



**CONSULTATION DOCUMENT**

**INTERCONNECTION OFFER FOR THE PROVISION OF SERVICES ON THE  
NEXT GENERATION NATIONWIDE BROADBAND NETWORK - REVIEW OF  
OPENNET PTE LTD'S INTERCONNECTION OFFER**

**8 November 2011**

# INTERCONNECTION OFFER FOR THE PROVISION OF SERVICES ON THE NEXT GENERATION NATIONWIDE BROADBAND NETWORK SERVICE - REVIEW OF OPENNET PTE LTD'S INTERCONNECTION OFFER

## INTRODUCTION

1. The Next Generation Nationwide Broadband Network ("**Next Gen NBN**") is of strategic importance to drive Singapore's economic and productivity growth into the next decade. OpenNet Pte Ltd ("**OpenNet**"), the Network Company ("**NetCo**") selected to build, operate and maintain the passive infrastructure of the Next Gen NBN, plays a pivotal role in the implementation of the Next Gen NBN and IDA places significant emphasis on achieving a successful and effective implementation of the NetCo layer.
2. It has come to IDA's attention that operational issues have arisen relating to the implementation of Next Gen NBN, some of which concern the NetCo layer, such as more timely provision of the services to end-users. To address some of these issues effectively, it would require changes to be made to the NetCo Interconnection Offer ("**ICO**"). As it has been more than a year since commercial operation of OpenNet, IDA believes that a more holistic review of the ICO is necessary to take in all operational issues faced by various industry players in implementing the Next Gen NBN.
3. As part of the review, IDA has imposed the following additional obligations on OpenNet:
  - (a) to provide additional diversity services for its Mandated Services (e.g., exchange or Central Office diversity), on top of those already provided under its ICO, through a Customised Agreement; and
  - (b) to allow the grouping of two or more orders for Non-Residential End-User Connections and/or NBAP Connections into a single group order ("**Group Application**") such that the Group Application can be cancelled if OpenNet is not able to fulfil all or any of the orders under the Group Application, through a Customised Agreement.

## REVIEW OF NETCO ICO

4. As part of the ICO review, IDA has required OpenNet to propose certain changes to its ICO ("**IDA Initiated Changes**"). The list of IDA Initiated Changes can be found in Appendix 1. OpenNet has also proposed certain changes to its ICO ("**OpenNet Initiated Changes**"). The list of OpenNet Initiated Changes can be found in Appendix 2.
5. OpenNet has since submitted the proposed changes to its ICO ("**Draft Revised ICO**") to incorporate the changes (in paragraph 4) for IDA's approval. The contents of the Draft Revised ICO are as follows:
  - (a) Main Body of the ICO; and

(b) Schedules of the ICO:

Schedule 1	Residential End-User Connection;
Schedule 2	Non-Residential End-User Connection;
Schedule 3	NBAP Connection;
Schedule 4	CO to CO Connection;
Schedule 5	CO to MDF Connection;
Schedule 6	Building MDF Room to FTTB Node Connection;
Schedule 7	FTTB Node to DP Connection;
Schedule 8	Building MDF Room to Residential Premises Connection;
Schedule 9	Building MDF Room to Non-Residential Premise Connection;
Schedule 10	CO to NBAP DP Connection;
Schedule 11	NBAP DP to NBAP TP Connection;
Schedule 12	Co-location Service;
Schedule 12A	RL to RL Interconnection Service;
Schedule 13	Patching Service;
Schedule 14	OSS/BSS Connection & Professional Service;
Schedule 15	Charges;
Schedule 16	Billing;
Schedule 17	Dispute Resolution; and
Schedule 18	Dictionary.

6. IDA notes that OpenNet has proposed new charges under the Draft Revised ICO. IDA will separately review and approve these charges.
7. Separately, IDA is currently reviewing OpenNet's Co-location Supplementary Cooling Service and will publish its decision in due course. In this regard, IDA will not be including this section in this consultation and will not consider or address any comments in relation to the Co-location Supplementary Cooling Service.

