



**INFORMATION PACKAGE
(ACCOMPANYING THE ICO)**

**PROPOSED INTERCONNECTION OFFER AND MODEL
CONFIDENTIALITY AGREEMENT FOR THE PROVISION OF
SERVICES ON THE NEXT GENERATION NATIONAL
BROADBAND NETWORK**

25 FEBRUARY 2009

[Please note that this set of document, including the accompanying appendixes, does not form part of the ICO and is not part of this public consultation. It is provided for informational purposes only. Should there be any inconsistencies between this set of document, including the accompanying appendixes, and the ICO, the information in the ICO shall prevail.]

INFORMATION PACKAGE (ACCOMPANYING THE ICO)

1. OpenNet will be developing the OpenNet Platform, an electronic system that allows for applications for services and transactions under the ICO to be done through automated processes. The OpenNet Platform allows persons requesting services under the ICO to connect and access the OpenNet Platform through a virtual private network, via public internet or dedicated communication links (“OSS/BSS Connection Service”). Eventually, it is the intention to minimise all manual processes regarding ordering and provisioning, billing, etc., (e.g. faxes and letters during ordering and provisioning).

Interim Processes Prior to Commissioning of OpenNet Platform

- 2.1 Prior to the implementation of the OpenNet Platform, OpenNet would manage the ICO services through manual processes as described in the current proposed ICO. To assist persons in their requests and ordering of services from OpenNet in the interim, OpenNet has prepared a set of guidance notes/flowcharts (enclosed as **Appendix 1**) related to the processes in the current proposed ICO.
- 2.2 The ICO would be modified to incorporate the detailed automated processes prior to the implementation of the OpenNet Platform at a later stage. With the migration to automated processes using the OpenNet Platform, OpenNet envisages that several of the manual verifications would no longer be required.
- 2.3 Features included in the automated processes that differ from the manual processes proposed in the proposed ICO are as follow:
 - (a) OpenNet Platform will inform the Requesting Licensee of the status of the current processing quota;
 - (b) OpenNet Platform will verify and validate, on a real time basis, an order for service or a request for termination for accuracy and completeness of the information before the order or request is accepted;
 - (c) Where the information is not accurate, OpenNet Platform will prompt the Requesting Licensee to amend the specific information field in the on-line request form;
 - (d) OpenNet will acknowledge the request, on a near real time basis, once the request has been accepted;

- (e) OpenNet Platform will automatically verify the number of orders received, the availability of Transmission Tie Cable ports, whether the Requesting Licensee is subject to a suspension event, any security and confidentiality requirements or conditions imposed on OpenNet by Government agencies, customer's name, premise address, OpenNet's rollout status and requirement for Patching Service to be provided at the Central Office etc and inform the Requesting Licensee with the reason accordingly, on a near real time basis; and
- (f) Where OpenNet has insufficient capacity and needs to increase capacity to provide the requested service, the Requesting Licensee would be informed electronically with the reason before the order is accepted.

Short Description of the OpenNet Platform and OSS/BSS Connection & Professional Service

- 3. A short description of the OpenNet Platform and OSS/BSS Connection & Professional Service is enclosed as **Appendix 2**. Please note that this document is only a preliminary indicator of how the OpenNet Platform and OSS/BSS Connection & Professional Service will be offered and is not a final document. IDA may invite comments regarding the OSS/BSS Connection & Professional Service at a later date, prior to the OpenNet Platform becoming operational.

- ▶ The following flowcharts and diagrams are designed to aid in the QP's understanding of OpenNet's ICO.

- ▶ QP will know about the:
 - ▶ Exclusivity Period
 - ▶ Steps to Enter into an ICO Agreement
 - ▶ Process for Ordering Different Services

- ▶ Content shall be as follows:
 - ▶ Flowchart 1: Acquire OpenNet Services during exclusivity period with the OpCo
 - ▶ Flowchart 2: Entering into an agreement with OpenNet
 - ▶ Flowchart 3: Services under ICO
 - ▶ Flowchart 4: Co-location Service
 - ▶ Figure 1 & 2: Diagram depicting the demarcation between OpenNet and the QP
 - ▶ Flowchart 5: Process for ordering Residential and Non-Residential End User Connection
 - ▶ Flowchart 6: Process for ordering NBAP Connection

