

# NUCLEUS CONNECT PTE. LTD. INTERCONNECTION OFFER (ICO) AGREEMENT SERVICE SCHEDULE – L2 VPN SERVICE

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#### 1. INTRODUCTION

- 1.1 This Service Schedule sets out the terms and conditions under which Nucleus Connect will provide the service known as L2 VPN Service (as defined below) to the Contracting QP.
- 1.2 This Service Schedule comprises the following:
  - (a) the provisions herein;
  - (b) subject to paragraph 6, the General Service Terms and Conditions and the following Appendices:
    - (i) Appendix 1: Provisioning Timeframe;
    - (ii) Appendix 2: Service Level Guarantees; and
  - (c) Orders submitted by the Contracting QP in relation to this Service Schedule.
- 1.3 In the event of any inconsistency or conflict between the provisions herein, the General Service Terms and Conditions and Orders submitted by the Contracting QP in relation to this Service Schedule, the order of precedence shall be as follows:
  - (a) the provisions herein;
  - (b) Orders submitted by the Contracting QP in relation to this Service Schedule; and
  - (c) the General Service Terms and Conditions.
- 1.4 The Master ICO Agreement, including the Annexes, shall apply unless and to the extent amended or supplemented by the provisions of this Service Schedule.
- 1.5 In this Service Schedule, a reference to a paragraph, unless stated otherwise, is to a paragraph of this Service Schedule.

#### 2. DEFINITIONS AND INTERPRETATION

- 2.1 Unless otherwise defined herein this Service Schedule, all terms and expressions used herein will be construed to have the same meanings as found in the Master ICO Agreement and the General Service Terms and Conditions. Where a term or expression is defined specifically in this Service Schedule herein, the provisions herein shall prevail.
- 2.2 In this Service Schedule:

Approved has the meaning ascribed to it in paragraph 6.1(d) or 6.1(f), as the Project case may be;

Schedule

Class of means any of the following class of service:

Service or CoS (a

- (a) Class A Real Time (Class A);
- (b) Class B Near Real Time (Class B);
- (c) Class C Mission Critical (Class C); or
- (d) Class D Best Effort (Class D),

each of which is prescribed QoS parameters as set out in the tables in paragraphs 4.2(c) and 4.7(d);

Committed Information Rate (CIR) means the minimum bandwidth that Nucleus Connect guarantees over the A-B segment of the diagram in the definition of "QoS" for each L2 VPN Connection (or as the case may be, EPL-Gigabit Connection):

Downlink

means bandwidth in the downstream direction (from Aggregation Network to the End-User);

EPL-Gigabit Connection

means a gigabit point-to-point Ethernet private line between two Non-Residential Premises;

L2 VPN Connection

means an end-to-end private layer 2 connection that allows the End-User to establish point-to-point or point-to-multipoint connections between Residential Premises, Non-Residential Premises and NBAP, excluding any EPL-Gigabit Connection;

### L2 VPN Service

#### means:

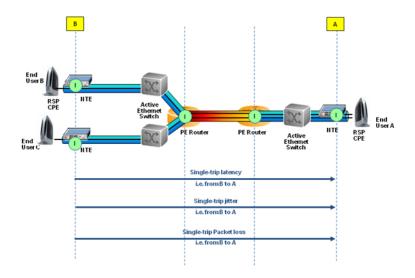
- (a) a point to point L2 VPN Connection and/or L2 VPN Service Port. A point to multipoint topology can be established by ordering multiple point to point L2 VPN Connections on the same L2 VPN Service Port. All the point to point L2 VPN Connections will be uniquely and logically separated by VLAN (IEEE802.1q or IEEEQ-in-Q). Inter L2 VPN Connections traffic will be switched by the End-User's equipment; or
- (b) an EPL-Gigabit Connection;

#### L2 VPN Service Port

means the physical port whereby L2 VPN Connection or (as the case may be) EPL-Gigabit Connection will be delivered to the End-User. Multiple point to point L2 VPN Connections multiplexed to a single L2 VPN Service Port is supported for point-to-multipoint topology;

NBAP L2 VPN Service Port has the meaning ascribed to it in paragraph 6.1;

Peak Information Rate (PIR) means the maximum bandwidth that each L2 VPN Connection (or as the case may be, each EPL-Gigabit Connection) can reach over the A-B segment of the diagram in the definition of "QoS" in the absence of any sort of traffic aggregation, congestion or multiplexing; Quality of Service or (QoS) means the service levels committed for ensuring delivery of services over the A-B segment of the diagram below, measured by Jitter, Latency and Packet Loss as set out in the tables in paragraph 4.2(c) and 4.7(d);



Service Port ID means an identification number assigned by Nucleus Connect to a

L2 VPN Service Port that has been provisioned for the Contracting

QP;

Symmetrical means equal bandwidth for Uplink and Downlink (between the End-

User and the Aggregation Network); and

Uplink means bandwidth in the upstream direction (from the End-User to

the Aggregation Network).

