SCHEDULE 14 OSS/BSS CONNECTION & PROFESSIONAL SERVICE

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SCHEDULE 14

OSS/BSS CONNECTION & PROFESSIONAL SERVICE

1. GENERAL

- 1.1 This Schedule sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with OSS/BSS Connection Services ("OSS/BSS Connection & Professional Service") for Requesting Licensee to connect and access to OpenNet Platform. The services also allow Requesting Licensee to integrate and interface its Routers, switches, Firewalls, Servers, etc ("OSS/BSS Connection Equipment") with OpenNet's OSS/BSS through a set of Open System APIs offered by the OpenNet Platform. The OSS/BSS functions available to the Requesting Licensees include network coverage check, order management and fault management.
- 1.2 Except as provided in this Schedule, the Requesting Licensee shall, at its own cost, provide all hardware, software and manpower needed to connect and access to the OpenNet Platform. Where any work or services are to be carried out by OpenNet under this Schedule, and the quantum of the Charge is not defined under Schedule 15 (Charges), the Requesting Licensee must pay all the reasonable costs incurred by OpenNet in provisioning OSS/BSS Connection & Professional Service, subject to the following conditions:
 - (a) the costs incurred by OpenNet will relate to the work that OpenNet needs to perform in order to provision the OSS/BSS Connection & Professional Services for Requesting Licensee to connect and access to the OpenNet Platform:
 - (b) before incurring the costs, OpenNet will provide Requesting Licensee with prior reasonable notice that the Requesting Licensee's request requires OpenNet to undertake such work and such notice shall clearly and with sufficient detail set out the following:
 - (i) the reasonable costs which OpenNet seeks to recover from the Requesting Licensee; and
 - (ii) based on the information set out in paragraph (i) above, a binding quote to the Requesting Licensee in respect of the work to be undertaken by OpenNet which shall be valid for a period of ten (10) Business Days (or such other time as may be agreed between the

Parties) from the date they are notified to the Requesting Licensee by OpenNet;

- (c) OpenNet shall obtain the prior approval of the Requesting Licensee to the costs noted in the notice within the time period under paragraph (b)(ii). For the avoidance of doubt, the Requesting Licensee shall not be liable to bear any costs incurred by OpenNet under clause 1.2 unless the Requesting Licensee has given its prior approval under this clause 1.2(c), and OpenNet shall not be obliged to perform any work or service until the Requesting Licensee has agreed to such costs; and
- (d) any dispute in respect of determining the reasonable costs set out in the notice shall be resolved in accordance with Schedule 17 of the ICO Agreement.

1.3 The OpenNet Platform consists of:

- (a) Service Portal with contents and functionalities for Requesting Licensees to conduct business transactions with OpenNet; and
- (b) System APIs exposed to Requesting Licensees' systems allowing electronic flow through business transactions.

To facilitate Requesting Licensees connecting to the OpenNet Platform, two types of access methods are allowed (at Requesting Licensees' cost):

- (i) Internet via secure VPN
- (ii) Dedicated Leased Connection

The Internet via secure VPN connection may be disconnected for reasons out of OpenNet's control. For the avoidance of doubt, Requesting Licensee is responsible for re-establishing the connection when the Internet via secure VPN connection or Dedicated Leased Connection is down.

1.4 Subject to the Requesting Licensee subscribing to B2B Web Services Interface, the Requesting Licensee shall request from OpenNet the relevant APIs provided that the Requesting Licensee have signed up to the associated schedules of the ICO. The Requesting Licensee shall adhere to all specifications (including APIs) provided by OpenNet.

1.5 OpenNet shall not be liable for any claims, damages or liabilities which may arise from OpenNet's provision of the OSS/BSS Connection & Professional Services other than to the extent that it is the result of a grossly negligent, wilful or reckless breach of this Schedule 14 by OpenNet.

2. MODE OF CONNECTION

- 2.1 OpenNet offers the following modes for connectivity to the OpenNet platform ("Connection Modes"):
 - (a) Service portal GUI, via
 - (i) Public Internet secured VPN Client software
 - (b) B2B Web Services Interface, via
 - (i) Public Internet secured VPN
 - (ii) Dedicated Leased Connection (refer to Section II of Annex 14B)

3. STANDARD SERVICES – CONNECTIVITY VIA SERVICE PORTAL GUI

- 3.1 OpenNet will provide user account(s) and the required password(s) for access to the Service Portal in accordance to the order request in Annex 14A, subject to the Requesting Licensee requesting for connectivity via Service Portal GUI.
- 3.2 The OpenNet Service Portal will provide the standard functionality of Account Management, Network Coverage Check, Order Management and Fault Management. A brief description of the various modules is as follows:
 - (a) Account management include features like account password change, user account details change, viewing of billing reports.
 - (b) Network coverage check includes features like checking of rollout status (e.g. Homes Passed and Homes Reached), dwelling type, network rollout time schedule.
 - (c) Order management includes features like order submission, appointment booking, status enquiry and order cancellation.

