# APPENDIX 5

# DIRECTED AMENDMENTS TO SCHEDULE 4

# SCHEDULE 4

# CO to CO Connection

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# CO TO CO CONNECTION

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**ANNEX 4A: REQUEST FORM FOR CO TO CO CONNECTION**

**ANNEX 4B: FAULT RECIFICATION SERVICE REPORT**

# SCHEDULE 4

## CO TO CO CONNECTION

### 1. SCOPE

This Schedule 4 sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with a licence for Layer 1 Service (a service provided by OpenNet for the use of passive optical fibre cable) from one Central Office (or "CO") to another Central Office (**CO to CO Connection**).

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 the CO to CO 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 Licensee. 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, 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 CO to CO 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 CO to CO 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 CO to CO Connection despite using its best endeavours to obtain expeditiously or maintain such licence or permission~~where OpenNet shall had used use its best endeavours needs to obtain expeditiously or maintain any licence or permission necessary to the provision or restoration of the CO to CO 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 CO to CO Connection shall always be excluded. Provided that i~~I~~n 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 obtaining~~ the licence/permission, OpenNet will provide ~~such~~ 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 AMENDMENT***

(e) delay in the provision or restoration of the CO to CO Connection caused by events beyond the reasonable control of OpenNet~~,~~ and~~/or~~ 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(e). In this regard, the inclusion of the word "or" in clause 2.6(e) 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.***

(f) OpenNet network outages for which the Requesting Licensee has not reported a fault;

(g) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by OpenNet;

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

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

2.7 If the Requesting Licensee disputes OpenNet's reason for rejection, its records and/or the amount of rebate, the Requesting Licensee shall not be entitled to be credited with any rebate until and unless the dispute has been resolved.

2.8 A failure by OpenNet to meet any Service Level Guarantee does not constitute a breach of the ICO Agreement or this Schedule.

2.9 The Requesting Licensee acknowledges that the relevant remedy provided under clause 2.1 is a genuine pre-estimate of the Requesting Licensee's loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant Service Level Guarantees for the CO to CO Connection and shall be OpenNet's sole and exclusive liability to the Requesting Licensee for such failure.

## 3. SERVICE DESCRIPTION AND ACCESS POINTS

3.1 OpenNet will provide a licence for the CO to CO Connection to the Requesting Licensee with the following:

(a) one (1) fibre strand from OpenNet's Fibre Distribution Frame (**FDF**) at one Central Office to OpenNet's FDF at the other Central Office if requested by the Requesting Licensee; and

(b) one (1) Patching Service at each of OpenNet's FDFs at the two Central Offices.

3.2 The Requesting Licensee shall access the CO to CO Connection at OpenNet's FDFs located at the two Central Offices or the Requesting Licensee's FDF at the Central Office.

## 4. ORDERING AND PROVISIONING PROCEDURE

### *CLAUSE 4.1 – DIRECTED AMENDMENT*

4.1 (A) The Requesting Licensee shall submit its request for the CO to CO Connection (**Request**) to OpenNet on a Business Day in the form of Annex 4A stating, but not limited to the following information:

(a) the relevant Central Offices.

(B) As an alternative to submitting a Request under the form set out in Annex 4A under clause 4.1(A), ~~The~~ the Requesting Licensee ~~should~~may also submit its Request for Residential End-User Connection (Request) to OpenNet via the OpenNet Platform, stating, but not limited to the following information:

(a) the relevant Central Offices.

For Request submitted~~ssion~~ via the Service Portal, the Requesting Licensee shall select an available date. Upon successful submission of the Request via the Service Portal, it will provide a Request acknowledgement.

Alternatively, ~~F~~for Request submitted ~~ssion~~ via the OpenNet Platform APIs, the Requesting Licensee shall first query the available time slots and use the applicable selected timeslot related for submission of Request. Upon successful submission of the Request via the OpenNet Platform APIs, it will provide a Request acknowledgement.