#### 3. COMMENCEMENT

This Service Schedule shall commence with effect from the date that the Contracting QP first places an Order to take up a L2 VPN Service, in accordance with the General Service Terms and Conditions.

#### 4. SERVICE REQUIRMENTS

#### Requirements for L2 VPN Connections

- 4.1 The Contracting QP shall place one (1) Order for each L2 VPN Connection. For example, if the Contracting QP wishes to take up two (2) L2 VPN Connections, the Contracting QP shall submit two (2) separate Orders.
- 4.2 When placing an Order for an L2 VPN Connection, the Contracting QP shall be required to:
  - (a) Specify two (2) L2 VPN Service Port types and the addresses of the installation locations, except that where any such installation location is an NBAP, the Contracting QP is required to provide Global Positioning System (GPS) co-ordinates and description of such installation location. The L2 VPN

Service Ports may be new or then existing and if the latter, the Contracting QP shall be required to specify the Service Port IDs in respect of such L2 VPN Service Ports. The L2 VPN Service Port type is either Fast Ethernet ("FE Service Port") or Gigabit Ethernet ("GE Service Port").

For FE Service Port(s), each L2 VPN Connection will have a Symmetrical PIR of 100Mbps.

For GE Service Port(s), each L2 VPN Connection will have a Symmetrical PIR of 1Gbps.

- (b) Specify the VLAN (IEEE 802.1q or IEEEQ-in-Q) tag permitted to be transparently carried by the L2 VPN Connection. In the case of multiple L2 VPN Connections sharing the same L2 VPN Service Port, the maximum number of VLANs that can be configured per L2 VPN Service Port is sixteen (16).
- (c) Subscribe to only one (1) Class of Service for such L2 VPN Connection and indicate the total Symmetrical CIR it wishes to purchase in blocks of 5Mbps, provided that:
  - (i) the Symmetrical CIR for such Class of Service shall be no more than 100Mbps for FE Service Port, and 1Gbps for GE Service Port;
  - (ii) such Class of Service shall have a minimum Symmetrical CIR of 25Mbps; and
  - (iii) where there are multiple L2 VPN Connections sharing the same L2 VPN Service Port, the aggregate Symmetrical CIR for such L2 VPN Connections shall be no more than 100Mbps for FE Service Port, and 1Gbps for GE Service Port.

The Contracting QP may subsequently from time to time, increase or decrease the Symmetrical CIR of the Class of Service subscribed for such L2 VPN Connection, in blocks of 5Mbps, provided that sub-paragraphs (i) to (iii) above are complied with. Such increase or decrease of Symmetrical CIR shall constitute a Modification for which the Contracting QP shall be required to submit an Order pursuant to and in accordance with the General Service Terms and Conditions.

The table below sets out the performance parameters of the Classes of Services for L2 VPN Connection.

Class Of Service	Jitter	Latency	Packet Loss
Class A Real Time	1ms	8ms	0.1%
Class B Near Real Time	1ms	15ms	0.1%
Class C Mission Critical	4ms	20ms	0.05%
Class D Best Effort	Best Effort	60ms	Best Effort

4.3 If the Contracting QP injects traffic into any L2 VPN Connection which exceeds the Symmetrical CIR purchased pursuant to paragraph 4.2(c), the Contracting QP acknowledges and agrees that notwithstanding that Nucleus Connect will endeavour

- to deliver such excess traffic, such delivery is not guaranteed. For the avoidance of doubt, the Contracting QP shall not be able to inject traffic into any L2 VPN Connection which exceeds the PIR as set out in paragraph 4.2(a).
- 4.4 Only one (1) Class of Service is supported per L2 VPN Connection. A L2 VPN Service Port can support multiple L2 VPN Connections of the same or different Classes of Service.
- 4.5 The Contracting QP must adhere to Nucleus Connect's QoS tagging scheme when sending or receiving data traffic through any L2 VPN Connection from the relevant L2 VPN Service Port(s). Such QoS tagging scheme requires the use of priority bit value 5 for Class A, priority bit value 4 for Class B, priority bit value 2 for Class C and priority bit value 1 for Class D.
- 4.6 In relation to any L2 VPN Connection taken up by the Contracting QP, if the Contracting QP wishes to change the then existing L2 VPN Service Port type in respect of such L2 VPN Connection (from FE Service Port to GE Service Port or vice versa), such event shall constitute a Modification for which the Contracting QP shall be required to submit an Order pursuant to and in accordance with the General Service Terms and Conditions.

