EXPLANATORY MEMORANDUM

This Explanatory Memorandum explains the Direction dated 14 September 2007, issued by the Info-communications Development Authority of Singapore ("IDA") to Singapore Telecommunications Ltd ("SingTel"), directing SingTel on the ambit of its recovery of one-time system set-up charge ("OTSSC") for tail local leased circuits ("TLLCs") as an interconnection related service ("IRS").

Background

- Pursuant to Paragraphs 7.4 and 7.7 of the Code of Practice for Competition in the Provision of Telecommunication Services (RIO Requirements) Notification 2005 (G.N. 414/2005), SingTel (being a Dominant Licensee) is required to offer TLLCs as an IRS ("IRS TLLCs") to Requesting Licensees ("RLs") under its Reference Interconnection Offer ("RIO").
- 3. On 26 April 2006, SingTel appealed to the Minister for Information, Communications, and the Arts ("Minister"). Amongst other issues, SingTel appealed against an IDA Decision on Reconsideration dated 12 April 2006 ("12 Apr 06 Reconsideration Decision") wherein IDA rejected SingTel's proposed Clause 4.5.11 of Schedule 9 of SingTel's RIO relating to the imposition by SingTel of the OTSSC.
- 4. On 23 January 2007, the Minister issued his decision varying IDA's 12 Apr 06 Reconsideration Decision ("Minister's 23 Jan 07 Decision"). Specifically, the Minister decided that SingTel should be able to recover the OTSSC but that "IDA should audit [the OTSSC]". The Minister "stress[ed] that the quantum of the [OTSSC] is contingent on SingTel being able to justify the costs and the reasonableness of it having to incur the costs" (emphasis ours). (Please see paragraphs 32 and 33 of the Minister's 23 Jan 07 Decision.)
- In respect of the audit process, the Minister gave the following guidance to IDA and SingTel ("Minister's Guidelines") on the recovery of reasonable costs:
 - "(a) IDA has a statutory duty to adopt an open mind and fairly consider whether each activity and modification to its system and practices proposed by SingTel is necessary and relevant and whether that activity and/or modification can be substituted with some other activity or modification that is equally viable but more cost and/or time efficient;

- (b) The responsibility is on SingTel to substantiate all its claims for the One-Time System Set-up Charge and to fully account and justify all the charges and individual cost components;
- (c) The activities will only be included within scope where SingTel is able to demonstrate that the activities are new and were not previously available for retail LLCs or MWS TLLCs."
- 6. Pursuant to the Minister's 23 Jan 07 Decision, IDA directed SingTel on 5 February 2007 ("5 Feb 07 Direction") to submit its "detailed justification and substantiation for the quantum of the [OTSSC] that it proposes to impose" (emphasis ours). Consistent with the Minister's 23 Jan 07 Decision, IDA directed SingTel to "include at the minimum all documentation, assumptions adopted and computations made [to] support SingTel's proposed quantum of the [OTSSC]" (emphasis ours).
- 7. SingTel submitted its proposed OTSSC ("Proposed OTSSC") accompanied by written justification and substantiation on 5 March 2007 ("5 Mar 07 Letter"). SingTel supplemented this with a letter on 28 May May 07 Letter") enclosing 2007 ("28 some internal email correspondences.
- 8. SingTel's Proposed OTSSC may be broadly categorized as follows:
 - (a) Information System Costs ("**IS Costs**"), comprising work done to implement changes in respect of the following:
 - (i) Order provisioning;
 - (ii) Billing configurations; and
 - (iii) Journaling.
 - (b) IS Costs comprising work to implement changes to SingTel's Fault Reporting Management System ("FRMS"); and
 - (c) Manpower Costs, comprising time spent on:
 - (i) Analysis, development and testing of work processes;
 - (ii) Billing-related issues ("Manpower Billing Costs"); and
 - (iii) Briefing and training of staff.
- 9. IDA conducted its audit from March to June 2007 through on-site audits, interviews with SingTel's staffs and verification of documents submitted by

SingTel. In the audit, IDA sought to ensure that the Proposed OTSSC was reasonable and reflective of the Minister's Guidelines.

