

APPENDIX 4
DIRECTED AMENDMENTS TO SCHEDULE 3

SCHEDULE 3

NBAP Connection

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NBAP CONNECTION

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SCHEDULE 3

NBAP CONNECTION

SCHEDULE 3 – DIRECTED AMENDMENT

IDA refers to its Directed Modifications to this Schedule 3 (below), by which IDA had required OpenNet to propose an option to allow Requesting Licensees to self-provide the NBAP Termination Point by accessing the NBAP Connection at OpenNet's FTTB Node and/or Building MDF Room.

IDA notes that OpenNet has proposed a new clause 3.3 to this Schedule 3, along with several Annexes to this Schedule 3, setting out certain terms and conditions relating to this option.

IDA refers to Section 2 of Part III of the Explanatory Memorandum to this Further Direction where IDA clarified its position that each NBAP Connection should be to one location and for the use of one End-User.

In relation to the new Annex 3E proposed by OpenNet, under which OpenNet proposed to set out a detailed process by which Requesting Licensees may elect to self-provide the NBAP Termination Point, several comments were received which disagreed with the new terms and conditions proposed by OpenNet. Some respondents commented that the terms proposed by OpenNet were onerous and unreasonable. Having carefully considered the comments received as well as the terms of OpenNet's proposed Annex 3E, IDA is of the view that OpenNet's proposed process (including the proposed audits) is unnecessarily complex and would give rise to uncertainty within the industry. IDA notes that where OpenNet has reason to believe that Requesting Licensee has not complied with the terms and conditions of the service, OpenNet always has the right to investigate and take further action. In the circumstances, IDA considers that it would provide greater clarity and certainty to the industry if the process for Requesting Licensees to self-provide the NBAP Termination Point is streamlined.

Further to the above, IDA considers that there is merit in expressly clarifying certain of the Parties' obligations and responsibilities in Annex 3E.

IDA notes that OpenNet has proposed to create a new network point called NBAP Node to enable Requesting Licensee to self-provide NBAP Termination Point. This is unlike the situation where OpenNet hands over the Non-Residential End-User Connection at the FTTB Node (where the Requesting Licensee elects to self-provide the Termination Point). Considering that the creation of an NBAP Node would increase the cost to Requesting Licensee but not necessary introduce additional benefit to Requesting Licensee, IDA is of the view that it may not be necessary to create such a point and OpenNet should handover the NBAP connection at the FTTB Node instead.

Further comments were received that the provisioning lead times and costs for self-providing of NBAP Termination Point should not be any different from that of a Non-Residential End-User connection under Schedule 2. After careful consideration and in view that the handover point would be at the FTTB Node, IDA agrees that there is no reason why the provisioning lead times and costs should be different, given the similarity in provisioning work involved.

Comments were also received that since the Requesting Licensee is responsible for securing access to the NBAP sites and OpenNet's responsibility is to provide its service to the handover point, it would be unnecessary to require Requesting Licensees to furnish information pertaining to locations beyond the handover point to OpenNet. After careful consideration, IDA agrees that it would be unnecessary to require the Requesting Licensee to furnish such information to OpenNet.

Accordingly, IDA directs OpenNet to amend this Schedule by incorporating the directed amendments as annotated below.

1. SCOPE

This Schedule 3 sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with a licence for:

CLAUSES 1(i) and (ii) – DIRECTED AMENDMENT

- (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 Non-Building Address Point Termination Point (**NBAP TP**) or to the ~~a NBAP Node in a FTTB Node~~ ~~or an MDF room of the Non-Residential Building~~ where OpenNet’s Network ends, for the purpose of the Requesting Licensee providing GPON services; or
- (ii) Layer 1 Service from OpenNet’s designated CO to the NBAP TP or to the ~~a NBAP Node in a FTTB Node~~ ~~or an MDF room of the Non-Residential Building~~ where OpenNet’s Network ends, for the purpose of the Requesting Licensee providing OE services

(NBAP Connection).

IDA refers OpenNet to the IDA’s Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

Accordingly, IDA directs OpenNet to amend the clauses by incorporating the directed amendments as annotated above.

1.1 This Schedule only applies to Requesting Licensees who are FBOs.

2. SERVICE LEVEL GUARANTEES

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

- (i) clause 6.8 and any terms and conditions contained in this Schedule in respect of request and provisioning timeframes;

- (ii) clause 11.13 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 – DIRECTED AMENDMENT

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

It is unclear under what situations OpenNet will require additional information to be provided. Therefore, IDA considers that there is merit for OpenNet to clarify the above.

Comments were received that the word "corresponding" is too ambiguous and provides OpenNet with an opportunity to further delay compensating Requesting Licensees. IDA agrees that the word "corresponding" may increase confusion among the industry and the word should be removed.

For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

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

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

- (d) OpenNet is unable to obtain or maintain any licence or permission necessary to the provision or restoration of the NBAP Connection despite using its best endeavours to obtain expeditiously or maintain such licence or permission. where OpenNet shall had used its best endeavours needs to obtain

~~expeditiously or maintain any licence or permission necessary to the provision or restoration of the NBAP 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 NBAP Connection shall always be excluded. Provided that In in the event that the Requesting Licensee raises a dispute ~~questioning as to whether OpenNet has used its best endeavours to obtain or maintain~~ OpenNet's effort in remedying the obstruction licence/permission, OpenNet will provide ~~such necessary~~ evidence that it has used such as may be available of its best endeavours;

In IDA's Directed Modifications, IDA had required OpenNet to propose modifications to incorporate the following: in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours, OpenNet will furnish evidence of the above. Clearly, in order for such requirement to have effect, OpenNet must take the necessary steps to ensure that it has such evidence available. In light of the above, IDA is of the view that it would promote greater consistency within clause 2.6(d) if the phrase "as may be available" is removed.

For greater clarity, IDA is also of the view that the clause should be amended.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 2.6(e) – DIRECTED AMENDMENTS

(e) OpenNet has difficulty accessing the NBAP TP location despite using its best endeavours ~~to expeditiously remedy the access difficulties in obtaining permission or license required,~~ provided always that ~~In~~ in the event that is a dispute ~~questioning as to whether OpenNet has used its best endeavours to expeditiously remedy the access difficulties,~~ OpenNet's effort in remedying the obstruction, OpenNet will provide ~~such necessary~~ evidence that it has used such as may be available of its best endeavours;

Comments were received that OpenNet has not fully complied with IDA's Directed Modifications, as OpenNet's proposed modifications do not state that OpenNet will use its best endeavours to "expeditiously remedy the building access difficulties". Having carefully reviewed the

matter, IDA agrees that there is merit for such requirement to be expressly stated in clause 2.6(e).

In IDA's Directed Modifications, IDA had also required OpenNet to propose modifications to incorporate the following: in the event that a challenge or dispute is raised by Requesting Licensees as to whether OpenNet has used its best endeavours, OpenNet will furnish evidence of the above. Clearly, in order for such requirement to have effect, OpenNet must take the necessary steps to ensure that it has such evidence available. In light of the above, IDA is of the view that it would promote greater consistency within clause 2.6(e) if the phrase "as may be available" is removed.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 2.6(f) – DIRECTED AMENDMENT

(f) _____ delay in the provision or restoration of the NBAP Connection caused by events beyond the reasonable control of OpenNet and ~~for~~ its suppliers and contractors.;

In IDA's Directed Modifications, IDA had stated its position that OpenNet must be responsible for the acts and omissions of its contractors and suppliers. Accordingly, if there is delay caused by events that are within the reasonable control of either OpenNet, its suppliers or contractors, such events should not be excluded from OpenNet's Service Level Guarantees by virtue of clause 2.6(f). In this regard, the inclusion of the word "or" in clause 2.6(f) would be inconsistent with IDA's position and would increase confusion in the industry. Therefore, in order to clarify this point, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

- (g) OpenNet network outages for which the Requesting Licensee has not reported a fault;**
- (h) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by OpenNet;**

- (i) OpenNet is required to carry out scheduled service interruption and the Requesting Licensee has been informed in accordance with clause 9.5; or
- (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.

CLAUSE 2.6(k) – DELETION APPROVED

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

3. SERVICE DESCRIPTION AND ACCESS POINTS

- 2.3.1 (A) Where the Requesting Licensee requests for NBAP Connection for the purpose of providing GPON services, OpenNet will provide a licence for NBAP Connection of 1:16 Split Ratio to the Requesting Licensee with the following:

CLAUSES 3.1(A)(a) AND (A)(b) – DIRECTED AMENDMENT

- (a) one (1) fibre strand from OpenNet’s Fibre Distribution Frame (**FDF**) at the Central Office designated by OpenNet to OpenNet’s splitter at the Building MDF Room for each group of sixteen (16) NBAP TPsConnections (or portion thereof);
- (b) one (1) dedicated fibre strand from the splitter to the NBAP TP or to the FTTB Node where OpenNet’s Network ends;

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated

FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend these clauses by incorporating the directed amendments as annotated above.

CLAUSE 3.1(A)(c) – DIRECTED AMENDMENT

- (c) one (1) Patching Service at OpenNet’s FDF at the Building MDF [Room](#); and

The word “Room” appears to have been inadvertently deleted by OpenNet. For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

- (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).

CLAUSE 3.1(A) –DIRECTED AMENDMENT

~~Unless reasonably considered necessary by OpenNet, Where the fibre terminated into the NBAP location can be provisioned from the existing splitter from the same rack in the MDF room, OpenNet shall utilise at least 90% of the connections in each splitter assigned to the Requesting Licensee in each of the FDF in the MDF room before an additional splitter is provisioned for the Requesting Licensee in that MDF Room. Where it is obvious to OpenNet that there is a projected (i) increased demand by the Requesting Licensee for a particular locality is above normal eg. Where the Requesting Licensee has notified OpenNet of the Requesting Licensee’s intention to carry out a promotion at a particular locality in advance such that OpenNet can provision the resources required or (ii) increase in consumer demand or (iii) delay in supply from the splitter’s vendor. To facilitate OpenNet’s consideration, Requesting Licensee shall provide to OpenNet its forecast in advance such that OpenNet can provision the resources required in time. OpenNet shall not be responsible for any delays in provisioning of service due to lack of splitters in the event the Requesting Licensee failed to provide its forecast in advance or provides inaccurate requirements.~~

IDA notes that OpenNet’s proposed modifications have not adequately clarified the conditions where OpenNet will provision an additional splitter even though the existing splitter has not been at least 90% utilised. IDA understands that the above situation will arise when the fibre cable terminated into the NBAP TP or the FTTB Node where

OpenNet's Network ends cannot be provisioned from the existing splitter.