#### Requirements for EPL-Gigabit Connections

- 4.7 When placing an Order for an EPL-Gigabit Connection, the Contracting QP shall be required to:
  - (a) place one (1) Order for each EPL-Gigabit Connection. For example, if the Contracting QP wishes to take up two (2) EPL-Gigabit Connections, the Contracting QP shall submit two (2) separate Orders.
  - (b) Specify two (2) L2 VPN Service Ports (GE (1Gbps) Service Port for Non-Residential Premise type only) and the addresses of the installation locations. The installation locations shall be Non-Residential Premises only. The underlying access technology for such L2 VPN Service Ports shall be based on AE. If pursuant to the Contracting QP's request, Nucleus Connect is not able to provide such EPL-Gigabit Connection based on AE, Nucleus Connect shall be entitled to reject the Order for the EPL-Gigabit Connection, but shall not impose any charges on the Contracting QP in respect of the rejection of such Order.
  - (c) Specify the VLAN (IEEE 802.1q or IEEEQ-in-Q) tag permitted to be transparently carried by the EPL-Gigabit Connection. Sharing of multiple EPL-Gigabit Connection(s), or EPL-Gigabit Connection and L2 VPN Connection(s) on the same L2 VPN Service Port (GE (1Gbps) Service Port for Non-Residential Premise type only) is not permitted.
  - (d) Subscribe to only one (1) Class of Service for such EPL-Gigabit Connection. Each EPL-Gigabit Connection shall have a Symmetrical PIR/CIR of 1Gbps

The Contracting QP may subsequently from time to time, change the Class of Service subscribed for such EPL-Gigabit Connection. Such changes shall constitute a Modification for which the Contracting QP shall be required to submit an Order pursuant to and in accordance with the General Service Terms and Conditions.

The table below sets out the performance parameters of the Classes of Services for EPL-Gigabit Connection.

Class Of Service	Jitter	Latency	Packet Loss
Class A Real Time	1ms	8ms	0.1%
Class B Near Real Time	1ms	15ms	0.1%
Class C Mission Critical	4ms	20ms	0.05%
Class D Best Effort	Best Effort	60ms	Best Effort

- 4.8 Only one (1) Class of Service is supported per EPL-Gigabit Connection. A L2 VPN Service Port can only support a single EPL-Gigabit Connection.
- 4.9 The Contracting QP must adhere to Nucleus Connect's QoS tagging scheme when sending or receiving data traffic through any EPL-Gigabit Connection from the relevant L2 VPN Service Port(s). Such QoS tagging scheme requires the use of priority bit value 5 for Class A, priority bit value 4 for Class B, priority bit value 2 for Class C and priority bit value 1 for Class D.

#### General Requirements

- 4.10 In relation to any L2 VPN Connection/Service Port taken up by the Contracting QP, if the Contracting QP wishes to change the L2 VPN Connection/Service Port into an EPL-Gigabit Connection, the Contracting QP shall:
  - (a) place an Order for the Deactivation of such L2 VPN Connection/Service Port, whereupon paragraph 8 of the General Service Terms and Conditions will apply; Provided That no Deactivation Charge or Early Termination Charge will be imposed on the Contracting QP in respect of such Order which was submitted by the Contracting QP to Nucleus Connect before 9 May 2011; and
  - (b) pursuant to paragraph 4.7, place an Order to take up a new EPL-Gigabit Connection/Service Port with an underlying access technology based on AE, whereupon paragraph 5.3 of the General Service Terms and Conditions will apply.

The provisions of sub-paragraphs (a) and (b) shall also apply mutatis mutandis where the Contracting QP wishes to change from an EPL-Gigabit Connection to a L2 VPN Connection.

