# APPENDIX 1 DIRECTED MODIFICATIONS TO SCHEDULE 1

# SCHEDULE 1 RESIDENTIAL END-USER CONNECTION

Note: Unless otherwise specified in IMDA's Directed Modifications in the Explanatory Memorandum and other IMDA Directed Modifications in other parts of the Direction (including Schedule 1 – Residential End-User Connection), NetLink Trust's proposed changes to Schedule 1 – Residential End-User Connection are approved.

IMDA Directed Modifications: On the outset, IMDA would like to clarify that the RLs' service experience for NetLink Trust's service provisioning over the ICO shall be no different for both Pre-COPIF 2013 Buildings and COPIF 2013 Buildings. IMDA considers it essential to streamline the processes serving both categories of buildings to the extent possible so that the industry need not deal with two sets of varying processes for residential buildings. Hence, there should ideally be only one set of service provisioning process and prices that can be applied to all residential buildings, regardless of the building's identity as a Pre-COPIF 2013 Building or COPIF 2013 Buildings. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modifications to Schedule 1 of the ICO to (a) remove language that seeks to differentiate the service provisioning process for COPIF 2013 Buildings or Pre-COPIF 2013 Buildings to the extent possible; (b) describe the different service provisioning processes based on the exact network configuration of the building (i.e., buildings fitted with NetLink Trust's fibre infrastructure from the CO to the riser and with BO/BD's fibre infrastructure from the riser to the residential premise, buildings fitted with end-to-end NetLink Trust's fibre infrastructure) if it is necessary for the service provisioning processes to differ arising from the different fibre network configurations for Pre-COPIF 2013 Buildings and COPIF 2013 Buildings; and (c) remove references made to "Pre-COPIF 2013 Buildings" and "COPIF 2013 Buildings" in the drafting of the processes described in (b) above.

# **SCHEDULE 1**

# RESIDENTIAL END-USER CONNECTION

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# **SCHEDULE 1**

#### RESIDENTIAL END-USER CONNECTION

# 1. SCOPE

This Schedule 1 sets out the terms and conditions under which NetLink Trust will provide the Requesting Licensee with a licence for:

- (i) Layer 1 Service (a service provided by NetLink Trust for the use of passive optical fibre cable) from NetLink Trust's designated Central Office (or "CO") to the First Termination Point of a Residential Premise for the purpose of the Requesting Licensee providing GPON services; or
- (ii) Layer 1 Service from NetLink Trust's designated CO to the First Termination Point of a Residential Premise for the purpose of the Requesting Licensee providing OE services

# (Residential End-User Connection).

- 1.1 The Residential End-User Connection is a service provided by NetLink Trust to the Requesting Licensee for the purpose of delivering GPON or OE services over the Layer 1 Services highlighted above to a Residential Premise at a:
  - (a) High-Rise Residential Building/Non-Residential Building; or
  - (b) Landed Residential Premise.
- 1.2 For the avoidance of doubt, NetLink Trust may provide a Residential End-User Connection via the 1<sup>st</sup> or 2<sup>nd</sup> fibre installed in the First Termination Point or 1<sup>st</sup> or 2<sup>nd</sup> fibre installed in the Second Termination Point (subject to clause 19), and all terms and conditions of this Schedule 1 shall apply regardless of which fibre is used.
- 1.3 This Schedule only applies to Requesting Licensees who are FBOs.

# 2. SERVICE LEVEL GUARANTEES

2.1 NetLink Trust will provide the Service Level Guarantees in respect of Residential End-User Connection as set out in this Schedule. If NetLink Trust 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 caused by NetLink Trust, its contractors and/or suppliers, NetLink Trust will provide a remedy in the form of a rebate to the Requesting Licensee in accordance with:

- (a) Clause 6.9 and any terms and conditions contained in this Schedule in respect of request and provisioning timeframes;
- (b) Clause 11.15 and any terms and conditions contained in this Schedule in respect of fault rectification timeframes; and
- (c) 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. NetLink Trust will respond within (30) Calendar Days from date of claim stating whether the claim by Requesting Licensee: (a) is valid for rebates; or (b) is an invalid claim. Where NetLink Trust assessed that the Requesting Licensee to provide additional information. For valid claims submitted within the timeframe, NetLink Trust 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, the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by NetLink Trust and will be reflected in NetLink Trust's bill to the Requesting Licensee in accordance with NetLink Trust's billing cycle.
- 2.4 The guarantee and rebates provided by NetLink Trust are:
  - (a) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
  - (b) subject to this Schedule.
- 2.5 Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim, NetLink Trust 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 or whether NetLink Trust is exempted from SLGs payment for a claim, 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.

- 2.6 Subject always to <u>c</u>Clause 2.6A and 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 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 NetLink Trust's fault;
  - (b) fault due to any equipment, wiring and/or cabling owned or operated by the Requesting Licensee or on behalf of the Requesting Licensee;
  - (c) provision or restoration of the Residential End-User Connection where any site-coordination meeting, <u>fault investigation</u>, Joint Investigation Meeting or fault identification coordination meeting is involved, except where (a) the fault was caused by NetLink Trust; 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 NetLink Trust, the time taken from the start of arranging any site-coordination meeting, <u>fault investigation</u>, Joint Investigation Meeting or fault identification coordination meeting up to the end of the meeting, shall always be excluded;
  - (d) NetLink Trust is unable to obtain or maintain any licence or permission necessary to the provision or restoration of the 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 NetLink Trust, the time taken by NetLink Trust to obtain or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection shall always be excluded. Provided that in the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain or maintain the licence/permission, NetLink Trust will provide evidence that it has used such best endeavours:
  - (e) NetLink Trust has difficulty accessing or working in the building or 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 NetLink Trust has

- used its best endeavours to expeditiously remedy the building access difficulties, NetLink Trust will provide evidence that it has used such best endeavours;
- (f) delay in the provision or restoration of the Residential End-User Connection caused by events beyond the reasonable control of NetLink Trust and its suppliers and contractors;
- (g) NetLink Trust's 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 NetLink Trust;
- (i) NetLink Trust is required to carry out service interruption and the Requesting Licensee has been informed in accordance with clause 9.5 or 9.6;
- (j) NetLink Trust 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;
- (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 NetLink Trust'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
- (1) where the End-User or Requesting Licensee requires customised arrangements (e.g. non-standard or customised installation) before access is granted to NetLink Trust or before NetLink Trust can provision its services, but such exclusion shall only be limited to the time taken for access to be granted to NetLink Trust or condition is suitable for NetLink Trust to provision its services; and
- (m) where any necessary permission is not granted by the relevant authorities, Government Agencies and/or their appointed or authorised third parties, e.g. LTA, PUB, NParks, JTC etc., provided always that NetLink Trust has exercised its best endeavours to obtain expeditiously and/or maintain all such necessary permissions. In the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain or maintain the permission, NetLink Trust will provide evidence that it has used such best endeavours.

- 2.6A This celause 2.6A shall apply in any case where there is a BM Delay, and NetLink Trust seeks to rely on any celause in this Schedule in order to exclude, exempt or otherwise limit its liability from SLGs, including without limitation celauses 2.6 and 6.10. In any such case, this Clause 2.6A shall have effect notwithstanding any other celause in this Schedule 1. For the purposes of this Schedule, "BM Delay" shall mean any delay that leads to a failure by NetLink Trust to meet any service activation period applicable to this Schedule, where such delay is solely caused by a developer, owner or MCST of a building, and without NetLink Trust contributing towards such delay.
  - (a) Where this <u>c</u>Clause 2.6A applies, the period in respect of which NetLink Trust may claim to be excluded or otherwise exempted from the SLGs shall not exceed the period beginning from the first Calendar Day on which the delay commences until the tenth (10<sup>th</sup>) Business Day thereafter (inclusive), provided that this period shall only commence after the applicable service activation period.
  - (b) For the avoidance of doubt, in any case where NetLink Trust claims such exclusion or exemption in respect of a BM Delay, the relevant period of delay, for the purpose of computing the rebate payable to the Requesting Licensee, shall commence on the Calendar Day immediately following the tenth (10<sup>th</sup>) Business Day after the applicable service activation period, as aforementioned.
- 2.7 If the Requesting Licensee disputes NetLink Trust'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 NetLink Trust 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 any Residential End-User Connection and shall be NetLink Trust's sole and exclusive liability to the Requesting Licensee for such failure.

#### CLAUSE 3 - REQUIRED MODIFICATIONS

# 3. SERVICE DESCRIPTION AND ACCESS POINTS

3.1 (A) Where the Requesting Licensee requests for Residential End-User Connection for the purpose of providing GPON services to the End-User, NetLink Trust will provide a licence for

Residential End-User Connection of 1:24 Split Ratio to the Requesting Licensee with the following:

- (a) one (1) fibre strand from NetLink Trust's Fibre Distribution Frame (**FDF**) at the Central Office designated by NetLink Trust to NetLink Trust's splitter at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);
- (b) for Pre COPIF 2013 Buildings <u>fitted with end-to-end NetLink Trust's fibre</u> <u>infrastructure</u>, one (1) dedicated fibre strand from the splitter to the First Termination Point of the Residential Premise;
- one (1) Patching Service at NetLink Trust's FDF at the Building MDF Room and where applicable, one (1) Patching Service from NetLink Trust's Fibre Distribution Point to the Fibre Interface Point which is provided by the building developer/owner and is located in either the telecommunication riser, gate pillar or meter compartment; and
- (d) where necessary, one (1) Patching Service at NetLink Trust'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, NetLink Trust 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 Residential End-User Connection for the purpose of providing OE services to the End-User, NetLink Trust will provide a licence for Residential End-User Connection of 1:24 Split Ratio to the Requesting Licensee with the following:
  - (a) two (2) fibre strands from NetLink Trust's FDF at the Central Office designated by NetLink Trust to NetLink Trust's FDF at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);
  - (b) for Pre-COPIF 2013 Buildings fitted with end-to-end NetLink Trust's fibre infrastructure, one (1) dedicated fibre strand to the First Termination Point of the Residential Premise from NetLink Trust's FDF at the Building MDF Room;

- up to three (3) Patching Services at NetLink Trust's FDF in the Building MDF Room and where applicable, one (1) Patching Service from NetLink Trust's Fibre Distribution

  Point to the Fibre Interface Point which is provided by the building developer/owner and is located in either the telecommunication riser, gate pillar or meter compartment; and
- (d) where necessary, two (2) Patching Services at NetLink Trust'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 Residential End-User Connection of 1:1 Split Ratio to the End-User, NetLink Trust will not provide any splitter at the Building MDF Room. NetLink Trust will provide:
  - (a) one (1) dedicated fibre strand from NetLink Trust's FDF at the Central Office designated by NetLink Trust to NetLink Trust's FDF at the Building MDF Room;
  - (b) for Pre COPIF 2013 Buildings <u>fitted with end-to-end NetLink Trust's fibre infrastructure</u>, one (1) dedicated fibre strand from NetLink Trust's FDF at the Building MDF Room to the First Termination Point of the Residential Premise;
  - one (1) Patching Service at NetLink Trust's FDF in the Building MDF Room and where applicable, one (1) Patching Service from NetLink Trust's Fibre Distribution Point to the Fibre Interface Point which is provided by the building developer/owner and is located in either the telecommunication riser, gate pillar or meter compartment; and
  - (d) one (1) Patching Service at NetLink Trust'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 requests for Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services to the End-User or Residential End-User Connection of 1:1 Split Ratio, the Requesting Licensee shall access the Residential End-User Connection at NetLink Trust's FDF at the Central Office designated by NetLink Trust or the Requesting Licensee's FDF at the Central Office designated by NetLink Trust, and at the First Termination Point in (for Pre COPIF 2013 Buildings fitted with end-to-end NetLink Trust's fibre infrastructure) or the Fibre Interface Point which is provided by the building developer/owner and is located in either the telecommunication riser, gate pillar or meter compartment (for COPIF 2013 Buildings) of the Residential Premise.
- 3.4 Where the Requesting Licensee requests for Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee shall

access the Residential End-User Connection at NetLink Trust's FDF at the Central Office designated by NetLink Trust or the Requesting Licensee's FDF at the Central Office designated by NetLink Trust, at NetLink Trust's FDF at the Building MDF Room, and at the First Termination Point in (for Pre COPIF 2013 Buildings fitted with end-to-end NetLink Trust's fibre infrastructure)—or the Fibre Interface Point which is provided by the building developer/owner and is located in either the telecommunication riser, gate pillar or meter compartment (for COPIF 2013 Buildings) of the Residential Premise.