## REQUEST FOR COMMENTS

8. Save as indicated in paragraphs above, IDA hereby invites interested parties to submit written comments regarding the Draft Revised ICO.
9. IDA requests that comments be presented in the following format:
  - (a) Description of the respondent and its interest in the proceedings;
  - (b) Summary of the respondent's position;
  - (c) General comments; and
  - (d) Views regarding specific provisions of the Draft Revised ICO.
10. In all comments, respondents should identify the specific provisions of the Draft Revised ICO (by paragraph/section number, where provided) to which comments are made. Where appropriate, respondents may suggest additional or alternative language, provided always that any such suggestions should be accompanied by an explanation of the reason for the proposal. All respondents are requested to keep their comments clear and succinct.
11. All views and comments should be submitted in writing in soft copies (preferably in Microsoft Word format) and shall reach IDA by **12 noon, 6 December 2011**.

For each set of comments, respondents are required to include their personal/company particulars as well as their correspondence address. Views and comments should be addressed to:

Ms Aileen Chia  
Deputy Director-General (Telecoms & Post)  
Infocomm Development Authority of Singapore  
10 Pasir Panjang Road  
#10-01 Mapletree Business City  
Singapore 117438

Please submit soft copies via email to: [IDA\\_Consultation@ida.gov.sg](mailto:IDA_Consultation@ida.gov.sg).

12. IDA reserves the right to make public all or parts of any written submissions made in response to this consultation, and to disclose the identity of the respondent. Any part of the submission which the respondent considers is commercially sensitive must be clearly marked and placed as a separate annex to the comments raised. IDA will take this into consideration when disclosing the information submitted.

## SUMMARY OF IDA INITIATED CHANGES

S/N	Area	IDA Initiated Changes
<b>End-User Connection</b>		
1	Service Activation Period (“ <b>SAP</b> ”)	To offer express Residential End-User Connections and Non-Residential End-User Connections based on a shorter SAP of one (1) business day.
2	Relocation of service (from one address to another address)	To allow relocation (so as to continue to service end-users who have moved to new locations) for Residential End-User Connections and Non-Residential End-User Connections without any Early Termination Charges and without any new contractual term.
3	Deactivation notification period	To reduce notification period for deactivating Residential End-User Connections and Non-Residential End-User Connections to no longer than the timeframe needed to activate connections (i.e., their respective SAP of three (3) business days and ten (10) business days).
4	Provision of Non-Residential End-User Connections - Improvement to long provisioning time	<p>To improve the current process in relation to the provision of Non-Residential End-User Connections to address issues related to long provisioning time for the Non-Residential End-User Connections.</p> <p>To promptly inform Requesting Licensees (“<b>RLs</b>”) of delays (including any change to the status of the delay) and to provide a revised completion date for the affected orders.</p>
5	Installation of additional Termination Points (“ <b>TPs</b> ”)	To offer to install additional/subsequent TPs.

S/N	Area	IDA Initiated Changes
6	Relocation of TP within the same premise	To offer relocation of TP within the same address for residential and non-residential premises.
7	Change of appointment time for the installation of TP	To provide a process to allow RL to change the appointment time for the installation of TP for residential premises.
8	Minimum contract term for connections to Non-Residential Premises and Non Building Address Points (“NBAPs”)	To offer additional services of shorter contract term of one (1) month for Non-Residential End-User Connection and NBAP Connection.
9	Classification of premises (non-residential premises versus NBAP)	<p>To provide a process to allow RLs to seek clarification on whether a particular location is considered a non-residential premise or NBAP prior to the submission of orders.</p> <p>To make OpenNet’s classification guidelines of such premises available (with appropriate examples).</p>
<b>Segment</b>		
10	Provision of optical power loss reading	To provide a process to allow RLs to request the optical power loss readings for segment services (i.e., Schedule 4 to Schedule 11).

S/N	Area	IDA Initiated Changes
<b>Co-location</b>		
11	Advanced notification for scheduled service interruptions at RL's co-location space	To provide RLs the details of any scheduled service interruption.
<b>General</b>		
12	Details related to scheduled service interruptions	To provide RLs the details of any scheduled service interruption.
13	Clarity on on-site charges	To clarify when on-site charges would be applicable.
14	"No fault found" situations	<p>To provide an investigation report to RLs when OpenNet imposes a "no fault found" charge on an RL.</p> <p>To propose objective criteria to determine a "no fault found" situation and a process clarifying how OpenNet would arrive at a "no fault found" conclusion.</p>
15	Fault investigation process	<p>To propose an outcome-based fault investigation process such that:</p> <p>(a) if a particular fault is due to OpenNet:</p> <p style="padding-left: 20px;">(i) No charge will be imposed on RL for RL's co-location space access ; and</p> <p style="padding-left: 20px;">(ii) No joint investigation charge will be imposed on RL;</p> <p>(b) if a particular fault is due to the RL:</p>

S/N	Area	IDA Initiated Changes
		(i) A charge may be impose on the RL for RL's co-location space access; and (ii) the joint investigation charge may be imposed on the RL.