Qualifying Persons desirous to acquire services from OpenNet

NBN OpCo resell OpenNet Services

QP (other than NBN OpCo) can acquire from NBN OpCo

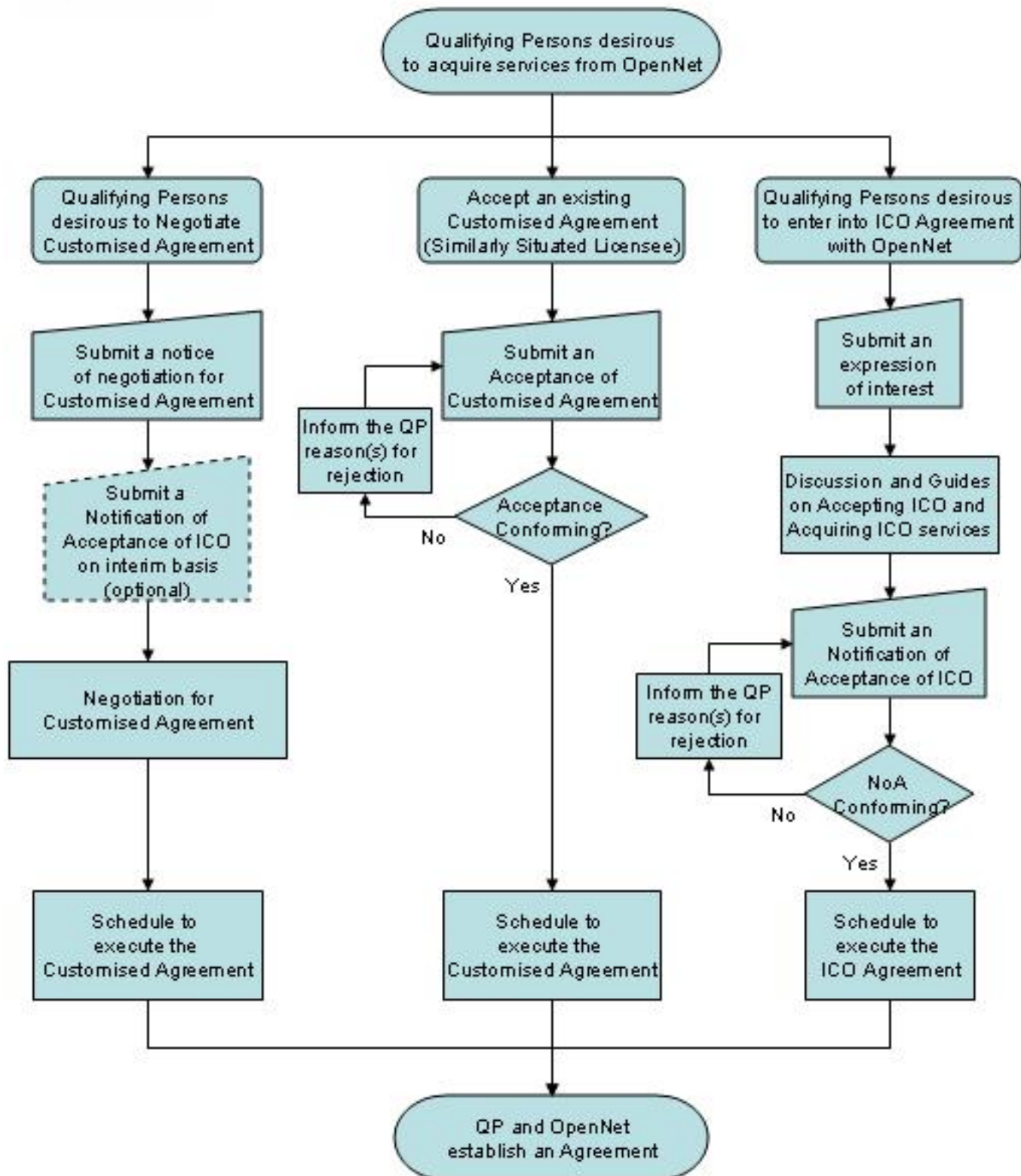
During Exclusivity Period with NBN OpCo

After Lapse of Exclusivity Period with NBN OpCo