Comments were received that OpenNet's requirement to provide a forecast on an MDF-by-MDF basis in advance is not practical, unduly laborious and imposes a significant burden on Requesting Licensees. Comments were also received that it is unreasonable for OpenNet to absolve itself for any delay in provisioning of service in the event that the Requesting Licensee failed to provide its forecast. After careful consideration, IDA agrees that there is merit in the comments received. As a service provider, IDA expects OpenNet to monitor the usage of the splitters and to ensure that it has sufficient splitters to provision services in accordance with the SAP. As such, IDA rejects that insufficient splitter can be used as a reason to extend the SAP for service provisioning.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

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

CLAUSES 3.1(B)(a) AND (B)(b) – DIRECTED AMENDMENT

- (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 sixteen (16) NBAP ~~TPs~~[Connections](#) (or portion thereof);
- (b) one (1) dedicated fibre strand from OpenNet's FDF at the Building MDF Room to the NBAP TP [or to the FTTB Node where OpenNet's Network ends](#);

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend these clauses by incorporating the directed amendments as annotated above.

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

CLAUSES 3.2(A) AND (B) – DIRECTED AMENDMENT

~~3.3.2~~ (A) Where the Requesting Licensee requests for a NBAP Connection for the purpose of providing GPON services, the Requesting Licensee shall access the NBAP Connection: (a) at OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet; and (b) at the NBAP TP or the FTTB Node where OpenNet's Network ends.

~~3.2~~ (B) Where the Requesting Licensee requests for a NBAP Connection for the purpose of providing OE services, the Requesting Licensee shall access the NBAP Connection: (a) at OpenNet's FDF at the Central Office designated by OpenNet or the Requesting Licensee's FDF at the Central Office designated by OpenNet; and (b) at OpenNet's FDF at the Building MDF Room and at the NBAP TP or the FTTB Node where OpenNet's Network ends.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point, IDA considers it is necessary to cater to this additional deployment scenario.

For clarity, IDA considers that the paragraph number "3.2" before the sub-paragraph "(B)" should be deleted.

Accordingly, IDA directs OpenNet to amend these clauses by incorporating the directed amendments as annotated above.

CLAUSE 3.3 – DIRECTED AMENDMENT

3.3. Where the Requesting Licensee elects to self-provide the NBAP TP by accessing the NBAP Connection ~~at the NBAP Node~~ at the FTTB Node ~~or Building MDF Room where OpenNet's Network ends,~~ in addition to those already provided in clause 3.1 or 3.2 (as the case may be), the Requesting Licensee shall access the NBAP Connection at OpenNet's designated NBAP Node at the FTTB Node ~~or Building MDF Room designated by OpenNet.~~ The Requesting Licensees wish shall be responsible for the installation of fibre from the NBAP

~~Node in designated~~ FTTB Node ~~or Building MDF Room~~ to the NBAP Termination Point, including securing the necessary access rights and approval. For the avoidance of doubt, it shall be Requesting Licensee's sole responsibility to obtain permission from the building owner/management to allow installation of fibre from the FTTB Node ~~or Building MDF Room~~ to the NBAP TP. The Requesting Licensee shall ~~furnish a report as per Annex 3C, to OpenNet upon completion of the work and also~~ notify OpenNet of any subsequent change to the location of the NBAP TP. ~~The Requesting Licensee is required to furnish a half yearly report to OpenNet as per Annex 3D.~~ The ~~additional detailed~~ process ~~and terms~~ to be adopted shall be as described in Annex ~~3C3E~~.

IDA refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

- 3.4 Where the Requesting Licensee wishes to acquire subsequent fibre connection from CO to Building MDF Room, the Requesting Licensee shall acquire such fibre connection pursuant to Schedule 5 (CO to Building MDF Room Connection).

~~4.3.5~~ Where the Requesting Licensee acquires a NBAP Connection for the purpose of providing OE services, the Requesting Licensee shall ensure the NBAP Connection is connected to active Optical Ethernet equipment.

4. ORDERING AND PROVISIONING PROCEDURE

DELETION OF CLAUSE 4.1 – APPROVED

DELETION OF CLAUSE 4.2 – APPROVED

CLAUSE 4.1 – DIRECTED AMENDMENT

- 4.1 Some locations within a Non-Residential building is classified by OpenNet as an NBAP instead of a Non-Residential End-User Premise. If in doubt whether a requested location is eligible for a NBAP Connection request, the Requesting Licensee can refer to the classification guidelines which are published on OpenNet's

Public Website. If there are further doubts, Requesting Licensee may submit its query to OpenNet via the OpenNet Public Website →NBAP enquiry tool with photographs of the location and Termination Point's proposed location. OpenNet ~~will~~shall respond to the Requesting Licensee the classification of a particular location within two (2) Business Days of receipt of such query subject to a maximum of ten (10) queries daily from all Requesting Licensees. If Requesting Licensee disputes OpenNet's decision on classification of the location, ~~the Requesting Licensee may raise a dispute in accordance to the Dispute Resolution process as set out in Schedule 17 and the parties shall use their best endeavours to resolve the disputes within five (5) Business Days or adopt such other process or timeframe as mutually agreed by the parties..~~

For clarity, IDA directs OpenNet to renumber this clause by creating a new clause 4.1 by incorporating the directed amendment as annotated above.

IDA refers OpenNet to the IDA's Directed Amendments on the approach to resolve classification dispute under Schedule 1. For consistency, there is merit to mirror the above approach in this Schedule. Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

4.23 The Requesting Licensee shall submit its request for a NBAP Connection (**Request**) to OpenNet on a Business Day in the form of Annex 3A stating, but not limited to the following information:

- (a) the Customer's name and telephone number for the NBAP Connection;
- (b) the NBAP TP address and a map demonstrating the location of the NBAP TP;

CLAUSE 4.2(c) – DIRECTED AMENDMENT

- (c) the Global Positioning System (GPS) coordinates, estimated height (in metres, relative to ground level), and a broad description of the NBAP TP location;

IDA understands that the height of the NBAP TP may be changed due to site conditions and as such, Requesting Licensees can only provide an estimated height.

For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

CLAUSES 4.2(d) TO (f) – DIRECTED AMENDMENT

(d) whether the request is for the purpose of providing GPON or OE services;
and

(e) the term of the licence required, either one (1) month or twelve (12) months;
and

~~(e)~~(f) whether the Requesting Licensee elects to self-provide the NBAP TP.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend these clauses by incorporating the directed amendments as annotated above.

CLAUSE 4.3 – DIRECTED AMENDMENT

4.3 (A) As an alternative to submitting a Request using the form set out in Annex 3A under clause 4.2, ~~T~~the Requesting Licensee may also shall submit its request for NBAP Connection (Request) to OpenNet via the OpenNet Platform stating, but not limited to, the following information.

(a) the Customer's name and telephone number for the NBAP Connection;

(b) the NBAP TP address and a map demonstrating the location of the NBAP TP;

- (c) the Global Positioning System (GPS) coordinates, estimated height (in metres, relative to ground level), and a broad description of the NBAP TP location;
- (d) whether the request is for the purpose of providing GPON or OE services;
- ± (e) the term of the licence required, either one (1) month or twelve (12) months,
- (f) whether the Requesting Licensee elects to self-provide NBAP TP,

when available (about which OpenNet shall inform the industry when the above feature will be available on OpenNet Platform)

For Request submitted via the Service Portal, the Requesting Licensee shall submit a feasibility check by providing the Global Positioning System (GPS) coordinates of the NBAP location and, Coordinate System ~~System~~ (WGS and SV21 formats only) and other required details to verify the coverage status. Subsequently and where applicable, the Requesting Licensee shall select an available date and appointment time for OpenNet to arrange a Site Survey Appointment. Upon successful submission of the Request via the Service Portal, it will provide a Request acknowledgement.

Alternatively, for For Request submissionsubmitted via the OpenNet Platform APIs, the Requesting Licensee shall perform the feasibility check by providing the Global Positioning System (GPS) coordinates of the NBAP location and, Coordinates System (WGS and SV21 formats only) and other required details needed to verify the coverage status. The Requesting Licensee shall also query the available time slots. The Requesting Licensee shall use the details returned by OpenNet and the Site Survey Appointment (where applicable) related to the status of the feasibility check for submission of order. Upon successful submission of the Request via the OpenNet Platform APIs, it will provide a Request acknowledgement.

(B) Following clause 4.3(A), Ffor orders submitted via the OpenNet Platform, when available, the Requesting Licensee is able to modify the contact details of customerEnd User subject to the requirement that the date of modification is within three (3) Business Days from the date of submission of Request. The OpenNet Platform will notify the Requesting Licensee if the contact details have been successfully modified.

For clarity, IDA considers there is merit for OpenNet to renumber and re-arrange clause 4.3 by splitting this clause into 4.3(A) and (B).

IDA understands that OpenNet has proposed to include the phrase “when available” as it will need some time to effect changes to its Platform to support the changes in the ICO. To avoid confusing the industry, OpenNet should inform the industry when certain features will be available on the Platform.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

IDA understands that the height of the NBAP TP may be changed due to site conditions and Requesting Licensees can only provide an estimated height.

Comments were received that the phrase “other required details” after the reference to GPS coordinates is ambiguous, and OpenNet may rely on such ambiguity to delay the provision of services. After careful consideration, IDA agrees that this phrase would introduce greater uncertainty, and should therefore be removed.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

4.4 Relocation of the NBAP Connection is not allowed. In the event that the NBAP TP has relocated, the Requesting Licensee shall submit a request for termination of the existing NBAP Connection and request for a new NBAP Connection at the new NBAP TP location in accordance with this Schedule.

CLAUSE 4.5 – DIRECTED AMENDMENT

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

For the switching from GPON to OE or from OE to GPON, the Requesting Licensee shall perform a check order status by providing, ~~but not limiting to~~ the unique

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

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

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

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

For clarity, there is merit to rearrange the clause.

IDA is of the view that OpenNet should be able to identify the circuit by using the unique reference number or similar form of identification and there should not be a need for OpenNet to request more information from the Requesting Licensees for the above purpose.

Considering that the connections are active during the switching process, IDA is of the view that it is necessary for OpenNet to use its best endeavours to minimise any service disruption to the Requesting Licensee during the switching process.

