## APPENDIX 2 DIRECTED AMENDMENTS TO SCHEDULE 1

# SCHEDULE 1 Residential End-User Connection

#### **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 OpenNet will provide the Requesting Licensee with a licence for:

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

#### **CLAUSE 1.1(a) – DIRECTED AMENDMENTS**

- 1.1 The Residential End-User Connection is a service provided by OpenNet to the Requesting Licensee for the purpose of delivering GPON or OE services over the Layer 1 Services highlighted above to a Residential Premise at a:
  - (a) High-Rise Residential Building/Non-Residential Building; or

For clarity and consistency, clause 1.1 (a) should clearly state that besides "High-Rise Residential Building", OpenNet shall also provide the Residential End-User Connection to a Residential Premise at a "Non-Residential Building".

#### CLAUSE 1.1(b) - APPROVED

- (b) Landed Residential Premise.
- 1.2 This Schedule only applies to Requesting Licensees who are FBOs.

#### 2. SERVICE LEVEL GUARANTEES

#### **CLAUSE 2.1 - DIRECTED AMENDMENTS**

OpenNet will provide the Service Level Guarantees in respect of Residential End-User Connection as set out in this Schedule. If OpenNet fails to meet any service activation period, Mean Time To Recovery or service level availability (collectively called the **Service Level Guarantees**) applicable to this Schedule and the failure to meet the Service Level Guarantees is solely-and directly caused by OpenNet, or its contractors and/or suppliers, OpenNet will provide a remedy in the form of a rebate to the Requesting Licensee in accordance with:

IDA considers that OpenNet's proposed modifications are not fully compliant with IDA's 3 July 2009 Directed Modifications, because it seeks to limit OpenNet's liability where it is an indirect cause of the failure to meet Service Level Guarantees. Further, the requirement of "directly" represents an unnecessary impediment to Requesting Licensees making appropriate claims for rebates.

Accordingly, IDA directs OpenNet to amend this clause 2.1 in the manner specified above.

- (i) Clause 6.10 and any terms and conditions contained in this Schedule in respect of request and provisioning timeframes;
- (ii) Clause 11.14 and any terms and conditions contained in this Schedule in respect of fault rectification timeframes; and
- (iii) Clause 12.1 and any terms and conditions contained in this Schedule in respect of service level availability.

#### **CLAUSE 2.2 – APPROVED**

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.

- 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 OpenNet and will be reflected in OpenNet's bill to the Requesting Licensee in accordance with OpenNet's billing cycle.
- 2.4 The guarantee and rebates provided by OpenNet are:
  - (i) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
  - (ii) subject to this Schedule.
- 2.5 Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim, OpenNet shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies for a claim or as to the quantum of the claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17 of the ICO Agreement, or in the case of a Billing Dispute, in accordance with Schedule 16 of the ICO Agreement.
- 2.6 In addition to the specific terms and conditions of the Service Level Guarantees, the Service Level Guarantees shall not apply in any of the following circumstances:

#### CLAUSES 2.6(a) AND 2.6(c) - APPROVED

- (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 OpenNet'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, Joint Investigation Meeting or fault identification coordination meeting is involved, except where (a) the fault was caused by OpenNet; and (b) the Requesting Licensee has not contributed to any delay in setting up the meeting. Notwithstanding the above, in determining whether the Service Level Guarantees have been

met by OpenNet, the time taken from the start of arranging any site-coordination meeting, Joint Investigation Meeting or fault identification coordination meeting up to the end of the meeting, shall always be excluded;

#### **CLAUSE 2.6(d) – DIRECTED AMENDMENTS**

(d) OpenNet needs to obtain or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection.

Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken by OpenNet to obtain or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection shall always be excluded;

Where OpenNet needs to obtain or maintain any licence or permission which is necessary to the provision or restoration of the Residential End-User Connection, IDA considers it fair and reasonable that the Service Level Guarantees shall apply except that the time taken for obtaining or maintaining the licence or permission shall be excluded in the determination of the Service Level Guarantees, since OpenNet would be able to resume the provisioning or restoration of the service upon obtaining or maintaining the licence or permission.

Accordingly, IDA directs OpenNet to amend this clause 2.6(d) in the manner specified above

- (e) OpenNet 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;
- (f) delay in the provision or restoration of the Residential End-User Connection caused by events beyond OpenNet's reasonable control;
- (g) OpenNet network outages for which the Requesting Licensee has not reported a fault;

CLAUSE 2.6(h) - APPROVED

- (h) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by OpenNet;
- (i) OpenNet is required to carry out scheduled service interruption and the Requesting Licensee has been informed in accordance with clause 9.5; or

#### **CLAUSE 2.6(j) - APPROVED**

- (j) OpenNet is required to carry out fibre diversion at the request of the Government Agencies, private developers or other relevant parties and the Requesting Licensee has been informed in accordance with clause 9.5.
- 2.7 If the Requesting Licensee disputes OpenNet's reason for rejection, its records and/or the amount of rebate, the Requesting Licensee shall not be entitled to be credited with any rebate until and unless the dispute has been resolved.
- 2.8 A failure by OpenNet to meet any Service Level Guarantee does not constitute a breach of the ICO Agreement or this Schedule.
- 2.9 The Requesting Licensee acknowledges that the relevant remedy provided under clause 2.1 is a genuine pre-estimate of the Requesting Licensee's loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant Service Level Guarantees for any Residential End-User Connection and shall be OpenNet's sole and exclusive liability to the Requesting Licensee for such failure.

#### 3. SERVICE DESCRIPTION AND ACCESS POINTS

#### **CLAUSE 3.1(A) – DIRECTED AMENDMENTS**

- 3.1 (A) Where the Requesting Licensee requests for Residential End-User Connection for the purpose of providing GPON services to the End-User, OpenNet 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 OpenNet's Fibre Distribution Frame (**FDF**) at the Central Office designated by OpenNet to OpenNet's splitter at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);

- (b) one (1) dedicated fibre strand from the splitter to the First Termination Point of the Residential Premise;
- (c) one (1) Patching Service at OpenNet's FDF at the Building MDF Room; and
- (d) where necessary, one (1) Patching Service at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

Unless <u>deemed reasonably considered necessary</u> by OpenNet in its sole <u>discretion</u>, OpenNet shall utilise at least <u>7590</u>% of the connections in each splitter before an additional splitter is provisioned.