## OPENNET INITIATED CHANGES

S/N	Area	OpenNet Initiated Changes
1	Safety Measures for Hoisting Process at Central Offices	To incorporate a set of measures to ensure safe working environment in the central offices.
2	Submission of Physical Access Application forms	<p>To stipulate that the notification timeframe for providing physical access escort service shall be based on business hours with the exception of physical access due to service-affecting emergencies.</p> <p>To also stipulate that the lead time for submission and cancellation of the request will be based on business hours.</p>
3	Power Upgrade	<p>To clarify that requests for the provision of additional power will be assessed on a case-by-case basis and that costs incurred for the provisioning of additional power will be recovered from the Requesting Licensee.</p> <p>To also clarify on the commonly available breaker sizes offered by industry players.</p>
4	Provision of Cable Tray	To incorporate drafting changes to align with COPIF requirements.
5	Connectivity Charges	<p>To incorporate connectivity charges for patching, patch removal, and re-patching of connections.</p> <p>To incorporate activation charges to service requests that require the use of the 2nd port in the installed 1st termination point.</p>

S/N	Area	OpenNet Initiated Changes
6	Damage to OpenNet's Network	<p>To stipulate that there will be no provisioning of service if any part of the fibre connection located in the end-user's premise is damaged.</p> <p>To also clarify that the cost for the repair of the damaged fiber connection shall be borne by the Requesting Licensee, which the Requesting Licensee may pass on to the End-User.</p>
7	Security Requirement	<p>To revise the security requirement of the Requesting Licensee (e.g., review on yearly basis and a higher security requirement of \$30,000 or three (3) times the Requesting Licensee's highest invoice).</p> <p>To revise the processing period for the return of the security requirement to the Requesting Licensee to fourteen (14) calendar days (instead of seven (7) calendar days).</p>
8	Notification of Acceptance of ICO	To reflect the process of accepting the notification of acceptance of ICO via online submission.
9	Cancellation Charge and Missed Appointment Charge for fault ticket	To impose a Cancellation Charge and Missed Appointment Charge for fault tickets.
10	Rejection Reasons	To clarify that OpenNet may reject a request if there is any breach of applicable regulatory requirements (e.g. COPIF) by the building owners/developers/management.
11	Deactivation clause (Schedule 3 to 11)	To replace the word "terminate" with "deactivate" for better clarity.

S/N	Area	OpenNet Initiated Changes
12	Classification of Premises, Definition of Resi and Non Resi Premises – Schedule 18 dictionary	To amend the current ICO definition to be aligned with the property classification in COPIF. Examples (non-exhaustive): <ul style="list-style-type: none"> <li>(i) Residential – to exclude service apartments and staff quarters</li> <li>(ii) Non Residential – to include service apartments and staff quarters</li> <li>(iii) In addition, to include Black and White Houses used for human habitation of residential nature under “Residential Premise”.</li> </ul>
13	Definition of Network under schedule 18	To amend the current definition of Network for better clarity.
14	Fault investigation process (Schedules 1 to 11)	To include words “where possible” in the clause relating to the measurement of optical power for each of three (3) wavelengths 1310nm, 1490nm and 1550nm for better clarity.
15	Request for Optical power reading clause (schedules 4 to 11)	To amend the clause relating to Requesting Licensee’s request for optical power reading for better clarity.
16	Daily Common Quota	To incorporate an enhanced daily common quota arrangement (i.e., OpenNet will process no more than 480 requests for Basic Mandated Services and Layer 1 Redundancy Services from all Requesting Licensees).
17	Fibre Handover Process	To propose the process on fibre handover to ensure a coordinated transfer of fibre connections between Requesting Licensees.  Together with the proposed changes to the deactivation notification period, the process should offer a seamless service handover for end-users when they change service provider.