- 4.11 If, in relation to an Order to take up a L2 VPN Service, the installation location required is a Non-Residential Premises and the Contracting QP indicates to Nucleus Connect in such Order that it does not require NetLink Trust to provide the cabling and ducting between the FTTB Node and the 1st TP for the relevant Non-Residential Building, the Contracting QP shall be responsible for the supply and maintenance of such cabling and ducting. In such event, the Contracting QP acknowledges and agrees that:
  - (a) the Contracting QP shall bear the following Charges on a per L2 VPN Service Port basis:
    - (i) NLT Charges, except those NLT Charges which would be subject to paragraph 4.11(a)(iii), which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, in connection therewith;

- (ii) any Third Party Charges which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, in connection therewith; and
- (iii) any other third party charges, NetLink Trust's charges and/or NLT Charges agreed pursuant to paragraph 5.2 or 6.3 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, in connection therewith:
- (b) the Contracting QP shall provide such cabling and ducting from the FTTB Node and up to and including the 1st TP that are of a quality that is fit-for-purpose; and
- (c) the Contracting QP shall make such cabling and ducting from the FTTB Node and up to and including the 1<sup>st</sup> TP, available and ready for Nucleus Connect's use at least three (3) Business Days before the RFS Date in respect of such L2 VPN Service.

For the avoidance of doubt, if the Contracting QP fails to comply with sub-paragraphs (b) and (c) above and due to such failure, Nucleus Connect is not able to provision and activate such L2 VPN Service by the scheduled RFS Date, the Contracting QP shall not be entitled to make any claim under Appendix 1 of the General Service Terms and Conditions, and Nucleus Connect shall be entitled to commence charging the Contracting QP the Monthly Recurring NC Charges set out in paragraph 5.1 on such scheduled RFS Date (and not the delayed date that such L2 VPN Service is in fact activated).

- 4.12 In relation to any L2 VPN Service taken up by the Contracting QP which will be delivered via (x) an NetLink Trust's Termination Point (the "Riser TP") at the vertical telecommunication riser on the same floor where the relevant Non-Residential Premises is located and (y) a Non-Residential Service Port located in the said Non-Residential Premises, the Contracting QP shall be responsible for the supply and maintenance of the cabling and ducting between the Riser TP and the said Non-Residential Premises. In such event, the Contracting QP acknowledges and agrees that:
  - (a) the Contracting QP shall provide such cabling and ducting from the Riser TP and up to the said Non-Residential Premises (including the TP located therein) that are of a quality that is fit-for-purpose; and
  - (b) the Contracting QP shall make such ducting and cabling (including the TP located in the said Non-Residential Premises) available and ready for Nucleus Connect's use at least three (3) Business Days before the RFS Date in respect of such L2 VPN Service.

For the avoidance of doubt, if the Contracting QP fails to comply with sub-paragraphs (a) and (b) above and due to such failure, Nucleus Connect is not able to provision and activate such L2 VPN Service by the scheduled RFS Date, the Contracting QP shall not be entitled to make any claim under Appendix 1 of the General Service Terms and Conditions, and Nucleus Connect shall be entitled to commence charging the Contracting QP the Monthly Recurring NC Charges set out in paragraph 5.1 with effect from such scheduled RFS Date (and not the delayed date that such L2 VPN Service is in fact activated).

#### 5. CHARGES

The Charges set out in this paragraph 5 are the rates payable by the Contracting QP on a L2 VPN Connection (or as the case may be, an EPL-Gigabit Connection) and a L2 VPN Service Port basis.

#### 5.1 <u>Monthly Recurring NC Charges</u>

#### (a) Twelve (12) months' contract term

Nucleus Connect will commence charging the Contracting QP the Monthly Recurring NC Charges specified below on the RFS Date.

	o-End L2 VPN nnection	Monthly Recurring NC Charge (12 months' contract term)  First 25Mbps Next 5Mbps				
	Real Time	\$282.40	\$84.00			
Class of	Near Real Time	\$240.70	\$71.60			
Service	Mission Critical	\$186.30	\$55.40			
	Best Effort	\$144.60	\$43.00			

Per EPL-Giç (Symmetrica	Monthly Recurring NC Charge (12 months' contract term)	
	Real Time (Class A)	\$3,634.20
Ola a a a f O a a da a	Near Real Time (Class B)	\$3,391.90
Class of Service	Mission Critical (Class C)	\$2,907.40
	Best Effort (Class D)	\$2,422.80