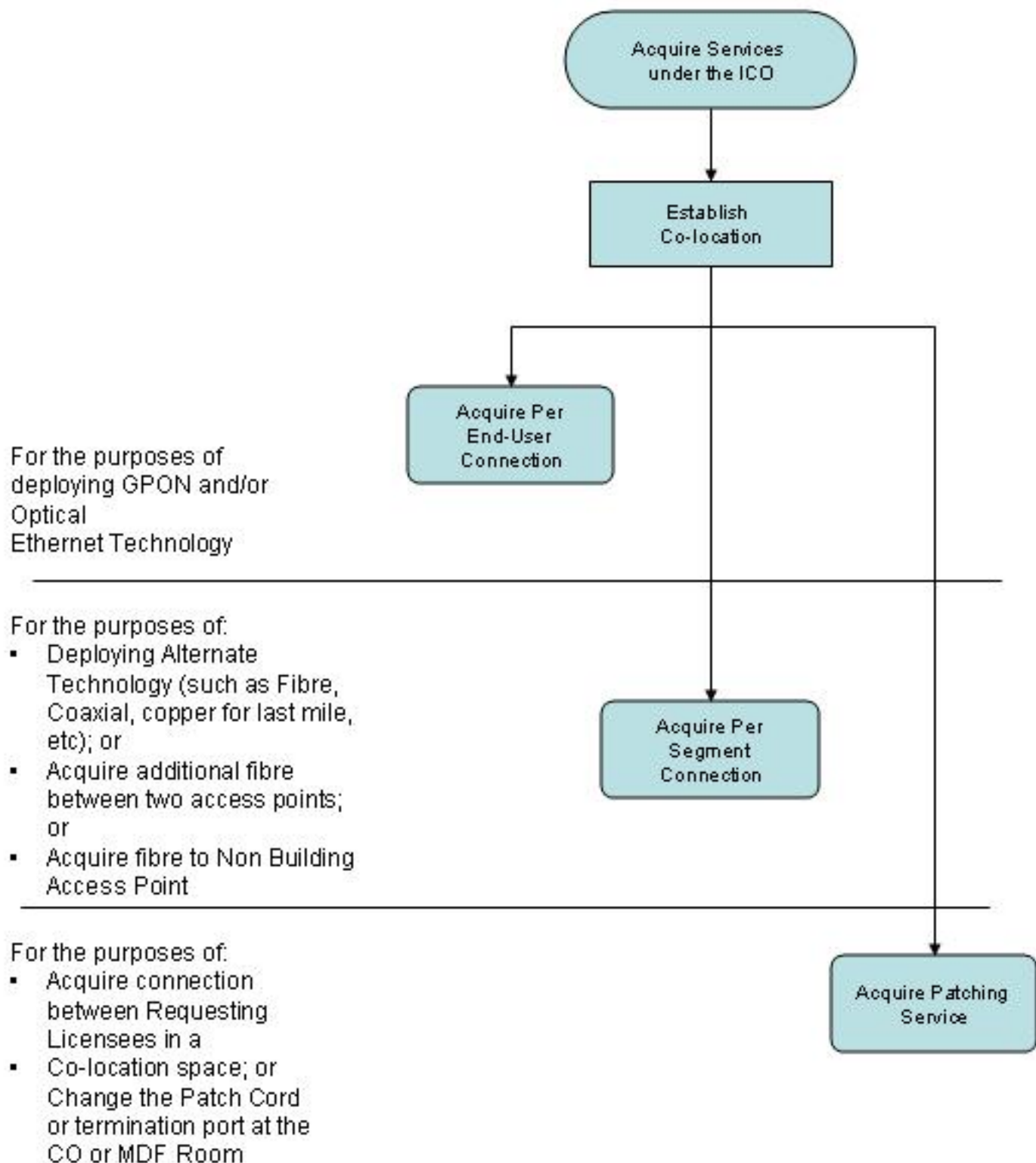
NBN OpCo may resell OpenNet Services

QP (other than NBN OpCo) can acquire directly From OpenNet

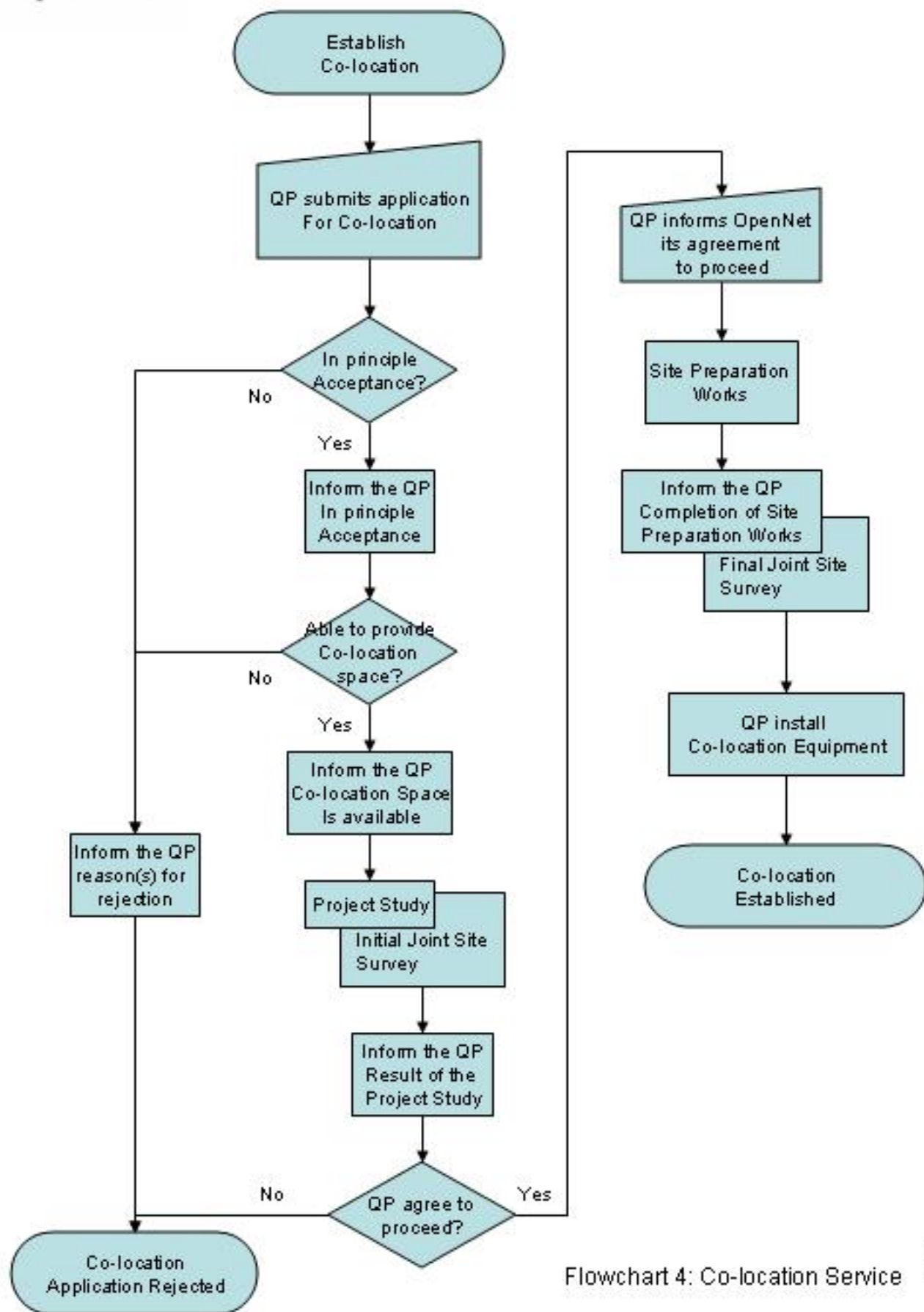
Flowchart 1: Acquire OpenNet Services during and after exclusivity period with the NBN OpCo