IDA considers that a more efficient minimum utilisation level of connections on the same splitter before OpenNet provisions another splitter is 90% instead of the 75% proposed by OpenNet. IDA considers this requirement fair and reasonable given that OpenNet is likely to wish to utilise as many connections as possible on a same splitter to minimise cost.

In addition, while OpenNet has amended clause 3.1(A) to state the minimum level of connections that will be utilised within the same splitter before OpenNet provisions an additional splitter, it does not provide assurance to the Requesting Licensees that OpenNet will exercise its discretion reasonably.

Accordingly, IDA directs OpenNet to amend this clause 3.1(A) in the manner specified above.

#### **CLAUSE 3.1(B) – DIRECTED AMENDMENTS**

- 3.1 (B) Where the Requesting Licensee requests for Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet 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 OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room for each group of twenty four (24) Residential Premises (or portion thereof);
  - (b) one (1) dedicated fibre strand to the First Termination Point of the Residential Premise from OpenNet's FDF at the Building MDF Room;

- (c) up to three (3) Patching Services at OpenNet's FDF in the Building MDF Room; and
- (d) where necessary, two (2) Patching Services at OpenNet's FDF in the Central Office will be provided and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

Unless deemed necessary by OpenNet in its sole discretion, OpenNet shall utilise at least 75% of the connections in each splitter before an additional splitter is provisioned.

IDA would clarify that the provision of OE services does not require OpenNet to deploy splitters.

Accordingly, IDA directs OpenNet to amend this clause 3.1(B) in the manner specified above.

#### **CLAUSE 3.2 – DIRECTED AMENDMENTS**

- 3.2 For a Residential End-User Connection of 1:1 Split Ratio for the purpose of providing either GPON services or OE services to the End-User, OpenNet will not provide any splitter at the Building MDF Room. OpenNet will provide:
  - (a) one (1) dedicated fibre strand from OpenNet's FDF at the Central Office designated by OpenNet to OpenNet's FDF at the Building MDF Room;
  - (b) one (1) dedicated fibre strand from OpenNet's FDF at the Building MDF Room to the First Termination Point of the Residential Premise;
  - (c) one (1) Patching Service at OpenNet's FDF in the Building MDF Room;
  - (e)(d) one (1) Patching Service at OpenNet's FDF in the Central Office and the Requesting Licensee shall pay a Patching Charge in accordance with Schedule 15 (Charges).

For clarity, clause 3.2 should not be restricted to supporting only GPON services and OE services, as the Requesting Licensee may provide other services on the Residential End-User Connection of 1:1 Split Ratio. In addition, OpenNet has omitted

to indicate that OpenNet will provide one Patching Service at OpenNet's FDF in the Building MDF Room.

Accordingly, IDA directs OpenNet to amend clause 3.2 in the manner specified above.

#### **CLAUSES 3.3 AND 3.4 - APPROVED**

- 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 OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet and at the First Termination Point 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 OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet, at OpenNet's FDF at the Building MDF Room and at the First Termination Point 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.

#### 4. ORDERING AND PROVISIONING PROCEDURE

#### **CLAUSE 4.1(a) – DIRECTED AMENDMENTS**

4.1 The Requesting Licensee shall submit its request for Residential End-User Connection (**Request**) to OpenNet 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

Arising from the deletion of former clauses 4.1(c) and 4.1(d), IDA directs OpenNet to insert "and" at the end of clause 4.1(a).

#### **CLAUSE 4.1(b) – DIRECTED AMENDMENTS**

(b) the Split Ratio required:

Arising from the deletion of former clauses 4.1(c) and 4.1(d), IDA directs OpenNet to replace the semi colon in clause 4.1(b) with a full stop.

#### FORMER CLAUSE 4.1(c) – DIRECTED AMENDMENTS

(c)whether the request is for the purpose of providing GPON or OE services where applicable, to the End-User.;

Arising from IDA's annotations to clause 3.2, IDA directs OpenNet to delete former clause 4.1(c) in its entirety.

#### FORMER CLAUSE 4.1(d) – DIRECTED AMENDMENTS

(d)where applicable, the Transmission Tie Cable Port to which the Residential End User Connection is to be connected at the Central Office.

OpenNet should be the party assigning the Transmission Tie Cable Port to which the Residential End-User Connection is to be connected at the Central Office instead of the Requesting Licensee since OpenNet is responsible for OpenNet's Fibre Distribution Frame at the Central Office.

#### Accordingly, IDA directs OpenNet to delete former clause 4.1(d) in its entirety.

4.2 Relocation of the Residential End-User Connection is not allowed. In the event that the Residential End-User has relocated, the Requesting Licensee shall submit a request for the termination of the existing Residential End-User Connection and request for a new Residential End-User Connection at the new Residential Premise in accordance with this Schedule.

#### **CLAUSE 4.3 – DIRECTED AMENDMENTS**

4.3 For the avoidance of doubt, Cchange of use from GPON to OE or from OE to GPON is not-allowed subject to the Requesting Licensee paying the applicable charges for Patching Service in accordance to Schedule 15 (Charges). In the event the Residential End-User requires changes to its End-User services, the Requesting Licensee shall submit a request for termination of the existing Residential End-User Connection and request for a new Residential End-User Connection for the new purpose in accordance with this Schedule.

IDA considers it fair and reasonable that (i) OpenNet allows the Requesting Licensee to change the use of the Residential End-User Connection from GPON to OE or from OE to GPON and (ii) OpenNet not to require the termination of the existing service and application for the new service, since OpenNet only needs to provide the necessary Patching Service to enable the change of the use.

Accordingly, IDA directs OpenNet to amend this clause 4.3 in the manner specified above.

4.4 OpenNet shall at its sole discretion determine the serving CO and Building MDF Room from which the Residential End-User Connection will be provided.

#### **CLAUSE 4.5 -- DIRECTED AMENDMENTS**

Initially, information relating to the Mandated Services will be available on OpenNet's website, for access by the Requesting Licensee through secured means. The secured access to OpenNet's website will require the payment of a <a href="Per User Account eCharge">Per User Account eCharge</a> (specified in clause 14 of Schedule 15 (Charges)) for each user account created. Initially, information relating to network outages will be sent to the Requesting Licensee via email. The information relating to the Mandated Services and the information relating to network outages shall be made available on the OpenNet Platform in due course. For the avoidance of doubt, such Per User Account Charge shall not be re-imposed when the information relating to Mandated Services is made available on the OpenNet Platform.

For avoidance of doubt, IDA considers that there is merit to make clear that the applicable charge is the user account charge and that it would be unreasonable to impose the user account charge a second time upon the OpenNet Platform becoming available.