Per L2 VPN S	Monthly Recurring NC Charge (12 months' contract term)	
	Residential Premise	\$21.20
FE (100Mbps) Service Port	Non-Residential Premise	\$86.50
	NBAP	\$192.40
OF (40km) Om in Bort	Non-Residential Premise	
GE (1Gbps) Service Port	NBAP	\$708.10

#### (b) One (1) month's contract term

- (i) Subject to sub-paragraph (iii) below, when the Contracting QP subscribes to a L2 VPN Service which will be delivered through a Non-Residential Service Port or NBAP Service Port with a Minimum Term of one (1) month, the Contracting QP shall pay NC Charges ("1-month NC Charges") as calculated below:
  - 1-month NC Charges = MRC x 3
     where MRC means all relevant Monthly Recurring NC Charges
- (ii) Nucleus Connect will commence charging the Contracting QP the 1-month NC Charges on the RFS Date.

as set out in paragraph 5.1(a).

- (iii) When placing the Order for such L2 VPN Service, the Contracting QP shall select the date of Deactivation, failing which:
  - (1) such L2 VPN Service will not be Deactivated upon the expiry of the said 1-month term but will continue to remain active until it is Deactivated in accordance with the General Service Terms and Conditions; and
  - (2) the Contracting QP shall continue to be liable to pay the 1-month NC Charges even after the expiry of the said 1-month term until such L2 VPN Service is Deactivated in accordance with the General Service Terms and Conditions.

#### 5.2 <u>One-Time Charges</u>

The Charges set out below are non-refundable once they are imposed on the Contracting QP by Nucleus Connect in the manner specified below. In addition, depending on when the relevant action is preferred by the Contracting QP to be undertaken by Nucleus Connect, the following multiplier factor will be applied to the NC Charges set out below. For the avoidance of doubt, the multiplier factor to be applied shall be one (1) unless the Contracting QP requests that the relevant action be undertaken by Nucleus Connect on off-working hours during Business Day(s) or on non Business Day(s).

	Period		Multiplier Factor	
Business	Monday to Friday	Working Hours	9.00am to 5.00pm	1
Day	Monday to Friday	Off-working hours	Before 9am and after 5.00pm	1.5
Non- Business day	Saturday, Sundays and Public Holidays	Throughout		2

#### (a) Cancellation Charge

Upon any Cancellation of any Order or Approved Project Schedule by the Contracting QP, the following Charges shall be imposed on the Contracting QP:

- (i) an NC Charge of \$10 if Cancellation happens before Nucleus Connect's acknowledgement of its receipt of the Order or an NC Charge of an amount equal to the applicable NC Charges as set out in paragraph 5.2 if Cancellation happens after Nucleus Connect's acknowledgement of its receipt of the Order;
- (ii) NLT Charges, except those NLT Charges which would be subject to paragraph 5.2(a)(iv), which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Cancellation:
- (iii) any Third Party Charges which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Cancellation:
- (iv) any other third party charges, NetLink Trust's charges and/or NLT Charges agreed pursuant to paragraph 5.2 or 6.3 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Cancellation; and
- (v) any charges agreed to be on-passed to the Contracting QP pursuant to paragraph 5.3 or 6.4 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Cancellation.

#### (b) Installation Charge

- (i) In addition to any charges agreed to be on-passed to the Contracting QP pursuant to paragraph 5.3 or 6.4 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, upon the installation of a L2 VPN Connection (or as the case may be, an EPL-Gigabit Connection) by Nucleus Connect, the following Charges shall be imposed on the Contracting QP on a per L2 VPN Service Port basis:
  - (a) the following NC Charges:

	One-Time Charges	
Installation	Residential Premises	\$37.50
Charge	Non-Residential Premises	\$140
	NBAP	\$1,050
Installation (at the red Service Port as part of t	\$250	

Provided that if it becomes necessary for Nucleus Connect to install an environmental hardened NTE as part of the installation of such L2 VPN Connection, Nucleus Connect shall seek the Contracting QP's prior consent to such installation of the environmental hardened NTE in accordance with the process set out in paragraph 6.1. If the

Contracting QP does not provide such consent in accordance with the process set out in paragraph 6.1, the Contracting QP acknowledges and agrees that the Order in respect of such L2 VPN Service shall be deemed to be Cancelled whereupon paragraph 5.2(a) shall apply; and

(b) if applicable, such other installation Charges as may be set out in the Approved Project Schedule.