Flowchart 2: Entering into an agreement with OpenNet



Flowchart 3: Services under ICO



Flowchart 4: Co-location Service

OpenNet

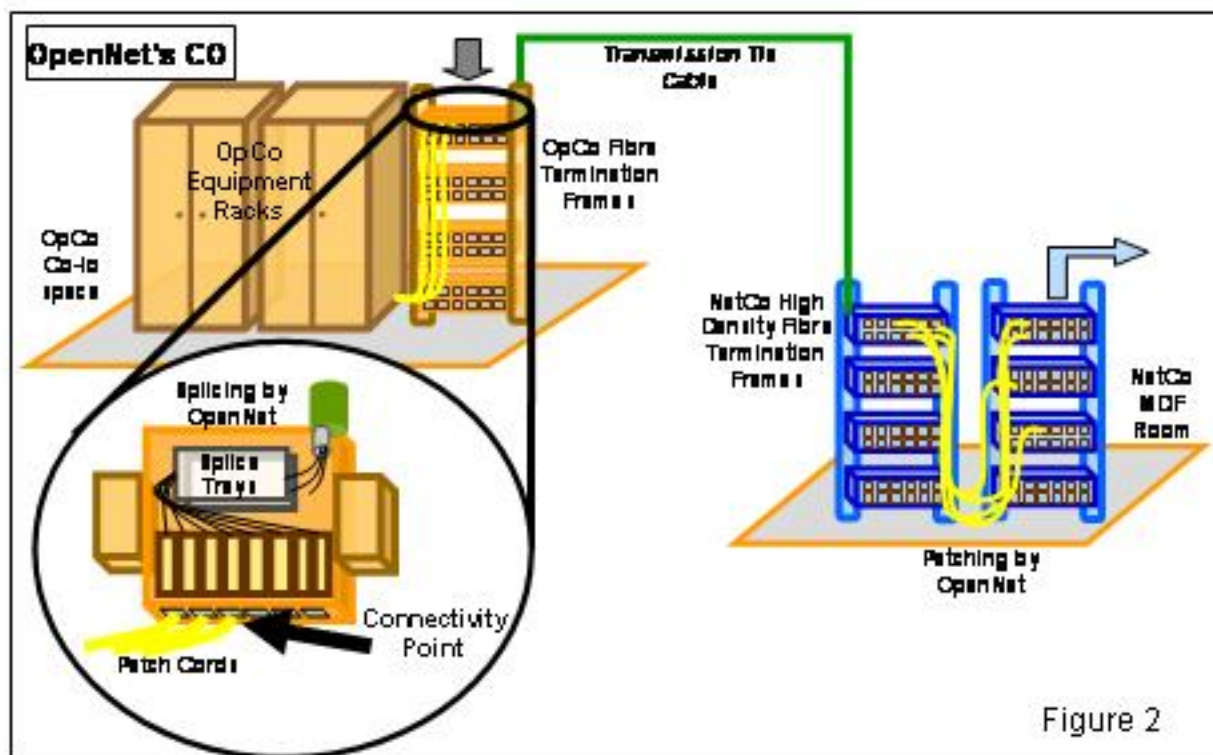
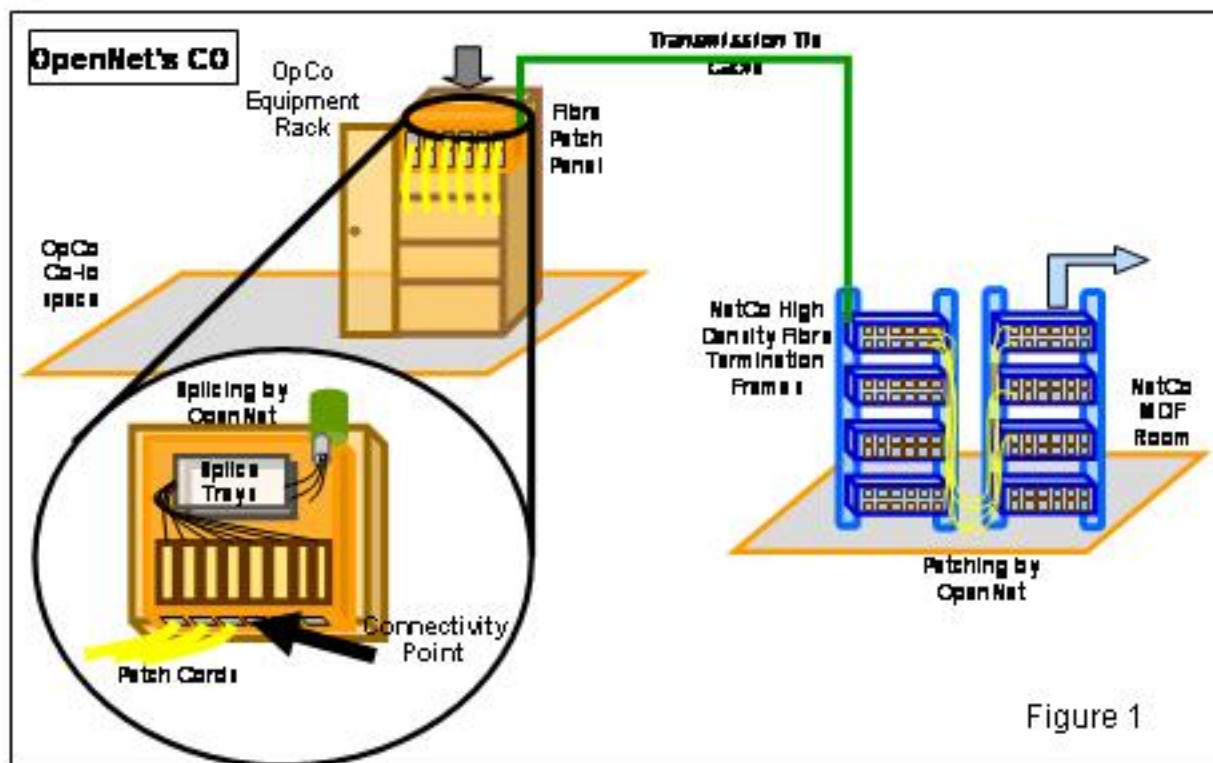
