



**CONSULTATION PAPER ISSUED BY  
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**PUBLIC CONSULTATION ON THE  
SECOND REVIEW OF SINGAPORE TELECOMMUNICATIONS LIMITED'S  
REFERENCE INTERCONNECTION OFFER**

**21 January 2011**

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## CONSULTATION DOCUMENT

### PUBLIC CONSULTATION ON THE SECOND REVIEW OF SINGAPORE TELECOMMUNICATIONS LIMITED'S REFERENCE INTERCONNECTION OFFER ("RIO")

21 January 2011

#### PART I: INTRODUCTION

- 1 Under the Telecom Competition Code ("**Code**"), a Licensee that seeks to obtain Interconnection Related Services ("**IRS**") and Mandated Wholesale Services ("**MWS**") from a Dominant Licensee may do so via 3 options<sup>1</sup>. In this regard, Singapore Telecommunications Limited's ("**SingTel**") Reference Interconnection Offer ("**RIO**") sets out IDA-approved prices, terms and conditions for other Licensees to interconnect with and access SingTel's network. While IDA encourages Licensees to enter into Interconnection Agreements through commercial negotiations, the RIO aims to facilitate the rapid adoption of Interconnection Agreements between SingTel and other Licensees, by presenting a standard agreement for which the parties need not expend material time and resources for further negotiations.
- 2 Following the conclusion of IDA's second review of the Code, where the revised Code ("**Code 2010**") came into effect on 21 January 2011, IDA intends to ensure that SingTel's RIO is aligned with the requirements of Code 2010 and that the services, including the associated terms and conditions, provided under SingTel's RIO remain relevant to the requirements of the industry.
- 3 In addition, the telecom landscape in Singapore has witnessed several significant developments since the last review of SingTel's RIO in 2005. These include the entry of new mandated wholesale operators such as OpenNet Pte Ltd and Nucleus Connect Pte Ltd as part of the Next Generation Nationwide Broadband Network ("**NGNBN**") project; the finalisation of the interconnection framework for conveyance of call traffic involving VoIP operators resulting in the entry of these operators; and the acquisition of level 6 numbers by more facilities-based operators for the provision of fixed-line telecommunication services.
- 4 Taking into account the above developments, IDA has identified several key issues that may have significant implications on the relevance and scope of SingTel's RIO going forward. IDA would like to hear the industry's views and comments on these issues before commencing the review of the RIO, i.e., by requiring SingTel to submit a proposed revised RIO.

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<sup>1</sup> Via a RIO Agreement; pursuant to an existing Interconnection Agreement; or pursuant to an Individualised Interconnection Agreement.

- 5 For the avoidance of doubt, pursuant to Sub-section 6.3.6 of Code 2010, IDA will conduct a separate public consultation on SingTel's subsequent proposed revised RIO.

## **PART II: IDA'S PROPOSED POSITIONS ON THE KEY ISSUES TO BE ADDRESSED IN THE SECOND REVIEW OF THE REFERENCE INTERCONNECTION OFFER**

### **SECTION 1 – Access to Co-Location Space at Submarine Cable Landing Stations (“SCLS”)/ Frontier Stations and Local Exchange Buildings**

- 6 Currently, SingTel's RIO prescribes that for access to Co-Location Space at SCLS/ Frontier Stations to be granted, a Requesting Licensee (“RL”) must be one of the following:
- a) an Indefeasible Rights of Use (“IRU”) holder to access acquired capacity in the relevant Cable System;
  - b) a holder of Long Term Leased Capacity to access leased capacity in the relevant Cable System; and/or
  - c) a cable owner of the landed submarine cable system to access its own capacity in the relevant Cable System.
- 7 In other words, an RL may only access and deploy its own backhaul facilities to a SingTel SCLS if it has capacity in a cable system landed at that SCLS. The conditions were put in place due to earlier considerations that co-location space in the SCLS might be limited. Thus, priority for co-location space was given to RLs who need to access their own submarine cable capacity<sup>2</sup> and were willing to deploy their own backhaul facilities, as opposed to other third party operators who may wish to access an SCLS solely for the provision of backhaul services from that SCLS. IDA notes that to date there are less than 10 Licensees who have accessed and deployed backhaul facilities to SingTel's SCLS.
- 8 While co-location space in SingTel's SCLS may still be a finite resource today, IDA believes that the significant investments necessary for deployment of backhaul connectivity to the SCLS will safeguard against inefficient network rollout and taking up of co-location space. Furthermore, allowing third party operators without submarine cable capacity of their own into SingTel's SCLS, to build backhaul connectivity for the purpose of allowing other operators to access submarine cable capacity, will facilitate an even more competitive backhaul market in Singapore. Although IDA has determined in June 2009 that the application of ex-ante dominant licensee obligations on SingTel was no longer necessary in the backhaul market, IDA believes that the above proposed move will further ensure that international connectivity costs in Singapore remain competitive compared to other markets. This in turn will likely enhance the competitiveness of downstream services that require international connectivity as an input