- 3.5 Where the Requesting Licensee wishes to acquire subsequent fibre connection from CO to Building MDF Room, the Requesting Licensee shall acquire such fibre connection in accordance with Schedule 5 (CO to Building MDF Room Connection).
- 3.6 Where the Requesting Licensee acquires a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services to the End-User, the Requesting Licensee shall ensure the Residential End-User Connection is connected to active Optical Ethernet equipment.

IMDA Directed Modifications: Under IMDA's Decision, NetLink Trust is required to propose changes to the ICO to clarify that NetLink Trust shall be responsible for patching works from the FIP to the FDP for Residential EUC orders to COPIF 2013 Buildings. IMDA notes that NetLink Trust's proposed changes in the Draft Revised ICO fail to give full effect to the above requirement. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modifications to clause 3 to clarify that NetLink Trust shall be responsible for patching works from the FIP to the FDP for buildings fitted with NetLink Trust's fibre infrastructure from the CO to the riser and BO/BD's fibre infrastructure from the residential premise.

# 4. ORDERING AND PROVISIONING PROCEDURE

# **CLAUSE 4.1 – REQUIRED MODIFICATIONS**

4.1 Within a reasonable timeframe after the First Termination Point has been installed at a Residential Premise in a Pre COPIF 2013 Buildings fitted with end-to-end NetLink Trust's fibre infrastructure or after NetLink Trust's fibre infrastructure from the Central Office to the telecommunication riser has been deployed and the necessary Patching Service has been completed, for Buildings in which the building developer/owner has provided the Fibre Interface Point and deployed fibre from either the telecommunication riser, gate pillar or meter compartment to the Residential Premise, NetLink Trust shall indicate the same as a "covered" site in its Mandated Service Information ("MSI") whereupon any Requesting Licensee may submit to NetLink Trust its request for Residential End-User Connection ("Request").

IMDA Directed Modifications: One of the respondents submitted that the coverage status of homes in COPIF 2013 Buildings (i.e., once the building is fibre-ready after the building attains TOP status) should also form part of MSI to enable RLs to check whether COPIF 2013 homes are serviceable. IMDA is of the view that the service provisioning processes for COPIF 2013 Buildings should be no different from the existing processes for Pre-COPIF 2013 Buildings to the extent possible. IMDA also understands from NetLink Trust that homes in COPIF 2013 Buildings will generally be classified as 'Home Reached' in NetLink Trust's system, after NetLink Trust deploys its fibre infrastructure into the building and performs the patching connection between the FIP and the FDP in the riser. In this regard, IMDA agrees that the coverage status of homes in COPIF 2013 Buildings, similar to the coverage status of homes in Pre-COPIF 2013 Buildings, shall also form part of NetLink Trust's MSI. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modifications to clause 4.1 to clarify that the coverage status of all homes shall form part of NetLink Trust's MSI.

- 4.2 (A) The Requesting Licensee shall submit its request for Residential End-User Connection (**Request**) to NetLink Trust on a Business Day in the form of Annex 1A stating, but not limited to the following information:
  - (a) the End-User's name, telephone number and address of the Residential Premise; and
  - (b) the Split Ratio required.
  - (B)(i) As an alternative to submitting a Request under the form set out in Annex 1A under clause 4.2(A), the Requesting Licensee may also submit its Request for Residential End-User Connection (Request) to NetLink Trust via the NetLink Trust Platform, stating, but not limited to the following information:
  - (a) the End-User's name, telephone number and address of the Residential Premise; and
  - (b) the Split Ratio required.

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

Alternatively, for Request submitted via the NetLink Trust Platform APIs, the Requesting Licensee shall perform the feasibility check for verifying the coverage status by supplying the postal code and unit number of the Residential Premise whichever is applicable. The Requesting

Licensee shall also query the available time slots for that particular Request. The Requesting Licensee shall then use the address details returned by NetLink Trust and the applicable time slot related to the status of the feasibility check for submission of Request. Upon successful submission of the Request via the NetLink Trust Platform APIs, it will provide a Request acknowledgement.

# CLAUSE 4.2(B)(ii) - REQUIRED MODIFICATIONS

- (B)(ii) Following clause 4.2(B)(i), for Request submitted via the NetLink Trust Platform, the Requesting Licensees are able to modify the contact details of End-Users subject to the requirement that the date of modification is more than three (3) Business Days from the request service activation date requested. The NetLink Trust Platform will notify the Requesting Licensee if the contact details have been successfully modified.
- 4.3(a) The Requesting Licensee may submit a request with the relevant Order Request Identifier (ORI) via manual means or NetLink Trust Platform when available (about which NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform) to relocate the First or Second Termination Point within the same Residential Premise, subject to the following terms and conditions:
  - (a) The Requesting Licensee hereby acknowledges and agrees that NetLink Trust shall not be held liable if despite its best endeavours there is any delay caused by any 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;
  - (a) (b) Subject to clauses 5.2, 5.3(A)(b), 5.3(A)(c), 5.3(B)(ii)(a) and 5.3(B)(i)(b), NetLink Trust 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;
  - (b)(c) The Requesting Licensee will have to bear the charge for installation where and service activation of the relocated Termination Point is relocated within the same Residential Premise in accordance to Schedule 15 (Charges); and
  - (e) (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 NetLink Trust.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 1 of the Explanatory Memorandum to this Direction. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modifications to clause 4.2(B)(ii) to clarify

# that the Service Activation Charge does not apply when an RL requests a relocation of the Residential EUC within a premise.

- 4.4 4.3 Where a premise which was previously a Non-Residential Premise but has since undergone a change of premise type to a Residential Premise or the End-User claims the premise is now a Residential Premise, the Requesting Licensee shall obtain from the End-User and keep a copy 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 the National Registration Identity Card (NRIC).

Items (a) to (d) should be dated within the last three (3) months from the date of Request for Residential End-User Connection submitted in the End-User's name and bearing the unit address of the premise for which the change in premise type is claimed.

Where the Requesting Licensee has the documentary evidence, as above, to demonstrate that the End-User is entitled to a Residential End-User Connection, the Requesting Licensee can request for a reclassification of premise via the NetLink Trust Platform, when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform. NetLink Trust will by default allow the request for reclassification to be submitted via NetLink Trust Platform.

In the event that Requesting Licensee is unable to submit the documents from at least two (2) of the categories (a) to (f) above, the Requesting Licensee shall provide sufficient written explanation to NetLink Trust within one (1) Business Day from the date of the reclassification request and NetLink Trust shall not unreasonably reject the reclassification request.

NetLink Trust shall reject the request for reclassification where the Requesting Licensee fails to provide the requisite documentary evidence and/or written explanation (as the case may be) within two (2) Business Days. NetLink Trust shall accept or reject the reclassification request within three (3) Business Days from the date of request.

For avoidance of doubt, reclassification of a Non-Residential Premise, having an active Non-Residential End-User Connection at the time of submission, to a Residential Premise is not allowed. However, reclassification of a Defined Area within a Non-Residential Premise (regardless of whether the Non-Residential Premise has or does not have an active Non-Residential End-User Connection at the time of submission) into a Residential Premise is permissible and must be done through a reclassification of premise request. The Requesting Licensee shall, for the purposes of such request, provide to NetLink Trust clear and sufficient documentary evidence showing the Defined Area as being used for residential purposes (e.g. photographs etc).

Where the Request is accepted, NetLink Trust will provision the Residential End-User Connection based on 1:16 split ratio in ten (10) Business Days or the preferred installation date requested by the Requesting Licensee, whichever is later, unless there are delays due to reasons beyond NetLink Trust's reasonable control despite NetLink Trust using its best endeavours to attempt to complete the reclassification within the prescribed timeframe. Such Residential End-User Connections shall be provisioned on a splitter used for Residential End-User Connections only.

NetLink Trust will waive the one-time installation charge for such premise where such premise is classified or re-classified for the first time as a Residential Premise. Where a premise is subsequently re-classified as a Residential Premise after it has been re-classified as a Non-Residential Premise from a Residential Premise, no waiver of fees shall be given. For the avoidance of doubt, there shall be no installation charge where the <u>First</u> Termination Point has been installed.

Where NetLink Trust requests for additional documentary evidence due to non-compliance with clause 4.43 and the Requesting Licensee is unable to provide the additional evidence to support the change in premise type to a Residential Premise or where NetLink Trust conducts a site survey and the proposed Residential Premise is not normally used for residential purposes, NetLink Trust reserves the right to maintain or re-classify the premise type as a Non-Residential Premise and bill the Requesting Licensee all charges applicable to a Non-Residential End-User Connection as per Schedule 15 (Charges) retrospectively. If Requesting Licensee disputes NetLink Trust's decision to classify the premise as a Non-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 such other process or timeframe as mutually agreed by the parties.

The Requesting Licensee shall pay NetLink Trust the applicable Installation Charge, Service Activation Charge and Patching Charge specified in Schedule 15 (Charges) for the reclassification request.

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

4.4 4.5 For the avoidance of doubt, switching from GPON to OE or from OE to GPON is allowed via the NetLink Trust Platform subject to the Requesting Licensee paying the applicable charges for Patching Service and Service Activation Charge 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 NetLink Trust 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. NetLink Trust 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 NetLink Trust Platform during the switch. NetLink Trust shall use its best endeavours to minimise any service disruption to the Requesting Licensee during the switch.

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

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

- 4.5 <u>4.6</u> NetLink Trust shall at its sole discretion determine the serving CO and Building MDF Room from which the Residential End-User Connection will be provided. Subject to clause 4.6, the Requesting Licensee, is able to query the NetLink Trust Platform at no cost for the serving CO and Building MDF by providing the postal code for the Residential Premise.
- 4.6 4.7 Information relating to the Mandated Services will be available on NetLink Trust Platform, for access by the Requesting Licensee through secured means. The secured access to NetLink Trust 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 NetLink Trust Platform. The information relating to the Mandated Services and the information relating to network outages is available on the NetLink Trust Platform.

For information related to network outages, NetLink Trust shall include the following details in the written notification or via NetLink Trust 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) NetLink Trust's Network Operations Centre Contact Number.

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

# 4A. VERIFICATION OF COVERAGE STATUS

- 4A.1 Where the Requesting Licensee obtains an "Address Not Found" message from NetLink Trust Platform, the Requesting Licensee may submit an Address Not Found Request via manual means using the form Annex 1D.
- AA.2 NetLink Trust shall notify the Requesting Licensee of the acceptance or rejection of its Address Not Found 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 Address Not Found Request is accepted, NetLink Trust shall provision the Residential End User Connection within three (3) Business Days for Residential Premises which was "Home Reached", ten (10) Business Days for Residential Premises which was "Home Passed" or forty (40) Business Days in any other scenario. Subject to Clauses 2.6 and 2.6A above, where there is a delay in provisioning, the SLG shall be computed starting from the Business Day after the expiry of the relevant time stated above.

