

**SCHEDULE 1 TO IDA'S DECISION PURSUANT TO SECTION 69(6) OF THE
TELECOMMUNICATIONS ACT (CHAPTER 323) AND SUB-SECTION 11.9.2(b) OF
THE TELECOM COMPETITION CODE 2005 IN RELATION TO SINGTEL'S
RECONSIDERATION REQUEST DATED 13 JANUARY 2006**

1. SingTel requested IDA to reconsider certain aspects of its 30 December 2005 Direction.
2. The grounds of SingTel's request may be summarised as follows:
 - a. It is necessary to make a distinction between point-to-multipoint ("PTMP") and point-to-point ("PTP") circuits – the former involves grooming of multiple individual circuits into a single 1984 kbps circuit, whereas the latter does not require grooming because each side of the circuit is of equal bandwidth and therefore does not need to be groomed into a larger aggregated circuit in order to be handed over to the Requesting Licensee ("RL").
 - b. The proposal to distinguish between an A-end link and a B-end link provides clarity because it differentiates the end that connects the End User and the other end that connects to the co-located equipment of the RL.
 - c. The B-end link is integral to a PTMP circuit. SingTel is entitled to recover a charge for providing the B-end link to the RL.
 - d. Provision of tie-cables is not relevant to the charges that SingTel imposes under Schedule 7B. Provisioning of tie-cables is a separate process to grooming that occurs under Schedule 8B and therefore has no relationship to the charges in respect of services provided under Schedule 7B.
3. IDA's Decision on Reconsideration is to confirm its 30 December 2005 Direction in full and the grounds are set out below. In arriving at its Decision on Reconsideration, IDA carefully reconsidered the directed requirements that SingTel raised in its Reconsideration Request, the requirements of the Code 2005 and IDA's policy principles underpinning the Code 2005.

Distinction between A-end Link and B-end Link

4. Amongst others, SingTel proposed to change the description of the underlying TLLC circuits by renaming the circuit connecting the End User's site the "A-end link" and the circuit connecting the RL's co-located equipment the "B-end link".
5. IDA's 30 December 2005 Direction rejected this proposal.
6. SingTel requested IDA to reconsider this aspect of the 30 December 2005 Direction. SingTel argued that A-end links and B-end links were introduced into Schedule 7B of the Reference Interconnection Offer ("RIO") so that it

would be clear which side of the circuit was connected to the End User and which would be connected to the RL's co-located equipment. SingTel also argued that the description in this manner is analogous to the tail and trunk circuits under Schedule 7A – by grooming tail circuits, the tail circuits would be “effectively aggregated into a trunk circuit inside of SingTel's exchange building”. SingTel also added that grooming was not possible in the absence of the 1984 kbps B-end link because the B-end link was the aggregation point in the groomed circuit.

7. After careful consideration, IDA rejects SingTel's submission.
8. First, IDA is not satisfied that it is necessary to adopt the manner in which SingTel proposes to distinguish between the side of the circuit that is connected to the End User and the side which is connected to the RL's co-located equipment. IDA reiterates its position that the additional offering of handover using the G.703 interface standard with grooming does not change the existing technical set-up in any way so as to justify SingTel's proposal. An existing TLLC, whether groomed or ungroomed, comprises the same two elements (a circuit connecting to the End User's site and another to the RL's co-located equipment).
9. Secondly, in relation to SingTel's use of the terms “A-end link” and “B-end link”, its: (a) claim that these are analogous to tail and trunk circuits under Schedule 7A; and (b) argument that grooming effectively aggregates the tail circuits into a trunk circuit inside SingTel's exchange building, are both misleading. In the case of TLLCs, the circuit that SingTel ascribes as a B-end Link is only a connection circuit from SingTel's TLLC equipment to the RL's co-located equipment within SingTel's exchanges. On the other hand, in the case of full LLCs (“**FLLCs**”) under Schedule 7A, the reference to “B-end links” or “trunk circuits” describes circuits linking SingTel's exchange building to the RL's exchange building, not just between SingTel's TLLC equipment and the RL's co-located equipment within SingTel's exchange buildings. Hence, it is clearly inappropriate to equate a “B-end link”/“trunk circuit” under Schedule 7A to a connection circuit between SingTel's and the RL's TLLC equipment under Schedule 7B.
10. Thirdly, SingTel's argument that grooming is not possible in the absence of the 1984 kbps B-end link connecting SingTel's and the RL's TLLC equipment is also misleading. Currently, for all TLLCs, SingTel already provides a connection circuit to connect SingTel's and the RL's TLLC equipment. Its obligation to provide grooming does not require it to provide a circuit that is any different from the connection circuits that it currently uses. Therefore, the 1984 kbps B-end link referred to by SingTel (in the case where it performs grooming) is the same network element that SingTel currently provides anyway. In other words, SingTel is not providing any new network element or circuit.

Distinction between PTP circuits and PTMP circuits

11. Another change in description of the underlying circuit proposed by SingTel was its introduction of, and distinction between, the concepts of PTP and PTMP circuits.
12. IDA's 30 December 2005 Direction also rejected this proposal.
13. SingTel requested that IDA reconsider this aspect of its 30 December 2005 Direction. SingTel's basis for its reconsideration request is that IDA's 19 October 2005 Direction introduced the requirement that SingTel hand over TLLCs with grooming at the G.703 interface standard, and that this was a new service under Schedule 7B of the RIO so it was necessary to distinguish it from the existing service which does not involve grooming.
14. After careful consideration, IDA rejects SingTel's submission.
15. First, as mentioned in paragraph 8 above, an existing TLLC comprises two elements - a circuit connecting to the End User's site and another to the RL's co-located equipment. In the case of multiple circuits to multiple End User sites, this remains unchanged. Each of those circuits to an End User site still comprises the same two elements. The only difference is that rather than having a same corresponding number of connecting circuits to the RL's co-located equipment, these multiple circuits are aggregated into circuits of 1984 kbps each.
16. Secondly, in relation to SingTel's claim that its provision of the G.703 interface standard with "grooming" constitutes a new service, IDA reiterates that the 30 December 2005 Direction only required SingTel to offer the RLs the alternative handover option of the G.703 interface standard with grooming. Clearly, the basic underlying service offered to RLs remains that of a TLLC and IDA fails to see how this requires SingTel to introduce an underlying new service (please also see paragraph 10 above).
17. Thirdly, as with the case of "A-end links" and "B-end links", the reference to "PTP" and "PTMP" circuits is confusing. This is because SingTel currently offers both PTP and PTMP FLLCs under Schedule 7A of its RIO. However, unlike TLLCs which refer to circuit connections between End Users' sites and SingTel's exchange buildings nearest to and serving the End Users' sites, FLLCs refer to circuit connections between End Users' sites and the RL's network sites. In other words, an FLLC includes the additional element of a "trunk" circuit which is not present in the case of a TLLC. Therefore, to use "PTP" and "PTMP" circuits in Schedule 7B would give the erroneous impression that the connection circuit between SingTel's and the RL's co-located equipment is equivalent to a trunk circuit between SingTel's and the RL's exchange buildings- this is simply not true. The two are clearly dissimilar and RLs have to roll out their own trunk circuits to SingTel's exchange buildings in order to access the TLLC.

18. Finally, SingTel's claim that a differentiation between a "PTP" and "PTMP" circuits was necessary because only the "PTMP" circuit requires the use of the G.703 interface standard is erroneous. Under Schedule 7B of the RIO, it is clearly provided that for "ungroomed" (or "PTP") TLLCs of 1536 kbps and above, the applicable interface standard may either be the V.35 or G.703 interface standard. As such, contrary to SingTel's claim, the use of the G.703 interface standard is not only restricted to "groomed" (or "PTMP") circuits.

Charges for TLLC Service with grooming

19. SingTel argued that the "B-end link" was an integral part of a PTMP circuit, without which it would not be able to provide a grooming service. On that basis, SingTel advanced the position that it was entitled to recover a charge for the B-end link as it is a new network element for which it is providing.
20. Having carefully considered SingTel's position, IDA maintains its position that SingTel should not be entitled to charge RLs for the "B-end link". SingTel has failed to satisfy IDA that the B-end link is a new element in a TLLC.
21. IDA reiterates its position in the 30 December 2005 Direction, as well as in paragraphs 8 and 10 above, that the so-called "B-end link" of a "groomed" TLLC is not a new element in a TLLC.
22. Currently, SingTel charges the RL a single monthly recurring charge and a one-time installation charge for the TLLC service comprising of a circuit between the End User's premises and SingTel's TLLC equipment (i.e. SingTel's so-called "A-end Link"), and another circuit between the TLLC equipment and the RL's co-located equipment (i.e. SingTel's so-called "B-end Link").
23. However, under SingTel's proposal, SingTel wants the RL to pay the same recurring charges for the TLLC service but these charges now only cover the circuit connection between the End User's sites and SingTel's TLLC equipment (i.e. SingTel's so-called "A-end Link"). To complete the TLLC service, the RL will also have to pay an additional monthly recurring charge and one-time installation charge, just to obtain the same connection between SingTel's TLLC equipment and its co-located equipment (i.e. SingTel's so-called "B-end Link"). These charges are over and above a monthly recurring "grooming" charge based on SingTel's prevailing retail charge for grooming facility. IDA maintains its position that it is unreasonable for SingTel to impose a charge for an element in the TLLC service that is neither new nor additional to what it currently provides to the RL.

Charges for tie-cables

24. SingTel submitted that the provisioning and recovery of charges for tie-cables fell under Schedule 8B of the RIO, and therefore it was inaccurate of IDA to state in the 30 December 2005 Direction that there would be cost savings to SingTel when an RL requested for grooming.

25. Having carefully considered SingTel's position, IDA maintains that SingTel derives cost savings when an RL requests for grooming because it will not require the use of one connection circuit for each n X 64 kbps circuit. When an RL requests for multiple n X 64 kbps circuits with grooming (i.e., groomed into a single 1984 kbps circuit), SingTel need only provide one connection circuit. However, if the multiple n X 64 kbps circuits are not groomed, SingTel will need to provide multiple connection circuits (one for each n X 64 kbps circuit). Hence, SingTel must derive cost-savings.
26. This is also in addition to the cost-savings derived from the use of less tie-cables under Schedule 8B of the RIO.

G.703 interface standard as an alternative to V.35

27. SingTel claimed that it will not be necessary to amend the drafting of Schedule 7B of the RIO to reflect that RLs can request for handover at the G.703 interface standard for all TLLCs from bandwidths of 64 kbps to 1984 kbps, as well as for the option of grooming. SingTel believes that the distinction between "PTP" and "PTMP" circuits in its proposed modifications is sufficient to address IDA's concerns, i.e., "PTMP" circuits will always be handed over at the G.703 interface standard with grooming while "PTP" circuits will be handed over at the V.35 interface standard.
28. First and foremost, IDA maintains that the PTP and PTMP distinction must be rejected for all the foregoing reasons.
29. Secondly, IDA is of the view that the proposed modifications do not fully reflect SingTel's obligations (as specified by the 19 October 2005 Direction) to provide the G.703 interface standard with grooming for all n X 64 kbps TLLCs. For instance, SingTel's proposed clause 1.6 in its proposed modifications appears to restrict an RL's request for groomed TLLCs only if the TLLCs are of bandwidths of 1024 kbps and below. In addition, SingTel's explanation that only "PTMP" circuits may be handed over at G.703 interface standard is inaccurate and inconsistent with the existing Annex 7B-4 of Schedule 7B of the RIO, which provides that an ungroomed TLLC may be handed over at the G.703 interface standard if the requested bandwidth is 1536 kbps and above.