***Comments were received that the actual process to be implemented by OpenNet for service ordering is unclear. IDA agrees that renumbering and suitable amendments to the clauses can address this concern.***

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

4.2 Relocation of the CO to CO Connection is not allowed.

### *CLAUSE 4.3 – DIRECTED AMENDMENT*

4.3 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 Service Portal~~ Platform will require 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 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;

(e) Steps taken to remedy the outage;

(f) Steps (if any) required by Requesting Licensee to assist with rectification of outage;

(g) Order Request Identifier of the affected orders; and

(h) OpenNet's Network Operations Centre Contact Number.

For the avoidance of doubt, where OpenNet has imposed a Per User Account Charge on the Requesting Licensee for each user account created to allow the Requesting Licensee to access OpenNet'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. CO TO CO CONNECTION REQUEST

### *CLAUSE 5.1 – APPROVED*

5.1 OpenNet shall process all Requests received for the CO to CO 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 580 ~~500~~ 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 October~~September)~~, 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 October~~September~~), OpenNet may ~~shall~~ 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 subject~~ed~~ 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.

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), 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 :***

5.3 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,

(i) 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

(ii) 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

(iii) 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

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

(v) Express Service activiation i.e. 40 per Business Days

(vi) 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** |
|---|---|
| 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 |

(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), 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 twelve (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***

~~5.4~~5.3 (A) Within one (1) Business Day of the date on which OpenNet receives the Request for CO to CO Connection (**Request Date**) and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected for any one of the following reasons:

(a) the Request for CO to CO Connection is not in the prescribed form;

(b) the Request does not contain all the required information or the information provided is inaccurate or misleading;

(c) the service activation date requested is less than three (3) Business Days from the date of receipt of a Request; or

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

***For clarity, IDA considers that there is merit for OpenNet to renumber and re-arrange this clause.***

***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 a Request for CO to CO Connection (request Date) via 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) the Request for CO to CO Connection is not in the prescribed form;

(b) the Request does not contain all the required information or the information provided is inaccurate or misleading;

(c) the service activation date requested is less than three (3) Business Days from the date of receipt of a Request; or

***For clarity, IDA considers that there is merit for OpenNet to renumber and amend this clause.***

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

~~(a) the information provided is inaccurate or misleading; or~~

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

~~(c) 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 this clause.***

***Under clause 5.3(B)(i)(b), OpenNet Platform will notify the Requesting Licensee of errors related to inaccurate or misleading information and allow the Requesting Licensee to make the necessary corrections. In this regard, it is not possible for OpenNet to still reject the Request due to inaccurate or misleading information under clause 5.3(B)(ii) and there is a need to remove this rejection criteria to avoid confusion.***

***Comments were received that OpenNet should not reject a valid application if OpenNet Platform is at fault. The industry suggested that OpenNet should instead, 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.***

***CLAUSE 5.4 (A) – DIRECTED AMENDMENT***

5.4 (A) Within three (3) Business Days of the Request Date and subject to clause 5.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) whether its Request is accepted, or if rejected, for any one of the following reasons, except where there is insufficient capacity, OpenNet must also notify the Requesting Licensee within three (3) Business Days of the Request Date that there is insufficient capacity and the timeframe to notify the acceptance or rejection of the Request shall be extended to within forty (40) Business Days of the Request Date:~~. In the event that there is insufficient capacity to provide the CO to CO Connection pursuant to the Request due to sudden surge of orders in a short period of time at a location or multiple Requesting Licensees serving the same location giving rise to rapid exhaustion of resources for that location or OpenNet's Network has not been rolled out to that location, clause 6.2 shall apply and OpenNet shall inform the Requesting Licensee accordingly within three (3) Business Days and advise the Requesting Licensee that the RFS of the CO to CO Connection will be extended to at least forty (40) Business Days. Upon receipt of OpenNet's notification of insufficient capacity, the Requesting Licensee have the option to continue with the Request or cancel the Request without charges within one (1) Business Day~~

***For consistency with other schedules and for clarity, it is necessary to renumber and incorporate suitable amendments.***

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

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

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

***CLAUSE 5.4(c) – APPROVED***

~~(f)~~(c) OpenNet has not rolled out its Network to the requested Central Offices and as at the date of such Request is received, OpenNet was not required to roll out its Network to such location under the terms of OpenNet's FBO License.

