

SUPPLEMENTARY AGREEMENT

THIS SUPPLEMENTARY AGREEMENT is made _____ 2013 between:

- (1) **NUCLEUS CONNECT PTE. LTD.**, a company incorporated under the laws of Singapore with its registered office at 3 Tai Seng Drive #04-01, Singapore 535216 ("**Nucleus Connect**")
- (2) **SINGAPORE TELECOMMUNICATIONS LTD**, a company incorporated under the laws of Singapore with its registered office at 31 Exeter Road, COMCENTRE, Singapore 239732 ("**Contracting QP**" or "**SingTel**")

(together, the "**Parties**" and each, a "**Party**").

WHEREAS:

- (A) The Info-communications Development Authority of Singapore (the "**Authority**") has published a Singapore's Next Generation National Broadband Network ("**NGNBN**") Project Operating Company ("**OpCo**") Request for Proposal (the "**OpCo RFP**"). The OpCo RFP closed on 5 December 2008 and Nucleus Connect has been selected on 3 April 2009 as an OpCo to design, build and operate the active infrastructure of the NGNBN.
- (B) Under Nucleus Connect's Facilities-based Operator Licence issued by the Authority on 30 October 2009, the OpCo must offer certain mandated services to certain qualifying persons on the terms of an Interconnection Offer ("**ICO**"). Nucleus Connect's ICO was submitted approved by the Authority on 6 April 2010, with further amendments approved by the Authority on 19 April 2010, 21 July 2010, 6 October 2010, 14 March 2011, 25 April 2011, 1 November 2011, 4 May 2012 and 12 March 2013 (collectively, "**NC ICO**").
- (C) On or about 4 June 2010, Nucleus Connect and the Contracting QP entered into NC ICO pursuant to which Nucleus Connect would supply certain mandated services to the Contracting QP (the "**ICO Agreement**").
- (D) The Ministry of Home Affairs of Singapore ("**MHA**") has issued a tender entitled **Tender No. HOMHQ0ETT12000039/ETTA302** on 25 October 2012 requesting for the provisioning of Next Generation Broadband Network (NGNBN) Services for MHA ("**MHA Project**").
- (E) MHA has awarded the MHA Project to the Contracting QP.
- (F) Upon and subject to the terms and conditions of this Supplementary Agreement, Nucleus Connect will provide certain Mandated Services to the Contracting QP for the purposes of enabling the Contracting QP to deliver the said NGNBN Services pursuant to the MHA Project.

NOW, THEREFORE, in consideration of the mutual agreements and obligations set forth herein, the Parties hereby agree as follows:

1. DEFINITIONS

- 1.1 Unless otherwise defined in this Supplementary Agreement or the context otherwise requires, all terms and expressions used in this Supplementary Agreement will be construed to have the same meanings as found in the ICO Agreement. Where a term or expression is defined specifically in this Supplementary Agreement, the provisions herein shall prevail.

2. COMMENCEMENT DATE

- 2.1 Nucleus Connect shall submit to the Authority a copy of this Supplementary Agreement.
- 2.2 This Supplementary Agreement shall take effect on a date (the “**Commencement Date**”) falling the later of:
- (i) the date on which this Supplementary Agreement is signed by both Parties; and
 - (ii) the date on which this Supplementary Agreement is approved by the Authority (or deemed approved by the Authority as provided for in the Code).

Notwithstanding anything in this Supplementary Agreement to the contrary, the Parties hereby acknowledge that this Supplementary Agreement will not be effective until approved by the Authority (or deemed approved by the Authority as provided for in the Code).

3. GENERAL AMENDMENTS

3.1 Ordering

Without prejudice to the General Service Terms and Conditions (except for paragraph 2.2 therein which shall not be applicable), the Contracting QP shall place Orders in accordance with the following process:

- (i) The Contracting QP shall only place Orders in respect of premises which are shown on OpenNet’s portal to be ready to be served by the NetCo Network.
- (ii) The Contracting QP shall be entitled to place Orders by submitting the duly completed Application Form via the Platform or by sending the duly completed Application Form by email to all of the following email addresses (the latter method shall be referred to as the “**Manual Process**”):
 - (a) Jayshree Rajarathnam: jayshreer@nucleusconnect.com;
 - (b) Christine Venturina Dayrit: christinev@nucleusconnect.com;
 - (c) Yeo Lee Lee: llyeo@nucleusconnect.com;
 - (d) Juliana Binte Othman: juliano@nucleusconnect.com; and
 - (e) such other email address as Nucleus Connect may notify the Contracting QP from time to time.