Accordingly, IDA directs OpenNet to amend this clause 4.5 in the manner as specified above.

5. RESIDENTIAL END-USER CONNECTION REQUEST

#### **CLAUSE 5.1 - APPROVED**

5.1 OpenNet shall process all Requests for Residential End-User Connection on a 'first come, first served' basis.

#### **CLAUSE 5.2 -- DIRECTED AMENDMENTS**

5.2 For each Business Dayweek, OpenNet shall process a combined total of no more than 4102050 Requests for Basic Mandated Services and Layer 1 Redundancy Services (Maximum Quota) from all Requesting Licensees, and a daily-weekly roll-over mechanism shall apply for additional Requests beyond the Maximum Quota. For avoidance of doubt, OpenNet will process additional Requests beyond the Maximum Quota in the next available week on a 'first come, first served' basis.

IDA is of the view that a weekly roll-over mechanism where OpenNet will process 2050 Requests per week is less restrictive than OpenNet's proposed daily roll-over mechanism where OpenNet will process only 410 Requests per Business Day because OpenNet will process more than 410 Requests on a certain Business Day (subject to a total of 2050 Requests in a week) if there is high demand on that particular Business Day. In addition, IDA is of the view that OpenNet should provide more clarity on the weekly roll-over mechanism,

Accordingly, IDA directs OpenNet to amend this clause 5.2 in the manner as specified above.

#### **CLAUSES 5.3 AND 5.4 – DIRECTED AMENDMENTS**

5.3 Within three one (31) Business Days of the date on which OpenNet receives the request for Residential End-User Connection (**Request Date**) and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) whether if its Request is accepted, or if 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 service activation date requested is less than three (3) Business Days from the date of receipt of a Request; or
- (d) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule.
- 5.4 Within three (3) Business Days of the Request Date and subject to clause 5.2,
  OpenNet must notify the Requesting Licensee (and shall provide the Requesting
  Licensee with a unique reference number or a similar form of identification in the
  notification) whether its Request is accepted, or if rejected, for any one of the
  following reasons, except where there is insufficient capacity, OpenNet must also
  notify the Requesting Licensee within 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:
  - (e)(a) the equipment or services that the Requesting Licensee proposes to use or to provide interfere with, or cause deterioration to services supplied by OpenNet;
  - (f)(b) there is obstruction from building owner, building management, home owner or End-User to OpenNet installation or installation schedule;

#### **CLAUSE 5.4(c) - DIRECTED AMENDMENTS**

(g)(c) the Transmission Tie Cable (installed pursuant to Co-location Service in Schedule 12) for connection to the Residential End-User Connection is not yet to be operational at the point in time of OpenNet's provisioning of the Residential End-User Connection;

IDA considers that there is merit to make clear that it is the Requesting Licensee's responsibility to ensure the Transmission Tie Cable will be operational in time for OpenNet to provision the Residential End-User Connection.

Accordingly, IDA directs OpenNet to amend this clause 5.4(c) in the manner specified above.

#### FORMER CLAUSE 5.3(h) - DIRECTED AMENDMENTS

(h)(d)the Transmission Tie Cable Port to be connected at the Central Office in relation to the Request for Residential End-User Connection is already in use;

IDA refers to IDA's annotations to former clause 4.1(d). Since OpenNet is the party assigning the Transmission Tie Cable Port and not the Requesting Licensee, the scenario where the Transmission Tie Cable Port is already in use would not arise and should not be a reason for rejection of a Request.

Accordingly, IDA directs OpenNet to delete former clause 5.3(h) in its entirety.

#### **CLAUSE 5.4(d) – DIRECTED AMENDMENTS**

(i)(d) OpenNet has not rolled out its Network to the Residential Building; or

IDA refers to IDA annotations to clause 1.1(a) and accordingly directs OpenNet to amend this clause 5.4(d) in the manner specified above.

#### FORMER CLAUSE 5.3(j) - DIRECTED AMENDMENTS

(j)(e)OpenNet needs to increase capacity to provide the Residential End User Connection; or

<u>Under clause 6.2, OpenNet is required to increase capacity in accordance with the service activation period stated therein if there is insufficient capacity. Hence, OpenNet's need to increase capacity should not be a reason for rejection of a Request.</u>

Accordingly, IDA requires OpenNet to delete former clause 5.3(j) in its entirety.

(k)(e) there are security and confidentiality requirements or restrictions imposed on OpenNet by Government Agencies.

IDA considers it reasonable to expect OpenNet to be able to assess whether the Requesting Licensee's application is to be rejected for the reasons described in clauses 5.3(a), 5.3(b), 5.3(c) and 5.3(d) within one (1) Business Day instead of three (3) Business Days as proposed by OpenNet since the assessment contemplated therein is

Request but subsequently finds out that one or more of the reasons for rejection has occurred when OpenNet carries out the installation of the service, OpenNet should have until the last day of the relevant service activation period, i.e. on the third Business Day, where there is sufficient capacity to provide the Residential End-User Connection; and on the tenth or fortieth Business Day, where there is insufficient capacity, to revert to the Requesting Licensee on the Request. In the case where there is insufficient capacity, OpenNet shall notify the Requesting Licensee within three (3) Business Days to keep the Requesting Licensee informed.

Accordingly, IDA directs OpenNet to amend clauses 5.3 and 5.4 in the manner specified above.

#### FORMER CLAUSE 5.4 - DIRECTED AMENDMENTS

- 5.4Notwithstanding anything in clause 5.3 to the contrary, OpenNet shall give a qualified acceptance to the Requesting Licensee with a revised service activation period if:
  - (a) there is initial obstruction from the building owner, building management, home owner or End User to OpenNet installation or installation schedule, but within two (2) Business Days from the initial visit, the Requesting Licensee obtains a firm commitment from the building owner, building management, home owner or End User (as applicable) and submits a written confirmation to OpenNet (in the form of Annex 1B) that OpenNet would be allowed access on a definite date acceptable to OpenNet and that the Requesting Licensee shall pay the Installation and Onsite Charge for that visit and all subsequent visits by OpenNet
    - 5.5 (b) the Transmission Tie Cable (installed pursuant to Co location Service in Schedule 12) for connection to the Residential End User Connection is not operational at the point in time of OpenNet's provisioning of the Residential End User Connection, but OpenNet has, at the time of the Request, already scheduled for such Transmission Tie Cable to be operational by a definite date; or
    - 5.5 (c) OpenNet needs to increase capacity in order to provide the Residential End-User Connection, but OpenNet has, at the time of the Request, already scheduled for capacity to be increased by a definite date.