- (d) Fault management includes features like fault reporting and tracking of resolution process, incident management.
- 3.3 Requesting Licensee shall access the OpenNet Service Portal using the following connection option:
 - (a) Requesting Licensee shall access the OpenNet Service portal GUI via public Internet secured VPN client application. Requesting Licensee shall configure its own firewall settings and allow the VPN connection. Requesting Licensee is required to inform OpenNet of its IP address and port connection setting. Requesting Licensee shall ensure the client setup is according to the specifications indicated in order to be granted the access. For avoidance of doubt, the Requesting Licensee shall provide at its own cost the necessary equipment and facilities such as web browser and Internet connection, and install the VPN client application software provided by OpenNet to connect and access to the OpenNet Service portal. The Requesting Licensee shall pay to OpenNet the Charges for provisioning the user account and connectivity setup for client-based Public Internet secured VPN access as provided in Schedule 15 (Charges).
- 3.4 Requesting Licensee will not be able to use the same User Account to login to the Service Portal simultaneously.

3.5

4. STANDARD SERVICES – CONNECTIVITY VIA B2B WEB SERVICES

- 4.1 OpenNet will provide the standard functionality of the OSS/BSS interface which includes network coverage check, order management and fault management. A brief description of the various modules can be found in Clause 3.2 above.
- 4.2 OpenNet will provide consultation for system integration and interfacing to OpenNet's Platform APIs as a value-added service under OSS/BSS Professional Services. The Requesting Licensee must pay the Charge(s) as defined in Schedule 15.
- 4.3 The Requesting Licensee will be charged for setup, support and use of OpenNet's testing environment upon request, under OSS/BSS Professional Services. Such Charges are defined in Schedule 15.
- 4.4 Requesting Licensee shall connect to OpenNet Platform via host-to-host interface from Requesting Licensee's system to OpenNet Platform to implement flow-through

business transactions with OpenNet using the following connection options for open system API:

- (a) Requesting Licensee shall connect via the secured VPN. Requesting Licensee is required to inform OpenNet its IP address and port connection settings. Requesting Licensee shall ensure the VPN setup is according to the specifications in Annex 14B in order to be granted the access. The Requesting Licensee shall pay to OpenNet the Charges for provisioning the user account and connectivity setup for Public Internet secured VPN access as provided in Schedule 15 (Charges).
- (b) Requesting Licensee shall connect via Dedicated Leased Connection. Requesting Licensee is required to inform OpenNet its IP address and port connection setting. Requesting Licensee shall ensure the setup is according to the specifications indicated in order to be granted the access. The Requesting Licensee shall pay to OpenNet the Charges for provisioning the user account, the port required for connection to firewall, and the connectivity setup for Dedicated Leased Connection, as provided in Schedule 15 (Charges).
- 4.5 Requesting Licensee will not be able to use the same account to interact with OpenNet's APIs simultaneously.

5. ORDERING AND PROVISIONING PROCEDURE FOR STANDARD SERVICES

- 5.1 OpenNet shall process all Requests for OSS/BSS Connections on a 'first come, first served' basis.
- 5.2 The Requesting Licensee shall use either of the Connection Modes specified in Clause 2 to access the functionality and services in the OpenNet Platform.
- 5.3 OpenNet will be responsible to setup and configure OpenNet's firewall to allow the Requesting Licensee to connect and access to OpenNet Platform using either Internet via secure VPN or Dedicated Leased Connection or both methods.
- 5.4 Requesting Licensee shall be responsible to liaise with OpenNet to set up and configure its own firewall to facilitate connection and access between its users/systems and the OpenNet platform.

- 5.5 If Requesting Licensee chooses to set up the Dedicated Leased Connection to OpenNet Platform, the firewall port and the connectivity setup charges as stated will be applicable.
- 5.6 The Requesting Licensee shall provide the transmission link to implement the Dedicated Leased Connection in accordance to OpenNet's specifications at its own cost.
- 5.7 To avoid firewall incompatibility and inter-operation issues, the Requesting Licensee shall agree to install and use only firewall and communication software certified by OpenNet or OpenNet appointed supplier(s) to interconnect with OpenNet Platform. Please refer to Annex 14B.
- 5.8 The Requesting Licensee will appoint a single point of contact ("SPOC") to liaise with OpenNet to provide necessary network information, agree on schedule, resolve interconnection problems, testing, commission and other related activities.
- 5.9 The Requesting Licensee shall appoint a user administrator to maintain the Requesting Licensee's user accounts & access rights. The Requesting Licensee administrator will manage the Requesting Licensee user accounts subscribed by the Requesting Licensee using the administrative functions in the Service Portal by a privileged user for each Requesting Licensees.
- 5.10 OpenNet will provide and expose sets of open system APIs for Requesting Licensees to integrate and interface with OpenNet Platform to support Requesting Licensee's flow-through of business transactions and related operations. OpenNet will support Requesting Licensee to setup and test their system interfaces with the APIs offered by OpenNet Platform pursuant to the terms and conditions of OSS/BSS Professional Services.
- 5.11 OpenNet shall not be responsible for any issues that may arise from Requesting Licensee's software which interfaces with OpenNet Platform's open system APIs. Requesting Licensee may request OpenNet to assist in investigating its software problems pursuant to the terms and conditions of OSS/BSS Professional Services, and the man-day(s) effort incurred shall be chargeable as negotiated and agreed by both OpenNet and Requesting Licensee pursuant to the provision of OSS/BSS Professional Services.
- 5.12 The Requesting Licensee shall submit its **OSS/BSS Connection** Request using the **OSS/BSS Connection** Request Form in the form of Annex 14A containing but not limited to the following information:

- (a) Required mode of Access
- (b) the Requesting Licensee's contact details.
- (c) the services that the Requesting Licensee wishes to undertake.
- (d) any other useful information which the Requesting Licensee believes would be useful to OpenNet in assessing the Requesting Licensee's request.
- (e) Within five (5) Business Days from the Connection Request Date, OpenNet will notify Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is accepted.
- 5.13 Within five (5) Business Day from the Connection Request Date, 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 **OSS/BSS Connection** Request is not in the prescribed form;
 - (b) the **OSS/BSS Connection** Request does not contain the required information or the information provided is inaccurate or misleading;
 - (c) the hardware resources are not available or user account limit has been reached;
 - (d) the provision of the OSS/BSS connection will give rise to significant technical or engineering issues;
 - (e) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule.

Where OpenNet rejects the OSS/BSS Connect Request, OpenNet must provide reasons explaining the basis for rejection.

5.14 Where OpenNet is unable to offer the **OSS/BSS Connection** due to unavailability, OpenNet shall take reasonable measures to cater for additional resources where possible. The Requesting Licensee will be informed of the delivery date. Where the user account limit has been reached, Requesting Licensee may take up OSS/BSS Professional Services to provide for additional accounts.

6. VALUE-ADDED SERVICE: OSS/BSS PROFESSIONAL SERVICES (OBPS)

- 6.1 The Requesting Licensee may request some customization to cater to his business requirement. Such customization requests are outside of the standard services offered by OpenNet. Requesting Licensee shall provide OpenNet with detailed technical specification of his requirements.
- 6.2 The Requesting Licensee may request for customisation of API(s). OpenNet shall evaluate the Requesting Licensee request on a case-by-case basis pursuant to the terms and conditions of OSS/BSS Professional Services. For the avoidance of doubt, OpenNet shall be entitled to reject the Requesting Licensee's request.
- OpenNet shall provide customised OSS/BSS Professional Services (**Customised Services**) to the Requesting Licensee to integrate and interface its systems with the OpenNet Platform under this Clause 6. The Customised Services include the following services:
 - (a) Setup, support and use of OpenNet's test environment. OpenNet will configure a testing environment for testing the customised interface;
 - (b) Consultation for system integration and interfacing using OpenNet Platform APIs.
 - (c) Customisation of OpenNet APIs for system integration and interfaces. OpenNet will provide the basic support for the customisation on the interface. OpenNet will provide assistance for troubleshooting on the customised interface in OpenNet Platform
- Where the Requesting Licensee requests to test any new or enhanced system functionalities, OpenNet will setup a platform test environment at Requesting Licensee's costs, which both OpenNet and the Requesting Licensee shall test before they are promoted into the OpenNet and Requesting Licensees production environment. This shall be a standard operation procedure to be followed by the Requesting Licensee to minimise the risks of deficient software functions causing disruptions to the NBN supply chain operation.

7. ORDERING OF OSS/BSS PROFESSIONAL SERVICES

(a) Ordering of OBPS

- 7.1 The Requesting Licensee shall submit its **OSS/BSS Professional Service** Request using **OSS/BSS Professional Service** Request Form in the form of Annex 14A including the detail document of **the technical requirement**. **The** Request Form and technical requirement document must be sent to an email account designated by OpenNet.
- 7.2 Within five (5) Business Day of the date on which OpenNet receives the OSS/BSS Professional Service Request ("Service Request Date") and subject to clause 5.1 and 5.2, OpenNet must notify the Requesting Licensee (and shall povide 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 OSS/BSS Professional Service Request is not in the prescribed form;
 - (b) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule.
- 7.3 Within fifteen (15) Business Days from the Service Request Date and subject to clause 5.1 and 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 it's Request is rejected, for any one of the following reasons:
 - (a) the Requesting licensee has not taken up the standard services for Connectivity via B2B Web Services;
 - (b) the OSS/BSS Professional Service Request and additional requirement does not contain the sufficient information or the information provided is inaccurate or misleading;
 - (c) the hardware resources are not available;
 - (d) the provision of the OSS/BSS Professional Service will give rise to significant technical or engineering issues;

(b) **Project Study**

7.4 OpenNet will provide a Project Study quotation within fifteen (15) Business Days upon receiving the Requesting Licensee's OSS/BSS Professional Service Request and

the associated technical specification and requirement. A pre-Project Study assessment will be conducted to evaluate the Requesting Licensee's requirements and estimate the lead-time required for the Project Study. OpenNet will provide the Requesting Licensee with the estimated schedule and estimated Charges for Project Study, as a result of the pre-Project Study.