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<sup>2</sup> In 2004, IDA amended the RIO to allow RLs who have already co-located at a particular SCLS to access the capacity of other operators landed in the same SCLS. However, the key consideration remains that RLs must have accessed the SCLS for its own capacity first.

such as broadband access services. Moreover, if co-location space is available at the SCLS, there are no objective reasons for denying access to facilities-based operators who wish to build local connectivity infrastructure to further facilitate access to these hard-to-replicate facilities.

- 9 Last but not least, allowing third party operators access to SingTel's SCLS may also promote more efficient use of the resources associated with network deployment to the SCLS (e.g., co-location space, lead-in pipes and in-building trunking). For instance, instead of having to obtain lead-in pipes and co-location space for its own backhaul facilities, a licensee could share or use those deployed by another licensee to access its cable capacity.
- 10 On a related note, notwithstanding that IDA has clarified in the review of Code 2010 that it would not be necessary to pre-designate all SCLS (including non-SingTel SCLS) as Critical Support Infrastructure, IDA will continue to monitor market conditions and where appropriate, review the need for pre-designation.

*(1a) IDA invites views and comments on:*

- i) Whether IDA should allow third party operators to access SingTel's SCLS for the sole purpose of building backhaul connectivity and providing backhaul services to allow other operators to access submarine cable capacity;*
- ii) Whether the RIO should still retain some form of priority for Licensees who have their own submarine cable capacity and wish to deploy their own backhaul facilities. If yes, whether there will be administrative difficulties and how these (if any) may be addressed appropriately; and*
- iii) Whether there are any other benefits and costs that may be brought about by such a measure, which IDA should be aware of and should take into consideration.*

- 11 Similarly, SingTel's RIO currently provides access to SingTel's local exchanges only to RLs who need to co-locate for the purpose of establishing a point of interconnection for conveyance of traffic (via Schedule 8A Co-location for Point of Interconnection), or for the purpose of accessing unbundled network elements and services such as local loops, sub loops, shared lines and tail local leased circuits (via Schedule 8B Co-location for Point of Access).

- 12 IDA believes that for similar reasons as set out in paragraphs 7 to 9 above, third party operators who wish to build local connectivity to SingTel's local exchanges and provide local connectivity services to other operators for the purpose of interconnection and accessing unbundled network elements and services should be allowed. Moreover, IDA had determined in June 2009 that several markets for local connectivity services such as the LLC and Local Managed Data Services markets are not subject to effective competition. Hence, IDA believes that the proposed move will further facilitate and enhance competition in these markets. Moreover, if co-location space is available at the local exchanges, there are no objective reasons for denying access to facilities-based operators who wish to build infrastructure to further facilitate access to these hard-to-replicate facilities.
- 13 On a related matter, IDA views that the grant of access to SingTel's local exchanges could also be reasonably extended to operators who require such access not for the purpose of obtaining services under the RIO, but to obtain mandated services offered by other Licensees which will require specific access to SingTel's local exchanges. For example, Licensees who wish to deploy their own facilities to access OpenNet's co-location service can do so only via access to certain specific SingTel local exchanges<sup>3</sup>. While the Licensees may not require co-location space from SingTel per se, they will require access to lead-in ducts and associated manholes of SingTel's local exchanges, together with the necessary routing and trunking facilities within the exchanges, for which IDA views there are no practical or viable alternatives.