Upon review of OpenNet's proposed modifications relating to the qualified acceptance of a Request, IDA is of the view that a qualified acceptance process may be cumbersome for OpenNet to administer and burdensome to the Requesting Licensee

to comply with. It will be more straightforward for OpenNet to reject the Request and the Requesting Licensee to submit a new application when the underlying conditions in clauses 5.4 (b) and 5.4(c), both of which are not a result of OpenNet's fault, are addressed by the Requesting Licensee.

Accordingly, IDA directs OpenNet to delete the former clause 5.4 in its entirety.

#### **CLAUSE 5.5 – APPROVED**

- 5.65.5 If there is sufficient capacity to provide the Residential End-User Connection pursuant to clause 6.1, OpenNet 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, clause 6.2 shall apply and OpenNet shall advise the Requesting Licensee within either ten (10) or forty (40) Business Days (as the case may be) whether the Residential End-User Connection has been successfully set up.
- <u>5.75.6</u> The Requesting Licensee shall pay OpenNet the applicable Installation Charge and Patching Charge specified in Schedule 15 (Charges) for provisioning the Residential End-User Connection.
- <u>5.85.7</u> Where OpenNet rejects any Request for Residential End-User Connection, OpenNet shall provide reasons explaining the basis for rejection.

#### 6. DELIVERY

#### **CLAUSE 6.1 -- DIRECTED AMENDMENTS**

6.1 Subject to clauses 5.2, 5.3, 5.4 and 6.2, OpenNet shall provide the Residential End-User Connection by the end of three (3) Business Days from the receipt of a valid Request from the Requesting Licensee, where OpenNet has deployed its Network to the Distribution Point, Final Distribution Point or First Termination Point of the Residential Premise. OpenNet shall use its reasonable endeavours to install the First Termination Point of the Residential Premise during the Requesting Licensee's preferred session.

To facilitate co-ordination with the Requesting Licensee and to minimise the number of visits to the Residential Premise by service providers, IDA considers it reasonable that

OpenNet and the Requesting Licensee should agree on a session for the installation of the First Termination Point of the Residential Premise, where OpenNet has only deployed its Network to the Distribution Point or Final Distribution Point.

In addition, as a consequence of IDA's annotations to clause 5, clause 6.1 should also be subject to clause 5.4.

Accordingly, IDA directs OpenNet to amend this clause 6.1 in the manner specified above.

#### **CLAUSE 6.2 -- DIRECTED AMENDMENTS**

- 6.2 Where there is insufficient capacity to provide the Residential End-User Connection, OpenNet 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 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 Termination Point of the Residential Premise.

OpenNet shall use its reasonable endeavours to install the First Termination Point of the Residential Premise during the Requesting Licensee's preferred session.

To facilitate co-ordination with the Requesting Licensee and to minimise the number of visits to the Residential Premise, IDA considers it reasonable that OpenNet and the Requesting Licensee should agree on a session for the installation of the First Termination Point of the Residential Premise.

Accordingly, IDA directs OpenNet to amend this clause 6.2 in the manner specified above.

**CLAUSE 6.3 - DIRECTED AMENDMENTS** 

6.3 Where the home owner has previously refused OpenNet's entry to the premise, OpenNet 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, OpenNet 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)OpenNet shall inform the Requesting Licensee a revised implementation timeline which shall not be subject to the provisioning Service Level Guarantee.

For clarity, clause 6.3 should reflect that the additional charges apply to work undertaken by OpenNet relating to the installation of internal cabling exceeding fifteen (15) metres only as the End-Users are responsible to engage their own contractors if they prefer the use of deployment technique other than open ducting.

Accordingly, IDA directs OpenNet to amend this clause 6.3 in the manner specified above.

- OpenNet's FDF at the Central Office and Building MDF Room, FTTB Node and First Termination Point, including Patching Service at OpenNet's FDF at the Central Office, Building MDF Room and FTTB Node in accordance with Schedule 13 on Patching Services. The Requesting Licensee shall bear the Charges for such work carried out by OpenNet.
- Where the Requesting Licensee requests Residential End-User Connection for the purpose of providing OE services to the End-User, OpenNet will provide the necessary Patching Service at OpenNet's FDF in the Building MDF Room using Patch Cable of not exceeding ten (10) metres in length. The Requesting Licensee shall provide its own Patch Cable if it requires a longer Patch Cable. For the avoidance of doubt, where the Requesting Licensee provides its own Patch Cable, OpenNet will not offer and Requesting Licensee shall not request for any rebate or discount over the Patching Service or the Residential End-User Connection.

6.6 OpenNet 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.

### **CLAUSE 6.7 - APPROVED**

- 6.7 OpenNet will test the optical fibre cable from OpenNet's FDF at its designated Central Office or the Requesting Licensee's FDF at the Central Office designated by OpenNet to the First Termination Point at the Residential Premise to ensure that the Residential End-User Connection falls within the specified optical performance. Testing will be conducted at wavelengths of 1310nm, 1490nm and 1550nm.
- 6.8 OpenNet 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

#### **CLAUSE 6.8(b) - APPROVED**

- (b) of any Residential End-User Connection for the purpose of provision of OE services does not exceed -20 dB from OpenNet's FDF in the Central Office or the Requesting Licensee's FDF at the Central Office designated by OpenNet to OpenNet's FDF in the Building MDF Room, and does not exceed -20dB from OpenNet's FDF in the Building MDF Room to the First Termination Point of the Residential Premise.
- 6.9 OpenNet shall promptly notify the Requesting Licensee upon the completion of the Residential End-User Connection.
- 6.10 Subject to clause 6.11, in the event OpenNet fails to meet the applicable service activation period for a Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the 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 (Weekly Recurring Charge), where:

Weekly Recurring Charge = Monthly recurring charge x 7 / 30

#### **CLAUSE 6.11 – DIRECTED AMENDMENTS**

- 6.11 Except for Requests with service activation periods which have been extended beyond the standard service activation period pursuant to clauses 5.4, 5.5 and 6.2, OpenNet shall not be required to compensate the Requesting Licensee under any of the following circumstances:
  - (a) Delay in the granting of permission from or permission is not granted by the building owners/management or house owner or End-User to install the required Network to the Residential Premise within the said building;
  - (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;

#### FORMER CLAUSE 6.11(c) - DIRECTED AMENDMENTS

(c)The Requesting Licensee has requested for a service activation date that is beyond the stipulated service activation period;

Arising from IDA's annotations to clause 6.11 requiring OpenNet to compensate the Requesting Licensee if OpenNet fails to meet the revised service activation date, former clause 6.11(c) has become a redundant clause.