## (ii) Patching Charge in the NC CO and Co-location Space

- (a) A Patching Charge in addition to the Installation Charge will be imposed if Nucleus Connect is required to provide Patching Services. Nucleus Connect may be required to provide Patching Services where the installation address is located at the Co-location Space or NC CO. This will be charged at \$40 per patch point.
- (b) This Patching Service will be provided by Nucleus Connect if required. The Contracting QP will be required to submit a separate Order for this Patching Service.

#### (c) (Intentionally Deleted)

#### (d) Modification Charge

In addition to any charges agreed to be on-passed to the Contracting QP pursuant to paragraphs 6.3 and 6.4 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, an NC Charge of \$40 shall be imposed on the Contracting QP upon the submission of a Modification Order by the Contracting QP.

#### (e) Maintenance or Repair

- (i) Nucleus Connect will charge for every onsite visit or joint investigation, according to the length of time spent by Nucleus Connect's representative during such onsite visit or joint investigation respectively, if such onsite visit or joint investigation is requested by the Contracting QP. There will be a minimum charge of \$300 per onsite visit or joint investigation (as the case may be) up to the first two hours. Subsequent hour blocks are charged at \$150 per hour.
- (ii) The No Fault Found Charge referred to in the General Service Terms and Conditions is \$214 per Fault report.
- (iii) In the event that routine maintenance of the NBAP L2 VPN Service Port requires the use of safety gear, equipment and/or escort and access by qualified personnel, such requirement shall be provided by the Contracting QP to Nucleus Connect at the Contracting QP's cost, unless Nucleus Connect is reasonably expected to own and provide the same.

#### (f) <u>Disconnection</u>

Upon a disconnection of a L2 VPN Service by reason of suspension pursuant to the ICO Agreement, an NC Charge of \$120 shall be imposed on the Contracting QP.

#### (g) <u>Deactivation</u>

Upon the Deactivation of a L2 VPN Service, the following Charges shall be imposed on the Contracting QP:

(i) the following NC Charges:

Description	Charges		
Deactivation Charge	\$300		
Early Termination Charge	100% of remaining		
	contract value		

- (ii) NLT Charges, except those NLT Charges which would be subject to paragraph 5.2(g)(iv), which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Deactivation;
- (iii) any Third Party Charges which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Deactivation;
- (iv) any other third party charges, NetLink Trust's charges and/or NLT Charges agreed pursuant to paragraph 5.2 or 6.3 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Deactivation; and
- (v) any charges agreed to be on-passed to the Contracting QP pursuant to paragraph 5.3 or 6.4 of the General Service Terms and Conditions which have been incurred by Nucleus Connect, or which Nucleus Connect has committed to incur, at the time of such Deactivation.

#### 6. CHANGES FROM THE GENERAL SERVICE TERMS AND CONDITIONS

#### 6.1 Paragraph 5.1 of the General Service Terms and Conditions

For the purpose of this Service Schedule, where the Contracting QP requires the L2 VPN Service Port to be installed at an NBAP ("NBAP L2 VPN Service Port"), paragraph 5.1 of the General Service Terms and Conditions shall not apply and the following provisions of this paragraph 6.1 shall apply instead:

"(a) The Contracting QP acknowledges and agrees that in order for Nucleus Connect to provide the NBAP L2 VPN Service Port to the Contracting QP, Nucleus Connect will need to request NetLink Trust to provide Nucleus Connect with the relevant NBAP connection, which may (if such request is accepted by NetLink Trust) involve a project study being undertaken by NetLink Trust (the "NetLink Trust Project Study").

- (b) If the Contracting QP indicates to Nucleus Connect in its Order that it does not require NetLink Trust to provide the ducting and cabling between the MDF Room (as determined by NetLink Trust where the NetCo Network ends) and the NBAP TP, the Contracting QP shall be responsible for the supply and maintenance of such ducting and cabling (including, without limitation, securing the necessary access rights and approvals). The Contracting QP shall also submit to Nucleus Connect the proposed cable routing from the MDF Room to the NBAP TP. In such event, the Contracting QP acknowledges and agrees that:
  - (i) the Contracting QP shall provide ducting and cabling from the MDF Room and up to and including the NBAP TP that are of a quality that is fit-for-purpose; and
  - (ii) the Contracting QP shall make such ducting and cabling from the MDF Room and up to and including the NBAP TP, available and ready for Nucleus Connect's use at least five (5) Business Days before the RFS Date in respect of such NBAP L2 VPN Service Port.
- (c) If an Order to take up an NBAP L2 VPN Service Port is not rejected by Nucleus Connect, Nucleus Connect will provide a project schedule (the "Project Schedule") to the Contracting QP within ten (10) Business Days from the completion of the NetLink Trust Project Study stating (i) the period within which Nucleus Connect will activate such NBAP L2 VPN Service Port, (ii) an estimation of Nucleus Connect's, NetLink Trust's and any third party charges involved and (iii) such other terms and conditions relating to the provision of such NBAP L2 VPN Service Port as Nucleus Connect may specify. In addition, in situations where NetLink Trust requires Nucleus Connect to agree on certain NLT Charges and Nucleus Connect intends to on-pass such NLT Charges to the Contracting QP, Nucleus Connect and the Contracting QP shall also agree on such NLT Charges before Nucleus Connect proceeds to incur such NLT Charges.
- (d) The Contracting QP will be able to raise to Nucleus Connect any terms that are not acceptable to it in the Project Schedule within five (5) Business Days from its receipt thereof, failing which the Contracting QP shall be deemed to have accepted and agreed to the terms in the Project Schedule in its entirety and such Project Schedule shall constitute an Approved Project Schedule.
- (e) If the Contracting QP and Nucleus Connect are unable to reach a mutual agreement on the terms of a Project Schedule within ten (10) Business Days after such Project Schedule is made available to the Contracting QP:
  - the Order which is the subject of such Project Schedule shall be deemed to be Cancelled whereupon paragraph 5.2(a) shall apply; and
  - (ii) such Project Schedule and this Service Schedule shall lapse, unless Nucleus Connect is separately providing L2 VPN Service to the Contracting QP at the time, in which case this Service Schedule shall remain in force.

Nucleus Connect shall not unreasonably reject the Contracting QP's request for extension of the said ten (10) Business Days timeframe to reach a mutual agreement on the terms of the Project Schedule.

- (f) As soon as practicable after the mutual agreement of the Contracting QP and Nucleus Connect to the terms of a Project Schedule (as modified or with such additional terms as the Contracting QP and Nucleus Connect may require), the Contracting QP shall confirm in writing to Nucleus Connect that the Contracting QP agrees to the terms of such Project Schedule in their entirety (and such agreed Project Schedule shall hereinafter be referred to as an "Approved Project Schedule") within the ten (10) Business Days timeframe (or as the case may be, the agreed extended timeframe) referred to in paragraph 6.1(e) above, whereupon the Approved Project Schedule shall be binding on Nucleus Connect and the Contracting QP.
- (g) If the Contracting QP subsequently does not wish to proceed with an Approved Project Schedule, that shall be deemed to be a Cancellation whereupon paragraph 5.2(a) shall apply."

**Application Form**Layer 2 VPN Service (L2 VPN)



ATTN: NUCLEUS CONNECT, ORDER DESK FACSIMILE NO. : (65) 6808 2820 EMAIL: orderdesk@nucleusconnect.com

Business Customer Information				
Company Deta	ils	Authorise	ed Officer Particulars	
Name of Firm/Company as in RCB:		Name of Authorised Officer as in NRIC/PASSPORT/FIN*. Please underline surname.  (Dr/Mr/Miss/Mrs/Mdm):_		
Registered Address as in RCB:		E-mail of Authorized Officer:		
Main Office Contact No.:		Designation:		
Main Office Fax No.:		Contact No. (Office):_		
Business Registration Number (BRN):		Contact No. (Fax):		
Account Information (For New Accounts, please refer to <a href="www.nuclesign">www.nuclesign</a> up Nucleus Connect's Services)	eusconnect.com for instruction to	☐ Account Number:		
Customer Reference ID: (This ID is issued by customer for their internal set out in this application form)	I reference of the service that is			
Billir	ng Details (If different from	Business Customer Information	ation)	
Company Name:		Billing Address :_		
City & Postal Code:		Country:		
Contact Person Name (Billing):		Customer Contact Number :		
Customer Fax Number:		E-mail:		
* Please select where appropriate				
	Customer Ted	chnical Contact		
Installation Contact (for service delivery)		Operations/Technica	l Contact (after service delivery)	
Name:		Name:		
Telephone (O):		Telephone (O):		
Mobile:		Mobile:		
Email:		Email:		
Notification Mode: 24 Hours Daily	Hours (9am-5pm, Mon-Fri)	Notification Mode: 24 Hours Daily    Office Hours (9am-5pm, Mon-Fri)		
L2 VPN Service Port A (A – end)				
☐ New Order ☐ Modification Existing Service Port II	☐ Deactivation ☐ C O (Mandatory field unless New Ord	Others (Please specify):	☐ Hub port	
☐ Fast Ethernet UTP (100MBps) ☐ Gigabit Ethernet UTP(1Gbps) ☐ Environmental hardened NTE is required	☐ Residential ☐ Non-Resid	dential ☐ Non-Building Address	Point (NBAP)	
Service Port Installation Location Address: Postal Code:			Postal Code:	