IDA is of the view that OpenNet should also be able to support such switching process when OpenNet Platform is experiencing technical problems. In this regard, if OpenNet Platform is experiencing technical difficulties. OpenNet should instead inform the Requesting Licensee how it could submit such request via manual means or offer alternative solutions when such incidents occur.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 4.6 – DIRECTED AMENDMENT

4.6 OpenNet shall at its sole discretion determine the serving CO and Building MDF Room which the NBAP Connection will be provided from. Subject to clause 4.7, the Requesting Licensee is able to query the OpenNet Platform at no cost for the serving CO and Building MDF Room by providing the postal code for the NBAP TP End-User address. For the avoidance of doubt, the choice of the serving CO and Building MDF Room from which the NBAP Connection will be provided shall be the same for the same NBAP TP address, regardless whether NBAP TP is installed by OpenNet or the NBAP TP is self- provided by the Requesting Licensee.

IDA notes that there is a typographical error and the term “End-User” should be replaced with the term “NBAP TP”.

The choice of serving CO and Building MDF Room from which the NBAP Connection will be provided should be the same regardless whether the NBAP Termination Point is installed by OpenNet or by the Requesting Licensee. For clarity, IDA considers that there is merit to clarify the above in this clause.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 4.7 – DIRECTED AMENDMENT

4.7 Information relating to the Mandated Services will be available on OpenNet Platform, for access by the Requesting Licensee through secured means. The secured access to OpenNet’s PlatformService Portal will require the payment of a Per User Account Charge (specified in clause 14 of Schedule 15 (Charges)) for each user account created. Information relating to network outages will be sent to the Requesting Licensee via email or OpenNet Platform. The information relating to the Mandated Services and the information relating to network outages is ~~made available on the OpenNet Platform.~~ For 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 information related to network outages, OpenNet shall include the following details in the written notification or via OpenNet Platform APIs to the Requesting Licensee:

- (a) Affected location;
- (b) Date of occurrence;
- (c) Time of occurrence (start & approximate end timings);
- (d) Cause of outage;
- (a) Steps taken to remedy the outage;
- ~~1.~~(b) Steps (if any) required by Requesting Licensee to assist with rectification of outage;
- (g) Order Request Identifier of the affected orders; and
- (h) OpenNet's Network Operations Centre Contact Number.

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

IDA is of the view that the proposed modifications may cause confusion to the industry. For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

IDA notes that where OpenNet has already imposed a Per User Account Charge on the Requesting Licensee for each user account created to allow the Requesting Licensee to access OpenNet's website, OpenNet shall not re-impose such a charge on the Requesting Licensee for each user account created to allow the Requesting Licensee to access OpenNet's Service Portal. There is therefore merit to clarify on the above. Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

5. NBAP CONNECTION REQUEST

CLAUSE 5.1 – APPROVED

- 5.1 OpenNet shall process all Requests received for NBAP Connection on a 'first come, first served' basis.

CLAUSE 5.2 – DIRECTED AMENDMENT

- 5.2 For each Business Day, OpenNet shall process a combined total of no more than ~~500~~580 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 OpenNet Platform and for which the Request is to be fulfilled except such Business Day where the Maximum Quota has been reached. OpenNet 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) If OpenNet finds that more than 95% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and ~~September~~October), OpenNet shall increase its daily quota for the quarter in which the review month occurs and the new quota shall be no less than 110% of the average demand over the preceding twelve (12) weeks. If OpenNet finds that less than 80% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and ~~September~~October), OpenNet ~~shall~~may decrease its daily quota for the quarter in which the review month occurs and the new quota shall be no less than 110% of the average demand over the preceding twelve (12) weeks. The review mechanism will be revised regularly ~~subjected~~ to the Authority's approval. ~~To ensure better capacity planning, the Requesting Licensee will be required to provide within the first week of the current quarter, a 4 quarter rolling forecast with monthly breakdown for the coming quarter. E.g The Requesting Licensee will provide in 1st week of January 2013 the forecast for April to June 2013. For the avoidance of doubt, the above review shall apply to the Maximum Quota.~~

- ~~(ii) For seasonal increase in demand during quarterly major fairs (namely e.g. IT Show in March, PC Show in June, Comex Show in September and SITEX in November), the Maximum Quota shall be supplement by Seasonal Slots (temporary increase of installation slots in excess of the Maximum Quota) and for which a sub quota for Non Residential Premise installation will be established. The Seasonal Slots, including the sub quota, shall be subjected to such terms and conditions stated in the Seasonal Slots Notification.~~

Version 2:

~~5.2 For each Business Day, OpenNet shall process a combined total of no more than 655 Requests for Basic Mandated Services and Layer 1 Redundancy Services (Maximum Quota) from all Requesting Licensees. For avoidance of doubt, Requesting Licensee is able to select such dates made available from the OpenNet Platform and for which the Request is to be fulfilled except such Business Day where the Maximum Quota has been reached. OpenNet will process all Requests on a ‘first come, first served’ basis. The Maximum Quota is not applicable to requests for deactivation of any Connection.~~

~~The Maximum Quota will be allocated in the following manner according to the type of work to be performed;~~

~~Schedule 1 High rise Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 170 installation slots per business day which are distributed across 4 time slots within the business day~~

~~Schedule 1 Landed Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 15 installation slots per business day which are distributed across 2 time slots within the business day~~

~~Schedule 2 Non-Residential Premise installation, repair/replacement, removal, re-location (within the same premise and to another premise) and 2nd port activation of 1st TP and 2nd TP i.e 40 installation slots per business day which are distributed across the time slots within the business day~~

~~Schedule 3 NBAP installation, removal and 2nd port activation of 1st TP i.e 5 installation slots per business day~~

~~Express Service activation i.e. 40 per Business Days~~

~~All unused quota shall be used for Requests that only require patching service in the CO and MDF to activate the connection.~~

Type of Work	Installation Slots Per Business Day
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Schedule 1 High-rise Residential Premise	170
Schedule 1 Landed Residential Premise installation	15
Schedule 2 Non-Residential Premise installation	40
Schedule 3 NBAP	5
Express Service Patching	40
Unused Quota	≤ 655

1. ~~If OpenNet finds that more than 95% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall increase its daily quota for the quarter in which the review month occurs. If OpenNet finds that less than 80% of the quota has been used consistently over a period of twelve (12) weeks preceding the review month (namely January, April, July and September), OpenNet shall decrease its daily quota within the quarter in which the review month occurs. The review mechanism will be revised regularly subjected to the Authority's approval. To ensure better capacity planning, the Requesting Licensee will be required to provide within the first week of the current quarter, a 4 quarter rolling forecast with monthly breakdown for the coming quarter. E.g The Requesting Licensee will provide in 1st week of January 2013 the forecast for April to June 2013.~~
- (ii) ~~For seasonal increase in demand during quarterly major fairs (namely IT Show in March, PC Show in June, Comex Show in September and SITEX in November), Maximum Quota shall be supplement by Seasonal Slots (temporary increase of installation slots in excess of the Maximum Quota). The Seasonal Slots shall be subjected to the terms and conditions stated in the Seasonal Slots Notification.~~

IDA refers OpenNet to Part II and section 1 of Part III of the Explanatory Memorandum to this Further Direction.

In addition, IDA notes that the review period is over a period of 12 weeks. In this regard, the review month should happen every quarter (i.e., January, April, July and October).

IDA notes that the seasonal increase in demand arising from quarterly major fairs is due to the increased demand for Residential End-User Connections. For clarity and to avoid conclusion, the mechanism to handle such seasonal increase in demand should therefore be removed from this schedule.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 5.3(A) - DIRECTED AMENDMENT

5.3 (A) Within one(1) Business Day of the date on which OpenNet receives the request for NBAP Connection (Request Date) and subject to clause 5.2, OpenNet will 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:

1-(a) the Request for NBAP 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; and

(c) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule.

For clarity, IDA considers that there is merit for OpenNet to renumber and re-arrange the clauses.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 5.3 (B)(i) – DIRECTED AMENDMENT

(B)(i) As an alternative to clause 5.3(A), where ~~Where~~ OpenNet receives the request for NBAP Connection via the OpenNet Platform, OpenNet will validate and notify the Requesting Licensee, so that the Requesting Licensee is able to make the necessary corrections in real time, if the request does not meet 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;

For clarity, IDA considers that there is merit for OpenNet to renumber and amend the clauses.

IDA understands that OpenNet Platform will perform the above check and allow the Requesting Licensee to make necessary corrections in a near real time basis.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 5.3 (B)(ii) – DIRECTED AMENDMENT

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

~~the information provided is inaccurate or misleading~~

- ~~(e) The~~ (e) The Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule; or

~~(d) where the OpenNet Platform is experiencing technical problems~~

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

For clarity, IDA considers that there is merit for OpenNet to renumber and amend the clauses.

Comments were received that OpenNet should not reject a valid application if OpenNet Platform is at fault. The industry suggested that OpenNet should alternatively, inform the Requesting Licensee to submit the Requests through fax/email or offer temporary alternative solutions when such incidents occur. After careful consideration, IDA agrees with the industry that OpenNet should not reject a valid application if OpenNet Platform is experiencing technical difficulties. IDA considers that OpenNet should instead inform the Requesting Licensee to submit the Requests through fax/email or offer alternative solutions when such incidents occur.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

5.4 Within twenty (20) Business Days of the Request Date and subject to clause 5.2, OpenNet will complete its Project Study (not applicable for clauses 5.4(a)) and 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 (and if accepted, the service activation period), or if rejected, for any one of the following reasons:

(a) the NBAP TP location is deemed to be inaccessible;

(b) the equipment or services that the Requesting Licensee proposes to use or to provide interfere with, or cause deterioration to services supplied by OpenNet;

CLAUSE 5.4(c) – DIRECTED AMENDMENT

~~(b)(c)~~ there is obstruction from building owner, building management, home owner, End-User, property owner or relevant authorities to OpenNet installation or installation schedule ~~including any breach by building owner, building management, home owner or End-User of applicable regulatory requirements including for example COPIF.~~ OpenNet shall use its best endeavours to resolve such obstructions ~~and where applicable, OpenNet shall refer any breaches of regulatory~~

~~requirements to the Authority for the Authority's action and follow up;~~

As stated in IDA's Directed Modifications, any breaches of regulatory requirements should be left to IDA to enforce, and should not be used as a reason for rejection.