***CLAUSE 5.4(B) – DIRECTED AMENDMENT***

(B) In the event that there is insufficient capacity to provide the CO to CO Connection pursuant to the Request due to sudden surge of orders in a short period of time at a location or multiple Requesting Licensees serving the same location giving rise to rapid exhaustion of fibres for that location or OpenNet's Network has not been rolled out to that location, clause 6.2 shall apply and OpenNet shall inform the Requesting Licensee accordingly within three (3) Business Days and advise the Requesting Licensee that the RFS of the CO to CO Connection will be extended to within forty (40) Business Days. Upon receipt of OpenNet's notification of insufficient capacity, the Requesting Licensee has the 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.

***IDA refers OpenNet to IDA's Directed Amendments to clause 5.4(A). There is therefore a need to incorporate part of the former clause 5.4 into the new clause 5.4 (B) for consistency with other schedules and for clarity.***

***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.***

***IDA notes that under clause 6.2, OpenNet will provision the CO to CO Connection within forty (40) Business Days where additional capacity is required. For consistency, IDA is of the view that there is merit to align the service provisioning timeframe in the above clause with clause 6.2.***

***Comments were received that the timeframe of one (1) Business Day to select a new appointment or cancel a request is too short and a longer***

***timeframe of three (3) Business Days was proposed. After careful consideration, IDA agrees that a three (3) Business Days timeframe would be more reasonable.***

***For purpose of clarity, there is a need to make clear that the Requesting Licensee should also have the ability to cancel the Request via 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.***

5.5 The Requesting Licensee shall pay OpenNet the applicable Installation Charge specified in Schedule 15 (Charges) for the provisioning of the CO to CO Connection.

***CLAUSE 5.6 – APPROVED***

5.6 Where OpenNet rejects the Request for the CO to CO Connection, OpenNet shall provide reasons explaining the basis for rejection promptly.

**6. DELIVERY**

6.1 Subject to clauses 5.2, 5.3, 5.4 and 6.2, OpenNet shall provide the CO to CO Connection by the end of three (3) Business Days from the receipt of a valid Request from the Requesting Licensee.

***CLAUSES 6.2(A) AND (B) – DIRECTED AMENDMENT***

6.2 (A) Where there is insufficient capacity to provide the CO to CO Connection and additional capacity is required to be installed between the Central Offices, OpenNet shall subject to clause 5.2 provide the CO to CO Connection within forty (40) Business Days from the receipt of a valid Request from the Requesting Licensee.

(B) Where there is a delay during service provisioning, the reasons for the delay and the estimated/revised timeframe required to complete service provisioning will be made available on the OpenNet Platform. ~~Alternatively t~~The Requesting Licensee has the option to cancel the Request without charges in the event of

insufficient capacity within three (3) ~~one (1)~~ Business Days upon OpenNet's notification to Requesting Licensee of the delay 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.

***Comments were received that insufficient capacity is not the only scenario where service provisioning is delayed. OpenNet's proposed amendments to the clause should apply in general to all circumstances where OpenNet is unable to provision the Request within the SAP rather than only in the event of insufficient capacity. IDA agrees with the comments received. IDA also refers OpenNet to IDA's earlier Directed Modifications under clause 6 in relation to the timely status updates of any delays.***

***Comments were received that the timeframe of one (1) Business Day to select a new appointment or cancel a request is too short and a longer timeframe of three (3) Business Days was proposed. After careful consideration, IDA agrees that a three (3) Business Days timeframe would be more reasonable.***

***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.***

~~6.1~~6.3 Unless otherwise stated, OpenNet shall retain the responsibility for working at OpenNet's FDF at the Central Office, including Patching Service at OpenNet's FDF at the Central Office in accordance with Schedule 13 (Patching Service). The Requesting Licensee shall bear the Charges for such work carried out by OpenNet.

~~6.2~~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) to deliver the CO to CO Connection.

~~6.3~~6.5 OpenNet will test the optical fibre cable from OpenNet's FDF at the requested Central Office or the Requesting Licensee's FDF at the requested Central Office

to OpenNet's FDF at the other Central Office to ensure that the CO to CO Connection falls within the specified optical performance. Testing will be conducted at wavelengths of 1310nm, 1490nm and 1550nm.

6.46.6 OpenNet shall ensure that the optical power loss does not exceed -0.4dB per km and -0.5dB per connector.

6.56.7 If the Requesting Licensee wishes to obtain the optical power readings, the Requesting Licensee shall submit its request furnishing the Order Request Identifier on a Business Day. OpenNet shall provide the requested information within three (3) Business Days of receipt of such request. The Requesting Licensee shall pay a charge to provide the optical power readings in accordance with Schedule 15 (Charges).

6.66.8 OpenNet shall promptly notify the Requesting Licensee upon the completion of provisioning the CO to CO Connection.

### *CLAUSE 6.9 – APPROVED*

6.9 Subject to clause 6.10, 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 CO to CO Connection, subject to a maximum of 30 times the weekly recurring charge for the CO to CO Connection (**Weekly Recurring Charge**), where:

Weekly Recurring Charge = Monthly recurring charge x 7 / 30

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

(a) The Requesting Licensee requests the deferment of the service activation date.

For the avoidance of doubt, where the service activation date has been revised pursuant to the circumstance 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

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.

7.2 Where the Requesting Licensee wishes to change the existing patching connection at OpenNet's FDF at the Central Office, 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 in accordance with Schedule 13 (Patching Service).

## 8. DEACTIVATION

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

8.2 If the CO to CO 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.

8.3 Where any Patching Service is no longer required as a result of the termination of the CO to CO Connection, OpenNet shall remove the Patching Service at all the relevant access points and the Requesting Licensee shall be liable for the termination charges 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 CO to CO Connection, if such termination is the result of OpenNet's fault.

## 9. STANDARD TERMS AND CONDITIONS

9.1 OpenNet shall at its sole discretion determine its network deployment, including but not limited to the access points and fibre cable routing from which the CO to CO Connection is provided.

9.2 OpenNet shall be responsible for the maintenance of the CO to CO 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 CO to CO 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 CO to CO Connection, OpenNet shall provide the Requesting Licensee with at least one (1) month's notice in advance of such interruptions, repairs or upgrades. 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 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 CO to CO Connections, OpenNet will carry out the scheduled service interruption between 1 am 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 Requesting Licensee to divert its CO to CO 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 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 CO to CO Connection; and

(b) co-location at the Central Offices.

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 CO to CO Connection.

***CLAUSE 9.14 – DIRECTED AMENDMENT***

9.14 Onsite charges are applicable whenever Requesting Licensee requests for OpenNet to be onsite other than for provisioning of CO to CO 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 CO to CO Connection.

## 11. FAULT REPORTING AND CLEARING

11.1 Each Party must have or establish a Fault Reporting and Control Centre (**FCC**) to act as a single point of contact for the reporting, management and clearing of faults. The FCC must be available twenty-four (24) hours a day, seven (7) days a week.

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

### *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.

~~11.3~~ Upon receipt of a fault report from the Requesting Licensee under clause 11.2, OpenNet shall investigate the cause of the fault experienced by the

Requesting Licensee in a diligent and responsible manner as would be expected of a competent service provider. OpenNet shall 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.***

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

11.5 If, following investigation, OpenNet determines that 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).

11.6 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 4B).

## *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:

- determine that the patching at CO and the patch cord are properly installed
- determine that no macro bending that produces high loss
- determine that no dirty/damaged connector
- determine that there is no wrong patching
- measurements of the following shall also be taken :
  - optical time-domain reflectometer
  - power loss

## *CLAUSE 11.6(c) – DIRECTED AMENDMENT*

(c) Upon completion of any fault ~~joint~~ investigation, where both OpenNet and Requesting Licensee are present, OpenNet will hand over the connection to the Requesting Licensee and both Parties shall jointly sign off on the "Fault Rectification Service Report" (Annex 4B), 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 the 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 ~~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 in the manner specified 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 11.8 – DIRECTED AMENDMENT***

11.8 The CO to CO Connection is deemed to be restored when OpenNet has tested and confirmed to the Requesting Licensee that the CO to CO 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***

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 suspects that there is a fault with the CO to CO Connection, the Requesting Licensee may request OpenNet for a joint investigation. ~~Additionally, where the Requesting Licensee disputes OpenNet's findings, the Requesting Licensee shall request OpenNet for a joint investigation.~~ The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges), if the fault is not~~–~~ due to OpenNet. If the

fault is due to~~within~~ OpenNet, ~~otherwise~~ OpenNet will waive the Joint Investigation Charge. 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.

***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.***

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

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

**Mean Time To Recovery**

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

11.13 Subject to clause 2.6, the MTTR shall be the average time OpenNet took to restore service for all fault incidents for all CO to CO 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 CO to CO Connection during a month as described above

Y = Total number of affected CO to CO Connections in the same month

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

## 12. SERVICE LEVEL AVAILABILITY

12.1 OpenNet shall offer a service level availability of 99.99% per month for the CO to CO 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 CO to CO 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 CO to CO 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 CO to CO Connection is unavailable measured from the time each fault is reported by the Requesting Licensee to the time OpenNet confirms that the fault is restored, excluding fault incidents where OpenNet is prevented or restricted from restoring the service owing to matters that are not within OpenNet's control.

## 13. PROTECTION AND SAFETY

13.1 Each Party is responsible for the safe operation of its Network and in particular the safe operation of any equipment within its Network on its side of the connection at the FDF in both COs.

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

## 15. SUSPENSION

15.1 OpenNet may suspend the Requesting Licensee's licence to the CO to CO Connection at any time until further notice to the Requesting Licensee if the CO to CO 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 the CO to CO 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 CO to CO 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, where applicable, activate a service to a Retail Service Provider using the CO to CO Connection within six (6) months from the service activation date of the CO to CO Connection. If the Requesting Licensee fails to do so, OpenNet will deactivate the CO to CO 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.

16.3 OpenNet may immediately terminate a licence of the CO to CO 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 the CO to CO Connection under the OpenNet ICO or exempts OpenNet from supplying the CO to CO 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 CO to CO 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 CO to CO 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 licence in respect of Co-Location Space to which the CO to CO Connection is connected has been terminated or has expired;

(g) the CO to CO Connection has become unsafe for its purpose; or

(h) OpenNet's right to own, maintain or operate the CO to CO Connection has been revoked or terminated or has expired.

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

(a) the Requesting Licensee must immediately discontinue use of the CO to CO Connection;

(b) the Requesting Licensee must without undue delay disconnect all equipment connected to the CO to CO 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 the CO to CO 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 CO to CO 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 CO to CO Connection.

## 17. REDUNDANCY SERVICE

### *CLAUSE 17.1 – DIRECTED AMENDMENT*

~~16.8~~17.1 The Requesting Licensee may acquire the following Redundancy Service for the CO to CO Connection:

(a) one separate fibre strand from OpenNet's FDF at one CO to OpenNet's FDF at the other CO via the same duct and along the same path as the CO to CO Connection (**Redundancy Service with Wireline Diversity**);

(b) one separate fibre strand from OpenNet's FDF at one CO to OpenNet's FDF at the other CO via a separate duct along the same path as the CO to CO Connection (**Redundancy Service with Duct Diversity**); or

(c) one separate fibre from OpenNet's FDF at one CO to OpenNet's FDF at the other CO via a separate path from the CO to CO Connection (**Redundancy Service with Path Diversity**),

at the same prices, terms and conditions as the CO to CO Connection through a request in the form of Annex 4A either via manual means ~~manually~~ or via the OpenNet Platform, unless stipulated otherwise in this clause 17.