Grounds of IDA's Decision

Quantum of Audited OTSSC

- 10. IDA has carefully audited SingTel's Proposed OTSSC. In so doing, IDA carefully considered all of the justification and substantiation, and emails as submitted by SingTel in its 5 Mar 07 Letter and 28 May 07 Letter respectively, as well as the representations made by SingTel during IDA's on-site audits and interviews. IDA's assessment is that SingTel should be allowed to recover \$17,130.98 by way of the OTSSC, such sum comprising costs incurred by SingTel for (i) IS Costs in respect of order provisioning and FRMS; and (ii) certain manpower costs. IDA's assessment was based on its audit of SingTel's actual incurred IS costs (which amounted to \$[c-i-c]), notwithstanding the fact that the IS Costs submitted by SingTel only amounted to \$[c-i-c].
- 11. IDA's derivation of this quantum is detailed in **Annex A** and the reasons for IDA's assessment are as follows.

IS Costs –Order Provisioning and FRMS

- 12. SingTel sought to recover IS Costs purportedly for work done to implement changes with respect to order provisioning and FRMS.
- 13. According to SingTel, the activities undertaken in respect of order provisioning were necessary to indicate that a new product (i.e. IRS TLLCs), distinct from retail/MWS LLCs, could now be obtained by RLs. The distinction was necessary as there were significant differences between the ordering, provisioning and other related operational processes for IRS TLLCs and retail/MWS LLCs. Further, the distinction was also necessary during the intervening period between 15 April 2006 and 14 October 2006¹ where SingTel's RIO offered both MWS LLCs and IRS TLLCs to RLs. In this respect, given the administrative differences between the retail/MWS LLCs and IRS TLLCs, the changes implemented with respect to order provisioning were new and necessary. Without these changes, SingTel's staffs would not be aware of the different workflows (work processes, work sequence and owners) applicable to IRS TLLCs as compared against the existing retail/MWS LLCs.
- 14. As for changes to SingTel's FRMS, again it was so that the FRMS could recognise the IRS TLLC product, which has network parameters different

¹ IRS TLLCs terminating within the CBD areas were made available from 15 April 2006, while the availability for MWS LLCs terminating in non-CBD areas expired only on 14 October 2006.

from those of retail/MWS LLCs. Since IRS TLLCs are differentiated from the retail/MWS LLC for the purposes of service provisioning, it follows that the FRMS has to be modified such that it is able to recognise the new IRS TLLC products. Therefore, the changes implemented in the FRMS were new and necessary in order for SingTel to rectify any IRS TLLC faults.

- 15. Applying the Minister's Guidelines: First, IDA notes that the work done in respect of order provisioning and FRMS is new and would be necessary and relevant for SingTel to provision and monitor the performance of IRS TLLCs. Prior to these changes, SingTel's Pegasus system pertaining to order provisioning and the FRMS were only equipped to provision and monitor retail/MWS LLCs. As for the substantiation of the costs incurred for the work done, IDA has verified the documentation provided by SingTel in its 5 Mar 07 Letter. Specifically, SingTel was able to substantiate the costs incurred with a system generated statement clearly stating the costs incurred, project details, project commencement/completion dates, etc.
- 16. Hence, IDA is of the view that SingTel has satisfied all of the Minister's Guidelines in respect of the IS Costs incurred for SingTel's changes to the order provisioning and FRMS. SingTel had not only substantiated the basis for recovery, it had also fully accounted for all the costs it incurred. Accordingly IDA assesses that SingTel should be allowed to recover the IS costs incurred for work done pertaining to order provisioning and the FRMS for the full amount of \$11,250.

IS Costs – Billing Configurations and Journaling

- 17. IDA notes that SingTel allegedly incurred IS Costs of:
 - (a) \$[c-i-c], for work done to configure its automated billing system (i.e. IS Billing Costs); and
 - (b) \$[c-i-c], for work done to enable SingTel to track financial concerns such as revenue obtained from the provision of IRS TLLCs (i.e., IS Journaling Costs).
- 18. SingTel claims that works done in respect of IS Billing Costs and IS Journaling Costs were necessary to enable it to bill RLs for IRS TLLCs charges correctly, and to track revenues and bad debts.
- 19. IDA has carefully reviewed SingTel's submission and considers that such costs should not be included in the OTSSC. The reasons for IDA's assessment are as follows.
- 20. First, according to SingTel, the activities undertaken were for the purpose of creating additional billing components and amending existing billing

components. Even though IRS TLLCs were not previously offered by SingTel, IDA notes from information obtained during the audits as well as from Annexes D and E of Attachment C2 in SingTel's 5 Mar 07 Letter, that not all IRS TLLC charging components were created from scratch. Instead, some charges (e.g., application charge per order and one-time installation charges) were merely amended since the corresponding billing components already existed for MWS TLLCs.

- 21. Therefore, applying the Minister's Guidelines, IDA's assessment is that the above-mentioned billing components already existed for MWS TLLCs and that the only work done was to amend the numerical values of the charges. Since the Minister's 23 Jan 07 Decision specifically permitted only "activities [that] are new and were not previously available for retail LLC or MWS TLLCs", the costs of modifying the said billing components would not satisfy the Minister's Guidelines and hence do not justify recovery.
- 22. Secondly, IDA assesses that IS Billing Costs and IS Journaling Costs are costs incurred for works that have no reasonable nexus to the offer of IRS TLLCs to RLs. IDA would reiterate that the Minister's decision to allow SingTel to recover OTSSC was made in the following context (please see paragraph 32 of the Minister's 23 Jan 07 Decision):

"The Minister is satisfied that SingTel will have to incur some costs in order to offer TLLCs under Schedule 4C and the Minister decides that SingTel should be able to recover the reasonable costs of having to offer the TLLCs and that such recovery is to be by way of a One-Time System Set-up Charge." (Emphasis ours)

It follows that the Minister only permitted SingTel to recover costs that are incurred for the purposes of offering IRS TLLCs (i.e., service provisioning) – the Minister's 23 Jan 07 Decision does not extend to costs for work done which is not directly necessary for SingTel's provisioning of IRS TLLCs per se. Against this background, IDA notes that all licensees are likely to have their own internal financial protocols, including measures to validate invoices as well as to track revenues and bad debts. The IS Billing Costs and IS Journaling Costs pertain to work done by SingTel to institute its own financial protocols. Such works are only ancillary to, but not directly relevant or necessary for service provisioning per se. Put another way, SingTel's IRS TLLC service provisioning is independent of such financial protocols, the main purpose of which is only to assure SingTel that it receives payment for providing the IRS TLLC service. The Minister's 23 Jan 07 Decision could not have contemplated recovery of OTSSC to extend to such internal financial protocols.

- 23. Thirdly, the benefit of having internal financial protocols accrues to the party instituting those protocols. Accordingly, IDA is of the view that these are ancillary business costs that should not be passed on to an RL. Instead, it is reasonable for each party instituting any measures for its benefit to bear its own business costs of the same. If SingTel was permitted to recover its ancillary business costs from RLs, the latter would be over-burdened by having to bear SingTel's business costs in addition to their own.
- 24. Fourthly, if IDA were to allow SingTel to recover the costs of billing RLs, a dangerous precedent would be set whereby SingTel would be permitted to recover the costs of implementing financial protocols via one-time charges, each time IRS charges are revised or new IRS are required to be offered. For instance, given that IDA reviews SingTel's RIO IRS prices triennially, the imposition of such one-time charges for SingTel to implement financial protocols could be as often as once every 3 years. Such frequent variations in the one-time charges would have an unintended adverse effect on competition - the Telecom Competition Code 2005 ("Code 2005") specifically provides that IRS are to be provided at cost-based prices because they usually involve bottleneck facilities; if a licensee was permitted to include its finance-related costs in pricing its IRS, the cost of obtaining that IRS would be inflated; this will discourage take-up of that same IRS and defeat the legislative intent behind designating certain services as IRS.
- 25. Last but not least, currently there are some RLs that have taken up reciprocal RIO services with SingTel. If IDA were to permit SingTel to recover its business costs of the same from RLs, IDA would also be required to allow each and every RL (present and future alike) to recover similar finance-related costs from SingTel for reciprocal RIO services provided by them to SingTel. Notwithstanding the fact that any such cost recovery is on a one-off basis, SingTel will be susceptible to such a cost recovery exercise in every instance that a reciprocal RIO service is introduced or altered, or when a new RL wishes to take up a reciprocal RIO service with SingTel.
- 26. IDA notes that these same arguments were made in our 11 July 2006 appeal submission, to which SingTel did not dispute in its 1 August 2006 response, even though it had the opportunity to do so.