IDA notes OpenNet's concerns that it would not be able to comply with its own obligations if there are regulatory breaches that amount to obstructions. However, OpenNet's proposed language "any breach by building owner, building management, home owner or End-User of applicable regulatory requirements..." is extremely wide and could potentially encompass any regulatory breach, even breaches that do not amount to obstructions and/or breaches that fall outside of the purview of IDA. Accordingly, IDA considers that such language would lead to greater uncertainty amongst the industry and should be removed. To the extent that there is a regulatory breach amounting to an obstruction, IDA considers that the existing language of this clause 5.4(b) would already address such a scenario. Therefore, there is no need to retain OpenNet's proposed drafting as cited above.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

~~2-(d)~~ the Transmission Tie Cable (installed pursuant to Co-location Service in Schedule 12) for connection to the NBAP Connection is yet to be operational at the point in time of OpenNet's provisioning of the NBAP Connection;

CLAUSE 5.4(e) – DIRECTED AMENDMENT

~~(e)~~(e) OpenNet has not rolled out its Network to the designated Building MDF Room and as at the date such Request is received, OpenNet was not required to roll out its Network to such location under the terms of OpenNet's FBO License; or ;~~or ;~~

IDA notes that there is a superfluous "; or" at the end of clause 5.4(e) which should be deleted. Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

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

CLAUSE 5.4 – DIRECTED AMENDMENT

Where the Requesting Licensee elects to self-provide the NBAP TP, OpenNet shall, within three (3) Business Days of the Request Date, complete its review of the Request and 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 (and if accepted, the designated FTTB Node where OpenNet's Network ends and service activation period), or if rejected, for any one of the reasons (excluding clause 5.4(a)) stated above. No Project Study shall be conducted for such a Request.

IDA refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

In this regard, given the similarity of work involved, there is a need to streamline the process of self-providing the NBAP TP to mirror, to the extent possible, that of Non-Residential End-User Connections (where Requesting Licensees self-provide the 1st TP).

In addition, IDA is of the view that as: (a) no Project Study is required in respect of Requests for self provisioning of NBAP TPs; and (b) OpenNet should have the information readily available to assess whether to accept or reject the Request, a period of three (3) Business Days should be a reasonable timeframe for OpenNet to review the Request and to respond to Requesting Licensees as to whether the Request is accepted or rejected.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

5.5 Where the NBAP TP location is initially deemed to be inaccessible, OpenNet and the Requesting Licensee shall conduct a joint site survey on a mutually agreed date to select an alternative NBAP TP location. For the avoidance of doubt, the Requesting Licensee will be required to pay Onsite Charges for this joint site survey and all subsequent joint site surveys.

5.6 Without prejudice to clause 5.4, the Requesting Licensee shall pay OpenNet the applicable Installation Charge and Patching Charge specified in Schedule 15 (Charges) for the provisioning of the NBAP Connection.

CLAUSE 5.7 – DIRECTED AMENDMENT

5.7 In addition to the Installation Charge and Patching Charge, the Requesting Licensee shall where applicable, be liable to pay a one-time charge for installation of the OpenNet Network from the designated Building MDF Room to the NBAP TP which will include ducting and/or trenching in order to reach the NBAP TP.

In the situation where the Requesting Licensee elects to self-provide the NBAP Termination Point, OpenNet will not proceed to install the NBAP Termination Point from the designated Building MDF Room to the NBAP Termination Point, and as such will not incur charges for ducting and/or trenching work. Therefore, the Requesting Licensees will not incur such charges. For clarity, IDA considers that there is merit to clarify the language above.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

5.8 Where OpenNet considers it reasonably necessary to conduct site visit(s) to assess the NBAP Connection Request from the Requesting Licensee, OpenNet shall provide reasons for the site visit(s), and the Requesting Licensee shall be liable to pay all applicable Onsite Charges for such site visit(s).

CLAUSE 5.9 – APPROVED

5.9 Where OpenNet rejects the Request for NBAP Connection, OpenNet shall provide reasons explaining the basis for rejection promptly.

CLAUSE 5.10 – DIRECTED AMENDMENT

5.10 Where OpenNet informs the Requesting Licensee that the Request is accepted, OpenNet will inform the Requesting Licensee of the one-time charge payable for the installation of the OpenNet Network from the designated Building MDF Room to the

NBAP TP (which will include ducting / trenching to reach the NBAP TP) and the service activation period for the NBAP Connection. The service activation period will be reasonably determined upon completion of the Project Study and, excluding any unforeseen circumstances, should not exceed ~~ninety (90)~~ forty (40) Business Days. OpenNet shall provide a reasonable breakdown of the charge components for this one-time charge. Alternatively, in the situation where the Requesting Licensee elects to self-provide the NBAP TP, Requesting Licensee shall pay the one-time installation charge under Schedule 15 (Charges). The service activation period shall be no longer than ten (10) Business Days (or such other timeframe to be mutually agreed between OpenNet and the Requesting Licensee) where there is sufficient capacity to provide the NBAP Connection. Where there is insufficient capacity, due to sudden surge of orders in a short period of time at a location or multiple Requesting Licensees serving the same location giving rise to rapid exhaustion of fibres for that location or OpenNet's Network has not been rolled out to that location, to provide the NBAP Connection, OpenNet shall provide the NBAP Connection within forty (40) Business Days (or such other timeframe to be mutually agreed between OpenNet and the Requesting Licensee) 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 FTTB Node where OpenNet's Network ends. Upon receipt of OpenNet's notification of insufficient capacity, the Requesting Licensee has an option to continue with the Request or cancel the Request without charges within three (3) Business Days, through OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet Platform.

The industry commented that the proposed service activation period of ninety (90) Business Days, where OpenNet provisions the NBAP Termination Point, is too long as it amounts to more than four (4) calendar months. The industry added that the service activation period for NBAPs should be no more than thirty (30) Calendar Days, or any other timeframe mutually agreed with the RL in accordance with the project requirements. After careful consideration, while IDA agrees that ninety (90) Business Days is too long a timeframe, IDA is of the view that it would not be unreasonable to allow for a timeframe of more than thirty (30) Calendar Days, as digging and trenching works may be involved. On balance, IDA is of the view that a maximum timeframe not exceeding forty (40) Business Days would be reasonable. IDA also refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

In this regard, given the similarity of work involved, there is a need to streamline the process of self-providing the NBAP TP to mirror, to the extent possible, that of Non-Residential End-User Connections (where Requesting Licensees self-provide the 1st TP). This includes the possible extension of Service Activation Period as a result of insufficient capacity and the ability of the Requesting Licensee to cancel the Request as a result of extension of the Service Activation Period.

IDA notes that the situation of insufficient capacity will typically arise when fibre deployed by OpenNet is not able to meet the demand of the Requesting Licensees. As such, IDA considers that there is merit to clarify the above in the clause.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 5.11 – DIRECTED AMENDMENT

5.11 The Requesting Licensee must provide its acceptance of the service activation period and agreement to pay the one-time installation charge to OpenNet within:

- (a) twenty (20) Business Days (the Initial Period); or
- (b) (upon OpenNet’s receipt of the Requesting Licensee’s written request no later than five (5) Business Days before the expiry of the Initial Period) within a further period of ten (10) Business Days in addition to the Initial Period,

failing which, the Request shall be deemed cancelled and the Requesting Licensee shall be liable for Cancellation Charges in accordance with Schedule 15 (Charges).

For Request [\(where OpenNet provisions the NBAP TP\)](#) submitted via the Service Portal, the Requesting Licensee shall submit the signed copy of the quotation; accept the service activation period and [the](#) agreement to pay the one-time installation charge to OpenNet. [For Request \(where the Requesting Licensee elects to self-provide the NBAP TP\) submitted via the Service Portal, the Requesting Licensee shall submit the proposed cable routing from the FTTB Node where OpenNet’s Network ends to the NBAP TP.](#) Upon successful acceptance, the ~~OpenNet Platform Service Portal~~ will provide a Request acknowledgement.

Alternatively, For orders (where OpenNet provisions the NBAP TP) submitted via the OpenNet Platform APIs, the Requesting Licensee shall submit the signed copy of the quotation to OpenNet's Platform and ~~Subsequently, the Requesting Licensee shall perform a Quotation Acceptance API~~ to indicate the acceptance of the quotation, the service activation period and payment of the one-time installation charge to OpenNet. For orders (where the Requesting Licensee elects to self-provide the NBAP TP) submitted via the OpenNet Platform APIs, the Requesting Licensee shall submit the proposed cable routing from the FTTB Node where OpenNet's Network ends to the NBAP TP via OpenNet Platform. Upon successful acceptance, the OpenNet Platform APIs will provide a Request acknowledgement.

IDA refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

In this regard, given the similarity of work involved, there is a need to streamline the process of self-providing the NBAP TP to mirror, to the extent possible, that of Non-Residential End-User Connections (where Requesting Licensees self-provide the 1st TP).

IDA also notes that Quotation Acceptance API is not a defined term and should be removed to avoid confusion.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

5.12 Where the Requesting Licensee provides its acceptance of the service activation period and agreement to pay the one-time installation charge, the service activation period shall be deemed to commence on the next Business Day from the date the acceptance is received by OpenNet.

6. DELIVERY

CLAUSE 6.1 – DIRECTED AMENDMENT

6.1 OpenNet shall provide the NBAP Connection by the end of the service activation period. Where there is a delay during service provisioning, the reasons for the delay and the estimated/revised timeframe required to complete service provisioning will be made available on the OpenNet Platform, when available. For the avoidance of

doubt, OpenNet shall inform the industry when the above feature will be available on OpenNet's Platform.

IDA notes that OpenNet has not fully given effect to IDA's Directed Modification, as OpenNet's proposed modifications to provide timely update where there is a delay during service provisioning has not been incorporated.

For purpose of clarity, there is a need to make clear that the OpenNet shall also be able to provide such updates via the OpenNet Platform. Separately, IDA understands that OpenNet may need some time to effect changes to its Platform to support the changes in the ICO. To avoid confusing the industry, IDA would require OpenNet to inform the industry when certain features will be available on the Platform.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

~~6.16.2~~ Unless otherwise stated, OpenNet shall retain the responsibility for working at OpenNet's FDF at the Central Office and Building MDF Room, and the NBAP TP, including Patching Service at OpenNet's FDF at the Central Office and Building MDF Room in accordance with Schedule 13 on Patching Services. The Requesting Licensee shall bear the Charges for such work carried out by OpenNet.

~~4.6.3~~ Where the Requesting Licensee requests for a NBAP Connection for the purpose of providing OE services, 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 NBAP Connection.

~~2.6.4~~ 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) deliver the NBAP Connection.

CLAUSES 6.5 AND 6.6 – DIRECTED AMENDMENT

~~3.6.5~~ 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 NBAP TP or to the FTTB Node where OpenNet's Network ends to ensure that the NBAP Connection falls within the specified optical performance. Testing will be conducted at wavelengths of 1310nm, 1490nm and 1550nm.

4.6.6 OpenNet shall ensure that the optical power loss:

- (a) of any NBAP Connection for the purpose of provision of GPON services does not exceed -28dB; and
- (b) of any NBAP Connection for the purpose of provision of OE services does not exceed -20 dB from OpenNet's FDF at its designated 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 NBAP TP or to the FTTB Node where OpenNet's Network ends.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend these clauses by incorporating the directed amendments as annotated above.

5.6.7 OpenNet shall promptly notify the Requesting Licensee upon the completion of the NBAP Connection.

CLAUSE 6.8 – APPROVED

6.6.8 Subject to clause 6.9 and only applicable to a Service Request with twelve (12) months minimum contract term, in the event OpenNet fails to meet the applicable service activation period for a Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the weekly recurring charge for the NBAP Connection, subject to a maximum of 30 times the weekly recurring charge for the NBAP Connection (**Weekly Recurring Charge**), where:

Weekly Recurring Charge = Monthly recurring charge x 7 / 30

Subject to clause 6.9 and only applicable to a Service Request with one (1) month minimum contract term, in the event OpenNet fails to meet the applicable service activation period for the Request, OpenNet shall compensate the Requesting Licensee an amount equal to the number of days of delay multiplied by the daily recurring charge for the NBAP Connection, subject to a maximum of 50% of the monthly recurring charge for the NBAP Connection, where

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

In the absence of specific feedback on the compensation arrangement for short term service, IDA is of the view that the compensation arrangement is not unreasonable and IDA will therefore approve the clause 6.12. Notwithstanding, IDA will monitor the situation and IDA reserves the right to review the compensation arrangement.

~~6.2~~—OpenNet shall not be required to compensate the Requesting Licensee under any of the following circumstances:

CLAUSE 6.9(a) – DIRECTED AMENDMENT

~~4.(a)~~ Delay in the granting of permission from or permission is not granted to install the required Network to the NBAP TP, despite OpenNet using its best endeavours to obtain expeditiously such permission, provided that, ~~In~~ in the event that the Requesting Licensee raises a dispute ~~questioning as to whether OpenNet has used its best endeavours to obtain expeditiously the permission, OpenNet's effort in remedying the obstruction,~~ OpenNet will provide ~~such~~ evidence that it has used such as may be available of its best endeavours;

IDA notes that OpenNet has not fully given effect to IDA's Directed Modification, as OpenNet's proposed modifications do not state that OpenNet will use its best endeavours to obtain expeditiously the permission mentioned in clause 6.9(a).

In addition, IDA refers to the IDA's Directed Amendments to clauses 2.6(d) and (e) of this Schedule 3. In the interests of consistency, IDA considers that the drafting of this clause 6.9(a) should be aligned with clauses 2.6(d) and (e) above.

Accordingly IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

~~(a)(b)~~ The Requesting Licensee requests the deferment of the service activation date; or

~~(b)(c)~~ The designated Building MDF Room which was initially under network coverage is demolished and/or reconstructed.

For the avoidance of doubt, where the service activation date has been revised pursuant to any of the circumstances contemplated in this clause 6.9 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.

7. RESPONSIBILITY AT OPENNET FDF

CLAUSE 7.1 DIRECTED AMENDMENT

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, ~~and the NBAP TP.~~ In addition, the Requesting Licensee shall not, and shall ensure that its employees, agents and contractors do not, at any time access the NBAP TP except in cases where the Requesting Licensee has elected to self-provide the NBAP TP.

Comments were received that this clause should be modified to address situations where a Requesting Licensee elects to self-provide the NBAP Termination Point. After careful consideration, IDA agrees that it is necessary to modify this clause to address the foregoing scenario.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

~~4.7.2~~ 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 an application for termination of the existing Patching Service and order for a new Patching Service at the Central Office or Building MDF Room in accordance with Schedule 13 (Patching Service).

~~4.8.~~ DEACTIVATION

8.1 Subject to the minimum contract term, the Requesting Licensee may deactivate the NBAP Connection by giving OpenNet not less than one (1) month prior written notice.

~~4.8.2~~ If the NBAP Connection 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.

~~4.8.3~~ Where any Patching Service is no longer required as a result of the termination of the NBAP 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 NBAP Connection, if such termination is the result of OpenNet's fault.

9. STANDARD TERMS AND CONDITIONS

CLAUSE 9.1 – DIRECTED AMENDMENT

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 and Building MDF Room from which the NBAP Connection is provided. Where OpenNet is required to provision the Termination Point and P~~P~~rior to installation of the Termination Point, OpenNet will assess the suitability of the location's ~~suitability~~ for the deployment of active equipment, such that there will be with~~with~~ adequate ventilation and power. Notwithstanding, OpenNet's assessment and recommendation on location of the ~~Termination Point~~, OpenNet shall defer to the agreement or

instructions of the End-User. [For the above case,](#) 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.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

9.2 OpenNet shall be responsible for the maintenance of the NBAP Connection installed under this Schedule.. For the avoidance of doubt, if there is a fault at the Patch Cable, OpenNet will charge the Requesting Licensee an additional Patching Charge if the Requesting Licensee was responsible for the fault at the Patch Cable.

9.3 Except to the extent strictly necessary to accurately describe the service to actual or potential Customers, the Requesting Licensee shall not use OpenNet's name, any of OpenNet's trademarks or the fact that any service is supplied using OpenNet's Network in promoting the Requesting Licensee's service.

9.4 The Parties shall in good faith co-operate with each other and take reasonable measures to ensure that there is no interference with or deterioration to OpenNet's existing services or those of a Third Party as a result of the Requesting Licensee's use of the NBAP 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 NBAP Connection, OpenNet shall provide the Requesting Licensee with at least one (1) month's 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 – APPROVED

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

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

9.7 If the scheduled service interruption affects NBAP Connections, OpenNet will endeavour to carry out the scheduled service interruption between 1am and 6am, unless it is not feasible for OpenNet to do so.

9.8 Subject to Requesting Licensee acquiring redundancy service, OpenNet shall, where technically feasible, provide assistance to the Requesting Licensee to divert its NBAP Connection to the redundancy service before commencing the scheduled service interruption.

9.9 Where there are available resources, OpenNet will, where possible, first divert critical links to alternative routings before commencing the scheduled service interruption.

9.10 Subject to clause 9.6, 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.

9.11 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.

9.12 The Requesting Licensee must procure and maintain at its own cost:

- (a) any equipment or software needed to implement, receive or use the NBAP Connection (including but not limited to any configuration of the NTE at the NBAP TP);

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

CLAUSE 9.13 – DIRECTED AMENDMENT

9.13 Upon receipt by OpenNet of any request from, Requesting Licensee for Removal, OpenNet shall check if the Termination Point is in use by any Requesting Licensee. OpenNet will reject the ~~request~~Request if the Termination Point is in use, otherwise OpenNet shall perform such Removal which shall not include removal of any part of the Network, surface trunking and/or termination point that are concealed either by a false ceiling, within any furniture or rendered inaccessible. ~~Requesting Licensee shall assist~~ OpenNet ~~shall be responsible for~~in obtaining the relevant approvals or consent from the relevant building owner or authorities such that OpenNet and/or its Contractor has ease of access to perform such Removal. Where it is necessary for OpenNet to seek the Requesting Licensee’s assistance in order to obtain such approvals or consent, the Requesting Licensee shall render all necessary assistance, and all Parties shall cooperate in good faith to secure the approvals or consent. For the avoidance of doubt, all incidental costs other than security deposits or escort charges related to the Request for Removal shall be borne by the Requesting Licensee on a Cost Oriented Basis. The Requesting Licensee shall pay OpenNet according to Schedule 15 (Charges) for the ~~request~~ Request for Removal. OpenNet shall use its best endeavours to minimize damage to the wall and/or other fittings save that OpenNet shall not be responsible or liable to move or shift any furniture or items belonging to End-User, re-plaster the wall, perform any painting works or reinstate the wall and/or other fittings accordingly.

IDA has carefully reviewed OpenNet’s proposed modifications and is of the view that OpenNet has not fully given effect to IDA’s Directed Modifications.

In particular, IDA had stated that as the provider of the service, OpenNet should be responsible for securing the relevant approvals or consents from the relevant building owner or authorities. Accordingly, OpenNet should bear the costs related to securing such approvals or consents (including security deposit and where applicable, escort charges). That said, if there is a need for OpenNet to approach Requesting Licensee for assistance, Requesting Licensee should render its assistance and all parties should work together to secure the approvals or consents.

Accordingly IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 9.14 – APPROVED

9.14 OpenNet shall use its best endeavours to minimize damage to the wall and/or other fittings save that OpenNet shall not be responsible or liable to move or shift any furniture or items belonging to End-User or building owner, re-plaster the wall, perform any painting works or reinstate the wall and/or other fittings accordingly.

9.13 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 NBAP Connection.

CLAUSE 9.16 – DIRECTED AMENDMENT

9.16 Onsite charges are applicable whenever Requesting Licensee requests for OpenNet to be onsite other than [for provisioning of NBAP Connection or](#) for reasons caused by OpenNet's fault or error.

Comments were received that it is not clear in the proposed modifications when onsite charges would not be applicable where OpenNet needs to be present to provision a service. For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

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 NBAP 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.

~~4.11.2~~ It is the Requesting Licensee's responsibility to determine the source of the fault at its own cost and to ensure that the fault does not lie within its network before reporting the fault to OpenNet. The Requesting Licensee shall pay OpenNet according to Schedule 15 (Charges) for cancellation of any fault reported regardless of the response or stage of investigation by OpenNet.

CLAUSE 11.3 – DIRECTED AMENDMENT

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

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

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

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

IDA understands that OpenNet has proposed to include the phrase “when available” as it will need some time to effect changes to its Platform to support the changes in the ICO. To avoid confusing the industry, OpenNet should inform the industry when certain features will be available on the Platform.