#### Accordingly, IDA directs OpenNet to delete this former clause 6.11(c) in its entirety.

(d)(c) The Requesting Licensee requests the deferment of the service activation date; or

(e)(d) The building which was initially under network coverage has been reconstructed and OpenNet has to reinstall its Network to the building.

For the avoidance of doubt, where the service activation date has been revised pursuant to any of the circumstances contemplated in this clause 6.11 or elsewhere in the ICO Agreement (unless otherwise stated), OpenNet shall nevertheless be required to compensate the Requesting Licensee if it fails to meet the revised implementation timeline.

As explained in IDA's 3 July 2009 Directed Modifications, IDA expects OpenNet to keep to the revised request service activation date for all the scenarios listed in clause 6.11 above, failing which the relevant Service Level Guarantees will apply. IDA also considers it fair and reasonable that OpenNet shall be required to compensate the Requesting Licensee the relevant Service Level Guarantees for failure to meet the

revised service activation date, if OpenNet agrees to a revised service activation date under the ICO Agreement, unless otherwise stated. IDA notes that there is no extension of service activation date under clauses 5.4, 5.5 and 6.2.

Accordingly, IDA directs OpenNet to amend this clause 6.11 in the manner specified above.

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

- 7.1 The Requesting Licensee shall not, and shall ensure that its employees, agents and contractors do not, at any time access OpenNet's FDF at the Central Office and Building MDF Room, the FTTB Node and the Distribution Point.
- 7.2 Where the Requesting Licensee wishes to change the existing patching connection at OpenNet's FDF at the Central Office 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 terminate the Residential End-User Connection by giving OpenNet not less than one (1) month prior written notice.

#### **CLAUSE 8.2 - APPROVED**

8.2 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 OpenNet one hundred percent (100%) of the Monthly Recurring Charge for the remainder of the minimum contract term.

#### **CLAUSE 8.3 – DIRECTED AMENDMENTS**

Where any Patching Service is no longer required as a result of the termination of the Residential End-User Connection, OpenNet shall remove the Patching Service at all the relevant access points and the Requesting Licensee shall be liable for the termination charges for removing the Patching Service at the Central Office designated by OpenNet in accordance with Schedule 15 (Charges). Notwithstanding the above, the Requesting Licensee shall not be liable to pay any

Charges for the removal of Patching Service related to or in connection with the termination of the Residential End-User Connection, if such termination is the result of OpenNet's fault.

For clarity, IDA directs OpenNet to amend this clause 8.3 to indicate that only the costs of removal of Patching Service at the Central Office designated by OpenNet shall be borne by the Requesting Licensee.

#### 9. STANDARD TERMS AND CONDITIONS

9.1 OpenNet shall at its sole discretion determine its network deployment, including but not limited to the access points, fibre cable routing and location of the Central Office, Building MDF Room, FTTB Node, Distribution Point and First Termination Point from which the Residential End-User Connection is provided.

#### **CLAUSE 9.2 – DIRECTED AMENDMENTS**

9.2 OpenNet shall be responsible for the maintenance of the Residential End-User Connection, excluding all Patching Services installed under this Schedule. The terms and conditions of Patching Services provided shall be pursuant to Schedule 13 (Patching Service).

Under clause 11.5, OpenNet is responsible for replacing a faulty patch cable (OpenNet is entitled to impose a Patching Charge on the Requesting Licensee if the Requesting Licensee is responsible for the fault). In this regard, to avoid confusion, clause 9.2 should not exclude Patching Services from the maintenance of the Residential End-User Connection. In addition, it is irrelevant to mention that the terms and conditions of Patching Services provided shall be pursuant to Schedule 13 (Patching Service).

Accordingly, IDA directs OpenNet to amend this clause 9.2 in the manner specified above.

- 9.3 Except to the extent strictly necessary to accurately describe the service to actual or potential Customers, the Requesting Licensee shall not use OpenNet's name, any OpenNet's trademarks or the fact that any service is supplied using OpenNet's Network in promoting the Requesting Licensee's service.
- 9.4 The Parties shall in good faith co-operate with each other and take reasonable measures to ensure that there is no interference with or deterioration to OpenNet's existing services or those of a Third Party as a result of the Requesting Licensee's use of the Residential End-User Connection.

#### **CLAUSE 9.5 - APPROVED**

9.5 If it is necessary to carry out any scheduled 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, OpenNet shall provide the Requesting Licensee with at least one (1) month's written notice in advance of such interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. OpenNet shall take reasonable measures to minimise any service disruption to the Requesting Licensee.

#### **CLAUSE 9.6 – DIRECTED AMENDMENTS**

9.6 If the scheduled service interruption affects Residential End-User Connections, OpenNet will endeavour to carry out the scheduled service interruption between 1:00am and 6:00am, unless it is not feasible for OpenNet to do so.

IDA refers to IDA's 20 August 2009 Decision varying IDA's 3 July 2009 Directed Modifications to allow OpenNet to carry out scheduled service maintenance outside of the 1:00am and 6:00am timeframe where it is unavoidable for OpenNet to do so within the specified timeframe. OpenNet's proposed modifications do not provide assurance to Requesting Licensees that OpenNet will carry out all planned service maintenance within the specified timeframe unless it is unavoidable for OpenNet to do so.

Accordingly, IDA directs OpenNet to amend this clause 9.6 in the manner specified above.

#### **CLAUSE 9.7 - APPROVED**

- 9.7 Subject to Requesting Licensee acquiring redundancy service, OpenNet shall, where technically feasible, provide assistance to Requesting Licensee to divert its Residential End-User Connection to the redundancy service before commencing the scheduled service interruption.
- 9.8 Where there are available resources, OpenNet will, where possible, first divert critical links to alternative routings before commencing the scheduled service interruption.

#### **CLAUSE 9.9 – DIRECTED AMENDMENTS**

9.9 <u>Subject to clause 9.6.</u> OpenNet shall not be liable for any loss caused by such scheduled service interruption, except for any Service Level Guarantee rebate that arises from OpenNet carrying out the scheduled service interruption outside of the stipulated period and the Requesting Licensee has reported the fault in accordance to clause 11.

IDA does not agree with OpenNet's comment that clause 12.3 fully addresses IDA's 3

July 2009 Directed Modifications to clause 9.9 requiring OpenNet to propose a suitable remedy where a scheduled service interruption is carried out outside of the stipulated period.