“**Application Forms**” means such application form(s) as may be agreed between the Parties in writing from time to time. For placement of more than one (1) new Order at any one-time, the Contracting QP shall be entitled to place such Orders by submitting a duly completed Excel form; Provided That (1) the format and fields of such Excel form(s) shall be determined by Nucleus Connect for purposes of ensuring all the relevant information for the Orders are properly captured and (2) the Contracting QP must still fill up the first page and sign on the last page of the prescribed Application Form and must submit the Application Form together with the said Excel form.

- (iii) For Orders submitted via the Platform, the Contracting QP shall also email the sales order ID in respect of such Orders to the above email addresses.
- (iv) For any Order received via the Platform, Nucleus Connect shall send to the Contracting QP (via the Platform) an acknowledgement that the Order has been received promptly upon such receipt. For any Order received via email, Nucleus Connect shall send to the Contracting QP (via email) an acknowledgement that the Order has been received within one (1) Business Day of the date of such receipt.
- (v) Nucleus Connect shall track all Orders closely.
- (vi) If Nucleus Connect is unable to provision any Order in accordance with the Prescribed SAP, it shall notify the Contracting QP as soon as practicable and advise the Contracting QP on the revised RFS date as soon as practicable.

3.2 Prescribed SAP

- (i) Paragraph 2 of Appendix 1 of the General Service Terms and Conditions shall be deleted in its entirety and replaced therefor by the following new paragraph 2:

“The Prescribed SAPs in relation to taking up of new Connections (except NBAP Per-End-User Connection, IP Multicast Connection and Connections provided through the NBAP Service Port) are:

Standard SAP

Type of Connection	Standard SAP (from SAP Start Date)
Residential Per-End-User Connection	6 Business Days
Non-Residential Per-End-User Connection	13 Business Days
i. L2 VPN Service (exclude EPL-Gigabit Connection); ii. L3 VPN Service; and iii. E-LAN Service, where the Connection provided is delivered through a Residential Service Port	6 Business Days
i. L2 VPN Service (exclude EPL-Gigabit Connection); ii. L3 VPN Service (exclude L3 VPN Gigabit Connection); and iii. E-LAN Service, where the Connection provided is delivered through a Non-Residential Service Port	13 Business Days
i. EPL-Gigabit Connection in Annex A, Service Schedule for L2 VPN Service; and ii. L3 VPN Gigabit Connection in Annex B, Service Schedule for	15 Business Days (where there is sufficient network capacity in existing AE access) 45 Business Days (where there is insufficient

L3 VPN Service	network capacity in existing AE access)
QP-EVPL Service Port	15 Business Days
PB-EVC	15 Business Days
AG-EVC	15 Business Days

Express SAP

Type of Connection	Express SAP
Residential Per-End-User Connection	2 Business Days (from SAP Start Date)
i. L2 VPN Service (exclude EPL-Gigabit Connection); ii. L3 VPN Service; and iii. E-LAN Service, where the Connection provided is delivered through a Residential Service Port	3 Business Days (from SAP Start Date)
i. Non-Residential Per-End-User Connection ii. L2 VPN Service (exclude EPL-Gigabit Connection) iii. L3 VPN Service (exclude L3 VPN Gigabit Connection) where the Connection provided is delivered through a Non-Residential Service Port	3 days from Nucleus Connect's receipt of the Order (provided that the Order is not rejected in accordance with the ICO Agreement) or 2 Business Days from SAP Start Date (whichever is shorter), if there is an existing NC NTE on-site with an unused NTE port. The new Connection will be provisioned on the un-used NTE port. 3 Business Days from Nucleus Connect's receipt of the Order (provided that the Order is not rejected in accordance with the ICO Agreement), if (a) there is no existing Nucleus Connect's NTE on-site with an unused NTE port or there is insufficient capacity with respect to the existing Nucleus Connect's NTE on-site and (b) OpenNet is able to successfully provide express service activation in accordance with its Interconnection Offer.