# **Application Form**

# Layer 2 VPN Service (L2 VPN)



addressable room(e.g NBAP)			GPS Co-ordinate: Elevation above floor:			Description:		
Site Contact: Name:			Name:			Contact nu	ımber:	
			L2 VPN	Service Port	B (B – end)			
☐ New Order ☐ Modir Existing Service Port ID (Manda		Deactives New Orde		Others (F	Please specify): _ Hub po			
☐ Fast Ethernet UTP (100MBp	s)							
☐ Gigabit Ethernet UTP (1Gbp	s)			N. B. H. d.			D (NIDAE	
☐ Environmental hardened NT required	E is	Reside	entiai 📙	Non-Residential	☐ Non-Buildi	ng Address	Point (NBAF	')
Service Port Installation Location	on	Address:					Postal Cod	de:
Installation Location not within a addressable room(e.g NBAP)	1	GPS Co-o	ordinate: above floor:				Description	n:
Site Contact:		Name:					Contact nu	ımber:
				Instruction	ıs			
	Class A (Real Time), Class B (Near Real Time), Class C (Mission Critical) and			L2 VPN Connection option: Only 1 Class of Service per L2 VPN Connection Minimum subscription of 25Mbps per L2 VPN Connection Total subscribed bandwidth per connection is in blocks of 5Mbps				
			Con	nection Confi	guration			
Network protocol options			☐ L2 VLAN	N IEEE802.1q	☐ L2 VLAN	IEEE Q-in-C	Q	
☐ L2VPN Connection☐ EPL-Gigabit Connection			Class Of Service Symmetrical CIR Bar		ndwidth	VLAN information		
□ New    □ Modification     □ Deactivation     □ Existing Connection ID:	_			☐ Class B ☐ Class D	Bandwidth	:		VLAN :
				Contract Per	iod			
Minimum Term <sup>®</sup>	☐ 12 Month	ns [	☐ Others (PI	ease specify):				
Customer requested RFS date <sup>^</sup>								
NetLink Trust Appointment Date: Slot: AM ☐ PM ☐			РМ 🗆					
Nucleus Connect Appointment Date**#  Date:			Slot: AM ☐ PM ☐ E		EVENING <sup>®</sup> (After 5pm)□			
Additional Information								
Requires NetLink Trust to provide the cabling and ducting between the FTTB Node and 1st TP for the Non-Residential Building: Yes/No*  Others:								
^ Subject to agreement, resource	availahility an	d confirmat	ion by Nuclo	ic Connect				

We hereby agree to subscribe to the abovementioned services on the terms and subject to the conditions contained in the Master ICO Agreement and the Service Schedule for the abovementioned services, which terms and conditions shall apply upon Nucleus Connect's acceptance of this application. We certify that all information provided by us herein are true, correct and complete. Further, we agree that any cancellation of the abovementioned services may result in a charge to us at Nucleus Connect's prevailing rates.

A Subject to agreement, resource availability and confirmation by Nucleus Connect.

If Minimum Term is not specified, the Contracting QP shall be deemed to have selected 12 months.

Timeslot is not available on weekends and public holidays

NC Multiplier factor / NetLink Trust Onsite Charges shall apply accordingly.

 $<sup>^{\</sup>Omega}$  NetLink Trust appointment is required if there is a installation of a termination point

<sup>\*\*</sup> When there is a termination point installation, Nucleus Connect's appointment shall be no more than 3 Business Days after NetLink Trust's appointment date.

**Application Form**Layer 2 VPN Service (L2 VPN)



Signature of Authorised Officer	<u>Date</u>	Company Stamp
	For Nucleus Connect Use	
Application Rejected:	Reason for rejection:	
Application Accepted	Service ID/s:	Work Order No.:
No. of pages attached (Excluding application forms):	Approval code:	Processed by (Name, Contact, Signature and Date)