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<sup>3</sup> Ang Mo Kio Telephone Exchange, Ayer Rajah Telephone Exchange, Bedok Telephone Exchange, Bukit Panjang Telephone Exchange, East Exchange, Jurong West Telephone Exchange, Orchard Telephone Exchange, Tampines Telephone Exchange, Tuas Telephone Exchange

*(1b) IDA invites views and comments on:*

- i) Whether IDA should allow third party operators who wish to build local connectivity to SingTel's local exchanges for the sole purpose of providing connectivity services for other operators co-located at SingTel's local exchanges for interconnection and accessing unbundled network elements and services;*
- ii) Whether IDA should allow third party operators who wish to build local connectivity to SingTel's local exchanges, for the purpose of accessing other operators' mandated services which will require access to SingTel's local exchanges*
- iii) Whether the RIO should still retain some form of priority for Licensees who have co-located at SingTel's local exchanges and wish to deploy their own connectivity facilities. If yes, whether there will be administrative difficulties and how these (if any) may be addressed appropriately; and*
- iv) Whether there are any other benefits and costs that may be brought about by such measures, which IDA should be aware of and should take into consideration.*

## **SECTION 2 – Removal of Number Portability Service Schedule from SingTel's RIO**

- 14 Since the publication of SingTel's RIO in 2001, the fixed-line voice communication services market in Singapore has evolved into a multi-player market, where end users have a wide choice as to which service provider they would like to subscribe to for their fixed line voice services. Against this backdrop of a multi-player market, new and existing fixed line voice service providers will likely have to engage in multi-party arrangements in order to offer fixed number portability services to their subscribers. In other words, IDA views that it may no longer be sufficient for any service provider to simply enter into the number portability schedule under SingTel's RIO, as the Donor Network Operator or Recipient Network Operator need not necessarily be SingTel alone. Other than SingTel having also raised this matter earlier<sup>4</sup>, IDA notes that there has been no take-up for this said schedule and that existing operators have effected number portability services among themselves via commercial agreements.

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<sup>4</sup> SingTel's submission on the Second Public Consultation on the Second Triennial Review of the Code of Practice for Competition in the Provision of Telecommunication Services dated 18 January 2010.

- 15 In addition, IDA views that there may be merit in the development of industry advisory guidelines, over and above the existing number portability obligations imposed under the various licence conditions, to provide guidance to new and existing fixed line voice service providers on their negotiations for multi-party number portability arrangements, including processes and procedures, timeframes and broad pricing principles.

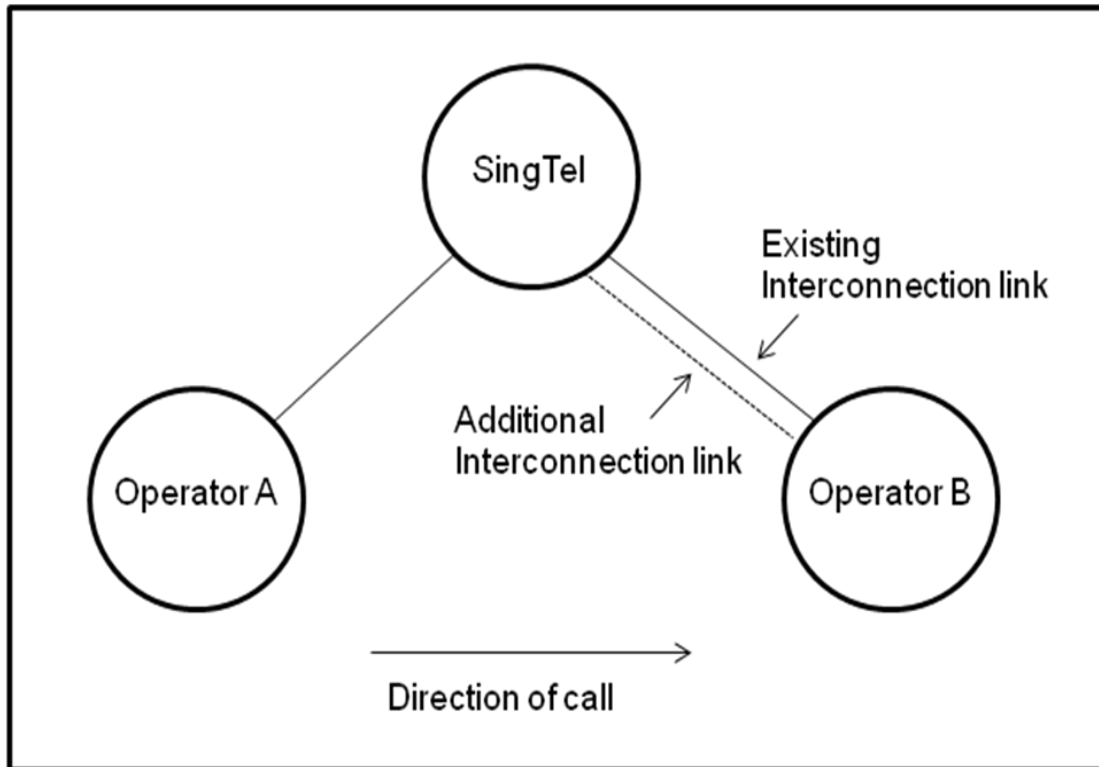
*(2) IDA invites views and comments on:*