Notes:

- (a) The Contracting QP may submit an Order for Express SAP in accordance with Annex 1-1, at the time of its submission of the Order for the relevant Connection.
 - (b) For the avoidance of doubt, Express SAP shall not be applicable to provisioning and activation of EPL-Gigabit Connections in Service Schedule for L2 VPN Service and/or L3 VPN Gigabit Connections in Service Schedule for L3 VPN Service.
 - (c) If Nucleus Connect is unable to provision the Connection within the Express SAP, the Standard SAP shall apply and Nucleus Connect shall notify the Contracting QP of the aforesaid as soon as practicable.
- (ii) For the avoidance of doubt:

- (i) save as expressly amended and supplemented by this Clause 3.2, the terms and conditions of Appendix 1 and Annex 1-1 of the General Service Terms and Conditions; and
 - (ii) the Express SAP Charges as set out in the relevant Service Schedules,
- shall apply.

3.3 Support for Pre-order Physical Site Survey

- (i) The Contracting QP may request Nucleus Connect in writing for a pre-order physical site survey. Nucleus Connect will charge \$100 for each request for the physical site survey during working hours. For physical site survey performed during non-working hours, Nucleus Connect will charge \$150 for each request. All OpenNet's charges for supporting and/or attending to the physical site survey will be borne by the Contracting QP. For the avoidance of doubt, Nucleus Connect shall be responsible for arranging the appointment of such physical site survey with OpenNet. Nucleus Connect's representatives shall also attend to such physical site survey together with representatives from OpenNet and the Contracting QP; provided that if Nucleus Connect's representatives are unable to attend to any pre-arranged physical site survey, subject to the availability of OpenNet's representatives, OpenNet and the Contracting QP may proceed with the physical site survey.
- (ii) The pre-order physical site survey will comprise OpenNet's representative(s) or contractor(s) pointing out the location of the MDF Room and manhole to the lead-in-pipe. The said physical site survey will not include (a) any written reports (including, without limitation, written reports containing information relating to OpenNet's serving exchange(s), lead-in pipe information, floor plans and photos) or (b) site survey of any OpenNet CO.

3.4 Fault Management

- (i) All Faults notified to Nucleus Connect pursuant to paragraph 9.2 of the General Service Terms and Conditions shall be logged and Nucleus Connect shall respond to the Fault as required. Save as expressly amended and supplemented by this Clause 3.4, the fault management and rectification process as set out in the General Service Terms and Conditions (including, without limitation, paragraphs 9.4 to 9.15 therein) shall apply.
- (ii)

Severity Level	Description
1	A. When any of the primary or secondary connection is down; OR B. When any service degradation in the Connections affect users within a site and unable to perform their business functions; OR C. When service degradation in the

	<p>Connections halts the operation of the entire site for more than ONE (1) hour; or causes negative public reaction or creates chaos; OR</p> <p>D. When service degradation in the Connections results in negative image or adverse impact on MHA.</p>
2	<p>A. When service degradation in the Connections results in some impact on site's ability to perform its function; OR</p> <p>B. When service degradation in the Connections affects a particular process or NGNBN or function of the users for which there are existing alternatives bypassing the Fault; OR</p> <p>C. Service degradation in performance of Connections (i.e. drop packets)</p>

Table 1: Severity Level Reporting

- (iii) Nucleus Connect shall provide preliminary report and post incident review report describing the Fault, root cause, corrective actions and preventive measures. The report shall capture the following information:
- a. Caller information (Name, Department, Telephone extension, location, email);
 - b. Date and time of Fault reported;
 - c. Type/Category/Sub-Category of Fault;
 - d. Fault description;
 - e. Details of Fault resolution;
 - f. Date and time of response;
 - g. Date and time of Fault resolution;
 - h. Date and time of Fault closed; and
 - i. Severity Level of Fault.
- (iv) Nucleus Connect shall provide its own troubleshooting tools to bring about rapid Fault resolution without additional cost to the Contracting QP.
- (v) Nucleus Connect shall use its best endeavours to perform a thorough analysis and resolution of the Fault, which includes identification of the cause of the Fault, the services affected, data or any loss suffered and the recommended solution.