IDA is of the view that Requesting Licensees must be able to submit fault report via manual means (e.g., email) to OpenNet.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

~~11.2~~11.4 If, following investigation, OpenNet determines that the fault is at the Transmission Tie Cable at the Central Office, OpenNet will patch the NBAP 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.

~~11.3~~11.5 If, following investigation, OpenNet determines that no fault is found or the fault is not with 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).

~~11.4~~11.6 The process for fault investigation shall be as follows:

- (a) For each of the three (3) wavelengths of 1310nm, 1490nm and 1550nm, the optical power shall be measured in accordance with clause 6.6 above where possible, and the findings shall be clearly recorded using the "Fault Rectification Service Report" (Annex 3B).

CLAUSE 11.6 (b) – APPROVED

- (b) if the power loss do not exceed the limit specified in clause 6.6 then the following steps shall be carried out before a finding of "no fault found" will be recorded:

- ~~1.~~1. determine that the patching at CO/MDF room and the patch cord are properly installed

- ~~2.~~2. determine the optical power at the output of splitter port, for GPON is within acceptable limits

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

- ~~2.~~2. determine that no macro bending that produces high loss

- ~~3.~~3. determine that no dirty/damaged connector

- ~~4.~~4. determine that no fibre cut or damaged Termination Point

1. determine that there is no wrong patching

1. measurements of the following shall also be taken :

1. optical time-domain reflectometer

2. power loss

CLAUSE 11.6(c) – DIRECTED AMENDMENT

(c) Upon completion of any ~~fault the joint~~ investigation, where both OpenNet and Requesting Licensee are present, OpenNet will hand over the NBAP Termination Point to the Requesting Licensee and both Parties shall jointly sign off on the “Fault Rectification Service Report” (Annex 3B), which will state the outcome of the ~~joint~~ investigation. For fault investigation where Requesting Licensee is not required to be present, In non joint investigation, ie where Requesting Licensee is absent despite notification from OpenNet, OpenNet shall conclude the investigation on-site and inform the Requesting Licensee of the outcome accordingly ~~which Requesting Licensee shall not dispute~~. OpenNet shall provide periodic updates to the Requesting Licensee on the status of the ~~non joint~~ investigation and also updates when there is a change in status of the ~~non joint~~ investigation through OpenNet Platform, when available. For the avoidance of doubt, OpenNet shall inform the industry when the above features will be available on OpenNet Platform.

Comments were received that the phrase “which the Requesting Licensee shall not dispute” should be deleted, as Requesting Licensees should have the right to dispute any conclusion from OpenNet as long as there is a basis, and the basis can be supported. After careful consideration, IDA agrees with the proposed deletion of that phrase.

IDA notes that clause 11.6 deals with the process for fault investigation in general and not specifically for joint investigation process under clause 11.9. In this regard, it is necessary to generalise clause 11.6(c) to also include situation where only OpenNet is present and Requesting Licensee is not required to be present.

IDA understands that OpenNet has proposed to include the phrase “when available” as it will need some time to effect changes to its Platform to support the changes in the ICO. To avoid confusing the industry, OpenNet should inform the industry when certain features will be available on the Platform.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 11.7 – DIRECTED AMENDMENT

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 OpenNet's Platform~~ will notify the Requesting Licensee on the request for fault identification. The Requesting Licensee shall provide all reasonable assistance requested by OpenNet. Each Party is to bear its own cost for attending ~~with reference to clause 11.9~~ 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:

IDA is of the view that the proposed reference to clause 11.9 is not necessary and may cause confusion. In addition, there is a need to further amend the clause for clarity.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

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

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

CLAUSE 11.7(d) – DIRECTED AMENDMENT

- (d) Except for (a) above, if it is discovered that any part of the Network located on the NBAP location is damaged, OpenNet shall impose the relevant charges in accordance to Schedule 15 (Charges) accordingly to the End-User and charge the End-User directly unless the damage is caused by the Requesting Licensee.

For purpose of clarity, there is merit to clarify that OpenNet will charge End-User directly for the repair of the damage to Termination Points unless it can be proven that Requesting Licensees had caused the damage.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 11.8 – DIRECTED AMENDMENT

1.11.8 The NBAP Connection is deemed to be restored when OpenNet has tested and confirmed to the Requesting Licensee that the NBAP Connection has been restored. The OpenNet Platform will notify the Requesting Licensee with the cause of fault.

For clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated.

CLAUSE 11.9 –DIRECTED AMENDMENT

2.11.9 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 NBAP 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. Under such circumstances, OpenNet shall attend the joint investigation and charge the

~~Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges) if the fault is not with OpenNet, otherwise OpenNet will waive the Joint Investigation Charge.~~ Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges), if the fault is not due to OpenNet. If the fault is due to OpenNet, OpenNet will waive the Joint Investigation Charge. ~~the~~The process for a joint investigation shall be as described in clause 11.6. Clauses 11.7(a) to (c) will also apply to joint investigations under clause 11.9. Additionally, where the Requesting Licensee disputes OpenNet's findings, the Requesting Licensee may request OpenNet for a fault identification coordination meeting.

For consistency and clarity, there is merit to align this clause to clause 11.10 of Schedule 1.

Comments were received that clause 11.9 contains two portions of drafting that are contradictory:

“Additionally, where the Requesting Licensee disputes OpenNet’s findings, the Requesting Licensee shall request OpenNet for a joint investigation.”; and

“Additionally, where the Requesting Licensee disputes OpenNet’s findings, the Requesting Licensee may request OpenNet for a fault identification coordination meeting.”

Comments were also received that in accordance with the IDA’s Directed Modifications, the line “Additionally, where the Requesting Licensee disputes OpenNet’s findings, the Requesting Licensee shall request OpenNet for a joint investigation.” should be deleted. IDA agrees with the comments.

For clarity, there is also merit to clarify that OpenNet will waive the joint investigation charge if the fault is due to OpenNet.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

~~11.5~~11.10The Requesting Licensee acknowledges that OpenNet may temporarily disconnect the Requesting Licensee’s NBAP Connection to perform reasonable fault analysis and line testing on the NBAP Connection. OpenNet shall conduct such disconnections only as it reasonably considers necessary. OpenNet shall notify the Requesting Licensee at least thirty (30) minutes before the temporary disconnection and provide its reasons for the temporary disconnection.

~~11.6~~11.11Each Party shall maintain and store its own records of faults and repairs.

Mean Time To Recovery

~~11.7~~11.12OpenNet shall restore any fault within a standard Mean Time To Recovery (MTTR) of eight (8) hours.

~~11.8~~11.13Subject to clause 2.6, the MTTR shall be the average time OpenNet took to restore service for all fault incidents for all NBAP Connections acquired by the Requesting Licensee under this Schedule during a month, measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet’s control. For the avoidance of doubt, the MTTR is calculated as follows:

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

Where X = Time taken to restore fault incidents for each NBAP Connection during a month as described above

Y = Total number of affected NBAP Connections in the same month

CLAUSE 11.14 – DIRECTED AMENDMENT

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 NBAP Connection, subject to a maximum of 30 times the Weekly Recurring Charge for the NBAP

Connection. [This shall not apply to NBAP Connections with one \(1\) month minimum contract term.](#)

In light of the insertion of the new clause 11.15 which covers services with one (1) month minimum contract term, IDA considers that clause 11.14 should expressly clarify that it does not apply to services with a one (1) month minimum contract term. In the interests of clarity, IDA directs OpenNet to amend this clause by incorporating the directed amendments as annotated above.

CLAUSE 11.15 – DIRECTED AMENDMENT

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

[Daily Recurring Charge = Monthly Recurring Charge \(1 month contract\) / 30](#)

[For the avoidance of doubt, the standard MTTR of eight \(8\) hours in clause 11.12 and the MTTR calculation in clause 11.13 shall apply.](#)

IDA notes that OpenNet had not made clear the MTTR applicable for a NBAP Connection with one (1) month minimum contract term. Considering that such short-term service is similar to the short-term Non-Residential End-User Connection, the same remedy framework for failing the standard MTTR should be applicable. Accordingly, IDA directs OpenNet to amend this clause in the manner annotated above.

12. SERVICE LEVEL AVAILABILITY

12.1 OpenNet shall offer a service level availability of 99.99% per month for the NBAP 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 NBAP Connection is calculated as follows:

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

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

B = total network outage time for the NBAP 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's NBAP 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

CLAUSE 13.1 – DIRECTED AMENDMENT

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 NBAP TP or otherwise to the FTTB Node where OpenNet's Network ends.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

13.2 Each Party shall, so far as reasonably practicable, take all necessary steps to ensure that the licence of the NBAP 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 NBAP Connection shall be one (1) month or twelve (12) months, as the case may be, starting from the service activation date of the NBAP Connection.

15. SUSPENSION

- 15.1 OpenNet may suspend the Requesting Licensee's licence to the NBAP Connection at any time until further notice to the Requesting Licensee if the NBAP 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 NBAP 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 NBAP 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 NBAP Connection within six (6) months from the service activation date of the NBAP Connection. If the Requesting Licensee fails to do so, OpenNet will deactivate the NBAP 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.

16.3 OpenNet may immediately terminate a licence of NBAP 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 NBAP Connection under the OpenNet ICO or exempts OpenNet from supplying NBAP 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 NBAP 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 NBAP 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 NBAP Connection is used other than the purposes specified in clause 1;
- (g) the licence in respect of Co-Location Space to which the NBAP Connection is connected has been terminated or has expired;
- (h) the NBAP Connection has become unsafe for its purpose; or
- (i) OpenNet's right to own, maintain or operate the NBAP Connection has been revoked or terminated or has expired.

16.4 Either Party (**Terminating Party**) may terminate the NBAP 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 NBAP 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 NBAP Connection:

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

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

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

17. REDUNDANCY SERVICE

CLAUSE 17.1 – DIRECTED AMENDMENT

17.1 The Requesting Licensee may acquire:

- (a) for a NBAP Connection for the purpose of providing GPON services, one separate fibre strand from OpenNet's splitter at the Building MDF Room to the NBAP TP [or to the FTTB Node where OpenNet's Network ends](#); or
- (b) for a NBAP Connection for the purpose of providing OE services, one separate fibre strand from OpenNet's FDF at the Building MDF Room to the NBAP TP [or to the FTTB Node where OpenNet's Network ends](#).