- 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 NetLink Trust.
- 4A.4 Only after NetLink Trust has covered the Residential Premise and notified the Requesting Licensee of the same will the Requesting Licensee be required to submit the same Request via NetLink Trust Platform and select the preferred installation date. Should the Requesting Licensee fail to submit the said Request via NetLink Trust Platform within two (2) weeks of NetLink Trust'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 Subject always to Celause 2.6A, SLGs will not apply in the following events: -
  - (a) the period after NetLink Trust had accepted the Address Not Found 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 Residential Premise within the said building, despite NetLink Trust using its best endeavours to obtain expeditiously such permission, provided that in the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain the permission, NetLink Trust will provide evidence that it has used such best endeavours;
  - (c) NetLink Trust has difficulty accessing or working in the building or 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 NetLink Trust has used its best endeavours to remedy the building access difficulties, NetLink Trust 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.

# 4B. VERIFICATION OF COVERAGE STATUS

- 4B.1 The Requesting Licensee may proceed to submit a Request for a Residential End User Connection via NetLink Trust Platform notwithstanding that the Requesting Licensee obtained a "address not found" message from NetLink Trust Platform. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.
- 4B.2 Within seven (7) Business Days from date of submission of the Request, NetLink Trust shall notify the Requesting Licensee whether the Request is rejected or accepted. Where the Request is rejected, NetLink Trust shall inform the Requesting Licensee of the reasons for rejection. Where the Request is accepted, NetLink Trust shall inform the Requesting Licensee of the estimated timeframe for service provisioning of not more than forty (40) Business Days unless there are delays due to reasons beyond NetLink Trust's reasonable control despite NetLink Trust using its best endeavours to attempt to complete the service provisioning within the prescribed timeframe.
- 4B.3 Where the Requesting Licensee cancels the Request after submission, the Requesting Licensee shall be liable for the Cancellation Charge as set out in accordance with Schedule 15 (Charges).
- 4B.4 Subject always to Clause 2.6A, SLGs will not apply in the following events : -
  - (a) 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 Residential Premise within the said building, despite NetLink Trust using its best endeavours to obtain expeditiously such permission, provided that in the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain the permission, NetLink Trust will provide evidence that it has used such best endeavours;
  - (b) NetLink Trust has difficulty accessing or working in the building or 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 NetLink Trust has used its best endeavours to remedy the building access difficulties, NetLink Trust will provide evidence that it has used such best endeavours;
  - (c) the occurrence of any of the events described in clause 2.6 above.

# 5. RESIDENTIAL END-USER CONNECTION REQUEST

- 5.1 NetLink Trust shall process all Requests received for Residential End-User Connection on a "first come, first served" basis.
- 5.2 For each Business Day, NetLink Trust shall process a combined total of no more than 1452, 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 (Maximum Quota) from all Requesting Licensees, excluding Requests for Non-Residential End-User Connections. For avoidance of doubt, Requesting Licensee is able to select such dates made available from the NetLink Trust Platform and for which the Request is to be fulfilled except such Business Day where the Maximum Quota has been reached. NetLink Trust will process all Requests on a 'first come, first served' basis. The Maximum Quota is not applicable to requests for deactivation of any Connection.
  - (i) The Maximum Quota is subject to the review mechanism as described as follows. If NetLink Trust finds that, on the average, more than 90% of the Maximum Quota has been used over a period of twelve (12) weeks preceding the review month (namely February, May, August and November), NetLink Trust shall increase its daily Maximum Quota for the quarter in which the review month occurs and the new quota shall be no less than 115% of the average demand over the preceding twelve (12) weeks. If NetLink Trust finds that, on the average, less than 80% of the Maximum Quota has been used over a period of twelve (12) weeks preceding the review month (namely February, May, August and November), NetLink Trust may decrease its daily Maximum 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 Maximum Quota will take effect upon its publication on the Service Portal following the conclusion of each review. The review mechanism may be revised from time to time subject to the Authority's approval.
  - (ii) For seasonal increase in demand during quarterly major fairs (e.g. IT Show in March, PC Show in June, Comex Show in September and SITEX in November), NetLink Trust shall offer Seasonal Slots (temporary increase of slots). The Seasonal Slots shall be subject to such terms and conditions stated in the Seasonal Slots Notification which shall be provided to all Requesting Licensees no later than two (2) weeks before the quarterly major fairs.
- 5.3 (A) Within one (1) Business Day of the date on which NetLink Trust receives the request for Residential End-User Connection (**Request Date**) and subject to clause 5.2, NetLink Trust 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 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 Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule;
- (d) as at the date of such Request is received, the building has not attained TOP status; or
- (e) where either the first or second fibre of the First Termination Point are not in use, the request to install a Second Termination Point will be rejected. Where the first and second fibre of the First Termination Point are in use, NetLink Trust will offer to install a Second Termination Point in accordance with the charges stated in Schedule 15; or
- (B)(i) As an alternative to clause 5.3(A), where NetLink Trust receives a Request for Residential End-User Connection (Request Date) via the NetLink Trust Platform, NetLink Trust 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 any 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
- (B)(ii) Following clause 5.3(B)(i), within one (1) Business Day of the date on which NetLink Trust receives the Request via the NetLink Trust Platform for Residential End-User Connection (**Request Date**) and subject to clause 5.2, NetLink Trust 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;
- (b) as at the date of such Request is received, the building has not attained TOP status; or

(c) where either the first or second fibre of the First Termination Point are not in use, the request to install a Second Termination Point will be rejected. Where the first and second fibre of the First Termination Point are in use, NetLink Trust will offer to install a Second Termination Point in accordance with the charges stated in Schedule 15.

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

- Within three (3) Business Days of the Request Date and subject to clause 5.2, NetLink Trust 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, NetLink Trust must also notify the Requesting Licensee within three (3) Business Days 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 NetLink Trust;
  - (b) there is obstruction from building owner, building management, home owner or End-User to NetLink Trust installation or installation schedule. NetLink Trust shall use its best endeavours to resolve such obstruction;
  - (c) the Transmission Tie Cable (installed pursuant to Co-location Service in Schedule 12) for connection to the Residential End-User Connection is yet to be operational at the point in time of NetLink Trust's provisioning of the Residential End-User Connection; or
  - (d) there are security and confidentiality requirements or restrictions imposed on NetLink Trust by Government Agencies.
- 5.5 If there is sufficient capacity to provide the Residential End-User Connection pursuant to clause 6.1, NetLink Trust shall advise the Requesting Licensee within three (3) Business Days whether the Residential End-User Connection has been successfully set up. In the event that there is insufficient capacity to provide the 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 NetLink Trust's Network has not been rolled out to that location, clause 6.2 shall apply and NetLink Trust shall inform the Requesting Licensee accordingly within three (3) Business Days

and advise the Requesting Licensee that the RFS of the Residential End-User Connection will be extended to within ten (10) Business Days if there is insufficient capacity from FTTB Node of the Residential Premise to the First Termination Point or within forty (40) Business Days if there is insufficient capacity from CO to the First Termination Point. Upon receipt of NetLink Trust'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 NetLink Trust Platform, when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.

- The Requesting Licensee shall pay NetLink Trust the applicable Installation Charge, Service Activation Charge and Patching Charge specified in Schedule 15 (Charges) for provisioning the Residential End-User Connection. For the avoidance of doubt, the Service Activation Charge specified in Schedule 15 (Charges) is applicable for each activation of service on any fibre strand from the First Termination Point, the Second Termination Point or any other Termination Points.
- 5.7 Where NetLink Trust rejects any Request for Residential End-User Connection, NetLink Trust shall provide reasons explaining the basis for rejection promptly.
- In the event that a Residential Premise has a First Termination Point installed but has not been indicated as a "covered" site in NetLink Trust's MSI within such timeframe, as approved by IMDA, indicated on NetLink Trust Platform, (due to an error in the MSI which is caused solely by NetLink Trust, its contractors or suppliers), and a Requesting Licensee is unable to submit its Request, NetLink Trust shall accept the Request and provision the Residential End-User Connection Service on the same terms and conditions as if the Residential Premise has been included as a "covered" site. In addition, NetLink Trust shall credit the Requesting Licensee with a one (1) month rebate of the Monthly Recurring Charge.
- 5.9 Where NetLink Trust has informed the Requesting Licensee that a Residential Premise has been installed with a First Termination Point and a valid Residential End-User Connection Request has been submitted by the Requesting Licensee for such a Residential Premise but it is subsequently found by NetLink Trust that the said Residential Premise has actually not been installed with the First Termination Point (due to an error in Mandated Services information which is caused solely by NetLink Trust, its contractors or suppliers), then NetLink Trust shall provision the Residential End-User Connection Service on the same terms and conditions as if the First Termination Point had been installed at the said Residential Premise. For the avoidance of doubt, NetLink Trust shall not impose the Installation Charge for the installation of such First Termination Points.

- 5.10 Where it is subsequently determined by NetLink Trust that a valid Residential End-User Connection Request submitted by the Requesting Licensee is for a Non-Residential Premise (due to an error in Mandated Services Information which is caused solely by NetLink Trust, its contractors or suppliers), then NetLink Trust 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 NetLink Trust will follow the rates for a Residential End-User Connection (i.e. the entire clause 1 of Schedule 15). For the avoidance of doubt, all applicable charges under Schedule 15 for this End-User Premise shall revert to the charges for Non-Residential Premises upon the expiry of the 12 month contract period.
- 5.11 Where it is subsequently determined by NetLink Trust that a valid Residential End-User Connection Request submitted by the Requesting Licensee is for a Residential Premise that is not a covered site (due to an error in Mandated Services Information which is caused solely by NetLink Trust, its contractors or suppliers), then NetLink Trust shall duly inform the Requesting Licensee of the nature of the error, and have the right to reject the Residential End-User Connection Request; however, NetLink Trust shall credit the Requesting Licensee with a one (1) month rebate of the Monthly Recurring Charge. For the avoidance of doubt, this clause 5.11 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.

#### 5.12 For the avoidance of doubt:-

- (a) where NetLink Trust discovers any error in the Mandated Services Information which is caused solely by NetLink Trust, its contractors or suppliers, NetLink Trust shall inform the Requesting Licensee of the error and the correct Mandated Services Information within one (1) Business Day of NetLink Trust's discovery of the error;
- (b) where NetLink Trust is informed of an error in the Mandated Services Information which is caused solely by NetLink Trust, its contractors or suppliers, NetLink Trust 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;
- the timeframe to inform the Requesting Licensee of an error in the Mandated Services Information or the correct Mandated Services Information indicated under clauses 5.12(a) and 5.12(b) shall exclude any delays caused by third parties such as building owners and/or management or end-user, who obstructs NetLink Trust during NetLink Trust's site survey or related checks;
- (d) where the Requesting Licensee wishes to cancel the Residential End-User Connection Request due to the error in the Mandated Services Information which is caused solely

by NetLink Trust, its contractors or suppliers, or to change any parameter in the Residential End-User Connection Request for the same reason, NetLink Trust 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 NetLink Trust Platform, when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform; and

- (e) where NetLink Trust fails to meet its Service Level Guarantees due to the error in Mandated Services Information which is caused solely by NetLink Trust, its contractors or suppliers, the Requesting Licensee is entitled to make a claim for the remedy provided by NetLink Trust 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 NetLink Trust has successfully changed the classification of a premise from a Non-Residential Premise to a Residential Premise upon the request of the Requesting Licensee, any error in the Mandated Services Information shall not apply. For the avoidance of doubt, NetLink Trust shall update the classification of the premise to Residential Premise in its Mandated Services Information after the change of classification has taken effect.
- 5.13 The Requesting Licensee may submit a request to change the scheduled appointment for the installation of the Termination Point in Buildings fitted with end-to-end NetLink Trust's fibre infrastructure. However, the Requesting Licensee must submit the request at least two (2) Business Days before the original appointment date and NetLink Trust reserves the right to reject the request depending on the Daily Request stated in the Demand Forecast.
- 5.14 The Requesting Licensee is only allowed to change the appointment to an available date, which shall be at minimum three (3) Business Days from the request for change of appointment date.

#### 6. **DELIVERY**

6.1 Subject to clauses 5.2, 5.3, 5.4 and 6.2, NetLink Trust shall provide the Residential End-User Connection by the end of three (3) Business Days or, where applicable, a later date selected by the Requesting Licensee from the receipt of a valid Request from the Requesting Licensee, where NetLink Trust has deployed its Network to the Distribution Point, Final Distribution Point or First Termination Point of the Residential Premise. NetLink Trust shall use its

reasonable endeavours to install the First or, where necessary, the Second Termination Point of the Residential Premise during the Requesting Licensee's preferred session.

- 6.2 (A) Where there is insufficient capacity to provide the Residential End-User Connection, NetLink Trust shall subject to clause 5.2 provide the 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 Residential Premise and the First or Second Termination Point of the 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 Second Termination Point of the Residential Premise.
    - NetLink Trust shall use its reasonable endeavours to install the First or, where necessary, the Second Termination Point of the Residential Premise during the Requesting Licensee's preferred session.
  - (B) Where there is a delay during service provisioning, NetLink Trust shall make available promptly and no less frequently than on a daily basis on the NetLink Trust Platform (after the Platform is operational) and via email, up-to-date information on: (a) the reasons for the delay; (b) the estimated/revised timeframe required to complete service provisioning; and (c) any changes and/or updates to (a) and/or (b) herein, until the delay is resolved and service is provisioned. In certain instances, NetLink Trust may, through the NetLink Trust 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 NetLink Trust Platform when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.

For each Request which could not be provisioned on the requested service activation date, NetLink Trust will provide a report stating the cause of delay (e.g. resource constraints, network segment) and the estimated timeframe for resolution of the delay and estimated timeframe for completion of service provisioning. Such report shall be provided, via email, to the Requesting Licensee the Business Day after the relevant requested service activation date. Where NetLink Trust seeks to claim exemption from SLG for delays caused by third parties beyond NetLink Trust's reasonable control and despite its best endeavours to resolve such delay, NetLink Trust shall provide clear explanations on the circumstances surrounding the delay, the efforts made to resolve the said delays and the estimated/revised timeframe to resolve the delays.

For orders which have been delayed for more than two (2) months, NetLink Trust shall at all times:

- (a) exercise its best endeavours to resolve the delays before rejecting any orders;
- (b) consider feedback received from the Requesting Licensee prior to any rejection of an order; and
- (c) in addition to providing updates no less frequently than once every day as above, update the Requesting Licensee on a weekly basis, providing clear explanations on the circumstances surrounding the delays and NetLink Trust's best endeavours to resolve the said delays.

For the avoidance of doubt, NetLink Trust shall not be entitled to reject any orders which have been delayed for more than two (2) months unless and until it has fulfilled all of requirements (a), (b) and (c) above, and the Requesting Licensee has been given an opportunity to make representations to NetLink Trust to express its objection to NetLink Trust's proposed rejection of the order, in accordance with the requirements set out below in this celause 6.2(B).

Where NetLink Trust proposes to reject an order which has been delayed for more than two (2) months, it shall give prior notice to the Requesting Licensee of its intention to do so and provide the Requesting Licensee with an opportunity to object to NetLink Trust's proposed rejection.

Where the Requesting Licensee objects to NetLink Trust's proposed rejection of such orders, the Requesting Licensee must substantiate the objection within three (3) Business Days with the appropriate documentary evidence and provide a timeframe to resolve the delay.

Where the Requesting Licensee is able to substantiate the objection with the appropriate documentary evidence, NetLink Trust must provide the Requesting Licensee with the additional time necessary to provision or reject the order should the Requesting Licensee have no further objection to NetLink Trust's proposed rejection of the order.

NetLink Trust shall proceed to reject the order where the Requesting Licensee fails to substantiate its objection within three (3) Business Days. In the event the Requesting Licensee disputes NetLink Trust's decision to reject such orders, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17 of the ICO Agreement.

For avoidance of doubt, nothing in this clause shall preclude the Requesting Licensee from submitting a new Request for the Residential End-User Connection once delays have been resolved. In such cases, NetLink Trust shall not be entitled to impose any rejection or re-

- submission charges on the Requesting Licensee where the Requesting Licensee submits the new Request in accordance with this <u>c</u>Clause 6.2(B).
- 6.3 Where the home owner has previously refused NetLink Trust's entry to the premise, NetLink Trust will provide internal cabling within the Residential Premise using PVC trunking up to a maximum distance of 15 metres to the First Termination Point, measured from the point of entry to the Residential Premise to the First Termination Point. If the owner of a Residential Premise requests the installation of internal cabling that exceeds 15 metres and/or requires the use of deployment technique other than open ducting, NetLink Trust shall inform the Requesting Licensee and both parties shall mutually agree to a revised implementation timeline which shall not be subject to the provisioning Service Level Guarantee. The Requesting Licensee shall pay the additional charges for installation of internal cabling which exceeds 15 metres in accordance to Schedule 15 (Charges). For the avoidance of doubt, where the owner of a Residential Premise requires the use of deployment technique other than open ducting, such deployment shall be provided by a third party. The Requesting Licensee may download the applicable Service Report Form(s) ("SRF"), which shall include the length of the internal cabling for cases where internal cabling exceeds 15 metres, from the Service Portal, within five (5) Business Days from the date of service provisioning, when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform. The final charge shall be reflected in NetLink Trust's Invoice to the Requesting Licensee. For the avoidance of doubt, this clause shall only be applicable for Pre-COPIF 2013 Buildings First Termination Point in Buildings fitted with end-to-end NetLink Trust's fibre infrastructure.

# **CLAUSE 6.4 – REQUIRED MODIFICATIONS**

Unless otherwise stated, NetLink Trust shall retain the responsibility for working at NetLink Trust's FDF at the Central Office and Building MDF Room, FTTB Node and First Termination Point, including Patching Service at NetLink Trust's FDF at the Central Office, Building MDF Room and FTTB Node in accordance with Schedule 13 on Patching Services. The Requesting Licensee shall bear the Charges for such work carried out by NetLink Trust. For the avoidance of doubt, NetLink Trust shall be responsible for carrying out all patching works in COPIF 2013

Buildings that may be necessary to connect NetLink Trust's Fibre Distribution Point to the Fibre Interface Point provided by the building developers/owners and located in either the telecommunication riser, gate pillar or meter compartment—using Patch Cable not exceeding ten (10) metres in length.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 5 of the Explanatory Memorandum and directs NetLink Trust to propose, for IMDA's approval, modifications to clause 6.4 to remove the restriction on the 10-metre length of the Patch Cable between the FDP and the FIP.

- 6.5 Where the Requesting Licensee requests Residential End-User Connection for the purpose of providing OE services to the End-User, NetLink Trust will provide the necessary Patching Service at NetLink Trust'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, NetLink Trust will not offer and Requesting Licensee shall not request for any rebate or discount over the Patching Service or the Residential End-User Connection.
- 6.6 NetLink Trust will 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 Residential End-User Connection.
- 6.7 NetLink Trust shall ensure that the optical power loss:
  - (a) of any Residential End-User Connection for the purpose of provision of GPON services does not exceed -28dB; and
  - (b) of any Residential End-User Connection for the purpose of provision of OE services does not exceed -20 dB from NetLink Trust's FDF in the Central Office or the Requesting Licensee's FDF at the Central Office designated by NetLink Trust to NetLink Trust's FDF in the Building MDF Room, and does not exceed -20dB from NetLink Trust's FDF in the Building MDF Room to the First Termination Point of the Residential Premise.
- 6.8 NetLink Trust shall promptly notify the Requesting Licensee upon the completion of the Residential End-User Connection.
- 6.9 Subject to clause 6.10, in the event NetLink Trust fails to meet the applicable service activation period for a Request, NetLink Trust shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the SAP Rebate for the Residential End-User Connection, subject to a maximum of 60 times the SAP Rebate for the Residential End-User Connection, where:
  - SAP Rebate = Monthly recurring charge x 12 / 60
- 6.10 NetLink Trust 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 house owner or End-User to install the required Network to the

Residential Premise within the said building, despite NetLink Trust using its best endeavours to obtain expeditiously such permission, provided that in the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain expeditiously the permission, NetLink Trust will provide evidence that it has used such best endeavours:

- (b) Where the owner of a Residential Premise requests the installation of internal cabling that requires more than 15 metres of ducting and/or 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 NetLink Trust's installation or installation schedule or any of the circumstances described in clauses 2.6(e) and 2.6(f) above, NetLink Trust shall use its best endeavours to remedy it expeditiously. The Requesting Licensee hereby acknowledges and agrees that NetLink Trust shall not be held liable for any delays upon NetLink Trust'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 NetLink Trust has used its best endeavours to resolve expeditiously such obstruction, NetLink Trust will provide evidence that it has used such best endeavours;
- (e) The building which was initially under network coverage has been reconstructed and NetLink Trust 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 6.10 or elsewhere in the ICO Agreement (unless otherwise stated), NetLink Trust shall nevertheless be required to compensate the Requesting Licensee if it fails to meet the revised implementation timeline.

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

#### CLAUSE 6A - REQUIRED MODIFICATIONS

# 6A. JOINT INVESTIGATION AND RESOLUTION OF INSTALLATION-RELATED FAULTS

6A.1 If any faults occur during the Requesting Licensee's initial installation of its equipment for the Residential End-User Connection, the Requesting Licensee shall first perform all necessary

checks (which shall be at its own cost) to ensure that such fault does not lie within the Requesting Licensee's network. For the avoidance of doubt, this clause 6A shall only apply when the Requesting Licensee's installation of its equipment takes place within seven (7) calendar days (excluding Sundays and Public Holidays) from NetLink Trust's handover of the First Termination Point to the Requesting Licensee.

- 6A.2 Where the Requesting Licensee has performed all necessary checks (which shall be at its own cost) to ensure that such fault does not lie within the Requesting Licensee's network, the Requesting Licensee may inform NetLink Trust and NetLink Trust shall send a representative to the relevant Residential Premise for a joint investigation with the Requesting Licensee. NetLink Trust shall use its best endeavours to ensure that such representative shall arrive at the Residential Premise within one (1) hour from the receipt of such request from the Requesting Licensee. Notwithstanding anything in this clause 6A to the contrary, the Requesting Licensee may only request for a joint investigation between 9am and 7pm from Mondays to Saturdays, and may not request for a joint investigation on Sundays and Public Holidays.
- 6A.3 NetLink Trust's and the Requesting Licensee's representatives shall be present throughout such joint investigation process. Upon completion of such joint investigation, the NetLink Trust and Requesting Licensee representatives shall jointly sign off on an investigation report. The format of such investigation report shall consist of readings, and actions taken by NetLink Trust during the joint fault investigation.
- 6A.4 Where the joint investigation shows that the fault is not due to the Requesting Licensee's network, NetLink Trust shall delay the billing start date for such Residential End-User Connection to the time such fault is rectified. The fault shall be deemed to have been rectified when NetLink Trust provides a confirmation to the Requesting Licensee that the Residential End-User Connection has been restored. In the event that the joint investigation team encounters a delay in fault rectification due to any applicable circumstances stated in clause 2.6 above, the billing start date shall be adjusted to exclude the delays attributable to the applicable circumstances stated in clause 2.6.
- 6A.5 If NetLink Trust fails to repair an installation-related fault within seventy-two (72) hours from the commencement of the joint investigation, the Requesting Licensee may elect to cancel such faulty Residential End-User Connection either through manual means or via NetLink Trust Platform when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform. NetLink Trust shall waive the Cancellation Charge and Installation Charge of the Termination Point if the Requesting Licensee submits NetLink Trust's standard cancellation form (as per Annex 1B) to NetLink Trust after seventy-two (72) hours from the commencement of the joint investigation but before the fault is rectified.

6A.6 For the avoidance of doubt, the Requesting Licensee shall not be entitled to make any SLA or MTTR claims for such Residential End-User Connection for the duration of such joint investigation (including but not limited to the time taken to resolve any fault found).

IMDA's Directed Modifications: IMDA notes that clause 6A of Schedule 1 to the ICO sets out the process, terms and conditions for NetLink Trust's management of installation-related faults, and does not only focus on how "Joint Investigation of Faults" should be processed. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modification to the header of clause 6A to clarify the intent of this clause.

#### 7. RESPONSIBILITY AT DP AND NETLINK TRUST FDF

- 7.1 The Requesting Licensee shall not, and shall ensure that its employees, agents and contractors do not, at any time access NetLink Trust'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 NetLink Trust's FDF at the Central Office or Building MDF Room, the Requesting Licensee shall submit applications for termination of existing Patching Service and an order for new Patching Service at the Central Office or Building MDF Room in accordance with Schedule 13 (Patching Service).

# 8. **DEACTIVATION**

- 8.1 Subject to the minimum contract term, the Requesting Licensee may deactivate the Residential End-User Connection by giving NetLink Trust a Request not less than three (3) Business Days before the date of deactivation. Except where NetLink Trust performs a Fibre Takeover pursuant to clause 20, the Existing Requesting Licensee shall remain liable for the minimum contract term.
- 8.2 The cancellation of the Request for deactivation shall be submitted to NetLink Trust at least one (1) Business Day before the date of the deactivation of the Residential End-User Connection.
- 8.3 If the 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 NetLink Trust 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 Residential End-User Connection, NetLink Trust 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 NetLink Trust 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 Residential End-User Connection, if such termination is the result of NetLink Trust's fault.

# 9. STANDARD TERMS AND CONDITIONS

- 9.1 NetLink Trust 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 Residential End-User Connection is provided. Prior to installation of the Termination Point, NetLink Trust will assess the suitability of the location to accommodate the deployment of active equipment, such that there will be adequate ventilation and power within reach of the active equipment. Notwithstanding, NetLink Trust's assessment and recommendation on the location of the Termination Point, NetLink Trust 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 NetLink Trust shall be responsible for the maintenance of the Residential End-User Connection installed under this Schedule. The demarcation point for NetLink Trust's Network in COPIF 2013 Buildings will be at the Fibre Distribution Point for Buildings in which the building developer/owner has provided the Fibre Interface Point and deployed fibre from either the telecommunication riser, gate pillar or meter compartment to the Residential Premise. For the avoidance of doubt, NetLink Trust shall only be responsible for the maintenance of the Residential End-User Connection up to NetLink Trust's Fibre Distribution Point (including the patch cord from Fibre Distribution Point to Fibre Interface Point) for for such Residential PremiseCOPIF 2013 Buildings.
- 9.3 Except to the extent strictly necessary to accurately describe the service to actual or potential Customers, the Requesting Licensee shall not use NetLink Trust's name, any NetLink Trust's trademarks or the fact that any service is supplied using NetLink Trust'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 NetLink Trust's existing services or

those of a Third Party as a result of the Requesting Licensee's use of the Residential End-User Connection.

- 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 Residential End-User Connection, NetLink Trust shall provide the Requesting Licensee with at least four (4) weeks' notice in advance of such interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. In the event that it is necessary for the planned service interruption to be postponed, NetLink Trust shall provide the Requesting Licensee with no less than one (1) week's notice prior to the original scheduled commencement date of the service interruption. Where, for reasons beyond its control, NetLink Trust is unable to give advance notice to the Requesting Licensee as required by this cclause 9.5 e.g. where the service interruption or postponement thereof is necessitated by site works carried out by Third Parties and such Third Parties do not give NetLink Trust sufficient advance notice, NetLink Trust shall notify the Requesting Licensee of the service interruption, or postponement thereof (as the case may be), as soon as practicable and shall inform the Requesting Licensee of the period of service interruption in accordance with the requirements for an urgent service interruption as set out in cclause 9.6. NetLink Trust shall use its best endeavours to minimise any service disruption to the Requesting Licensee.
- 9.6 If it is necessary to carry out an urgent service interruption, including but not limited to circumstances in which it is necessary for a planned service interruption to be postponed or brought forward, and NetLink Trust is unable to give advance notice to the Requesting Licensee as required by celause 9.5 for reasons beyond NetLink Trust's control, NetLink Trust shall notify the Requesting Licensee as soon as practicable of: (i) the commencement date and time of the urgent service interruption; and (ii) the estimated period and end date of the urgent service interruption; and (iii) the reason for such urgent service interruption. NetLink Trust shall also inform the Requesting Licensee as soon as the urgent service interruption has ended. NetLink Trust shall use its best endeavours to minimise any service disruption to the Requesting Licensee.
- 9.7 NetLink Trust shall include the following details in the written notification or via the NetLink Trust 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) NetLink Trust's Network Operations Centre Contact Number.
- 9.8 If the planned service interruption affects Residential End-User Connections, NetLink Trust will carry out the planned service interruption between 9:00am and 6:00pm or as the Building Managers/MCST may approve (if applicable) or unless it is not feasible for NetLink Trust to do so.
- 9.9 Subject to Requesting Licensee acquiring redundancy service, NetLink Trust shall, where technically feasible, provide assistance to Requesting Licensee to divert its Residential End-User Connection to the redundancy service before commencing the planned service interruption.
- 9.10 Where there are available resources, NetLink Trust 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, NetLink Trust shall not be liable for any loss caused by such service interruption, except for any Service Level Guarantee rebate that arises from NetLink Trust 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.
- 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 Residential End-User Connection (including but not limited to any configuration of the NTE at the Residential Premise);
  - (b) co-location at the designated Central Office and Building MDF Room; and
  - (c) access to the Residential Premise.
- 9.14 Upon receipt by NetLink Trust of any request from Requesting Licensee for Removal, NetLink Trust shall check if the First or Second Termination Point is in use by any Requesting Licensee. NetLink Trust will reject the request if the First or Second Termination Point, as the case may be, is in use. Otherwise NetLink Trust 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. The Requesting Licensee will have to bear the charge for Removal of the Termination Point in accordance with Schedule 15 (Charges). End-User shall ensure that NetLink Trust and/or its Contractor has ease of access to perform such Removal. NetLink Trust shall use its best endeavours to minimize damage to the wall and/or other fittings save that NetLink Trust shall not be responsible or liable to move or shift any furniture or items belonging to End-User, replaster 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 Residential End-User Connection.
- 9.16 Onsite charges are applicable whenever Requesting Licensee requests for NetLink Trust to be onsite other than for provisioning of Residential End-User Connection or for reasons caused by NetLink Trust's fault or error.
- 9.17 Upon receipt by NetLink Trust of any request from Requesting Licensee for relocation or repair and replacement of Termination Point within the same premise, NetLink Trust 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 NetLink Trust and/or its Contractor has ease of access to perform such relocation or repair and replacement of Termination Point. NetLink Trust shall use its best endeavours to minimize damage to the wall and/or other fittings save that NetLink Trust 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 Residential End-User Connection.

#### CLAUSE 11 - REQUIRED MODIFICATIONS

#### 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 own network before reporting the fault to NetLink Trust. The Requesting Licensee shall pay NetLink Trust according to Schedule 15 (Charges) for cancellation of any fault reported regardless of the response or stage of investigation by NetLink Trust.
- 11.3 Where the fault is reported via the NetLink Trust 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 NetLink Trust Platform will provide a fault acknowledgement.

Upon receipt of a fault report from the Requesting Licensee under clause 11.2, NetLink Trust 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. NetLink Trust 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 NetLink Trust Platform, when available, or via manual means. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform. Where a fault is reported via manual means, Requesting Licensee shall submit information as required above. NetLink Trust may also provide the updates and status via e-mail.

11.3A The Requesting Licensee shall have the option to attend the fault investigation procedure conducted by NetLink Trust at no additional Joint Investigation Charge to the Requesting

Licensee. The Requesting Licensee shall indicate the request to attend NetLink Trust's fault investigation at the point of fault reporting. The date and time for such investigation shall be determined by NetLink Trust and the Requesting Licensee will be informed accordingly. The Requesting Licensee shall bear its own cost for attending such investigation as well as any testing or trouble-shooting activities required as a result of such investigation. Regardless of the outcome of the fault investigation, the Requesting Licensee shall be liable for any charge imposed by NetLink Trust for access to the Co-Location Space (where applicable). For the avoidance of doubt, this clause 11.3A does not apply to a request for joint investigation pursuant to clause 11.10.

- 11.4 If, following investigation, NetLink Trust determines that the fault is at the Transmission Tie Cable at the Central Office, NetLink Trust will patch the 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, NetLink Trust determines that the fault is at the Patch Cable at the Building MDF Room, NetLink Trust 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.

#### **CLAUSE 11.6 – REQUIRED MODIFICATIONS**

- 11.6 If, following investigation, NetLink Trust determines that no fault is found or the fault is not due to the NetLink Trust Network or equipment, then NetLink Trust shall charge the Requesting Licensee a- Fault Identification Charge for the fault report in accordance with Schedule 15 (Charges). The Fault Identification Charge will only be levied upon completion of the fault investigation by NetLink Trust in the passive fibre network in either Pre COPIF 2013 Buildings or COPIF 2013 Buildings. For avoidance of doubt, the Fault Identification Charge will only apply in instances where:
  - (a) Requesting Licensee has requested NetLink Trust to identify faults on NetLink Trust's Network in Pre COPIF 2013 Buildings and NetLink Trust determines that the faults identified are not evidently caused attributed to the End User, Retail Service Provider and/or the Requesting Licensee by NetLink Trust or its contractors or NetLink Trust's Network or equipment. In the event that the Requesting Licensee did not elect to participate in a joint investigation pursuant to clauses 11.3A or 11.10, and subsequently raises a dispute on the validity of the Fault Investigation Charge imposed by NetLink Trust, NetLink Trust shall disclose to the Requesting Licensee the necessary evidence that supports the position taken by NetLink Trust. For avoidance of doubt, the Requesting Licensee shall accept the veracity of

and rely solely on the evidence supplied by NetLink Trust when assessing whether the Fault Investigation Charge was correctly levied by NetLink Trust in the event that the Requesting Licensee elects not to participate in the fault investigation or identification process conducted by NetLink Trust;

(b) Requesting Licensee has requested NetLink Trust to identify faults on NetLink Trust's Network in COPIF 2013 Buildings and NetLink Trust determines that the faults identified are evidently attributed to the End User, Retail Service Provider and/or the Requesting Licensee; or

(be) it is determined that the fault reported resides in the building owner/building developer's network ((i.e. from Fibre Interface Point to the Fibre Termination Point in the Residential Premise) in COPIF 2013 Buildings and where the fault is not evidently caused by NetLink Trust or its contractors.

11.6A If, following investigation, NetLink Trust determines that the fault identified in NetLink Trust's

Network was not caused by the End-User, RSP, or Requesting Licensee (including but not limited to situations where NetLink Trust's Network is damaged by rodent bites, cable cuts by

Third Parties, and wear and tear of the fibre in NetLink Trust's Network), NetLink Trust shall not impose any Fault Identification Charge.

For the avoidance of doubt, NetLink Trust will bear the cost and responsibility for any fault rectification which is necessary to rectify any defect or fault solely caused by NetLink Trust in NetLink Trust's Network.

In the event that the Requesting Licensee elects not to be present for the fault investigation/ identification, the Requesting Licensee is deemed to accept the outcome of the fault identification as conducted by NetLink Trust as final and will be liable for the Fault Identification Charge.

IMDA's Directed Modifications: IMDA refers NetLink Trust to Section 2 of the Explanatory Memorandum to this Direction. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, (a) modifications to clause 11.6(a) and 11.6(b) to clarify that NetLink Trust may recover the cost of fault identification through imposing the Fault Identification Charge for faults found on its network when it is able to provide evidence to the RLs that the fault is not caused by NetLink Trust, NetLink Trust's network or NetLink Trust's equipment; (b) and modifications to clause 11.6 to clarify that NetLink Trust shall not impose the Fault Identification Charge for identification of faults lying on NetLink Trust's network that are not evidently caused by end-users, the RSP and/or the RL (e.g.,

# where NetLink Trust's network is destroyed by rodent bite, cable cuts by contractors, wear and tear of the fibre in NetLink Trust's network).

- 11.7 The process for fault investigation shall be as follows:
  - (a) For each of the three (3) wavelengths of 1310nm, 1490nm and 1550nm where applicable, the optical power shall be measured in accordance with clause 6.7 above, and the findings shall be clearly recorded using the "Fault Rectification Service Report" (Annex 1C),
  - (b) if the power loss do not exceed the limit specified in clause 6.7 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 NetLink Trust'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
  - Upon completion of any fault investigation where both NetLink Trust and Requesting Licensee are present, NetLink Trust will hand over the Termination Point to the Requesting Licensee and both Parties shall jointly sign off on the "Fault Rectification Service Report" (Annex 1C), which will state the outcome of the investigation. For fault investigation where Requesting Licensee is not required to be present, NetLink Trust shall conclude the investigation on-site and inform the Requesting Licensee of the outcome accordingly. NetLink Trust 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 NetLink Trust Platform, when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above features will be available on NetLink Trust Platform.

- 11.8 If NetLink Trust is unable to identify any fault, NetLink Trust will call for a fault identification coordination meeting between NetLink Trust and the Requesting Licensee to identify the fault. NetLink Trust will notify the Requesting Licensee on the request for fault identification. The Requesting Licensee shall provide all reasonable assistance requested by NetLink Trust. 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 NetLink Trust or its contractors, NetLink Trust shall not impose any charge on the Requesting Licensee for access to the Co-Location Space (where applicable), regardless of whether it is an NetLink Trust-initiated fault identification coordination meeting or a Requesting Licensee-initiated joint investigation process. In addition, NetLink Trust 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, NetLink Trust 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 NetLink Trust-initiated fault identification coordination meeting or a Requesting Licensee-initiated joint investigation process. In addition, NetLink Trust 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 NetLink Trust (or its contractors) or the Requesting Licensee (or its contractors or End-Users), NetLink Trust 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, NetLink Trust shall also be entitled to impose the joint investigation charge on the Requesting Licensee if the process was initiated by the Requesting Licensee.

### CLAUSE 11.8(d) - REQUIRED MODIFICATIONS

(d) Except for (a) above, if it is discovered that any part of the NetLink Trust Network located in the Residential Premise in Buildings fitted with end-to-end NetLink Trust's fibre infrastructure is damaged, NetLink Trust shall impose the relevant repair and replacement charges in accordance to Schedule 15 (Charges) accordingly to the End-UserRequesting License NetLink Trust will proceed to rectify the fault and the

Requesting Licensee shall bear the repair and replacement charges. and charge the End-User directly unless the damage is caused by the Requesting Licensee.

IMDA's Directed Modifications: IMDA refers NetLink Trust to Section 2 of the Explanatory Memorandum to this Direction. Accordingly, IMDA directs NetLink Trust to revert clause 11.8(d) to its original drafting.

- (e) In the event that a particular fault is found in the building owner/building developer's network in COPIF 2013 Buildings (i.e. from Fibre Interface Point to the Fibre Termination Point in the Residential Premise), the Requesting Licensee may submit a request for NetLink Trust to carry out the fault rectification. NetLink Trust shall impose the relevant repair and replacement charges in accordance to Schedule 15 (Charges) to the Requesting Licensee. Alternatively, the End-User may approach any of the NGNBN contractors or authorised by NetLink Trust to carry out the fault rectification. For the avoidance of doubt, NetLink Trust shall not be obliged to carry out any repair and replacement work if the End-User does not confirm its agreement to pay the relevant repair and replacement charges.
- 11.9 The Residential End-User Connection is deemed to be restored when NetLink Trust has tested and confirmed to the Requesting Licensee that the Residential End-User Connection has been restored. NetLink Trust will notify the Requesting Licensee with the cause of fault.
- 11.10 Where the Requesting Licensee has lodged with NetLink Trust a fault report without indicating a request to attend the fault investigation procedure conducted by NetLink Trust and NetLink Trust is in the process of investigating the fault or where the Requesting Licensee has not lodged a fault report but suspects that there is a fault on the Residential End-User Connection, the Requesting Licensee may request NetLink Trust for a joint investigation. The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to NetLink Trust's resource availability and agreement to the date, time and venue, NetLink Trust 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 NetLink Trust. If the fault is due to NetLink Trust, NetLink Trust 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 NetLink Trust's findings, the Requesting Licensee may request NetLink Trust for a fault identification coordination meeting.
- 11.11 The Requesting Licensee acknowledges that NetLink Trust may temporarily disconnect the Requesting Licensee's Residential End-User Connection to perform reasonable fault analysis and line testing on the Residential End-User Connection. NetLink Trust shall conduct such disconnection only as it reasonably considers necessary. NetLink Trust shall notify the

Requesting Licensee at least thirty (30) minutes before the temporary disconnection and provide its reasons for the temporary disconnection.

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

IMDA's Directed Modifications: IMDA refers NetLink Trust to Section 2 of the Explanatory Memorandum to this Direction. Accordingly, IMDA directs NetLink Trust to propose, for IMDA's approval, modifications to clause 11 to clarify that (a) NetLink Trust shall be the sole party fronting RLs on the status of fault management for all residential buildings; (b) NetLink Trust shall be responsible for fault investigation and identification for the passive fibre infrastructure for all faults reported by the RLs; (c) where the fault occurs in NetLink Trust's infrastructure, and where the fault is attributable to NetLink Trust, the principle of NetLink Trust bearing the cost and responsibility for fault identification and/or rectification shall continue to apply; and (d) to offer RLs the opportunity to be present for a joint investigation (at no additional Joint Investigation Charge to the RLs) at the point of NetLink Trust going onsite to investigate fault trouble ticket logged by the RL, including clarification in the ICO on how the liability for the Fault Identification Charge will apply if any party chooses not to participate in such joint investigations (e.g., if an RL does not participate in the joint investigation, the RL should rely on NetLink Trust's evidence to assess if it is appropriate for NetLink Trust to impose the Fault Identification Charge).

#### **Mean Time To Recovery**

- 11.13 NetLink Trust shall restore any fault within a standard Mean Time To Recovery (**MTTR**) of eight (8) hours.
- 11.14 Subject to clause 2.6, the MTTR shall be the average time NetLink Trust took to restore service for all fault incidents for all 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 NetLink Trust confirms that the fault is restored, excluding fault incidents where NetLink Trust is prevented or restricted from restoring the service owing to matters that are not within NetLink Trust's control. For the avoidance of doubt, the MTTR is calculated as follows:



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

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

11.15 In the event NetLink Trust fails to meet the standard MTTR for a particular month, NetLink Trust 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 Residential End-User Connection, subject to a maximum of 30 times the Weekly Recurring Charge for the Residential End-User Connection.

#### 12. SERVICE LEVEL AVAILABILITY

- 12.1 NetLink Trust shall offer a service level availability of 99.99% per month for the Residential End-User Connection. NetLink Trust shall offer to rebate the Requesting Licensee ten percent (10%) of the Monthly Recurring Charge if NetLink Trust fails to meet the service level availability for that month.
- 12.2 Service level availability for the Residential End-User Connection is calculated as follows:

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

- B = total network outage time for the 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 Residential End-User Connection is unavailable, measured from the time each fault is reported by the Requesting Licensee to the time NetLink Trust confirms that the fault is restored, excluding fault incidents where NetLink Trust is prevented or restricted from restoring the service owing to matters that are not within NetLink Trust'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 Residential Premise.

- 13.2 Each Party shall, so far as reasonably practicable, take all necessary steps to ensure that the licence of the 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 NetLink Trust Network.

#### 14. TERM OF LICENCE

14.1 The minimum contract term for a Residential End-User Connection shall be twelve (12) months starting from the service activation date of the Residential End-User Connection.

#### 15. SUSPENSION

- 15.1 NetLink Trust may suspend the Requesting Licensee's licence to the Residential End-User Connection at any time until further notice to the Requesting Licensee if the Residential End-User Connection licence causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of NetLink Trust or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the NetLink Trust 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, NetLink Trust shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of a Residential End-User Connection licence under this clause 15.

#### 16. TERMINATION OF LICENCE

- 16.1 The Requesting Licensee shall keep NetLink Trust informed on the Requesting Licensee's utilisation of each Residential End-User Connection six (6) months from the service activation date and when there are changes to the utilisation.
- 16.2 The Requesting Licensee must use or activate a service to a Retail Service Provider using the Residential End-User Connection within six (6) months from the service activation date of the Residential End-User Connection. If the Requesting Licensee fails to do so, NetLink Trust shall, at its sole discretion, deactivate the Residential End-User Connection upon giving the Requesting Licensee ten (10) Business Days' prior notice, and if the Requesting Licensee does

not dispute such written notice as given by NetLink Trust. The Requesting Licensee must pay NetLink Trust the Monthly Recurring Charges for the remainder of the minimum contract term.

Where an End-User ceases its subscription to a Residential End-User Connection service, the Requesting Licensee shall submit a request to terminate the corresponding Residential End-User Connection via the NetLink Trust Platform within one (1) Business Day of such cessation of subscription by the End-User. NetLink Trust shall make available the released and unused fibre strand to all Requesting Licensees within one (1) Business Day from the date the Requesting Licensee releases an unused fibre strand.

- 16.3 NetLink Trust may immediately terminate a licence of Residential End-User Connection under this Schedule if:
  - (a) the Requesting Licensee is no longer an FBO;
  - (b) the NetLink Trust ICO is revoked by the Authority under clause 12.8 of the ICO Agreement;
  - (c) the Authority removes the requirement for NetLink Trust to supply Residential End-User Connection under the NetLink Trust ICO or exempts NetLink Trust from supplying 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 NetLink Trust's reasonable opinion, the Requesting Licensee is using the Residential End-User Connection in contravention of an applicable law, licence, code, regulation or direction and NetLink Trust 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 NetLink Trust's reasonable opinion, the Requesting Licensee is using the 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 NetLink Trust 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 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 Residential End-User Connection is connected has been terminated or has expired;
- (h) the Residential End-User Connection has become unsafe for its purpose; or
- (i) NetLink Trust's right to own, maintain or operate the Residential End-User Connection has been revoked or terminated, or has expired.

#### 16.4 Either Party (**Terminating Party**) may terminate the 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 un-remedied for a period of sixty (60) Calendar Days after receiving notice from the Terminating Party;
- (b) if the Requesting Licensee's 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 un-remedied 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 Residential End-User Connection:
  - (a) the Requesting Licensee must immediately discontinue the use of the Residential End-User Connection; and
  - (b) the Requesting Licensee must without undue delay disconnect all equipment connected to the Residential End-User Connection; and
  - (c) NetLink Trust 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 NetLink Trust's costs of removing all necessary Patching Services at the Building MDF Room, or if the termination is the result of NetLink Trust's fault
- 16.6 If the licence of a Residential End-User Connection is terminated as a result of the Requesting Licensee's fault, the Requesting Licensee shall be liable to NetLink Trust 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 Residential End-User Connection under clause 16.5(b), NetLink Trust may at its sole discretion remove and/or dispose of the Requesting Licensee's equipment. The Requesting Licensee shall pay to NetLink Trust all reasonable costs associated with the work undertaken by NetLink Trust including the cost of disposing the Requesting Licensee's equipment. The Requesting Licensee shall have no claim whatsoever against NetLink Trust in connection with the removal and/or disposal of the Requesting Licensee's equipment from the Residential End-User Connection.

#### 17. REDUNDANCY SERVICE

- 17.1 The Requesting Licensee may acquire:
  - (a) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services, one separate fibre strand from NetLink Trust's splitter at the Building MDF Room to the First Termination Point of the Residential Premise;
  - (b) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services, one separate fibre strand from NetLink Trust's FDF at the Building MDF Room to the First Termination Point of the Residential Premise; or
  - (c) for a Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from NetLink Trust's FDF at the CO to the First Termination Point of the Residential Premise

(**Redundancy Service**) at the same prices, terms and conditions as the Residential End-User Connection through a request in the form of Annex 1A either via manual means or via the NetLink Trust Platform, unless stipulated otherwise in this clause 17.

- 17.2 NetLink Trust shall provide the Redundancy Service via the same duct and along the same path as the existing Residential End-User Connection, without Duct Diversity and without Path Diversity. NetLink Trust may provide the Redundancy Service using a separate fibre strand from the same fibre cable that carries the existing Residential End-User Connection. NetLink Trust shall have the right to reject a request for the Redundancy Service if both fibres in the First Termination Point are in use.
- 17.3 The Requesting Licensee is eligible to acquire a Redundancy Service for the Residential End-User Connection provided that the Requesting Licensee has acquired or is acquiring an equivalent Residential End-User Connection to the same Residential Premise. The Requesting Licensee may request NetLink Trust to reject the Request for the Residential End-User Connection in the event that NetLink Trust is unable to provide the Redundancy Service, but

- such Requests for the Residential End-user Connection and the Redundancy Service must be submitted together to NetLink Trust.
- 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 NetLink Trust.
- 17.5 NetLink Trust shall make the Redundancy Service available to the Requesting Licensee, except where NetLink Trust 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 FROM ONE RESIDENTIAL ADDRESS TO ANOTHER RESIDENTIAL ADDRESS

- 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 residential address (**Relocation Service**) via manual means or the NetLink Trust Platform when available (which NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform) giving, amongst others, the following information:
  - (i) The Order Request Identifier of existing connection at old residential premise
  - (ii) Service activation date at new 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, NetLink Trust shall provide the Relocation Service by installing (where applicable) and activating a new Residential End-User Connection at the new Residential Premise in accordance to clause 6, followed by deactivation of the existing Residential End-User Connection at the former premise. The expiry date of the minimum contract term which will be computed from the initial order remains unchanged.
- 18.3 For the avoidance of doubt, each request for Relocation Service shall constitute one (1) Request for Residential End-User Connection, which must fall within the Maximum 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, Service Activation, 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 NetLink Trust. A change in the End-User's new Residential Premise address shall constitute 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.
- 18.6 For avoidance of doubt, there shall be no express service activation for a request for Relocation Service.

#### 19. SECOND TERMINATION POINT

- 19.1 Where all the fibre strands of the First Termination Point of a Residential Premise in a Pre-COPIF 2013 Buildings fitted with end-to-end NetLink Trust's fibre infrastructure are in use, NetLink Trust shall install a Second Termination Point:
  - (a) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing GPON services, one separate fibre strand from NetLink Trust's splitter at the Building MDF Room to the Second Termination Point of the Residential Premise:
  - (b) for a Residential End-User Connection of 1:24 Split Ratio for the purpose of providing OE services, one separate fibre strand from NetLink Trust's FDF at the Building MDF Room to the Second Termination Point of the Residential Premise; or
  - (c) for a Residential End-User Connection of 1:1 Split Ratio, one separate fibre strand from NetLink Trust's FDF at the CO to the Second Termination Point of the Residential Premise

on the same terms and conditions as the Residential End-User Connection via manual means or the NetLink Trust Platform when available, unless stipulated otherwise in clause 19. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.

- 19.2 NetLink Trust shall have the right to reject a Request for Second Termination Point if not all the fibre of the First Termination Point are in use.
- 19.3 The Requesting Licensee may submit a Request for Second Termination Point provided the Requesting Licensee has submitted a Request for a Residential End-User Connection to this Second Termination Point.
- 19.4 The Requesting Licensee shall pay NetLink Trust the applicable Installation Charge for Second Termination Point, Service Activation Charge and Installation of Internal Cabling Charge specified in Schedule 15 (Charges) for provisioning the Residential End-User Connection for the Second Termination Point.

#### 20. FIBRE TAKEOVER PROCESS

- 20.1 The provisions of this section shall be applicable to New Requesting Licensees' requests to NetLink Trust for Fibre Takeover. The proposed provisioning sequence ("Original FTO Process") is as follows:
  - (i) New Requesting Licensee shall submit a request for Fibre Takeover to NetLink Trust through NetLink Trust Platform when available. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.
  - (ii) No later than the next Business Day after receipt of New Requesting Licensee's request for Fibre Takeover, the Existing Requesting Licensee will be informed of NetLink Trust's intention to deactivate the existing connection. Existing Requesting Licensee must decide within five (5) Business Days whether it wishes to accept such request.
  - (iii) If the Existing Requesting Licensee does not accept the Request, the request will be deemed as rejected. Where Existing Requesting Licensee accepts the request, NetLink Trust will process the request and perform the Fibre Takeover, as according to the terms of this Schedule, within three (3) business days thereafter. Both New and Existing Requesting Licensees will be informed of the date of the Fibre Takeover three (3) business days in advance.
  - (iv) It is then the responsibility of both the New and Existing Requesting Licensee to liaise with its affected Retail Service Providers accordingly.
  - (v) The New Requesting Licensee is responsible for providing accurate information to NetLink Trust and shall indemnify NetLink Trust for any loss or damages occasioned by or arising from wrong information provided which resulted in NetLink Trust activating or deactivating any Residential End-User Connection.
  - (vi) The Existing Requesting Licensee shall be entitled to:
    - (a) Waiver of the Pre-mature Termination Charge (if any); and
    - (b) Rebate amount equal to one (1) month of the Monthly Recurring Charge, for the affected connection.
  - (vii) The New Requesting Licensee shall be entitled to:

(a) Rebate amount equal to one (1) month of the Monthly Recurring Charge,

for the affected connection.

20.2 The New Requesting Licensee shall pay NetLink Trust the applicable Service Activation Charge specified in Schedule 15 (Charges) for provisioning of the Residential End User Connection under this Fibre Takeover.

#### 21. ENHANCED FIBRE TAKEOVER PROCESS

- 21.1 The provisions of this section shall be applicable only where the New Retail Service Providers ("New RSP") intending to provide telecommunication services to End-Users ("EU") via the NGNBN are parties to an industry implemented agreement on the Fibre TakeOver ("FTO") process. Additionally, the New Requesting Licensee and Existing Requesting Licensee are different but must also be parties to the same industry implemented agreement on the FTO process. For the avoidance of doubt, such industry implemented agreement is to be voluntarily agreed upon and entered into by the parties to that agreement.
- 21.2 The New and Existing Requesting Licensees shall comply with the FTO process ("Enhanced FTO Process") as outlined below:
  - (a) The EU shall approach the New RSP, who shall determine the EU's eligibility for the FTO process via NetLink Trust Platform. For the avoidance of doubt, NetLink Trust shall inform the industry when the above feature will be available on NetLink Trust Platform.
  - (b) Where the EU has an existing service, the New RSP to check if EU would be switching RSPs.
  - (c) Where EU is switching RSP, the New RSP shall explain the details of the FTO process and the applicable terms & conditions to the EU.
  - (d) Where the relevant criteria are satisfied, the eligible EU's application will include an FTO request. The New RSP will place the order via the New Requesting Licensee together with the particulars of the Existing RSP. The New Requesting Licensee shall proceed to indicate the preferred appointment date which is from T+5 onwards in the FTO request.
  - (e) No later than the next business day after receipt of Request for FTO from the New RSP, NetLink Trust shall inform the Existing Requesting Licensee of the Existing RSP of the order from the New RSP.

- (f) The Existing Requesting Licensee must approve the New RSP's order within three (3) Business Days. The Existing Requesting Licensee may only reject the request if the Existing Requesting Licensee is using the same fibre to provide services to more than one RSP, or if the stated End User is not the authorized party of the subscribed service with the Existing RSP.
- (g) NetLink Trust shall proceed with the service provisioning to the New Requesting Licensee where approval pursuant to paragraph (f) above is received from the Existing Requesting Licensee. Where NetLink Trust do not receive any response from the Existing Requesting Licensee as provided for in paragraph (f) above, the New RSP's order shall be deemed approved and NetLink Trust shall proceed with service provisioning accordingly.
- (h) Where the order is rejected pursuant to paragraph (f) above, NetLink Trust shall notify the New Requesting Licensee to place a normal service provisioning order under this Schedule1. All timelines stated in this Schedule 1 shall be computed from the time the order is placed.
- (i) Where the order is approved or deemed approved as set out in paragraphs (f) or (g) above, NetLink Trust shall proceed to the serving cabinet to proceed with the service provisioning on the appointed date.
- (j) Where service was successfully provisioned, NetLink Trust will notify both the Existing and New Requesting Licensees.
- (k) Upon the successful service provisioning under the Request for Fibre Takeover, the Existing Requesting Licensee shall be entitled to:
  - a. Waiver of the Pre-mature Termination Charge (if any); and
  - b. Rebate amount equal to one (1) month of the Monthly Recurring Charge, for the affected connection.
- (1) Upon the successful service provisioning under the Request for Fibre Takeover, the New Requesting Licensee shall be entitled to a rebate amount equal to one (1) month of the Monthly Recurring Charge for the affected connection.
- 21.3 For avoidance of doubt, switching of GPON to OE or from OE to GPON is not allowed. The New Requesting Licensee may only submit the request to switch from GPON to OE or viceversa only after the successful service provisioning of the Residential End-User Connection with Fibre Take-Over Process. The same applies for relocation requests (within the same premise or to a new premise) as well.

- 21.4 For avoidance of doubt, New and Existing Requesting Licensee shall not be entitled to make any SLA or MTTR claims in respect of the affected Residential End-User Connection for the duration of the Fibre Takeover.
- 21.5 For avoidance of doubt, cancellation after approval has been sought will be chargeable according to the cancellation charges as set out in Schedule 15 (Charges).
- 21.6 The New Requesting Licensee shall pay NetLink Trust the applicable Service Activation Charge specified in Schedule 15 (Charges) for provisioning of the Residential End User Connection under this Fibre Takeover.

Reque	st for Residential End-User Connection						
	Please Tick only one option:						
	Relocation Service from one Residential Address to another Residential Address						
	New End-User Connection						
	For Request for Relocation Service from one Residential Address to another Residential						
	Address, please provide:						
	Order Identification Number	r (ORI)	of	existing			
	connection:	(0111)	01	· · · · · · · · · · · · · · · · · · ·			
	Date of Application:	Application	Reference	Number:			
	Requested Date of Activation:	Application	Reference	rumoer.			
	Preferred Installation Session*: AM/PM						
	Preferred installation Session*. AM/PM	Desidential End	Haan Talambana	Manala am			
	Davidandal Fad II. a Nama	Residential End-	Oser Telephone	Number:			
	Residential End-User Name:						
	· <del></del>						
(b)							
Ise							
Sen	Residential End-User Address of NEW Conne	ction:					
Lic							
Requesting Licensee	For NEW connection, please select:						
stir	, r						
ne	Split Ratio: 1:1 / 1:24	Technology:	GPON / C	)E			
ed	Spit Ratio. 1.17 1.21	reemiology.	GI OIV	L			
<u>~</u>	(Change of Split ratio is not allowed for						
	Relocation Service from one Residential						
	ž						
	Address to another Residential Address)						
	(only applicable for 1:24 Split Ra	itio)					
	Any other info:						
	Redundancy Service is required						
	Request for Residential End-User Connec	tion to be rejected if	f Redundancy Ser	vice is not			
	available	· ·	·				
	u vanable						
	The Requesting Licensee acknowledges that b	ov submitting this R	Request Form, it i	undertakes			
	to pay any additional charges which may be in						
	of Schedule 1. For avoidance of doubt, the Req						
			sum mable for the	applicable			
	Monthly Recurring Charge and one-time charges.						
	1 D 1 10 CD						
Fo	r and on Behalf of Requesting Licensee	T == ======					
	Sign:	Company Stamp:					
e g							
ıse	Name:	Company Name:					
ceı							
Ľ	Designation:						
ng	Designation.						
sti	C						
lne	Contact Number, Fax and email address						
Name: Company Name:  Designation:  Contact Number, Fax and email address							
Part 1: Date:							
	Application accepted:						
	Circuit Identifi	cation		Number:			
NetLink Trust							
Tentative Provision Date:							
ĮŽΪ		ernal cabling to Firs	t Termination Po	int (Y/N)			
	Provide internal cabling to First Termination Point (Y/N)						

## ANNEX 1A: REQUEST FORM RESIDENTIAL END-USER CONNECTION

	Application rejected Reason for	or rejec	ction:			
	NetLink Trust Name / Signature:	Queue Status:				
Pa	rt 2: Date:					
	Circuit Provision:					
	Revised Provision Date (where applicable):					
	Reason:					
	Any other reason:					
ب	Application rejected					
rus	Reason fe	or rejec	ction:			
NetLink Trust						
ini	NetLink Trust Name / Signature:					
etL						
Z						

## ANNEX 1B: REQUEST FOR CANCELLATION OF RESIDENTIAL END-USER CONNECTION DUE TO INSTALLATION-RELATED FAULT

Request for Cancellation of Residential End-User Connection Due to Installation-related Fault						
Date & Time of Reporting	Date & Time of Reporting of Installation-related Fault:					
Order Request Identifier (	ORI) Number :					
Trouble Ticket No:		1 hour a	ctivation			
Appointment Date & Time	<b>:</b>	Arrival Tim	ne:			
Number of Hours Since Ti	me of Reporting of In	nstallation-R	elated Faul	t:		
END-USER INFORMAT	TION					
Authorised Person Name:	*Mr/Mrs/Miss/Mdn	n/Dr				
<b>Q</b>			(LID)			
Contact no:			(HP):			
Location of						
Installation	Blk/House:	Unit No	o: #_	<del>-</del>		
	Street Name:					
	Building Name: _		Po	stal Code :S()		
ACKNOWLEDGEMEN	T					
This is to acknowledge that the installation-related fault has been attended and the fault resolution has not been resolved after seventy-two (72) hours from commencement of the joint investigation.  The Requesting Licensee hereby requests for the immediate cancellation of the Residential End-User Connection.						
Fault Attended By	Acknov	vledgemer	at by Requesting Licensee			
NetLink Trust Technician	Name:			ee Technician Name :		
NetLink Trust Technician			ee Technician Signature:			

<sup>\*</sup>Please delete where inapplicable.

## ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

Fault Rectification Serial No: Service Report						
Appointment Date:	Arrival Tim	rival Time:				
Time:		Completion	Time:			
Trouble Ticket No:	1 hour ac	ctivation nance Fault	Rectification appointmen			
END-USER INFO		1/D				
Authorised Person Name:	*Mr/Mrs/Miss/Mo	dm/Dr				
Contact no:			(HP):			
Company:			(111 ).			
Registered	Blk/House:	Unit No	): #		-	
Address:	Street Name:					
	Building Name:		Post	tal code:	S(	)
LOCATION OF I			400 F			
A-END (CO/MDF	) _ Unit No: #		(CO/MDF,	End-User's	Premise)	
Street Name: Blk/He			ase: ame: g Name:	Unit No: =	#l code: S(_	
End-User Declarati	on (check only one b	oox)				
I am the owner of the above premises  I, Name:						
and/or the ab Management Trust") or its full responsib	Prove-stated company Pte Ltd (as Trustee- contractor to enter to positive if the owner should be a second to the company of the owner should be a second to the company of the company	-Manager of N he premises an	etLink Trus id conduct t	st) (hereinaft he fault recti	er referred fication wo	to as "NetLink ork. I will bear
and/or the ab Management Trust") or its full responsib	Pte Ltd (as Trustee- contractor to enter to ility if the owner shoustructions.	-Manager of N he premises an	etLink Trus id conduct t	st) (hereinaft he fault recti	er referred fication wo	to as "NetLink ork. I will bear
and/or the ab Management Trust") or its full responsib Trust at my i Company Stamp (if	Prove-stated company Prove-stated company Prove-stated company Prove-stated company Contractor to enter to Contractor	-Manager of N he premises an ould dispute (a	etLink Trus id conduct t ) my author	st) (hereinaft he fault recti ity, or (b) an	er referred fication wo	to as "NetLink ork. I will bear
and/or the ab Management Trust") or its full responsib Trust at my i Company Stamp (if	Prove-stated company Prove-stated company Prove-stated (as Trustee- contractor to enter to polity if the owner sho instructions.  Fapplicable):	-Manager of N he premises an ould dispute (a	etLink Trus id conduct t ) my author	st) (hereinaft he fault recti ity, or (b) an	er referred fication wo	to as "NetLink ork. I will bear
and/or the ab Management Trust") or its full responsib Trust at my i Company Stamp (if	Prove-stated company Prove-stated company Prove-stated company Prove-stated company Contractor to enter to Contractor	-Manager of N he premises an ould dispute (a	etLink Trus id conduct t ) my author	st) (hereinaft he fault recti ity, or (b) an	er referred fication wo	to as "NetLink ork. I will bear
and/or the ab Management Trust") or its full responsib Trust at my i Company Stamp (if	Prove-stated company Prove-stated company Prove-stated (as Trustee- contractor to enter to enter to contractor to enter to enter to enter to contractor to enter to enter to enter to enter to contractor to enter to enter to enter	-Manager of N he premises an ould dispute (a	etLink Trus id conduct t ) my author	et) (hereinaft the fault recti tity, or (b) an	er referred fication wo	to as "NetLink ork. I will bear

## ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

Test Measurement (Segment Services A-END to B-END) Certified by NLT Technician Name: Technician Signatu OPTICAL MEASU Fault description:	re: JREMENTS, Y	1490n WHERE PO	Date:		Onm	NLT)	Distance (m)		
Test Measuremen (CO to Serving Cabinet):	g 1310nm	1	1490nm		15.	50nm	(m		
Test Measuremen (CO to 1st TP):	t   1310nm	1	1490nm		15	50nm	Di (m	stance  a)	
Test Measuremen (Segment Service A-END to B-END	s 1310nm	1	1490nm		15.	50nm	Di (m	stance	
Certified by :	_				I		<u>'</u>		
RL Name:				Date: Time:					
RL Signature:	) agamintian		11111	e:					
	Fault Root Cause Description  ACTION TAKEN/ADDITIONAL REMARKS								
G A GYN									
CUSTOMER ACKN		IENT AND A	ACCEPTA	ANCE					
Remarks/Comments:									
This is to acknowl effective	edge that the	fibre fault 1	rectificati	on has b	een a	ttended a	and the fau	lt resolu	tion is
Fault Attended by:			Res	olution A	Accep	ted by E	nd-User:		
Technician Name:			End	-User Si	gnatur	·e:			
Technician Signature:			End-User Signature:						

## ANNEX 1C: FAULT RECTIFICATION SERVICE REPORT

Resolution Verified and Accepted by RL (Only applicable for 1 hour activation):			
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 1D: REQUEST FOR ADDRESS NOT FOUND

**Request for Address Not Found Section 1: Application** (*To be filled up by Requesting Licensee*) Date of Application: Application Reference Number: Residential End-User Name: Residential End-User Telephone Number: Residential End-User Address: For and on Behalf of Requesting Licensee Company Name: Name: Contact Number: **Designation: Email Contact: Section 2: Acceptance of application** (for official use) Date of Receipt to RL: Application accepted/rejected: For accepted request Request Identification Number: ANF-DDMMYY (of submitted request)-XX(QP code)-01 For rejected request Reason(s) for rejection: NetLink Trust Name: **Section 3: Verification of address**(for official use) Date of notification to RL: For valid address Estimated RFA (if available): For non-valid address Valid proof of stay available?: Yes/ No Remarks: NetLink Trust Name:

## ANNEX 1D: REQUEST FOR ADDRESS NOT FOUND

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

Date of notification to RL:

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

NetLink Trust Name:

## ANNEX 1E: CONSENT TO SWITCH FIBRE INTERNET SERVICE PROVIDER

## CONSENT TO SWITCH FIBRE INTERNET SERVICE PROVIDER

Pre-Check Criteria *Please Tick Either "YES" or "NO"	or Yes	No	N/A
"N/A"			
Are you replacing your current Fibre Service Provider?			
Do you intend to retain all or any of the services on the fibre listed below with the	ie		
Existing Service Provider (if applicable)?			
(a) Fixed Line on Fibre			
(b) IPTV on Fibre			
Note:			
If you wish to retain all or any of the above services, switching of Fibre Interna	et		
Service Provider will not be applicable.			
Do you wish to port over your existing Fixed Line number to the New Service	e		
Provider?			
Note:			
If you wish to retain your existing Fixed Line number, you may need to complete	te		
the Fixed Line Number Porting Application.			

<b>Service Information</b>	
Subscriber Name:	
NRIC/FIN No.:	
Service Address:	(Postal
	Code)
Existing Service Provider:	M1 / MyRepublic / SingTel / StarHub / ViewQwest *Circle ONE Only
New Service Provider:	M1 / MyRepublic / SingTel / StarHub / ViewQwest *Circle ONE Only
Service Activation Date:	(mm/dd/yy)

To complete if existing subscriber is different from new subscriber

## ANNEX 1E: CONSENT TO SWITCH FIBRE INTERNET SERVICE PROVIDER

	reby (Name) (Name) (NRIC/FIN No.
	(Name)(NRIC/FIN No.) to
act	t on my behalf in the matter of switching Fibre Internet Service Providers. A copy of my NRIC/FIN as per attached.
	•
	nme: Signature:
	NRIC:
Da	ate:
I/V	We hereby confirm as follows:
1.	I/We intend to switch Fibre Internet Service Providers from the above mentioned Existing Service
	Provider to New Service Provider and will notify the Existing Service Provider of my intention to
	terminate my existing service/s with them.
2.	I/We consent to NetLink Trust, the above mentioned Existing Service Provider and New Service
	Provider to switch over the Fibre Internet Service from Existing Service Provider on the above
	mentioned Service Activation Date.
3.	I/We shall be liable for all fees and charges arising from the switching of the Fibre Internet Services
	and I/We agree to bear all fees and charges which may be imposed by the Existing Service Provider
	as mentioned above.
4.	I/We understand that upon successful activation of the Fibre Internet Service by the New Service
	Provider, I/We are obligated to notify my/our Existing Service Provider to terminate my/our
	existing subscription else I/We shall be liable for all fees and charges up to the agreed service
	termination date.
5.	I/We acknowledge that if some of the non-fibre bundled services from the Existing Service Provider
	are continued after the switching of the Fibre Internet Services to the New Service Provider, the
	charges for those non-fibre bundled services after the switching may be different from what is
	charged currently and I/We agree to bear the whole of such charges which may be imposed by the
	Existing Service Provider for those non-fibre bundled services if the existing Subscriber do not pay
	for the same.
6.	I/We reside at the above mentioned address and I am the subscriber of the existing Fibre Internet
	Service from the Existing Service Provider and the subscriber of the new service from the New
	Service Provider.
7.	I/We confirm that the information declared above is true and correct.
Νa	Signature

## ANNEX 1E: CONSENT TO SWITCH FIBRE INTERNET SERVICE PROVIDER

NRIC:	Date:
	For Official Use Only
To be completed by the Reque	esting Licensee who requested for Fibre Takeover ("FTO")
· · ·	("ORI"):