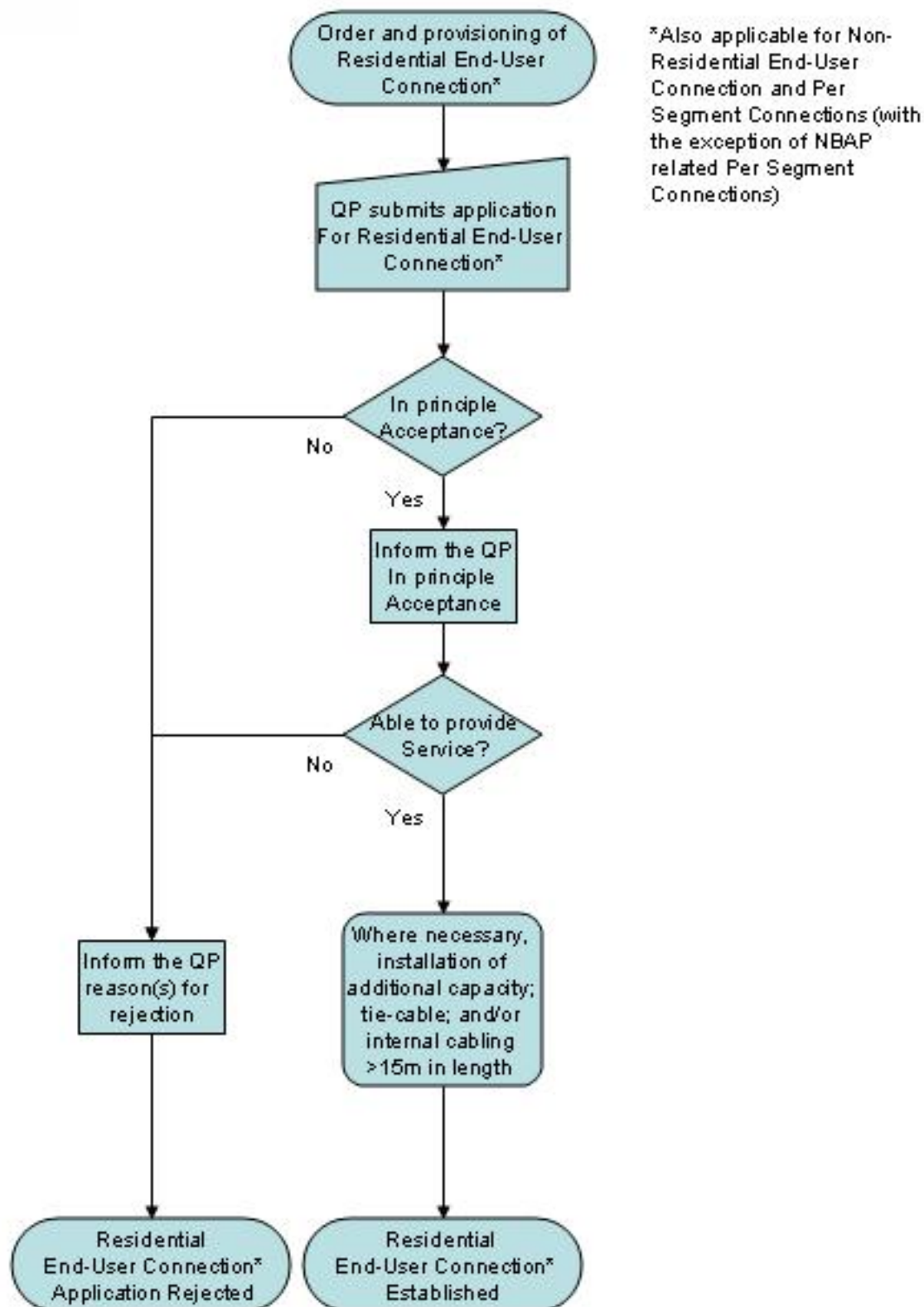
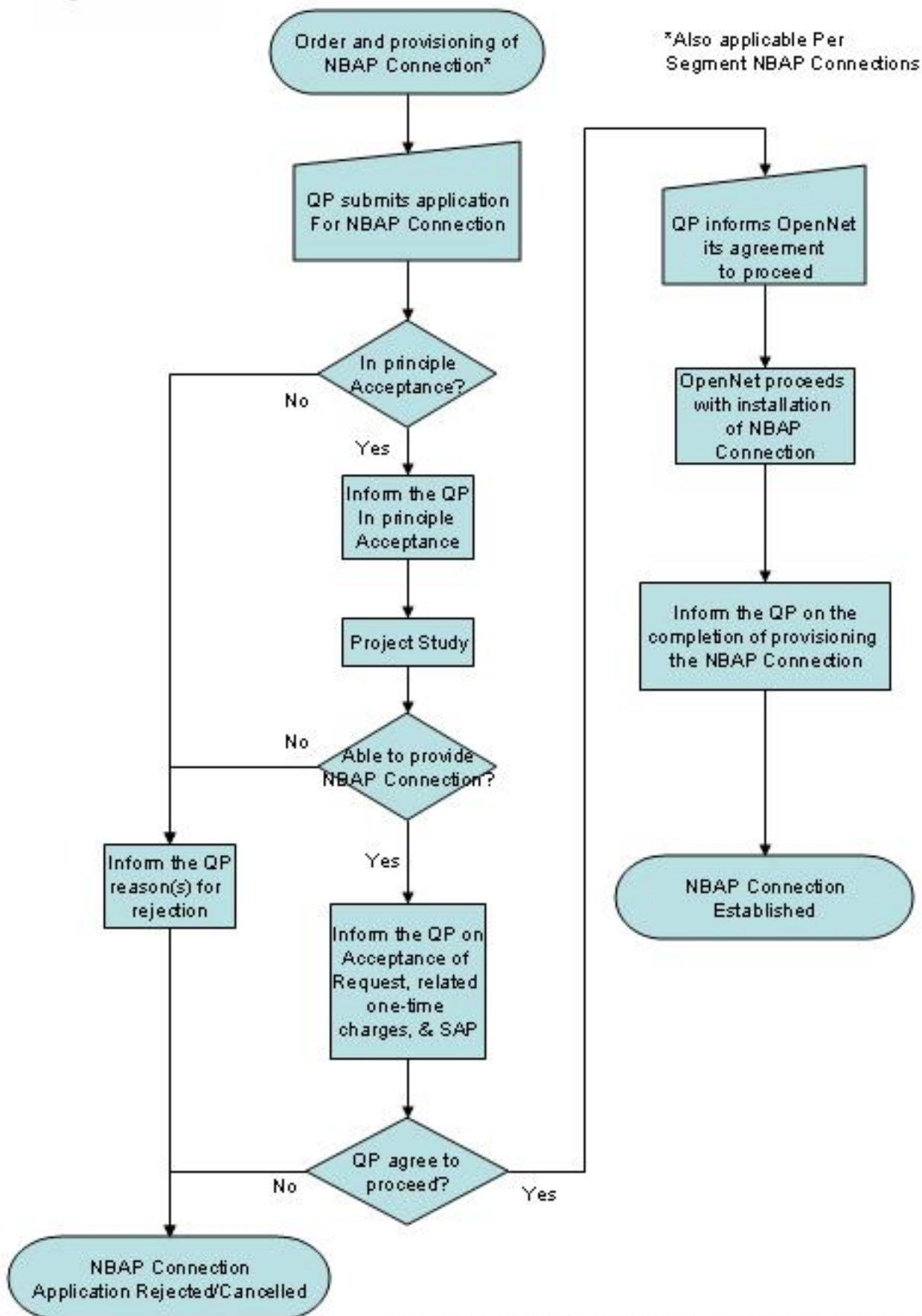


Figure 1 & 2: Diagram depicting the demarcation between OpenNet and the QP



Flowchart 5: Process for ordering Residential & Non-Residential End-User Connection



Flowchart 6: Process for ordering NBAP Connection

**Brief Description
of the OpenNet
Ordering and Provisioning
Platform**

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BRIEF DESCRIPTION OF THE ORDERING AND PROVISIONING PLATFORM

1 Introduction

1.1 OpenNet will be developing an OSS/BSS system ("OpenNet Platform") so that all applications of ICO Services and all transactions under the ICO can be done electronically through automated processes. It is OpenNet's intention to remove, if not keep to the minimum necessary, all manual intervention, such as faxes and letters during ordering and provisioning.

1.2 OpenNet Platform is designed with the following key features:

(a) Easy Access

The OpenNet Platform allows Qualifying Persons ("QPs") to connect and access the OpenNet Platform through Virtual Private Network ("VPN") *via* public internet or dedicated communication links. QPs with low transaction volumes and who prefer using low-cost solutions can use public internet VPN connections to access the OpenNet Platform. QPs with high transaction volumes may prefer to use dedicated communication links for fast turn-around time. In addition, the public internet VPN connection can also be an alternative backup access for QPs with high transaction volumes.

In light of the above, QPs are thus provided with complete flexibility in connection option to the Platform, thereby enhancing the ease of obtaining information and service ordering.

(b) Rich Functionalities

The OpenNet Platform will provide various functionalities that QP can use to obtain information, order services, track services subscribed, report faults, cease services and conduct many other transactions.

(c) Open System Interface

OpenNet will provide standard Open System (Web Services) API interfaces for QPs to integrate their systems with the OpenNet Platform to create a seamless, end-to-end flow-through environment. The following high-level functionalities are available to the QPs for system-to-system integration:

- Order and Processing;
- Problem Management;
- Service Management;
- OpenNet Service Information;
- Network Information; and
- Information Query and Reports.

In light of the above functionalities, QPs can conduct ICO transactions, such as order processing and fault management, electronically and automatically with minimum manual intervention.

- 1.3 In addition to the high level functionalities mentioned above, OpenNet will make the following services available to QPs on the OpenNet Platform
- (a) QPs can access the OpenNet Platform to perform the following business transactions:
- (i) Check and verify network coverage;
 - (ii) Obtain product and service catalogues;
 - (iii) Order ICO services and monitor the service provisioning progress;
 - (iv) Submit fault report and monitor the fault clearing progress; and
 - (v) View and download historical SLA and fault information.
- 1.4 OpenNet would make the following information available to QPs:
- (a) The following information will be available on OpenNet Website:
- (i) OpenNet Company Profile;
 - (ii) OpenNet Network Rollout:
 - OpenNet Network Rollout schedule and status;
 - Residential Premises covered by the Network (including Building reached, Home reached, Home passed and first-time wavier information);
 - Non-Residential Premises covered by the Network (including granted access and denied access during planned rollout); and
 - FAQ for OpenNet Network Rollout and Internal Cable installation.
 - (iii) OpenNet Network Services:
 - List of Mandated Services and information;
 - List of Ancillary Mandated Services and information;
 - List of Value Added Services and information;
 - Other Services; and
 - FAQ for Network Services.
 - (iv) Qualifying Person's Registration:
 - Registration and submission of new QP details;
 - Registration for new QP Administrator account and password; and
 - FAQ for New QP.
 - (v) OpenNet Announcement Notice and Others;
 - (vi) Partners' Information and Website Links, subject to Partners' agreement
 - Qualifying Person's Information and Services;
 - Retail Services Provider's (RSP) Information and Services;
 - IDA NGNBN Project and Announcement; and
 - Other Partners' Information and Services.

- (b) The following Mandated Service Information will be available to Requesting Licensee on the OpenNet Platform:
 - (i) OpenNet ICO Agreements and Customised Agreements;
 - (ii) Mandated Services' pricing and terms and conditions;
 - (iii) Mandated and Ancillary Services' Technical Specification;
 - (iv) Connectivity Points;
 - (v) Description of physical interface to implement connection;
 - (vi) Availability of Mandated Services and Ancillary Services; and
 - (vii) Help Manual.

2 Secured Access to the OpenNet Platform

- 2.1 To obtain access to the OpenNet Platform, the QP shall register online, through public internet access, at the OpenNet Website for secured access to the OpenNet Platform. The QP shall provide contact information for verification purposes. Documents to be attached include a softcopy of the letter of authorisation duly signed by a senior management member of the company and followed by an original copy of the letter of authorisation which shall be sent by mail to OpenNet. OpenNet will provide the QP with an OpenNet Platform URL, User ID and password with limited access, a temporary VPN client software and a setup guide to access the secured OpenNet Platform. OpenNet will provide the above *via* email with the exception of User ID and password which will be provided by mail.
- 2.3 QP could access the QP website QP could access the QP page of OpenNet website using the User ID and password assigned by OpenNet *via* public internet VPN. QP may review the prices, terms and conditions of the ICO or any Customised Agreement, and then submit an expression of interest to enter into an ICO Agreement with OpenNet, an acceptance of ICO or opt into any of the Customised Agreement online.
- 2.4 All transactions made within the OpenNet Platform will be recorded in the system audit log.