(Redundancy Service) at the same prices, terms and conditions as the NBAP Connection through a request in the form of Annex 3A either [via manual means](#) ~~by~~ or ~~via the~~ OpenNet Platform [\(which OpenNet shall inform the industry when the above feature will be available on OpenNet Platform\)](#), unless stipulated otherwise in this clause 17.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

IDA understands that OpenNet will need some time to effect changes to its Platform to support the changes in the ICO. To avoid confusing the industry, OpenNet should inform the industry when certain features will be available on the Platform.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

[+17.2](#) OpenNet shall provide the Redundancy Service via the same duct and along the same path as the existing NBAP 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 NBAP Connection.

CLAUSE 17.3 – DIRECTED AMENDMENT

4.17.3 The Requesting Licensee is eligible to acquire a Redundancy Service for the NBAP Connection provided that the Requesting Licensee has acquired or is acquiring an equivalent NBAP Connection to the same NBAP TP or to the FTTB Node where OpenNet's Network ends. The Requesting Licensee may request OpenNet to reject the Request for the NBAP Connection in the event that OpenNet is unable to provide the Redundancy Service, but such Requests for the NBAP Connection and the Redundancy Service must be submitted together to OpenNet.

As the Requesting Licensee may elect to self-provide the NBAP Termination Point by accessing the NBAP Connection at the designated FTTB Node, IDA considers that it is necessary to cater to this additional deployment scenario.

Accordingly, IDA directs OpenNet to amend this clause by incorporating the directed amendment as annotated above.

4.17.4 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.

4.17.5 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.

ANNEX 3A – DIRECTED AMENDMENT

IDA refers OpenNet to the IDA’s Directed Amendment to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

As Requesting Licensees may elect to self-provide the NBAP Termination Point, it is necessary to reflect this additional deployment scenario in this Annex 3A, which sets out the form for a Request for a NBAP Connection.

Accordingly, IDA directs OpenNet to amend this Annex by incorporating the directed amendments as annotated below.

	Request for NBAP Connection			
	Date of Application:	Application	Reference	Number:\
	_____	_____		
	End-User Name:			

	NBAP address or description of address; GPS co-ordinates and <u>estimated</u> height (Please attach map):			

Requesting Licensee	Technology:	GPON / OE		
	Term of Licence :			
	<input type="checkbox"/> One (1) month / <input type="checkbox"/> Twelve (12) months			
	Any other info <u>(including whether Requesting Licensee will self-provide NBAP TP)</u> :			

	<input type="checkbox"/> Redundancy Service is required			
	<input type="checkbox"/> Request for NBAP Connection to be rejected if Redundancy Service is not available			
Requesting Licensee	For and on Behalf of Requesting Licensee			
	Sign:	Company Stamp:		
	_____	_____		
	Name:	Company Name:		
	_____	_____		
	Designation:	_____		

	Contact Number, Fax and email address	_____		

OpenNet	Part 1: Date: _____			
	<input type="checkbox"/> Application accepted and will proceed with detailed study:			
	Circuit Identification Number: _____			
	<input type="checkbox"/> Application rejected			
	Reason for rejection: _____			
	OpenNet Name / Signature: _____	Queue Status:	_____	
	_____	_____		
OpenNet	Part 2: Date: _____			
	<input type="checkbox"/> Circuit Provision:			

ANNEX 3A: REQUEST FORM FOR NBAP CONNECTION


Provision Date: _____
Digging and Trenching Work Charges: _____ (Breakdown of charges to be attached)
 Application rejected
Reason for rejection: _____
OpenNet Name / Signature: _____

Requesting Licensee Acceptance:
We **agree** that we are liable for the digging and trenching work charges and agree with the service provisioning date stated (both) above.

Requesting Licensee

Sign: _____ Company Stamp: _____
Name: _____ Company Name: _____
Designation: _____
Contact Number, Fax and email address _____

ANNEX 3B: FAULT RECTIFICATION SERVICE REPORT – APPROVED

		Fault Rectification Service Report			Serial No:	
Appointment Date: Time:		Arrival Time:				
Trouble Ticket No:		Completion Time:				
		<input type="checkbox"/> 1 hour activation <input type="checkbox"/> Maintenance Fault Rectification <input type="checkbox"/> Follow up end-user appointment				
END-USER INFORMATION						
Authorised Person Name:		*Mr/Mrs/Miss/Mdm/Dr				
Contact no:				(HP):		
Company:						
Registered Address:		Blk/House _____ Unit No: # _____ - _____ Street Name: _____ Building Name: _____ Postal code: S(_____)				
LOCATION OF INSTALLATION						
A-END (CO/MDF)			B-END (CO/MDF, End-User's Premise)			
Blk/House: _____ Unit No: # _____ - _____ Street Name: _____ Building Name: _____ Postal code: S(_____)			Blk/House: _____ Unit No: # _____ - _____ Street Name: _____ Building Name: _____ Postal code: S(_____)			
End-User Declaration (check only one box)						
<input type="checkbox"/> I am the owner of the above premises <input type="checkbox"/> I, Name: _____, am authorised by the owner of the premise and/or the above-stated company to sign this form and permit OpenNet Pte Ltd or its contractor to enter the premises and conduct the fault rectification work. I will bear full responsibility if the owner should dispute (a) my authority, or (b) any action taken by OpenNet Pte Ltd at my instructions.						
Company Stamp (if applicable):						
For Official Use Only						
OPTICAL MEASUREMENTS, WHERE POSSIBLE (Measured by RL)						
Fault description:						
Test Measurement (CO to Serving Cabinet):	1310nm		1490nm		1550nm	D i s t a n c e

ANNEX 3B: FAULT RECTIFICATION SERVICE REPORT – APPROVED

							(m)
Test Measurement (CO to 1st TP):	1310nm		1490nm		1550nm		D i s t a n c e (m)
Test Measurement (Segment Services A-END to B-END)	1310nm		1490nm		1550nm		D i s t a n c e (m)
Certified by ON:							
Technician Name:				Date:			
Technician Signature:				Time:			

OPTICAL MEASUREMENTS, WHERE POSSIBLE (Measured by ON)								
Fault description:								
Test Measurement (CO to Serving Cabinet):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (CO to 1st TP):	1310nm		1490nm		1550nm		Distance (m)	
Test Measurement (Segment Services A-END to B-END)	1310nm		1490nm		1550nm		Distance (m)	
Certified by :								
RL Name:				Date:				
RL Signature:				Time:				
Fault Root Cause Description								
ACTION TAKEN/ADDITIONAL REMARKS								
CUSTOMER ACKNOWLEDGEMENT AND ACCEPTANCE								
Remarks/Comments:								
This is to acknowledge that the fibre fault rectification has been attended and the fault resolution is effective								
Fault Attended by:				Resolution Accepted by End-User:				
Technician Name:				End-User Signature:				
Technician Signature:								
Resolution Verified and Accepted by RL (Only applicable for <u>1 hour activation</u>) :								
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 3B – APPROVED

ANNEX 3C – DIRECTED AMENDMENT

IDA refers OpenNet to the IDA’s Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

Accordingly, IDA directs OpenNet to remove ANNEX 3C in its entirety.

~~ANNEX 3C : NOTICE OF WORK COMPLETION~~

~~Date of Application:~~

~~Application Reference Number:\~~

~~_____~~

~~_____~~

~~End User Name:~~

~~_____~~

~~NBAP address or description of address; GPS co-ordinates and height (Please attach pictures and routing of the NBAP.):~~

~~_____~~

~~Please attach ODTR and Power Meter Test from Patch Cord in the Building MDF Room to the NBAP Point.~~

~~I certified that the job is completed according to the Request Form for Customised NBAP Connection Application Reference Number;~~

~~For and on Behalf of Requesting Licensee~~

Sign:

Company Stamp:

Name:

Company Name:

Designation:

Contact Number, Fax and email address

ANNEX 3D – DIRECTED AMENDMENT

ANNEX 3D : HALF-YEARLY REPORT FOR SELF-PROVIDE NBAP TP

1. ~~Serial Number~~
2. ~~Application Reference Number~~
3. ~~Date of Submission~~
4. ~~Date of Completion~~
5. ~~NBAP Address, GPS coordinates and description~~
6. ~~Picture of the NBAP~~

1.

Comments were received that the purpose of such a report is unclear, and that there is no justification for requiring such a report to be submitted to OpenNet (particularly on a 6-monthly basis). There were also comments that the report will simply increase the bureaucratic burden associated with this service, without providing any offsetting benefit.

Having carefully considered the various submissions, IDA notes that the information listed in Annex 3D (with the exception of 6) would already be available to OpenNet without provision of such a report by Requesting Licensees. In relation to 6, IDA does not see why OpenNet should request for a picture of the NBAP from the Requesting Licensee. In the premises, IDA considers that it is not necessary for Requesting Licensees to incur the time and expense involved in generating such half-yearly reports.

IDA also refers to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensee self-provide the NBAP Termination Point, and the directed amendments to clause 3.3 of this Schedule 3.

Accordingly, IDA directs OpenNet to remove Annex 3D in its entirety.

ANNEX 3C - DIRECTED AMENDMENT

IDA refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

Due to the removal of other Annexes to this Schedule, this Annex should be renumbered as Annex 3C.

Accordingly, IDA directs OpenNet to amend this Annex by incorporating the directed amendments as annotated below.

ANNEX ~~3E~~3C : PROCESS FOR SELF-PROVIDING NBAP ~~TP~~TERMINATION POINT

DELETION OF CLAUSE 1 – DIRECTED AMENDMENT

~~1. DEFINITIONS~~

~~In this Agreement, unless the context otherwise requires, capitalised terms shall have the meaning given to them in the Approved ICO unless they are otherwise defined as follows:-~~

As a consequence of other directed amendments to this Annex, it is not necessary for this Annex to retain this list of definitions. Accordingly, IDA directs OpenNet to delete clause 1 (Definitions) from this Annex in its entirety.

~~“Approved ICO” means the OpenNet’s ICO as approved by IDA and may be found on IDA’s [webpage <http://www.ida.gov.sg/Policies%20and%20Regulation/20090224174101.aspx#13Nov09>](http://www.ida.gov.sg/Policies%20and%20Regulation/20090224174101.aspx#13Nov09) or any successor webpage and as may be amended from time to time), shall have the same meaning and construction when used in this Agreement;~~

~~“Code” means the NetCo Interconnection Code 2009 or successor code of practice and as may be amended from time to time;~~

~~“NBAP Order” has the meaning ascribed to it in Clause 2.23 below;~~

“NBAP Connection” has the meaning ascribed to it in Clause 2.1 below;

~~“Digging & Trenching Work” has the meaning ascribed to it in Clause 2.1 below;~~

~~“Law” means any domestic or foreign constitutional provision, statute or other law (including common law), act, rule, regulation, subsidiary legislation, ordinance, treaty, code, permit, certificate, license, or interpretation of any Governmental Agency and any decision, decree, resolution, injunction, judgment, order, ruling, interpretation, or assessment issued by any Governmental Agency, including any of the foregoing applicable to health, safety and environmental matters;~~

~~“Mandated NBAP-TP Connections” has the meaning ascribed to it in Clause 5.5 below;~~

~~“NBAP” has the meaning ascribed to it in the Approved ICO;~~

FORMER CLAUSES 2 AND 3 – DIRECTED AMENDMENT

IDA refers OpenNet to the IDA’s Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point, as well as the further annotations below.

Accordingly, IDA directs OpenNet to amend the former clauses 2 and 3 of this Annex by incorporating the directed amendments as annotated below.

~~2. Requesting Licensee’s Obligations~~

~~2.1 The Requesting Licensee shall observe and comply with the terms and conditions of this Agreement and the Approved the ICO including specifications, where applicable, in the construction of the fibre connection from ON’s Network to the NBAPs (including the installation of a NBAP Termination Point)(“NBAP Connection”), such construction is hereinafter referred to as “Digging & Trenching Work”. Any failure to observe or breach by the Requesting Licensee of the process described herein may result in a suspension and/or termination of the Request submitted under this Schedule.~~

~~Before the Requesting Licensee commences any Digging & Trenching Work, an order including the proposal in format specified in Annex 3A shall be given to ON (“NBAP Order”) including the requested date of activation of the NBAP Connection by ON to the Requesting Licensee. The minimum contract term for NBAP Order shall betwelve (12) months from the date of activation of the NBAP Order. ON reserves the right to reject the Request for NBAP~~

~~Connection. It is the Requesting Licensee's sole responsibility to ensure that all particulars given are true and accurate. In the event of any deviation, the Requesting Licensee shall notify ON of the nature and basis of the said deviation in the format specified in Annex 3A. Depending on ON's absolute discretion, the Requesting Licensee may be required to submit a fresh proposal. For the avoidance of doubt, the Digging & Trenching Work shall consist of all works from the patch cord in the FTTB Node or Building MDF Room (as described in clause 3.1 below) to the NBAP Termination Point.~~

~~2.3 After submission of the NBAP Order with proposal in the format specified in Annex 3A, the Requesting Licensee shall conduct a joint site survey with ON on a mutually agreed date to identify the location of the NBAP Node in the FTTB Node or Building MDF Room assigned by ON and such designated NBAP Node shall be connected to one fibre installed by the Requesting Licensee pursuant to the Digging & Trenching Work. Concurrently, ON will give to the Requesting Licensee a quotation of the charges for work to be done by ON.~~

~~2.4 The Requesting Licenses shall accept the quotation given by ON and submit the proposed cable routing from the NBAP Node to the NBAP Termination Point within 20 business days failing which it will be deemed as a cancellation of the NBAP Order by the Requesting Licensee who will be liable for the cancellation charges under Schedule 15. Requesting Licensee shall only be permitted to carry out the Digging & Trenching Work upon approval being given by ON.~~

CLAUSE 1 – DIRECTED AMENDMENT

~~1.2.5 The Requesting Licensee shall be solely responsible for any cost, charges, fees or expense as may be necessary for the Digging & Trenching Work installation, or removal as the case may be, from the point where OpenNet handovers the fibre to the NBAP TP (including any maintenance work thereafter) including getting any approval, permission or consent from the relevant authorities or building owners for access to the FTTB Node ~~or Building MDF Room~~. In the event the Requesting Licensee requires the assistance of OpenNet, OpenNet may will use its reasonable endeavours to, at ON's absolute discretion, render such assistance as may be necessary on a cost-oriented basis. ~~Additionally, the Requesting Licensee shall be liable to pay NBAP Node Installation to ON for each NBAP Node made available by ON in the FTTB Node or Building MDF Room as described in clause 3.1 below in accordance with the charges as set out in Schedule 15.~~~~

IDA refers OpenNet to the IDA's Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

IDA considers that, where it is necessary for the Requesting Licensee to seek OpenNet's assistance, it is only reasonable for OpenNet to use its reasonable endeavours to assist the Requesting Licensee, since OpenNet will be able to recover its costs on a Cost-Oriented Basis.

Accordingly, IDA directs OpenNet to amend clause 1 of Annex 3C by incorporating the directed amendments as annotated above.

~~2.6 — Upon the completion of any Digging & Trenching Work, the Requesting Licensee shall furnish to tON a report setting out the completion of the said work including, where applicable, pictures of the completed works and such particulars per format specified in Annex 3C including the relevant test results conducted of the connection between the patch cord in the FTTB Node or Building MDF Room and the NBAP Termination Point. The relevant patch cord in the FTTB Node or Building MDF Room shall be properly labelled for purposes of patching with ON's NBAP Node and the Requesting Licensee shall only connect its patch cord to the NBAP Node on or after the date notified by ON under clause 3.1 below.~~

~~2.7 — On a half yearly basis not later than the 10th business day of the month or such periods as ON may specify, the Requesting Licensee shall provide a report of such NBAP Connections in the format specified in Annex 3D of the previous month. After the Requesting Licensee had submitted the report described in this clause 2.5, any changes to the work done shall constitute a fresh Digging & Trenching Work and the Requesting Licensee shall comply with clauses 2.2, 2.3 and 2.4 hereinabove accordingly.~~

~~2.8 — The Requesting Licensee hereby agrees that the use, operation and maintenance of the resulting NBAP including the connection thereto of the Digging & Trenching Work, shall be subject to the terms and conditions of th is Agreement and as follows~~

~~2.8.1 — All fibre optic cables, fibre cable guides, fibre termination points, connectors, patch cords and fibre related accessories including any new ducting or trunking installed by the Requesting Licensee in the course of the Digging & Trenching Work (“NBAP Dark Fibre”) shall be owned by and be maintained by the Requesting Licensee at its own cost for the Term of this Agreement and thereafter including any risk or removal of the NBAP Termination Point thereto.~~

DELETION OF FORMER CLAUSE 2.8.2 – DIRECTED AMENDMENT

~~2.8.2—There shall only be one NBAP Termination Point per fibre per NBAP Order. In the event the Requesting Licensee intends to include more than one fibre or any other medium of transmission in the new duct or trunking installed during the Digging & Trenching Work, this shall be specified in the proposal submitted to ON per clause 2.2 above. The Requesting Licensee shall compensate ON a sum equivalent to the MRC payable per fibre multiply by the amount of additional fibre or medium or Termination Point installed commencing the activation of the NBAP Connection by ON.~~

IDA refers OpenNet to the IDA Directed Amendment to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

IDA has already clarified that each NBAP Connection should be to one location and for the use of one End-User.

Furthermore, considering that the Requesting Licensee will be the party performing the necessary work to self-provide the NBAP Termination Point, IDA is of the view that it is not necessary for OpenNet to restrict the number of fibres that the Requesting Licensee could lay, or to charge for additional fibre to be laid, so long as the Requesting Licensee only connects one of the installed fibre to the FTTB Node where OpenNet's Network ends.

Accordingly, IDA directs OpenNet to delete the previous clause 2.8.2 in its entirety.

~~2.8.3—Each NBAP Termination Point shall be for the use of one End User at any time and at all times, there shall not be any fibres connection or fibre optic splitters to be built or connected to the NBAP Termination Point.~~

~~2.8.4—All NBAP Dark Fibre shall and may only be used for the provisioning of services by ON to the Requesting Licensee during the Term of this Agreement.~~

~~2.8.5—Upon the submission of the report to ON under clause 2.4 above and within one month of the activation of the NBAP Connection the Requesting Licensee and ON~~

~~shall conduct a joint audit of the work done (“First Audit”). Subsequently, the Requesting Licensee shall conduct, at its own cost, periodic audit of the NBAP Dark Fibre jointly with ON upon reasonable notice given by ON and such joint audit to be conducted not more than twice in any 12 month period (excluding the “First Audit”) and may include, at ON’s discretion, access into any infrastructure and equipment including the NBAP Termination Point.~~

~~2.8.6. In any event, the Requesting Licensee will be required to pay ON such On site Charges specified in Schedule 15 for any joint site survey conducted with ON~~

~~2.9 Requesting Licensee shall abide by the terms of the Approved ICO in requesting ON for provisioning of services for the NBAP Dark Fibre whereupon such applicable terms and conditions of the Approved ICO shall apply in relation to the provisioning of services by ON up to the point of the NBAP Node in the relevant FTTB Node or Building MDF Room.~~

~~23. OPENNET’S OBLIGATIONS~~

CLAUSE 2 – DIRECTED AMENDMENT

~~2.3.4 In accordance with clause 5.10 in this Schedule, Upon approval being given to the Requesting Licensee to proceed with the Digging & Trenching Work, OpenNetON shall will notify and confirm with the Requesting Licensee of the date the patch cord from the FTTB Node where OpenNet’s Network ends NBAP Node is available for connecting with Requesting Licensee to connect to its self-provided NBAP TP ’s patch cord which will also be the date OpenNetON commences provisioning of the NBAP Connection. OpenNet’s ON’s responsibility and risk shall end at the FTTB Node where OpenNet’s Network ends NBAP Node from the CO.~~

IDA refers OpenNet to the IDA’s Directed Amendments to Schedule 3 (at the beginning of Schedule 3) above in relation to the option where Requesting Licensees self-provide the NBAP Termination Point.

IDA considers that there is merit in expressly clarifying certain of the Parties’ obligations and responsibilities in relation to the new option.

Accordingly, IDA directs OpenNet to amend clause 2 of Annex 3C by incorporating the directed amendments as annotated above.

~~23.2~~ ON shall be solely responsible for any Patching Service necessary for the provisioning of services to the Requesting Licensee at the FTTB Node or Building MDF Room and the Requesting Licensee shall be liable for any charges thereto under the terms of the Approved ICO.

~~3.3~~ Upon the application by the Requesting Licensee for any services under the terms of the Approved ICO, ON shall be liable under such applicable terms of the Approved ICO accordingly up to and including the NBAP Node at such FTTB Node or Building MDF Room.