Accordingly, IDA requires OpenNet to amend this clause 9.9 in the manner specified above.

- 9.10 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.
- 9.11 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);

#### CLAUSE 9.11(b) - APPROVED

- (b) co-location at the designated Central Office and Building MDF Room; and
- (c) access to the Residential Premise.
- 9.12 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.

#### 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.

#### 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 OpenNet.

#### **CLAUSE 11.3 - APPROVED**

11.3 Upon receipt of a fault report from the Requesting Licensee under clause 11.2, OpenNet shall investigate the cause of the fault experienced by the Requesting Licensee in a diligent and responsible manner as would be expected of a competent service provider. OpenNet shall update the Requesting Licensee as and when there is a change in status of the fault investigation/rectification work.

#### **CLAUSE 11.4 – DIRECTED AMENDMENTS**

11.4 If, following investigation, OpenNet determines that the fault is at the Transmission Tie Cable at the Central Office, OpenNet 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). OpenNet will not charge the Requesting Licensee a Patching Charge if OpenNet (or its contractors and/or suppliers)the Requesting Licensee was solely and directly responsible for the fault at the Transmission Tie Cable at the Central Office.

As the responsibility for the Transmission Tie Cable at the Central Office lies with OpenNet, OpenNet should only charge the Requesting Licensee a Patching Charge if the fault at the Transmission Tie Cable at the Central Office is caused by the Requesting Licensee.

Accordingly, IDA directs OpenNet to amend this clause 11.4 in the manner specified above.

#### **CLAUSE 11.5 – DIRECTED AMENDMENTS**

11.5 If, following investigation, OpenNet determines that the fault is at the Patch Cable at the Building MDF Room, OpenNet will replace with another Patch Cable(s) and charge the Requesting Licensee a Patching Charge(s) in accordance with Schedule 15 (Charges). OpenNet will not—charge the Requesting Licensee a Patching Charge if OpenNet (or its contractors and/or suppliers)the Requesting Licensee was solely and directly—responsible for the fault at the Patch Cable at the Building MDF Room.

As the responsibility for the Patch Cable at the Building MDF Room lies with OpenNet,
OpenNet should only charge the Requesting Licensee a Patching Charge if the fault at
the Patch Cable at the Building MDF Room is caused by the Requesting Licensee.

Accordingly, IDA directs OpenNet to amend this clause 11.5 in the manner specified above.

- 11.6 If, following investigation, OpenNet determines that no fault is found or the fault is not due to the OpenNet Network or equipment, then OpenNet shall charge the Requesting Licensee a No Fault Found Charge for the fault report in accordance with Schedule 15 (Charges).
- 11.7 If OpenNet is unable to identify any fault, OpenNet will call for a fault identification coordination meeting between OpenNet and the Requesting Licensee to identify the fault. The Requesting Licensee shall provide all reasonable assistance requested by OpenNet. Each Party is to bear its own cost for attending such fault identification coordination meeting as well as any testing or trouble-shooting activities required as a result of such a meeting.
- 11.8 The Residential End-User Connection is deemed to be restored when OpenNet has tested and confirmed to the Requesting Licensee that the Residential End-User Connection has been restored.

11.9 Where the Requesting Licensee has lodged with OpenNet a fault report and OpenNet is in the process of investigating the fault or where the Requesting Licensee has not lodged a fault report but suspect that there is a fault on the Residential End-User Connection, the Requesting Licensee may request OpenNet for a joint investigation. The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges).

#### **CLAUSE 11.10 – DIRECTED AMENDMENTS**

11.10 The Requesting Licensee acknowledges that OpenNet 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. OpenNet shall conduct such disconnection only as it reasonably considers necessary. OpenNedt shall notify the Requesting Licensee at least thirty (30) minutes before the temporary disconnection and provide its reasons for the temporary disconnection.

IDA refers to IDA's 3 July 2009 Directed Modifications requiring OpenNet to modify clause 11.9 such that any temporary disconnection by OpenNet under clause 11.9 to perform fault analysis and line testing on the Residential End-User Connection must in its reasonable discretion, be considered necessary. IDA also notes that "OpenNet" is misspelt as "Opened".

Accordingly, IDA directs OpenNet to amend this clause 11.10 in the manner specified above.

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

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

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

#### **CLAUSE 11.13 -- DIRECTED AMENDMENTS**

11.13 Subject to clause 2.6, the MTTR shall be the average time OpenNet 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 OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control. For the avoidance of doubt, the MTTR is calculated as follows:

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

For clarity, IDA directs OpenNet to amend this clause 11.13 to specify the formula for the computation of the MTTR in the manner specified above.

11.14 In the event OpenNet fails to meet the standard MTTR for a particular month, OpenNet shall compensate the Requesting Licensee an MTTR Rebate equal to the difference between the MTTR experienced by the Requesting Licensee and the standard MTTR in terms of number of days, multiplied by the number of services affected, multiplied by the Weekly Recurring Charge for the 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 OpenNet shall offer a service level availability of 99.99% per month for the Residential End-User Connection. OpenNet shall offer to rebate the Requesting Licensee ten percent (10%) of the Monthly Recurring Charge if OpenNet fails to meet the service level availability for that month.
- 12.2 Service level availability for the 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 OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control.

#### 13. PROTECTION AND SAFETY

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

#### **CLAUSE 15.1 - APPROVED**

15.1 OpenNet 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 OpenNet or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the OpenNet Network. If the suspension is the result of the Requesting Licensee's fault, the Requesting Licensee shall continue to pay the Monthly Recurring Charge during the period of suspension.

15.2 Without limiting the exclusions or limitations of liability in this ICO Agreement, OpenNet shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of a Residential End-User Connection licence under this clause 15.

#### 16. TERMINATION OF LICENCE

16.1 The Requesting Licensee shall keep OpenNet 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.

#### **CLAUSES 16.2 AND 16.3 – DIRECTED AMENDMENTS**

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, OpenNet will deactivate the Residential End-User Connection upon giving the Requesting Licensee ten (10) Business Days prior notice, and the Requesting Licensee did not dispute such written notice given by OpenNet. The Requesting Licensee must pay OpenNet the Monthly Recurring Charges for the remainder of the minimum contract term.

16.3OpenNet may terminate the licence in respect of the Residential End-User Connection after giving the Requesting Licensee ten (10) Business Days prior written notice if: (1) the Requesting Licensee abandons its Residential End-User Connection; or (2) the Requesting Licensee is not providing any service over the Residential End-User Connection; and the Requesting Licensee did not dispute such written notice given by OpenNet.