- i) Whether it will be appropriate to remove the number portability service from SingTel's RIO; and*
- ii) IDA's proposal to develop advisory guidelines for multi-party number portability service arrangements, and the specific issues (if any) that the guideline should address.*

### **SECTION 3 – Provision of transit services in the event of insufficient interconnect link capacity**

- 16 Currently, as specified in Appendix 2 of Code 2010, SingTel is required to offer transit services, between Licensees interconnected at its interconnect gateway switches (“**IGS**”), under its RIO. However, SingTel's RIO currently does not specify clearly whether SingTel's obligation to convey such transit traffic will still apply in the event the existing interconnection link(s) between SingTel and the terminating party reaches full capacity (Refer to Diagram 1 below for illustration).
- 17 IDA views that SingTel's obligation to convey transit traffic should still apply, and that SingTel should procure additional link capacity in the said circumstance. This is in consideration that the alternative for other Licensees will be via direct interconnection with each other or transit via another Licensee, which may be unjustifiable economically should traffic volumes between them and the 3<sup>rd</sup> party Licensee be low. That said, it is also only reasonable that SingTel should be allowed to recover the additional costs it would incur to procure additional link capacity for the conveyance of such transit traffic.





**Diagram 1: Illustration of transit call scenario with licensees interconnected at SingTel's IGS**

*(3) IDA invites views and comments on:*

*i) Whether SingTel's RIO should prescribe that SingTel should be responsible for procuring additional link capacity for the conveyance of transit traffic; and*

*ii) If so, what would be an appropriate mechanism to allow SingTel to recover the reasonable costs of doing so.*

**PART III: PROCEDURE AND TIMEFRAME FOR SUBMITTING COMMENTS**

- 18 IDA would like to seek the views and comments from the industry on the above proposed key issues, i.e. Section 1 to Section 3. All submissions should be clearly and concisely written.
- 19 All submissions should reach IDA by **5pm, 21 February 2011**. Comments must be submitted in both hard and soft copy (in Microsoft Word or PDF format). All comments should be addressed to:

**Aileen Chia (Ms)**  
**Deputy Director General (Telecoms & Post)**  
**Infocomm Development Authority of Singapore**  
**8 Temasek Boulevard**  
**#14-00 Suntec Tower Three**  
**Singapore 038988**  
**Fax: (65) 6211 2116**

Please submit your soft copies, with the email header "Public Consultation on the Second Review of Singapore Telecommunications Limited's Reference Interconnection Offer", to this e-mail: **IDA\_Consultation@ida.gov.sg**.

- 20 IDA reserves the right to make public all or parts of any written submission and to disclose the identity of the source. Commenting parties may request confidential treatment for any part of the submission that the commenting party believes to be proprietary, confidential or commercially sensitive. Any such information should be clearly marked and placed in a separate annex. If IDA grants confidential treatment, it will consider (but will not publicly disclose) the information. If IDA rejects the request for confidential treatment, it will return the information to the party that submitted it and will not consider this information as part of its review. As far as possible, parties should limit any request for confidential treatment of information submitted. IDA will not accept any submission that requests confidential treatment of all, or a substantial part, of the submission.