- (vi) For Severity Level 1 Faults, Nucleus Connect shall provide in writing a preliminary report explaining the Fault within one (1) Business Day of being notified of the same.

Subsequently, Nucleus Connect shall provide a post incident review report to explain in detail the cause of the Fault, the corrective actions taken and the solutions to prevent the Fault from recurring, within three (3) Business Days after the Fault has been rectified.

- (vii) For Severity Level 2 Faults, Nucleus Connect shall provide a post incident review report to explain in detail the cause of the Fault, the corrective actions taken and the solutions to prevent the Fault from recurring, within three (3) Business Days after the Fault has been rectified.

3.5 Proactive Monitoring and Performance Reporting

Nucleus Connect will provide proactive monitoring and performance reporting (which includes availability and utilisation) for L2 VPN Service and L3 VPN Service, at the monthly rate of \$20 per subscribed Connection. Upon being notified by the Contracting QP that the subscribed Connection requires such proactive monitoring and performance reporting, Nucleus Connect will need one (1) month to set up such monitoring and reporting for that Connection. Nucleus Connect shall provide the report to the Contracting QP on a monthly basis within the first week of every calendar month. Nucleus Connect and the Contracting QP shall negotiate in good faith in relation to any request for additional statistics and/or reports. Nucleus Connect shall be entitled to impose additional charges for such request.

4. **AMENDMENT OF SERVICE SCHEDULE FOR L2 VPN SERVICE**

The new Service Schedule for L2 VPN Service as attached to this Supplementary Agreement as Annex A shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MHA Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for L2 VPN Service of the ICO Agreement shall continue to apply to other Mandated Services acquired or to be acquired by the Contracting QP under the ICO Agreement.

5. **AMENDMENT OF SERVICE SCHEDULE FOR L3 VPN SERVICE**

The new Service Schedule for L3 VPN Service as attached to this Supplementary Agreement as Annex B shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MHA Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for L3 VPN Service of the ICO Agreement shall continue to apply to other Mandated Services acquired or to be acquired by the Contracting QP under the ICO Agreement.

6. **APPLICABILITY OF THIS SUPPLEMENTARY AGREEMENT**

This Supplementary Agreement shall only apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MHA Project upon and subject to the terms and conditions herein. This Supplementary Agreement shall not apply to the supply by Nucleus Connect of any other Mandated Services and/or services.

7. ENTIRE AGREEMENT

This Supplementary Agreement contains the whole agreement between the Parties with respect to the subject-matter herein and replaces all previous written or oral agreements relating to the subject-matter herein.

8. AMENDMENT AND REVIEW

- 8.1 Except to the extent expressly amended and supplemented by this Supplementary Agreement, all terms and conditions of the ICO Agreement shall remain unchanged and in full force and effect. This Supplementary Agreement and the ICO Agreement shall be read and construed as one and the same document and this Supplementary Agreement shall be considered to be a part of the ICO Agreement. Without prejudice to the foregoing, where the context allows, references in the ICO Agreement to “the ICO Agreement” shall be read and construed as references to the ICO Agreement as amended and supplemented by this Supplementary Agreement.
- 8.2 For the avoidance of doubt, the Parties hereby acknowledge that they shall, if required by the Authority, amend this Supplementary Agreement to incorporate any additional or modified Duties Related to the Provision of Mandated Services as required by the Authority during the term of the ICO Agreement.

9. COUNTERPARTS

This Supplementary Agreement may be signed in counterparts and by the Parties on separate counterparts, each of which when so executed shall be an original, but all counterparts shall together constitute one and the same document.

10. GOVERNING LAW

The interpretation, validity and performance of this Supplementary Agreement shall be governed in all respects by the laws of the Republic of Singapore, including the Code.

IN WITNESS WHEREOF this Supplementary Agreement has been entered into on the date stated at the beginning.

Nucleus Connect

Signed by _____)

(Name of Signatory)

for and on behalf of)

NUCLEUS CONNECT PTE. LTD.)

in the presence of:)

(signature) _____

Title:

(signature of witness) _____

Name of Witness:

Title:

Contracting QP

Signed by _____)

(Name of Signatory)

for and on behalf of)

SINGAPORE TELECOMMUNICATIONS LTD)

in the presence of:)

(signature) _____

Title:

(signature of witness) _____

Name of Witness:

Title: