SUPPLEMENTARY AGREEMENT

THIS SUPPLEMENTARY AGREEMENT is made	2012 between:
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- (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 and 1 November 2011 (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 Education of Singapore ("MOE") has issued a tender ("MOE Project") on 31 March 2011 requesting for the provisioning of a WAN infrastructure over the NGNBN that allows interconnectivity between approximately 359 MOE schools and three (3) MOE NOCs.
- (E) MOE has awarded the MOE 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 WAN infrastructure (the "MOE WAN Infrastructure") pursuant to the MOE 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, the provisions herein shall prevail.

1.2 In this Supplementary Agreement:

Commencement Date	has the meaning ascribed to it in Clause 2.2.
Diverse Connections	has the meaning ascribed to it in Clause 3.3.1.
Diverse Network Effective Date	has the meaning ascribed to it in Clause 3.3.2(i).
Duties Related to the Provision of Mandated Services	has the meaning ascribed to it in the Code.
MOE	has the meaning ascribed to it in Recital (D) above.
MOE NOC	means any of MOE NOC 1, MOE NOC 2, MOE NOC 3 and any New MOE NOC(s) as agreed between the Parties in writing pursuant to Clause 3.2.2.
MOE NOC 1	means MOE's NOC which is situated at 1 North Buona Vista Drive, Singapore 138675.
MOE NOC 2	means MOE's NOC which is situated at 750E Chai Chee Road, Singapore 469005.
MOE NOC 3	means MOE's NOC which is situated at 7 Bedok South Road, Singapore 469272.
MOE Project	has the meaning ascribed to it in Recital (D) above.
MOE Schools	means the MOE's schools and educational institutions as set out in MOE's website: http://www.moe.gov.sg/schdiv/sis/ (as amended by MOE from time to time and notified by the Contracting QP to Nucleus Connect).
MOE Schools Connections	has the meaning ascribed to it in Clause 3.4.
MOE WAN Infrastructure	has the meaning ascribed to it in Recital (F) above.
NC CO 1	means NC CO which is situated at No. 13 Tai Seng Drive, Singapore 535219.
NC CO2	means NC CO which is No. 50 Yishun Industrial Park A, Singapore 768725.

NOC	means a network operating centre.
New MOE NOC	means any NOC which may be designated by MOE, other than MOE NOC 1, MOE NOC 2 and/or MOE NOC 3.
Primary Connections	has the meaning ascribed to it in Clause 3.2.1.
WAN	means wide area network.

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. MOE WAN INFRASTRUCTURE

- 3.1 Subject to the terms and conditions herein, Nucleus Connect will provision the following Connections for the Contracting QP:
 - (i) the Primary Connections as set out in Clause 3.2.
 - (ii) the Diverse Connections as set out in Clause 3.3; and
 - (iii) the MOE Schools Connections as set out in Clause 3.4.

3.2 <u>Primary Connections</u>

- 3.2.1 Nucleus Connect will provision the following Connections (collectively, the "Primary Connections") using the NetCo Network:
 - (i) two (2) Non-Residential Per-End-User Connections (each at 500Mbps CIR with CoS Class A and installation address at MOE NOC 1), which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for Non-Residential Per-End-User Connection;
 - (ii) two (2) Non-Residential Per-End-User Connections (each at 500Mbps CIR with CoS Class A and installation address at MOE NOC 2), which will be provisioned pursuant to the terms and conditions of the General Service Terms and

- Conditions and the Service Schedule for Non-Residential Per-End-User Connection:
- (iii) one (1) EPL-Gigabit Connection at 1Gbps PIR/CIR with CoS Class A and installation addresses at MOE NOC 1 and MOE NOC 3 respectively, which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for L2 VPN Service; and
- (iv) one (1) EPL-Gigabit Connection at 1Gbps PIR/CIR with Cos Class A and installation addresses at MOE NOC 1 and MOE NOC 2 respectively, which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for L2 VPN Service.
- 3.2.2 Subject to the coverage of Nucleus Connect's Network, Nucleus Connect will (upon the Contracting QP's written request) use its best endeavours to provision Connections to New MOE NOC(s) upon such terms and conditions as may be agreed between the Parties in writing (such agreement not to be unreasonably withheld).
- 3.3 <u>Diverse Connections</u>
- 3.3.1 Subject to Clauses 3.3.2 and 3.3.3, Nucleus Connect will provision the following Connections (collectively, the "**Diverse Connections**") to MOE NOCs through Nucleus Connect's Central Office(s) which is/are different from that which is serving the Connections provisioned under Clause 3.2:
 - (i) two (2) EPL-Gigabit Connections (each at 1Gbps PIR/CIR with CoS Class A and installation addresses at MOE NOC 1 and NC CO1 respectively), which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for L2 VPN Service;
 - (ii) two (2) EPL-Gigabit Connections, each at 1Gbps PIR/CIR with CoS Class A and installation addresses at MOE NOC 3 and NC CO 2 respectively, which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for L2 VPN Service; and
 - (iii) one (1) EPL-Gigabit Connection at 1Gbps PIR/CIR with CoS Class A and installation addresses at MOE NOC 1 and MOE NOC 3 respectively, which will be provisioned pursuant to the terms and conditions of the General Service Terms and Conditions and the Service Schedule for L2 VPN Service.
- 3.3.2 The Parties acknowledge and agree that notwithstanding any provision in this Supplementary Agreement or the ICO Agreement:
 - (i) Nucleus Connect will only be able to fully implement its Network coverage for the Diverse Connections within thirty (30) Business Days of the Commencement Date. Nucleus Connect will promptly notify the Contracting QP of the date of the full implementation of its Network coverage for the Diverse Connections (the "Diverse Network Effective Date"). For the avoidance of doubt, the Diverse Network Effective Date shall not be more than thirty (30) Business Days of the Commencement Date; and
 - (ii) Nucleus Connect will only be able to process and provision Orders for the Diverse Connections with effect from the Diverse Network Effective Date.

- 3.3.3 In the event of any failure of any of the Primary Connections or Diverse Connections, it shall be the Contracting QP's sole responsibility to implement and execute its failover mechanism.
- 3.3.4 Nucleus Connect will also commence charging the Contracting QP the following Monthly Recurring NC Charges with effect from the Commencement Date, for the Diverse Connections.

Description	Monthly Recurring NC Charge
MOE NOC 1 Setting up and maintenance of Diversity Network at MOE NOC 1	\$18,000 per month
MOE NOC 3 Setting up and maintenance of Diversity Network at MOE NOC 3	\$18,000 per month

Note:

The above Monthly Recurring NC Charges for the Diverse Connections shall exclude the diverse vertical fibre installation charges at MOE NOC 1 and MOE NOC 3 respectively. Installation of the diverse vertical fibre shall be carried out by Nucleus Connect's contractor from the FTTB Node to the TP of each respective MOE NOC. Any one-time and/or recurring charges (including charges imposed by third parties such as building managements and/or data centre operators) incurred in connection with the implementation of the diverse vertical fibre shall be passed on to the Contracting QP.

3.4 MOE Schools Connections

Nucleus Connect will also provision Connections (collectively, the "MOE Schools Connections") to each of the MOE Schools pursuant to the terms and conditions of the General Service Terms and Conditions and the relevant Service Schedule for such Connections.

- 3.5 If the Contracting QP requires any PB-EVC, AG-EVC, L3 VPN Service or E-LAN Service for the MOE WAN Infrastructure, Nucleus Connect will provision such Mandated Service pursuant to the General Service Terms and Conditions and the Service Schedule for Provider Backbone Ethernet Virtual Connection (PB-EVC) (or as the case may be, the Service Schedule for Aggregation Ethernet Virtual Connection (AG-EVC), L3 VPN Service or E-LAN Service).
- 3.6 For the avoidance of doubt but subject to Clause 3.3.2, Nucleus Connect will only provision a Connection upon receiving a valid Order from the Contracting QP pursuant to the terms and conditions of the General Service Terms and Conditions and the respective Service Schedule for such Connection.

4. NTE FIBRE SERVICE PORT

For any Connection based on AE underlying technology, the Contracting QP may request for NTE service port to support fibre interface. Any request for such NTE fibre handoff interface by the Contracting QP shall be evaluated on a case-by-case basis and Nucleus Connect shall provide the Contracting QP with the costs quotation upon receipt of the said request.

5. AMENDMENT OF GENERAL SERVICE TERMS AND CONDITIONS

The new General Service Terms and Conditions 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 MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the General Service Terms and Conditions 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. AMENDMENT OF SERVICE SCHEDULE FOR NON-RESIDENTIAL PER-END-USER CONNECTION

The new Service Schedule for Non-Residential Per-End-User Connection 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 MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for Non-Residential Per-End-User Connection 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.

7. AMENDMENT OF SERVICE SCHEDULE FOR PROVIDER BACKBONE ETHERNET VIRTUAL CONNECTION (PB-EVC)

The new Service Schedule for Provider Backbone Ethernet Virtual Connection (PB-EVC) as attached to this Supplementary Agreement as Annex C shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for Provider Backbone Ethernet Virtual Connection (PB-EVC) 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.

8. AMENDMENT OF SERVICE SCHEDULE FOR AGGREGATION ETHERNET VIRTUAL CONNECTION (AG-EVC)

The new Service Schedule for Aggregation Ethernet Virtual Connection (AG-EVC) as attached to this Supplementary Agreement as Annex D shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for Aggregation Ethernet Virtual Connection (AG-EVC) 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.

9. AMENDMENT OF SERVICE SCHEDULE FOR L2 VPN SERVICE

The new Service Schedule for L2 VPN Service Connection as attached to this Supplementary Agreement as Annex E shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for L2 VPN Service Connection 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.

10. AMENDMENT OF SERVICE SCHEDULE FOR L3 VPN SERVICE

The new Service Schedule for L3 VPN Service Connection as attached to this Supplementary Agreement as Annex F shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for L3 VPN Service Connection 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.

11. AMENDMENT OF SERVICE SCHEDULE FOR E-LAN SERVICE

The new Service Schedule for E-LAN Service Connection as attached to this Supplementary Agreement as Annex G shall apply to Nucleus Connect's supply of Mandated Services to the Contracting QP for the MOE Project upon and subject to the terms and conditions herein. For the avoidance of doubt, the Service Schedule for E-LAN Service Connection 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.

12. 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 MOE 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.

13. 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.

14. AMENDMENT AND REVIEW

14.1 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.

14.2 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.

15. 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.

16. 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.

 ${\bf IN}$ ${\bf WITNESS}$ ${\bf WHEREOF}$ this Supplementary Agreement has been entered into on the date stated at the beginning.

Nucleus Connect	
Signed by))))) (signature) Title:
(signature of witness) Name of Witness: Title:	
Contracting QP	
Signed by))))) (<u>signature)</u> Title:
(signature of witness) Name of Witness: Title:	