IDA notes that clause 16.2 and former clause 16.3 are largely repetitive and directs

OpenNet to merge the two clauses in the manner specified above.

#### **CLAUSE 16.3 - APPROVED**

<u>16.416.3</u> OpenNet 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 OpenNet ICO is revoked by the Authority under clause 12.8 of the ICO Agreement;
- (c) the Authority removes the requirement for OpenNet to supply Residential End-User Connection under the OpenNet ICO or exempts OpenNet 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 OpenNet'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 OpenNet has the necessary confirmation from the relevant Government Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
- (e) in OpenNet's reasonable opinion, the Requesting Licensee is using the Residential End-User Connection in a manner which places or allows a Third Party to act in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Government Agencies that the Third Party is in contravention of the applicable law, licence, code, regulation or direction;
- (f) the 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;

#### CLAUSES 16.3(h) AND 16.3(i) - APPROVED

- (h) the Residential End-User Connection has become unsafe for its purpose; or
- (i) OpenNet's right to own, maintain or operate the Residential End-User Connection has been revoked or terminated, or has expired.

#### **CLAUSE 16.4 - APPROVED**

<u>16.516.4</u> Either Party (**Terminating Party**) may terminate the Residential End-User Connection:

#### CLAUSE 16.4(a) AND 16.4(b) - APPROVED

- (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).

#### **CLAUSE 16.5 – DIRECTED AMENDMENTS**

- 16.5 Upon expiry or 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

IDA considers that there is merit to make clear that unless the Requesting Licensee requests to terminate the Residential End-User Connection service, the licence of Residential End-User Connection will not expire upon the expiry of the minimum contract term.

Accordingly, IDA directs OpenNet to amend this clause 16.5 in the manner specified above.

#### CLAUSE 16.5 (b) - DIRECTED AMENDMENTS

(b) the Requesting Licensee must promptly and without undue delay disconnect all equipment connected to the Residential End-User Connection; and

IDA recognises that OpenNet needs to be protected from recalcitrant licensees who delay removal of equipment after their licences have been terminated. Yet this must be balanced with the Requesting Licensees' need for sufficient time to remove equipment. On balance, IDA is of the view that the requirement "without undue delay" is reasonable and already sufficient to protect OpenNet's interests.

Accordingly, IDA directs OpenNet to amend clause 16.5(b) in the manner specified above.

#### CLAUSE 16.5(c) -- DIRECTED AMENDMENTS

(c) OpenNet shall be responsible for removing all necessary Patching Services at the Requesting Licensee's cost in accordance with Schedule 15 (Charges). Notwithstanding the above, the Requesting Licensee will not be liable for OpenNet's costs of removing all necessary Patching Services at the Building MDF Room, or if the termination is the result of OpenNet's fault

For clarity, IDA directs OpenNet to amend this clause 16.5(c) to indicate that the costs of removal of necessary Patching Services at the Building MDF Room shall not be borne by the Requesting Licensee.

#### **CLAUSE 16.6 – APPROVED**

- 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 OpenNet for the Monthly Recurring Charges for the remainder of the minimum contract term.
- 16.8 If the Requesting Licensee fails to disconnect its equipment from the Residential End-User Connection under clause 16.6(b), OpenNet may at its sole discretion remove and/or dispose of the Requesting Licensee's equipment. The Requesting Licensee shall pay to OpenNet all reasonable costs associated with the work undertaken by OpenNet including the cost of disposing the Requesting Licensee's equipment. The Requesting Licensee shall have no claim whatsoever against

OpenNet in connection with the removal and/or disposal of the Requesting Licensee's equipment from the Residential End-User Connection.

#### 17. REDUNDANCY SERVICE

#### **CLAUSE 17.1 – DIRECTED AMENDMENTS**

- 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 OpenNet'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 OpenNet's FDF at the Building MDF Room to the First Termination Point of the Residential Premise; or

### CLAUSE 17.1(c) - DIRECTED AMENDMENTS

(c) for a Residential End-User Connection of 1:1 Split Ratio for the purpose of providing either GPON services or OE services, one separate fibre strand from OpenNet's FDF at the CO to the First Termination Point of the Residential Premise

IDA refers to IDA's annotations to clause 3.2 and accordingly directs OpenNet to amend this clause 17.1(c) in the manner specified above.

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

IDA deems that in addition to amending Annex 1A to provide an option for Requesting Licensee to order the Redundancy Service for the Residential End-User Connection, it is also necessary for OpenNet to indicate in the main Schedule 1 that the Redundancy Service can be requested through Annex 1A.

Accordingly, IDA directs OpenNet to amend this clause 17.1 in the manner specified above.

17.2 OpenNet 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. OpenNet may provide the Redundancy Service using a separate fibre strand from the same fibre cable that carries the existing Residential End-User Connection.

#### **CLAUSE 17.3 – DIRECTED AMENDMENTS**

17.3 The Requesting Licensee is eligible to acquire a Redundancy Service for the Residential End-User Connection provided that the Requesting Licensee <a href="https://has.nc.ni.org/ha

OpenNet should provide Requesting Licensee an option for OpenNet to reject the Request for Residential End-User Connection if OpenNet is unable to provide the Redundancy Service as certain End-Users have strict redundancy service requirements and may not wish to proceed with procuring the Residential End-User Connection without the associated Redundancy Service.

Accordingly IDA directs OpenNet to amend this clause 17.3 and Annex 1A in the manner specified.

17.4 The Requesting Licensee shall be responsible, at its own cost and equipment, for the implementation of diversity or redundancy for its services using the Redundancy Service provided by OpenNet.

#### **CLAUSE 17.5 -- DIRECTED AMENDMENTS**

17.5 OpenNet shall make the Redundancy Service available to the Requesting Licensee, except where OpenNet is unable to build the requisite infrastructure (other than fibre) to provide the Redundancy Service or due to any of the reasons stated in clause 5.4.

Upon further review, IDA considers it fair and reasonable that for consistency, OpenNet should be allowed to reject a request for the Redundancy Service on the same grounds as that for rejecting a request for a Residential End-User Connection service as set out in clause 5.4.

Accordingly,	IDA direc	ts OpenNet	to amend	this clause	17.5 in the	manner specif	iec
bove.							