- 7.5 Within fifteen (15) Business Days (or such other time as may be agreed between the Parties) from the date of notification of the result of the pre-Project Study assessment under clause 7.4, the Requesting Licensee shall confirm in writing whether it wishes to proceed with OSS/BSS Professional Service and whether it agrees to pay the estimated Charges for the Project Study.
- 7.6 Except where OpenNet has rejected an **OSS/BSS Connection** Request under clauses 7.2 and 7.3, and the Requesting Licensee has chosen to only acquire Service Portal GUI access only, OpenNet will commence on a Project Study. The Requesting Licensee must pay the Project Study Fee specified in the Project Study quotation under 7.4.
- 7.7 OpenNet shall use its reasonable endeavours to complete the Project Study within the estimated timeframe and charges. If OpenNet's costs increase above OpenNet's estimate set out in the notice under clause 7.5 (as may be varied from time to time under this clause 7.7), OpenNet shall provide the Requesting Licensee with a revised price estimate. OpenNet must obtain the prior approval of the Requesting Licensee to the revised price estimate and if the Requesting Licensee does not provide its approval, then, OpenNet may suspend the Project Study until the Requesting Licensee agrees to the revised price estimate.
- 7.8 OpenNet shall inform Requesting Licensee for any changes on the schedule provided and provide the revised schedule.
- 7.9 Requesting Licensee will have to agree and endorse on the revised schedule before OpenNet proceeds with further work
- 7.10 In the event that the Requesting Licensee cancels the Request before the Project Study is completed, the Requesting Licensee shall be liable to cancellation charges which shall be based on the amount of work done and any other incidental costs and/or expenses which are reasonably incurred by OpenNet in connection with the evaluation of the cancelled Request (to be recovered on a cost-oriented basis).

7.11	The Project Study will define the project scope of work ("SOW") including deliverables, acceptance and timeline schedule, assess software, hardware and subject matter expert requirements.		
7.12	•	Wet and the Requesting Licensee shall jointly define the SOW and the terms and tons ("T&Cs") which shall include, but not be limited to, the following:	
	(a)	Key project assumptions.	
	(b)	OpenNet responsibilities.	
	(c)	Requesting Licensee responsibilities.	
	(d)	OpenNet deliverables.	
	(e)	Acceptance of deliverables.	
	(f)	Change requests management	
	(g)	Project schedule	
	(h)	Payment terms	
7.13		ving completion of the Project Study, OpenNet shall provide the Requesting ee with the following information ascertained as a result of the Project Study:	
	(a)	SOW	
	(b)	T&Cs	
	(c)	Functional specification of the enhanced interface (where applicable)	
	(d)	Implementation plan	
	(e)	the estimated Charges for the OSS/BSS Professional Services (including a breakdown of the major components of the Charges) and an outline of the	

major elements of the OSS/BSS Professional Services to be undertaken by

OpenNet; and

(f) provide an estimation of project man-day(s) required to complete the OSS/BSS Professional Services.

OpenNet shall be entitled to levy and receive the Project Study Fee provided in Schedule 15 (Charges) irrespective of whether the Requesting Licensee proceeds with the **OSS/BSS Connection** Request immediately after completion of the Project Study

8. IMPLEMENTATION OF OSS/BSS PROFESSIONAL SERVICES

- 8.1 Within fifteen (15) Business Days (or such other time as may be agreed between the Parties) from the date of notification of the result of the Project Study under clause 7.13, the Requesting Licensee shall confirm in writing whether it wishes to proceed with OSS/BSS Professional Service and whether it agrees to pay the estimated Charges for the OSS/BSS Professional Services work.
- 8.2 OpenNet shall use its reasonable endeavours to provide OSS/BSS Professional Services within the estimated charges and timeframe and in accordance to the agreed project SOW and T&Cs.
- 8.3 OpenNet shall use its reasonable endeavours to complete the OSS/BSS Professional Services Work within the estimated charges. If OpenNet's costs increase above OpenNet's estimate set out in the notice under clause 7.13 (as may be varied from time to time under this clause 8.3), OpenNet shall provide the Requesting Licensee with a revised price estimate. OpenNet must obtain the prior approval of the Requesting Licensee to the revised price estimate and if the Requesting Licensee does not provide its approval, then, OpenNet may suspend the OSS/BSS Professional Services Work until the Requesting Licensee agrees to the revised price estimate.
- 8.4 OpenNet shall complete any implementation within a timeframe stated in the quotation under clause 7.13. Subject to delays that may result from suspension of the work under clause 8.3, if OpenNet is not able to complete the work within the timeframe under this clause 8.4, OpenNet shall inform the Requesting Licensee of when the work will be completed.
- 8.5 OpenNet will assist in conducting the testing with Requesting Licensee according to the agreed schedule.
- 8.6 Prior to commencing testing, the Requesting Licensee must submit detailed testing plans and testing timetables no less than fifteen (15) Business Days before commencement of works for OpenNet's approval (or such other time as may be

- agreed between the Parties). The Requesting Licensee shall not commence testing until it has received OpenNet's approval in writing.
- 8.7 Requesting Licensee shall inform OpenNet on the actual date of deployment to production.
- 8.8 Within three (3) Business Day after the completion of the OSS/BSS Professional Services, OpenNet will notify the Requesting Licensee and request the Requesting Licensee for a final acceptance of the OSS/BSS Professional Services.
- 8.9 OpenNet will provide the support for OSS/BSS Professional Services for a period of one (1) month from the date of final acceptance.
- 8.10 In the event that the Requesting Licensee decides to cancel its Request before the work is completed but after its acceptance of the agreement to pay the Professional Service Charge, the Requesting Licensee shall be liable to cancellation charges which shall include the work completed so far and any other incidental costs and/or expenses which are reasonably incurred by OpenNet in connection with the cancelled Request (to be recovered on a cost-oriented basis).
- 8.11 The Requesting Licensee shall pay for all software, hardware and subject matter experts and any other costs incurred for the project as stated in the project SOW and T&Cs.

9. FAULT REPORTING AND CLEARING

- 9.1 The Requesting Licensee acknowledges that it is technically impracticable to provide fault free access to and use of the OpenNet Platform and OpenNet does not undertake to do so. The Requesting Licensee acknowledges that it may experience, and OpenNet shall not be liable for, disruption to the OpenNet Platform. The Requesting Licensee shall resubmit to OpenNet service requests affected by any system downtime of the OpenNet Platform.
- 9.2 The Requesting License shall call, email or fax to OpenNet to report problem related to OpenNet Platform with details including the Requesting Licensee's name, contact, nature of problems, problem description, application function etc. OpenNet shall respond by issuing an incident reference number to the Requesting Licensee for follow up.

- 9.3 It is the Requesting Licensee's responsibility to determine the source of the fault at its own cost and to ensure that the fault does not lie within its own OSS/BSS Connection Equipment before reporting the fault to OpenNet.
- 9.4 Upon receipt of a fault report from the Requesting Licensee under clause 9.2, OpenNet shall investigate the cause of the fault experienced by the Requesting Licensee in a diligent and responsible manner as would be expected of a competent service provider. OpenNet shall update the Requesting Licensee as and when there is a change in status of the fault investigation/rectification work.
- 9.5 If, following investigation, OpenNet determines that the fault is within the OpenNet Platform, OpenNet shall use reasonable efforts to rectify the fault.
- 9.6 If, following investigation, OpenNet determines that no fault is found or the fault is not due to the OpenNet Network or equipment, then OpenNet shall charge the Requesting Licensee a No Fault Found Charge for the fault report in accordance with Schedule 15 (Charges).
- 9.7 If OpenNet is unable to identify any fault, OpenNet will call for a fault identification coordination meeting between OpenNet and the Requesting Licensee to identify the fault. The Requesting Licensee shall provide all reasonable assistance requested by OpenNet. Each Party is to bear its own cost for attending such fault identification coordination meeting as well as any testing or trouble-shooting activities required as a result of such a meeting.
- 9.8 The OSS/BSS Connection is deemed to be restored when OpenNet has tested and notified to the Requesting Licensee that the OSS/BSS Connection has been restored.
- 9.9 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 OSS/BSS Connection, the Requesting Licensee may request OpenNet for a joint investigation. The Requesting Licensee shall propose the date, time and venue for the joint investigation. Subject to OpenNet's resource availability and agreement to the date, time and venue, OpenNet shall attend the joint investigation and charge the Requesting Licensee the Joint Investigation Charge according to Schedule 15 (Charges).
- 9.10 The Requesting Licensee acknowledges that OpenNet may temporarily disconnect the Requesting Licensee's OSS/BSS Connection to perform reasonable fault analysis and line testing on the OSS/BSS 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.
- 9.11 Each Party shall maintain and store its own records of faults and repairs.
- 9.12 Where the fault lies within the OpenNet Platform, OpenNet shall evaluate the severity level of the problem reported and respond accordingly. See "Timeframe" section below for response times.
- 9.13 OpenNet shall resolve the reported problem based on a mutually agreed timeline between OpenNet and the Requesting Licensee.
- 9.14 In the event the Requesting Licensee and OpenNet connection(s) at the Requesting Licensee's end is faulty, the Requesting Licensee may request OpenNet to setup and configure Express Firewall Setup (for Emergency Public Internet secured VPN access) from its alternative Firewall at different location. Such request shall be subject to following terms and conditions:
 - (a) The Requesting Licensee shall pay the Express Firewall Setup charge as stated in Schedule 15 (Charges).
 - (b) The Requesting Licensee shall provide its own internet connection from its alternative firewall premises or work site at its own cost.
 - (c) The Requesting Licensee shall liaise with OpenNet to set up and configure OpenNet firewall to allow the emergency public Internet secured VPN access from the Requesting Licensee's alternative access sites.
 - (d) The Requesting Licensee shall inform and liaise with OpenNet to cease the emergency public Internet secured VPN access when the alternative access to OpenNet Platform is no longer required.
- 9.15 OpenNet retains the right to suspend, modify, remove and/or to add to the OpenNet Platform in its sole discretion with immediate effect and without notice and OpenNet will not be liable for any such action.
- 9.16 Access to the OpenNet Platform may be suspended temporarily and without notice in circumstances of system failure, maintenance or repair or for reasons beyond the control of OpenNet.

- 9.17 Where the OpenNet Platform is unavailable, OpenNet shall use its reasonable endeavours to notify the Requesting Licensee and accept requests for Mandated Services from the Requesting Licensee via a dedicated email address and fax number.
- 9.18 Service level guarantees are not provided under this Schedule.
- 9.19 OpenNet shall use its reasonable endeavours to respond to the Request Licensee in respect of the following:

Timeframe	Severity Level	Response Time
	Severity Level 1 – System and users are unable to do production works or critical business processes (in crisis mode).	Immediate.
	Severity Level 2 – A key system function is not usable but the system is able to continue operation.	Within 2 hours.
	Severity Level 3 – A feature or function is faulty but does not seriously impact operation.	Within 24 hours.
	Severity Level 4 – A feature or function having a minor fault (e.g. Cosmetic problems) but does not impact operation or others issues that do not require immediate action.	Within 2 days or as agreed.

10. OTHER TERMS & CONDITIONS

10.1 All new, modified or upgraded Requesting Licensee software system interfaces must be tested in the OpenNet Platform test environment before being promoted to the live production environment. In the event the Requesting Licensee does not comply with such procedure and such untested software system causes any interruption or damage to the OpenNet Platform, the Requesting Licensee shall be liable to pay Professional Services charges for man-day(s) effort incurred to recover system and data to resume normal operation.

- 10.2 The Requesting Licensee shall work with OpenNet to support testing of OpenNet-initiated OpenNet Platform API software changes including but not limited to implementation of new, modified and upgraded API(s).
- 10.3 The OpenNet Platform will be available daily from 8am to 11pm with the exception of fault reporting functionalities, which will be operational 24 hours daily excluding specific scheduled maintenance periods. The daily maintenance of the OpenNet Platform shall be between 11pm and 8am of the next day, unless otherwise agreed.
- 10.4 For scheduled maintenance activity with duration beyond 24 hours, OpenNet shall inform the Requesting Licensee one (1) month in advance.
- 10.5 OpenNet retains the right to terminate, vary or suspend the Requesting Licensee's named user accounts and take whatever action it considers appropriate should the Requesting Licensee breach any terms of the ICO Agreement.
- 10.6 OpenNet shall use its reasonable endeavours to ensure that the information provided on the OpenNet Platform is correct. However, OpenNet makes no representations or warranties as to the accuracy of the information on the OpenNet Platform and OpenNet shall not be liable to the Requesting Licensee in respect of the information provided on the OpenNet Platform.
- 10.7 All Charges are for work done by OpenNet on Business Days unless stated otherwise.

11. TERM OF LICENCE

- 11.1 The term of an OSS/BSS Connection licence granted under this Schedule shall commence on the date of completion of the OSS/BSS Professional Services ("Commencement Date") and continues for the term of either one (1) year ("Term"), or until the earlier occurrence of any of the following events:
 - (a) either Party terminates the OSS/BSS Connection Service in accordance with Clause 13 of this Schedule;
 - (b) the OpenNet ICO is revoked by the Authority under clause 12.8 of the ICO Agreement; or
 - (c) the Authority removes the requirement for OpenNet to provide OSS/BSS Connection Service under the OpenNet ICO or exempts OpenNet from

providing OSS/BSS Connection Service under clause 12.9 of the ICO Agreement.

11.2 OpenNet shall, three (3) months before the end of the Term, send a first reminder to the Requesting Licensee notifying it of the impending expiry of OSS/BSS Connection Service licence. If the Requesting Licensee does not respond to the first reminder, OpenNet shall, two (2) months before the end of the Initial Term, send a second reminder to the Requesting Licensee. If the Requesting Licensee does not respond to the first and second reminders, OpenNet shall, one (1) month before the end of the Initial Term, send a third reminder to the Requesting Licensee. If OpenNet does not receive a response from the Requesting Licensee at least three (3) weeks before the end of the Initial Term that it does not wish to extend the OSS/BSS Connection Service licence, then in this event, the OSS/BSS Connection Service licence shall be deemed to be extended for another term of one (1) year on the same terms and conditions.