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

~~16.9~~17.2 The Requesting Licensee is eligible to acquire a Redundancy Service for the CO to CO Connection provided that the Requesting Licensee has acquired or is acquiring an equivalent CO to CO Connection between the same two COs. The Requesting Licensee may request OpenNet to reject the Request for the CO to CO Connection in the event that OpenNet is unable to provide the Redundancy Service, but such Requests for the CO to CO Connection and the Redundancy Service must be submitted together to OpenNet.

~~16.10~~17.3 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.

~~16.11~~17.4 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 4A: REQUEST FORM FOR CO TO CO CONNECTION**

Request for CO to CO Connection

| | | |
|---|---|---|
| Requesting Licensee | Date of Application: _____<br>Requested Date of Activation: _____ | Application Reference Number:\<br>_____ |
| | Segment from: _____ CO | |
| | To: _____ CO | |
| | Any other info: _____<br><br>☐ Redundancy Service with Wireline Diversity is required<br>☐ Redundancy Service with Duct Diversity is required<br>☐ Redundancy Service with Path Diversity is required<br>☐ Request for CO to CO Connection to be rejected if Redundancy Service is not available | |

For and on Behalf of Requesting Licensee

| | | |
|---|---|---|
| Requesting Licensee | Sign:<br>_____ | Company Stamp:<br>_____ |
| | Name:<br>_____ | Company Name:<br>_____ |
| | Designation:<br>_____ | |
| | Contact Number, Fax and email address<br>_____ | |

Part 1: Date: _____

| | | |
|---|---|---|
| OpenNet | ☐ Application accepted:<br><br>Circuit Identification Number: _____<br>Tentative Provision Date : _____ | |
| | ☐ Application rejected<br>Reason for rejection: _____ | |
| | OpenNet Name / Signature:<br>_____ | Queue Status:<br>_____ |

Part 2: Date: _____

| | |
|---|---|
| OpenNet | ☐ Circuit Provision:<br>Revised Provision Date (where applicable): _____<br>Reason:<br><br>Any other reason: _____ |
| | ☐ Application rejected<br>Reason for rejection: _____ |
| | OpenNet Name / Signature:<br>_____ |

## ANNEX 4B: FAULT RECTIFICATION SERVICE REPORT

| OpenNet BROADEN YOUR MIND | **Fault Rectification Service Report** | Serial No: |
|---|---|---|

| | |
|---|---|
| Appointment Date:<br>Time: | Arrival Time:<br>Completion Time: |
| Trouble Ticket No: | ☐ 1 hour activation<br>☐ Maintenance Fault Rectification<br>☐ 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:** **#** - <br>**Street Name:** <br>**Building Name:** **Postal code:** **S(** **)** | | |

**LOCATION OF INSTALLATION**

| **A-END (CO/MDF)** | **B-END (CO/MDF, End-User's Premise)** |
|---|---|
| **Blk/House: _____ Unit No: #_____ - _____**<br>**Street Name: _____**<br>**Building Name: _____ Postal code: S(_____)** | **Blk/House: _____ Unit No: #_____ - _____**<br>**Street Name: _____**<br>**Building Name: _____ Postal code: S(_____)** |

End-User Declaration (check only one box)

☐ I am the owner of the above premises

☐ 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 | | 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 ON:**

| | |
|---|---|
| Technician Name: | Date: |
| Technician Signature: | Time: |

OPTICAL MEASUREMENTS, WHERE POSSIBLE (Measured by ON)

**ANNEX 4B: FAULT RECTIFICATION SERVICE REPORT**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **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 4B – APPROVED*