

EXPLANATORY MEMORANDUM

1. This Explanatory Memorandum explains the Direction dated 7 August 2009, issued by the Info-communications Development Authority of Singapore (“**IDA**”) to OpenNet, directing it to incorporate modifications to its proposed additional NetCo ICO Schedule 12A - QP to QP Interconnection Service, Schedule 15 - Charges and Schedule 18 - Dictionary.
2. Unless the context requires otherwise, all capitalised terms used in this Explanatory Memorandum shall have the same meanings as in the ICO (including Schedule 18 - Dictionary).

Background

3. Pursuant to the requirements under the Next Generation National Broadband Network (“**NGNBN**”) NetCo Request for Proposal (the “**RFP**”), and in compliance with the NetCo Interconnection Code issued on 25 February 2009, OpenNet submitted to IDA for approval, its proposed ICO for the provision of services on the NGNBN. IDA issued a consultation paper titled, “Proposed Interconnection Offer and Model Confidentiality Agreement for the Provision of Services on the Next Generation National Broadband Network” on 25 February 2009, for the public to comment on OpenNet’s proposed ICO (“**25 February 2009 Public Consultation**”).
4. OpenNet subsequently submitted an additional proposed ICO schedule, namely, Schedule 12A - QP to QP Interconnection Service, as well as OpenNet’s proposed consequential changes to Schedule 15 - Charges and Schedule 18 - Dictionary to IDA for approval, to enable a NetCo Requesting Licensee to directly connect its co-located equipment to that of another Requesting Licensee who have successfully obtained co-location service within the same OpenNet’s Central Office.
5. IDA issued a consultation paper titled “Proposed Interconnection Offer for the Provision of Services on the Next Generation National Broadband Network – Additional Schedules” on the proposed ICO Schedule 12A, Schedule 15 - Charges and Schedule 18 - Dictionary (collectively the “**Additional ICO Schedules**”) on 8 June 2009, to elicit public comments in connection with IDA’s review of OpenNet’s proposed Additional ICO Schedules (“**8 June 2009 Public Consultation**”). At the close of the public consultation on 22 June 2009, IDA received comments from 2 respondents (namely, MobileOne Ltd and Nucleus Connect Pte Ltd). IDA expresses its appreciation for the comments received.

Scope of Proposed Additional ICO Schedules Review

6. For the review of OpenNet's proposed Additional ICO Schedules, IDA had adopted the same scope of review, including the guiding principles, as that set out in IDA's Explanatory Memorandum accompanying IDA's Direction on "IDA's Public Consultation on Proposed Interconnection Offer for the Provision of Services on the Next Generation National Broadband Network" to OpenNet dated 3 July 2009 ("**3 July 2009 Direction**"), requiring OpenNet to propose modifications to its proposed ICO for IDA's approval to give effect to IDA's required modifications.
7. Where the issues identified by IDA and/or the industry in the review of OpenNet's proposed Additional ICO Schedules are similar to those identified in the review of OpenNet's proposed ICO, IDA refers OpenNet to IDA's positions already set out in the Explanatory Memorandum accompanying the 3 July 2009 Direction. In this regard, this Explanatory Memorandum highlights IDA's position with respect to issues identified by IDA and/or the industry that are specific to OpenNet's proposed Additional ICO Schedules. In relation to the modifications that IDA is directing OpenNet to incorporate into its proposed Additional ICO Schedules, these are set out in the appendices to the Direction. IDA's specific requirements applicable to each schedule of the proposed Additional ICO Schedules are set out as annotations in the relevant schedule (see Appendices 1, 2 and 3 of the Direction). Finally, IDA will subsequently be requiring OpenNet to amend clauses 1.2(c) and 5.1 of Schedule 12 of the proposed ICO for consistency with IDA's proposed modifications to clauses 1.3(c) and 4.1 of the Schedule 12A of the proposed Additional ICO Schedules.
8. For the avoidance of doubt, IDA at all times reserves its rights to review and require changes to be made to the ICO, including the Additional ICO Schedules, in exercise of its statutory and regulatory powers, functions and duties, as IDA deems fit.