12. SUSPENSION OF LICENCE

- 12.1 OpenNet may suspend the Requesting Licensee's OSS/BSS Connection Service licence at any time until further notice to the Requesting Licensee if the OSS/BSS Connection 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 OpenNet's Network.
- 12.2 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 access to **OSS/BSS Connection** under this clause 12.

13. TERMINATION OF LICENCE

- 13.1 The minimum contract term shall be for one year and automatically renewed yearly ("**Term**"), unless terminated pursuant to the prevailing agreement.
- 13.2 If any of the user accounts is inactive for more than two (2) months, OpenNet shall be entitled to recover the inactive user account upon giving the Requesting Licensee ten (10) Business Days prior notice, and the Requesting Licensee did not dispute such written notice given by OpenNet.

- 13.3 At any time after the minimum contract term, OpenNet or the Requesting Licensee may terminate the OSS/BSS Connection Service by giving the other party not less than one month prior notice.
- 13.4 If the Requesting Licensee desires to terminate the OSS/BSS Connection Service before the end of a Term, the Requesting Licensee shall (i) give OpenNet at least one (1) month's prior written notice.
- OpenNet may terminate the licence of **OSS/BSS Connection** Service at any time with immediate effect by giving notice to the Requesting Licensee if the Requesting Licensee fails to complete the connection of its OSS/BSS platform within thirty (30) Business Days. If the Requesting Licensee's failure to complete installation is attributable to circumstances beyond the Requesting Licensee's reasonable control, OpenNet may grant a reasonable extension of time for installation to the Requesting Licensee at the Requesting Licensee's request. A Requesting Licensee's request under this clause must describe the circumstances beyond the Requesting Licensee's control and such request must be received prior to the expiry of the aforementioned thirty (30) Business Days period. OpenNet shall respond to the Requesting Licensee's request under this clause 9.1 within two (2) Business Days from the date of receipt of such request.
- 13.6 Either Party (**Terminating Party**) may terminate the licence of the OSS/BSS Connection Service:
 - (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; or
 - (b) 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).
- 13.7 OpenNet may immediately terminate a licence of **OSS/BSS Connection** Service if:
 - (a) in OpenNet's reasonable opinion, the Requesting Licensee is using the OSS/BSS Connection Service in contravention of any applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation

- from the relevant Governmental Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
- (b) the Requesting Licensee's OSS/BSS Connection Service licence has been suspended pursuant to clause 12.1 of this Schedule, and the Requesting Licensee fails to rectify the fault resulting in the suspension within a period of sixty (60) Calendar Days from the date of suspension;
- (c) the **OSS/BSS Connection** Service is used for a purpose other than for connecting to the OpenNet Platform to order services and report faults;
- (d) the **OSS/BSS Connection** Service has become unsafe or unfit for its purpose;
- (e) OpenNet's right to own, maintain or operate the OpenNet Platform is revoked or terminates or expires.
- 13.8 OpenNet may terminate the licence of OSS/BSS Connection Service on five (5) Business Days prior written notice, if the Requesting Licensee removes or abandons its OSS/BSS Connection Service and the Requesting Licensee does not dispute such written notice by OpenNet.
- 13.9 If a Requesting Licensee's licence of an OSS/BSS Connection Service is to be terminated at any time during the Term because of the closure of an OpenNet OSS/BSS data centre, OpenNet must give the Requesting Licensee prior written notice at least three (3) months before the scheduled closure of such OpenNet OSS/BSS Data Centre. However, in the event of downtime of the OSS/BSS Connection Service due to system migration or relocation, OpenNet shall give the Requesting Licensee one (1) month's written notice before such system migration or relocation.
- 13.10 Upon expiry or termination of the licence of OSS/BSS Connection Service:
 - (a) the Requesting Licensee must discontinue the use of its OSS/BSS Connection Services and remove its OSS/BSS Connection from OpenNet's OSS/BSS data centre without undue delay;
 - (b) OpenNet shall reinstate the OpenNet Platform and recover/reinstate all firewall settings and recover the reasonable cost of such reinstatement (other than the cost of removing the user accounts) from the Requesting Licensee, other than in circumstances where the Requesting Licensee's discontinuation of the use of the OpenNet Platform is a direct result of OpenNet's

- decommissioning of the OpenNet OSS/BSS data centre under this Schedule 14, or where the termination occurs as a result of OpenNet's fault; and
- (c) the Requesting Licensee shall pay OpenNet the Charges for the OSS/BSS

 Connection Service for the remainder of the Term of the OSS/BSS

 Connection Service licence if the termination is the result of the Requesting

 Licensee's fault
- 13.11 If the Requesting Licensee fails to discontinue the use of OpenNet Platform and remove its OSS/BSS Connection under clause 13.9(a), OpenNet may at its sole discretion remove and/or dispose of the Requesting Licensee's OSS/BSS Connection and reinstate the OSS/BSS Connection to its original condition. The Requesting Licensee shall pay to OpenNet all reasonable costs associated with the work undertaken by OpenNet including the cost of disposing the OSS/BSS Connection. In such event, the Requesting Licensee shall have no claim whatsoever against OpenNet related to or in connection with the work undertaken by OpenNet pursuant to this Clause 13.10.