REQUEST FORM FOR RESIDENTIAL END-USER CONNECTION

ANNEX 1A:

equest for Residential End-User Connection  Date of Application:  APPROVED	Application	Refe	erence	Number:
Requested Date of Activation:  DIRECTED AMENDMENTS  Preferred Installation Session*: AM/PM	Residential	End-User	Telephone	Number
IDA refers to IDA's annotations to clause Annex 1A in the manner specified above.	es 6.1 and 6	.2 and dire	ects OpenNe	et to am
Residential End-User Name:				
Residential End-User Address:				
		ansmission	<del>Tie Cable P</del> e	ort (Whe
Split Ratio: 1:1 / 1:24	<del>applicable):</del> _			
IDA refers to IDA's annotations to form		.1(d) and	directs Ope	enNet to
IDA refers to IDA's annotations to form amend Annex 1A in the manner specified		<u>.1(d) and (</u>	directs Ope	enNet to
amend Annex 1A in the manner specified		<u>.1(d) and (</u>	directs Ope	enNet to
		.1(d) and (	directs Ope	enNet to
amend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE  (only applicable for 1:24 Split Ratio)	above.			
<u>amend Annex 1A in the manner specified</u> <u>DIRECTED AMENDMENTS</u> Technology: GPON / OE	above.			
amend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE  (only applicable for 1:24 Split Ratio)	above.			
<u>amend Annex 1A in the manner specified</u> <u>DIRECTED AMENDMENTS</u> Technology: GPON / OE (only applicable for 1:24 Split Ratio) <u>IDA refers to IDA's annotations to clause</u> in the manner specified above.  Any other info:	above.	cts OpenN		
<u>DIRECTED AMENDMENTS</u> Technology: GPON / OE (only applicable for 1:24 Split Ratio)  IDA refers to IDA's annotations to clause in the manner specified above.  Any other info: APPROVED	above.	cts OpenN		
mend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE (only applicable for 1:24 Split Ratio)  IDA refers to IDA's annotations to clause in the manner specified above.  Any other info: APPROVED  Redundancy Service is required	above.	cts OpenN		
DIRECTED AMENDMENTS  Technology: GPON / OE (only applicable for 1:24 Split Ratio)  IDA refers to IDA's annotations to clause in the manner specified above.  Any other info: APPROVED Redundancy Service is required DIRECTED AMENDMENTS	above.	cts OpenN	et to ameno	I Annex
mend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE (only applicable for 1:24 Split Ratio)  IDA refers to IDA's annotations to clause in the manner specified above.  Any other info: APPROVED  Redundancy Service is required	above.	cts OpenN	et to ameno	I Annex
Amend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE	above.  e 3.2 and direction to be rejution	cts OpenN	et to ameno	I Annex
mend Annex 1A in the manner specified  DIRECTED AMENDMENTS  Technology: GPON / OE (only applicable for 1:24 Split Ratio)  IDA refers to IDA's annotations to clause in the manner specified above.  Any other info: APPROVED Redundancy Service is required DIRECTED AMENDMENTS Request for Residential End-User Connections  Residential End-User Connections	above.  e 3.2 and direction to be rejution	cts OpenN	et to ameno	I Annex

The Requesting Licensee acknowledges that by submitting this Request Form, it undertakes to pay any additional charges which may be imposed by OpenNet pursuant to (but not limited to) clause 6.3 of Schedule 1. For avoidance of doubt, the Requesting Licensee is still liable for the applicable Monthly Recurring Charge and one-time charges.

While OpenNet has amended Annex 1A to enable the Requesting Licensee to give a pre-approval to OpenNet for the additional charges that OpenNet may impose for installing internal cabling exceeding 15 metres, the pre-approval appears to extend beyond the charges contemplated under clause 6.3. However, IDA recognises that OpenNet may wish to make clear that the Requesting Licensee is liable for the applicable Monthly Recurring Charge and one-time charges for this service.

Accordingly, IDA directs OpenNet to amend Annex 1A in the manner specified above.

For and on Behalf of Requesting Licensee

e e	Sign:	Company Stamp:
Requesting Licensee	Name:	Company Name:
esting	Designation:	
Requ	Contact Number, Fax and email address	
J	Part 1: Date:  DIRECTED AMENDMENTS  Application accepted in principle:  IDA has directed OpenNet to re acceptance of a Request submitted in the submitted in th	move the process relating to the in-principle by the Requesting Licensee from clause 5.
	Accordingly, IDA directs OpenNet to	amend Annex 1A in the manner specified above.
	Circuit Identification Number: Tentative Provision Date :	Duraida internal cabling to First Tomainstica Daint (V/N)
OpenNet	Application rejected Reason for rejection:	Provide internal cabling to First Termination Point (Y/N)
Ope	OpenNet Name / Signature:	Queue Status:
1	Part 2: Date:  Circuit Provision:  Revised Provision Date (where applicable)	:
	Reason:  IDA refers to IDA's annotations to classical descriptions to the second secon	<u>DIRECTED AMENDMENTS</u> — Insufficient Capacity (Y/N) ause 5.4(e) and directs OpenNet to amend Annex
	1A in the manners specified above.	Any other reason:
OpenNet	Application rejected Reason for rejection: OpenNet Name / Signature:	
$\circ$		

### ANNEX 1B: QUALIFIED ACCEPTANCE REQUEST FORM FOR RESIDENTIAL END-USER CONNECTION

## <u>IDA refers to IDA's annotations to former clause 5.4 and directs OpenNet to delete Annex 1B in its entirety.</u>

	Request for Residential End-User Connection Date of	Application Reference	e Number
	Application:	QA -	_
Ф		Q11	_
<b>P</b>	Activation:		
g Licer	Residential End-User Name:	Residential End User Number:	Telephone
Requesting Licensee	Residential End-User Address:		
	For and on Behalf of Requesting Licensee Sign:	Company Stamp:	
<b>d</b>		——————————————————————————————————————	
3	<del>Name.</del>	Company Ivame.	
Requesting Licensee	Designation:		
Reques	Contact Number, Fax and email address		
	Part 1: Date: Application accepted in principle: Circuit Ident	ification	Number:
	Tentative Provision Date :	<u> </u>	
	Provide internal cabling to First Termina  Application rejected		
重	Reason	<del>for</del>	rejection:
OpenNet	OpenNet Name / Signature:	Queue Status:	<u> </u>
	<u>—</u>	<u>—</u>	
	Part 2: Date:		
	Circuit Provision:	• >	
<b>#</b>	Revised Provision Date (where applicable)	<del>le):</del>	
OpenNet	Reason:		
#	Insufficient Capacity (Y/N)		
_	Any other reason:		
	Application rejected		

OpenNet Name	/ Signature:	
Openi vet i vani	or bignature.	