3 Acceptance of the ICO

- 3.1 A QP who has not entered into an agreement with OpenNet could only review the prices, terms and conditions of the ICO or any of the Customised Agreement over the secured OpenNet Platform. The QP could:
 - (a) submit an expression of interest to enter into an ICO Agreement with OpenNet; or
 - (b) submit an acceptance of ICO or opt into any Customised Agreement online alongside the attachment of the necessary information.
- 3.2 If acceptance of the ICO or Customised Agreement is found conforming, OpenNet will respond electronically to the QP and schedule to execute the ICO or Customised

Agreement. The ICO or Customised Agreement, once executed, will be filed with the IDA and published on the OpenNet Website.

- 3.3 With the execution of the ICO or Customised Agreement, the QP will be granted access to all services available under the OpenNet Platform, including ordering the relevant Mandated Services and acquiring OSS/BSS Connection Services to implement the necessary VPN connection to the QP Platform.
- 3.4 For the avoidance of doubt, the initial User ID and VPN access acquired by the QP will be deemed as services provided under the prices, terms and conditions of the OSS/BSS Connection Services schedule.
- 3.5 If QP decides not to enter into ICO or Customised Agreement, the administration fee charged for setup VPN access is not refundable.

4 Connectivity to the OpenNet Platform

- 4.1 OpenNet will offer secured internet access or dedicated point-to-point VPN connections for access to the OpenNet Platform in its OSS/BSS Connection Service Schedule. [[We have re-worded this sentence to make it clear that we will offer either type of access means to OpenNet Platform]] Requesting Licensee could subscribe to both access methods to implement redundancy and ensure resiliency.
- 4.2 If the Requesting Licensee has subscribed only to dedicated point-to-point VPN connections and that the connection link fails, OpenNet will provide a VPN connectivity over the public internet pursuant to an emergency internet connectivity service order by email, to enable the Requesting Licensee to establish VPN access to OpenNet Platform expeditiously *via* public internet. The emergency internet connectivity service is available under the OSS/BSS Connection Service Schedule.
- 4.3 Where the OpenNet Platform is unavailable due to either hardware or software failure, OpenNet will make arrangements to inform all Requesting Licensees and accept requests from Requesting Licensees *via* a dedicated email address.

5 Ordering the Mandated Services via the OpenNet Platform

- 5.1 Only authorised users who have acquired OSS/BSS Connection Services and are connected *via* VNP client software through public internet or dedicated communication links could access the ordering services on the QP Website.
- 5.2 The OpenNet Platform will accept QP's order either from an external system (where the QP integrates its OSS/BSS system with the OpenNet's Platform through Open System (Web Services) APIs interfaces) or from the OpenNet Platform.
- 5.3 The OpenNet Platform will authenticate the user's rights to submit the order and verify the order and resource availability prior to accepting the order. Once the order is accepted, the OpenNet Platform will respond to the QP over the OpenNet Platform and initiate its respective service fulfilment workflow depending on the service requested.

- 5.4 The OpenNet Platform will compose, assign and track work tasks issued to OpenNet's provisioning systems to fulfil the order.
- 5.5 Only authorised users could request to deactivate any Mandated Services *via* the OpenNet Platform or through the open system interface APIs. The OpenNet Platform will authenticate the user's rights to submit the request and verify the request. Once the request is accepted, the OpenNet Platform will initiate its respective service termination workflow. The OpenNet Platform will compose, assign and track work tasks issued to OpenNet's provisioning systems to fulfil the order.

6 Interim Processes prior to OpenNet Platform comes on line

- 6.1 Prior to the implementation of the OpenNet Platform, OpenNet would manage the ICO services through manual processes as described in the current Draft ICO. This ICO would be modified to incorporate the detailed automated processes prior to the implementation of the OpenNet Platform at a later stage.
- 6.2 With the migration to automated processes using the OpenNet Platform, OpenNet envisages that several of the manual verifications would no longer be required.
- 6.3 Features included in the automated processes that differ from the manual processes proposed in the Draft ICO are:
 - (a) OpenNet Platform will inform the Requesting Licensee the status of the current processing quota;
 - (b) OpenNet Platform will verify and validate, on a real time basis, an order for service or a request for termination for accuracy and completeness of the information before the order or request is accepted;
 - (c) Where the information is not accurate, OpenNet Platform will prompt the Requesting Licensee to amend the specific information field in the on-line request form;
 - (d) OpenNet will acknowledge the request, on a near real time basis, once the request is accepted;
 - (e) OpenNet Platform will verify automatically the number of orders received, the availability of Transmission Tie Cable ports, whether the Requesting Licensee is subject to suspension event, any security and confidentiality requirements or conditions imposed on OpenNet by Government Agencies, Customer's name, premise address, OpenNet's rollout status and requirement for Patching Service to be provided at the Central Office etc and inform the Requesting Licensee accordingly, on a near real time basis; and
 - (f) Where OpenNet has insufficient capacity and needs to increase capacity to provide the requested service, the QP would be electronically informed with the reason before the order is accepted