ANNEX 14A

OSS/BSS CONNECTION & PROFESSIONAL SERVICE

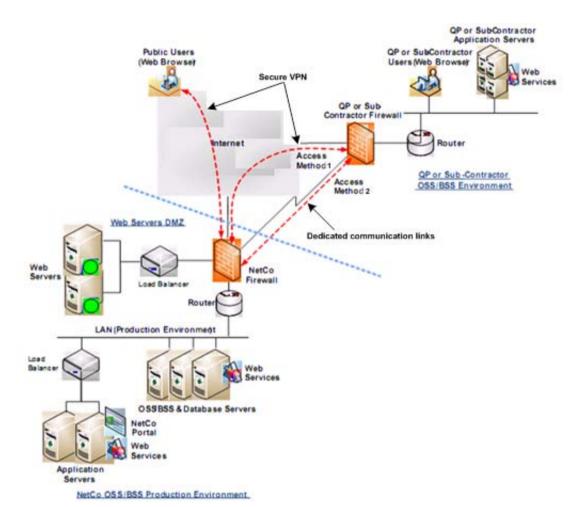
REQUEST FOR OSS/BSS CONNECTION & PROFESSIONAL SERVICE						
Date of Application :		Application Reference Number :				
Request for OSS/BSS Mode of Access is sought for either or both connection: 1.						
Request for OSS/BSS Professional Services Setup, support and use of OpenNet's test environment Consultation for system integration and interfacing using OpenNet Platform APIs Customisation of OpenNet APIs for system integration and interfaces						
		No of Attachment :				
Name Designation Contact Number	: :	Name of Requesting License : [Company Name]				
Fax Number Signature	:	Company Stamp:				
OpenNet						
☐ Not Approved ☐ Approved		Reason for Rejection : OpenNet Reference Number:				
OpenNet Sign: Name:		Contact Number :				
OpenNet Endorsement						
Received Date:	Queue Status :	Processed Date:				

REQUEST FOR USER ACCOUNT					
Date of Application :	Application Reference Number :				
Requesting Licensee Information :					
(select either one of option)					
Organisation:					
☐1st New User Account (ICO Regis	tration No:)				
☐ New User Account	☐ Change Password ☐ Remove User Account				
L					
1st User Account Information:					
Name:	Designation:				
Contact Number:	Email:				
Subsequent User Account Inform	nation:				
Name:	Designation:				
Contact Number:	Email:				
Subsequent User Account Inform	nation:				
Name:	Designation:				
Contact Number:	Email:				
Subsequent User Account Inform	nation:				
Name:	Designation:				
Contact Number:	Email:				
Subsequent User Account Inform	nation:				
Name:	Designation:				
Contact Number:	Email:				
Name :	Name of Requesting License :				
Designation :	[Company Name]				
Contact Number :					
Fax Number : Company Stamp:					
Signature :					
Application returned – incomplete/illegible					
☐ Not Approved Reason for Rejection:					
Approved OpenNet Approval Code:					
OpenNet					
Received Date: Queue Status: Processed Date:					
OpenNet Endorsement					
Name:	Signature: Date:				

ANNEX 14B

TECHNICAL SPECIFICATIONS

I. CONNECTIVITY DIAGRAM



II. TYPES OF COMMUNICATION LINKS & SPECIFICATIONS

Specification	OpenNet end	NetCo QP end
Type of Links	Dedicated, Secured VPN link preferably fibre optic WAN link	Dedicated, Secured VPN link preferably fibre optic WAN link
	Secured VPN via Internet links	Secured VPN via Internet links
Bandwidth	10 Mbps or higher	10 Mbps or higher
Physical Connection	RJ45	
Termination Details	Connect to NetCo QP or S/P Firewall	Connect to OpenNet Firewall
Protocol Support at WAN Links	Must Support TCP/IP	Must Support TCP/IP
Security details	Must support VPNs, Support of 3DES, IPSEC, ACL	Must support VPNs, Support of 3DES, IPSEC, ACL
Application Access Control	User authentication, authorisation, access control,	
	OpenNet will govern the web services that could be consumed by segmenting user grouping and access list	User authentication, access control, Audit trail

Table 4: Types of Communication Links and Specifications

III. LIST OF SUPPORTED FIREWALL AND VPN

This firewall supports both IPSec and Secure Socket Layer (SSL) VPN. Below are a list of firewalls which are interoperability with OpenNet's firewall.

- ZyXEL ZyWALL
- SonicWall
- WatchGuard Firebox II
- Netscreen-204
- Microsoft ISA 2004
- Checkpoint NGX
- Linksys BEFVP41
- Cisco PIX
- Juniper SSG
- YAMAHA RTX1200