Issues

RL to RL Interconnection Service

9. IDA notes that the entities seeking the QP to QP Interconnection Service would be entities that have already submitted a Notification of Acceptance to OpenNet, namely, the Requesting Licensees ("**RLs**") under the ICO. In this regard, the appropriate term to describe the service contemplated in Schedule 12A would be "RL to RL Interconnection Service" instead of "QP to QP Interconnection Service".

Additional Service Configuration Option for RL to RL Interconnection Service

10. The industry has commented that OpenNet should avail RLs the additional option of interconnecting the RL's Co-Location Equipment by patching the OpenNet Fibre Distribution Frame ("FDF") connected to the first RL to the OpenNet FDF connected to the second RL, via a patch cable, as each RL is already connected to an OpenNet FDF via a Transmission Tie Cable (the "**Additional Option**"). In this case, the only applicable charge would be the patching charge. This would provide more flexibility and interconnection options to RLs.
11. IDA is of the view that in allocating OpenNet's network resources, including the ports on its FDF, OpenNet should accord priority to providing RLs with access to OpenNet's Layer 1 services for the provision of services to End Users. In this regard, a direct connection between the RLs' Co-Location Equipment via the RLs' FDFs (instead of via OpenNet's FDFs under the Additional Option proposed by the industry) as currently proposed in Schedule 12A should be the default option. Nevertheless, in limited situations where OpenNet is unable to directly interconnect the RLs' Co-Location Equipment due to constraints (e.g. capacity limitation in the cable trays between the RLs' FDFs), the Additional Option should be made available to the RLs.

Restriction on Use of RL to RL Interconnection Service

12. One respondent has commented that there should not be any restriction on RLs to use the RL to RL Interconnection Service only for the provision of service over the OpenNet network since RLs are only entitled to use this service if they are co-located within OpenNet's Central Office. The respondent opined that OpenNet should not be concerned with the purpose for which the RLs are interconnected.
13. Similar to the position stated in paragraph 11, IDA's position is that OpenNet should allocate its network resources, which in this case include the Co-Location Space and cable trays in OpenNet's Central Offices, towards the provision of services over the NGNBN. This position will help to avoid the situation whereby RLs who wish to provide services to End Users over OpenNet's network are being denied due to capacity constraints. In any case, RLs who wish to be interconnected for purposes other than for the provision of services over the OpenNet network may do so via other alternatives (e.g. interconnecting at their own central offices and third party data centres, etc).

Service Level Guarantee

14. One respondent has commented that the respective Service Level Guarantee for the completion of Project Study and Site preparation

Work in the proposed ICO Schedule 12A are too low and are below industry practice. The respondent believed that the proposed Service Level Guarantees do not create incentives for OpenNet to meet the timeframes for completing the Project Study and Site Preparation Work.

15. IDA is of the view that the Service Level Guarantees under OpenNet’s ICO must be appropriate to ensure OpenNet meet its service commitments to the RLs. In this regard, IDA agrees with the respondent that the existing levels in the proposed ICO Schedule 12A may be too low to achieve the desired outcomes. After careful consideration, IDA considers the following Service Level Guarantee quantum to be appropriate and yet not unduly burdensome on OpenNet:

Missed timeframe for completion of Project Study by:	Rebate
1-30 Calendar Days	Number of days of delay x (50% of Project Study Fee) / 30
More than 30 Calendar Days	50% of Project Study Fee
Missed timeframe for completion of Site Preparation Work by:	Rebate
1-30 Calendar Days	Number of days of delay x (50% of Site Preparation Charge) / 30
More than 30 Calendar Days	50% of Site Preparation Charge

Conclusion

16. In conclusion, IDA assures the industry it will be subjecting the ICO prices, timelines, processes, terms and conditions to review from time to time, and that as the NGNBN matures, IDA will ensure the ICO continues to be relevant to the industry and the prevailing market conditions in Singapore.