

SINGAPORE TELECOMMUNICATIONS LIMITED

RESPONSE TO IDA CONSULTATION PAPER

HANDOVER OF TAIL LOCAL LEASED CIRCUITS (“TLLC”) UNDER SCHEDULE 7B OF SINGAPORE TELECOMMUNICATIONS LIMITED’S REFERENCE INTERCONNECTION OFFER (“RIO”)

1. In this submission, Singapore Telecommunications Limited (**SingTel**) comments on the *Consultation Paper: Handover of Tail Local Leased Circuits under Schedule 7B of Singapore Telecommunications Limited’s Reference Interconnection Offer*, issued by the Info-communications Development Authority of Singapore (**IDA**) on 4 July 2005 (**Consultation Paper**).

2. SingTel’s submission is structured in the following parts:

Section A	SingTel’s concerns about the Consultation Paper;
Section B	SingTel’s clarifications in relation to Schedule 7B of the RIO;
Section C	SingTel’s comments on the IDA’s views on the Existing Handover Configuration;
Section D	SingTel’s comments to the IDA-proposed Direct Handover Configuration;
Section E	SingTel’s comments to Implementation Issues associated with the Direct Handover Configuration; and
Section F	Conclusion.

3. All capitalised terms have the same meaning as defined in the Telecom Competition Code 2005 (**Code 2005**), RIO or the Consultation Paper.

SECTION A – SINGTEL’S CONCERNS ABOUT THE CONSULTATION PAPER

4. As the IDA is aware, the issue of the configuration was identified and raised in representations by interested parties to the IDA during the public consultation on the designation of LLCs as a Mandatory Wholesale Service and consequent amendments to the SingTel RIO in 2004.
5. SingTel has a legitimate expectation that the IDA would adhere to decisions that it had made only recently. With reference to paragraph 4 of the Consultation Paper, it is clear that the IDA received private submissions on this matter subsequent to the public consultation. Private representations are likely to be self-serving.
6. In fact, it is fair to say that all the issues surrounding the provision of SingTel LLCs as a mandatory wholesale service have been the subject of the most intensive public consultation and scrutiny of any other regulatory decision.
7. SingTel is concerned that decisions can be put up for review, and possibly, reversed a short time after being made arising from private representations received by the IDA.
8. While the time for reviews and appeals has now expired in relation to those previous decisions, SingTel submits that the negotiation of individualised interconnect agreements by those parties who have made the private representations is the available option under the Code. The IDA should terminate this consultation and allow the relevant parties to negotiate such an agreement. Nevertheless, SingTel has commented on the IDA’s proposals contained in the Consultation Paper below.

SECTION B – SINGTEL’S CLARIFICATIONS IN RELATION TO SCHEDULE 7B OF THE RIO

9. SingTel would briefly like to provide clarifications with regard to certain aspects of the Schedule 7B of the RIO.
10. With reference to paragraph 4 of the Consultation Paper, SingTel clarifies that Annex 7B-4 of the RIO provides that V.35 is the default interface standard for 64kbps to 1984kbps TLLC, instead of 64kbps to 1536kbps TLLC as indicated.
11. Similarly, with reference to paragraph 5 of the Consultation Paper, SingTel clarifies that V.35 is the default interface standard for 1536kbps and 1984kbps TLLC, and not

the G.703 interface standard. The G.703 interface standard is merely an alternative interface standard, which is subject to availability.

SECTION C – SINGTEL’S COMMENTS ON THE IDA’S VIEWS ON THE EXISTING HANDOVER CONFIGURATION

12. SingTel has the following detailed comments on the IDA’s views on the Existing Handover Configuration:

- the NTU does not impose unnecessary and unjustified costs on the Requesting Licensee;
- concerns regarding Co-Location Space are unfounded; and
- technical adequacy of the NTU.

(a) The NTU does not impose unnecessary and unjustified costs on the Requesting Licensee

13. SingTel submits that the Network Termination Unit (“NTU”) does not impose unnecessary and unjustified costs on the Requesting Licensee. SingTel also rejects the application of the description “intermediary” on the NTU.

14. The NTU is not intermediary equipment. Rather, it is a standard and integral component necessary to deliver n x 64 kbps data service. Without the NTU, the TLLC would not be a data service with the same transmission characteristics as that which SingTel supplies to its End Users.

(b) Unfounded concerns regarding Co-Location Space

15. The IDA’s concerns regarding Co-location Space are entirely unfounded. In the approximately five (5) years that co-location space in SingTel exchanges has been offered, there has been no instance where co-location space was not available.

16. As the IDA is aware, the IDA has required that in the event of any co-location space constraints in SingTel’s exchanges, SingTel must allow virtual (distant) co-location where an FBO can locate its equipment in a nearby building and connect to the SingTel network.

17. IDA's stated concerns are therefore unjustified. Notwithstanding that there has been no instance where co-location space was not available, this concern has already been adequately addressed in the Code 2005, the IDA Decision and the SingTel RIO.

(c) **Technical Adequacy of the NTU**

18. Please refer to SingTel's comments above. SingTel reiterates that the NTU is not an "additional network element" which SingTel had "introduced".

19. SingTel does not see why additional equipment compatibility testing may be necessary prior to the handover and activation of circuits by the NTU when the Requesting Licensee could acquire the NTU from SingTel. In any event, where the Requesting Licensee intends to acquire its own brand of NTU, it would only require equipment compatibility testing prior to the first instance of the handover and activation of circuits by that brand of NTU. Therefore, SingTel submits that there is no genuine concern with regard to the issue of equipment compatibility testing for the NTU as the equipment compatibility test would only have to be conducted once.

20. SingTel rejects the IDA's assertion in paragraphs 6(c) and 9(b) that the use of the NTU would result in more potential points for network failure and in turn require more complex fault identification and restoration work in the event of circuit failures. Instead, SingTel submits that NTU provides a clear point of demarcation between the SingTel network and the FBO's network. The NTU facilitates fault rectification and testing as it enables SingTel to test up to the NTU in the End User premises or the Co-Location Space, as the case may be. In the event of a fault, the network would be able to identify fault more accurately and in a shorter timeframe. In fact, SingTel cannot fully manage the TLLC service without the NTU.

21. Furthermore, the NTU is a necessary component of the network in SingTel's provision of the retail LLC services. In fact, the NTU ensures that SingTel is able to provide the relevant LLC in accordance with the service specifications. SingTel submits that thousands of Local Leased Circuits have been provisioned by SingTel under its retail services and SingTel has not experienced more potential points of failure and complications in identifying and restoring faults in circuits as a result of the deployment of the NTU.

SECTION D – SINGTEL’S COMMENTS TO THE IDA-PROPOSED DIRECT HANDOVER CONFIGURATION

22. SingTel has the following detailed comments on the IDA-proposed Direct Handover Configuration raised in the Consultation Paper:

- non-discriminatory application of the Existing and Direct Handover Configuration; and
- feasibility of the Direct Handover Configuration as an alternative to the Existing Handover Configuration.

Non-discriminatory application of the Existing and Direct Handover Configuration

23. The default interface standard for n x 64 kbps TLLC, as specified in Annex 7B-4 of Schedule 7B of the RIO, is no different from what SingTel provides to its End Users under its retail services – the V.35 interface standard, which is provided through the deployment of the NTU.

24. Further, the transmission characteristic of SingTel access equipment is not in the form of data streams. The NTU acts as a network interface necessary to convert this transmitted signal into n x 64 kbps data service using the V.35 interface that is the most common input to the End User equipment.

25. Given SingTel’s obligations to provide the mandatory wholesale LLCs to the Facilities-based Licensees that are of the same quality and capable of supporting the same transmission characteristics as those that SingTel supplies to its End Users, SingTel submits that it is providing the service under Schedule 7B on a non-discriminatory basis and SingTel rejects the implication in paragraph 9(a) of the Consultation Paper that the Existing Handover Configuration is discriminatory whereas the Direct Handover Configuration is not.

Feasibility of the Direct Handover Configuration as an alternative to the Existing Handover Configuration

26. With respect to the feasibility of the Direct Handover Configuration as an alternative to the Existing Handover Configuration, SingTel believes that direct connection between SingTel access equipment and a Requesting Licensee’s access equipment at the Co-Location Space is feasible. Currently, SingTel deploys the Tellabs ® 8100.

The Requesting Licensee may deploy the Tellabs ® 8100 with HCQ cards to interface with the SingTel Tellabs ® 8100. We have also confirmed this with our vendor.

SECTION E – SINGTEL’S COMMENTS TO IMPLEMENTATION ISSUES ASSOCIATED WITH THE DIRECT HANDOVER CONFIGURATION

27. Notwithstanding the fact that SingTel does not agree that there exists any implementation difficulties associated with the Existing Handover Configuration for n x 64kbps circuits under Schedule 7B of the RIO, SingTel provides our comments on the implementation issues associated with the Direct Handover Configuration as follows.

Redefinition of the Point of Access

28. As submitted above, the NTU is a necessary component to be installed at the Requesting Licensee's co-location site for SingTel to provide and manage the TLLC service. Without the NTU, SingTel is unable to manage the TLLC service up to Point of Access at the co-location site before the Requesting Licensee’s Co-location Equipment. The deployment of the Direct Handover Configuration does not allow SingTel to manage the TLLC service beyond its Tellabs ® 8100 equipment. As such, in the absence of an NTU, SingTel can only manage the TLLC service up to SingTel’s Tellabs ® 8100 equipment. The Point of Access for the TLLC service would need to be redefined to be at the Requesting Licensee’s side of the SingTel Tellabs ® 8100 equipment. These issues would need to be dealt with in a review of the terms and conditions for the provision of TLLC should the IDA adopt the Direct Handover Configuration.

Requesting Licensee must purchase and maintain its own Tellabs ® 8100 equipment

29. The Requesting Licensee must purchase and maintain its own equipment, in this case, the Tellabs ® 8100 equipment and the relevant HCQ cards.

SingTel’s unrestricted ability to upgrade its network

30. SingTel must not be unjustly restricted or prevented from upgrading its network as a result of the implementation of the Direct Handover Configuration. SingTel must retain the sole rights to specify the vendor, the equipment configuration as well as the software and hardware version. SingTel will advise the Requesting Licensee the software version and hardware model and any changes to the software version and

hardware model from time to time. Requesting Licensee must be solely responsible for its cost in upgrading its equipment to ensure that it is compatible and can work with the SingTel's equipment.

Trials and additional issues in relation to the Direct Handover Configuration

31. We would also highlight that SingTel has no previous experience in the implementation of the Direct Handover Configuration using the Tellabs ® 8100 equipment and the HCQ cards.
32. Should the IDA require SingTel to provide for the Direct Handover Configuration, a Requesting Licensee who wishes to implement the Direct Handover Configuration must unreservedly acknowledge that SingTel shall not be responsible or liable for any degradation in the quality of service provided as a result of implementing the Direct Handover Configuration. Further, suitable trials should be put in place to implement the Direct Handover Configuration.

SECTION F – CONCLUSION

33. SingTel believes that the Consultation Paper undermines commercial and regulatory certainty. The Existing Handover Configuration which was the determined following extensive public consultation should be retained.
34. SingTel submits that the IDA should allow the processes under the Code to run the normal course. In this case, Requesting Licensees should be required to negotiate individualised interconnection agreements to cover any alternative configurations.
35. SingTel also submits that the Existing Handover Configuration is not economically and technically inefficient. In fact, SingTel cannot fully manage the TLLC service without the NTU. The NTU does not impose unnecessary and unjustified costs on the Requesting Licensee. In addition, the concerns regarding equipment compatibility tests and Co-Location Space are unfounded.
36. If, however, the Direct Handover Configuration is adopted, then SingTel submits that there would be a need to review the terms and conditions for the provision of TLLC to address the issues identified in Section E above. Also, SingTel submits that a suitable trial period should be allowed to cover any implementation issues.