</u>  <i>For non-valid address</i> <u>Valid proof of stay available?: Yes/ No</u>  <u>Remarks:</u>
<u>OpenNet Name:</u>

#### Section 4: Ready for ordering *(for official use)*

**ANNEX 2C : REQUEST FOR ADDRESS NOT FOUND**

Date of notification to RL:

The address as per request in this application can now be order for Non-Residential End-User Service Connection from the OSS/BSS platform.

OpenNet Name:

**ANNEX 2D : EXAMPLE OF DEMAND FORECAST ASSESSMENT**

This shows an example of Demand Forecast assessment for the week of 1<sup>st</sup> to 5<sup>th</sup> December:

Month of assessment	Forecast Period	Requesting Licensee daily Request forecast (A)	Minimum Commitment (A x 90%)	Slots Utilised By Requesting Licensee	OpenNet Actual Fulfilment	Slots Shortfall by Requesting Licensee	Requesting Licensee to pay Work Slot Charge	Slots Shortfall by OpenNet	OpenNet to pay per Work Slot Charge	Amount Payable by Requesting Licensee or (OpenNet)
January	1-Dec	30	27	25	25	2	\$460	0	\$-	\$ 460
	2-Dec	30	27	29	27	0	\$-	3	\$690	\$(690)
	3-Dec	30	27	26	25	1	\$230	5	\$1,150	\$(920)
	4-Dec	30	27	28	28	0	\$-	0	\$-	\$-
	5-Dec	30	27	20	20	7	\$1,610	0	\$-	\$1,610

The amount payable for forecast period (December) will be computed and shall be billed on one month (February) after the month of assessment (January).