Manpower Costs – Analysis, Development and Testing of Work Processes

27. SingTel sought to recover manpower costs associated with activities to modify its systems and operational processes, amounting to \$[c-i-c].

- 28. Applying the Minister's Guidelines on whether the activities are "within scope" and "new and were not previously available for retail LLCs or MWS TLLCs", IDA assesses that the activities specified by SingTel would be necessary and relevant to the provision of IRS TLLCs. In particular, IDA considers that SingTel would have needed to expend manpower for the analysis of IRS TLLC requirements, to determine whether existing MWS LLC work processes could continue to be applicable for IRS TLLCs and the development and testing of new work processes. For example, IDA notes that a new requirement for IRS TLLCs is that RLs would have to provide for their own Network Termination Units ("NTUs"), as against MWS LLCs where such NTUs would be supplied by SingTel. As a result, SingTel not only had to analyse both the administrative and technical feasibility of this requirement, but also to develop a work process that included 'backup plans' should the RL-provided NTU be faulty.
- 29. Nevertheless, IDA notes that the Minister's 23 Jan 07 Decision requires SingTel not only to justify the necessity of incurring the alleged costs, it also requires SingTel to <u>fully account</u> for all costs it purports to have incurred.
- 30. In this respect, IDA assesses that SingTel was unable to <u>fully account</u> for all manpower costs associated with the analysis, development and testing of work processes for IRS TLLCs. Specifically, SingTel had proposed to recover the said manpower costs based on the "number of man-days" expended by its staff. However, aside from certain internal email correspondences submitted in its 28 May 07 Letter ("**Emails**"), SingTel's alleged justifications were based on verbal explanations by its staffs that they believe they had spent an approximate number of man-days for their respective roles in the analysis, development and testing of work processes. SingTel was not able to provide any other objective and verifiable evidence, e.g., time sheets, meeting minutes, internal correspondences, management paper, etc, to demonstrate and support its claim that the proposed number of man-days was indeed expended in order to carry out the analytical, development and testing activities.
- 31. Clearly, for the manpower resources allegedly expended by SingTel for which there was no objective and verifiable documentation provided to substantiate SingTel's claims, IDA could not reasonably assess that indeed SingTel had fully accounted for such costs. Even for certain manpower costs which were supported by the Emails, IDA's assessment is that the Emails only suggest that certain meetings could have taken place between various SingTel's staffs for a specified duration in order to discuss (amongst others) analytical, development and testing works they do not provide irrefutable evidence that such meetings did in fact take place between the identified parties for the stated duration for the

- specified agenda; it also does not specify, or provide any evidence, that any follow-up tasks were undertaken.
- 32. Notwithstanding, and bearing in mind the Minister's Guidelines, IDA will permit SingTel's recovery of those manpower costs "accounted for" by the Emails to the extent that such costs pertain to the analytical, development and testing works. In this respect, IDA's audit and review of the Emails discloses a sum of \$5,880.98 that may be recovered by SingTel. For the rest of the alleged costs, IDA will not permit the recovery for any manpower costs relating to analysis, development and testing works which have not been "accounted" for by objective and verifiable documentation, since IDA could not draw any reasonable assurance that indeed such manpower resources were expended by SingTel.

Manpower Costs – Billing Costs

- 33. IDA understands that this manpower cost component, allegedly amounting to \$[c-i-c], was for the purpose of guiding the IS department on changes to be made to SingTel's automated billing system, e.g., whether charges were monthly or annual charges etc., as well as to verify whether such changes had been accurately reflected in the system after the IS department had completed the necessary changes made to the billing system.
- 34. However, as assessed in paragraph 22 above, IDA considers that SingTel's costs of implementing internal financial protocols fall outside the scope of the Minister's 23 Jan 07 Decision and should not be included in the OTSSC. Rather, they should be borne by SingTel because such costs have no reasonable nexus to the provisioning process of IRS TLLCs to RLs.
- 35. In any case, IDA considers that these alleged costs should not be included in the OTSSC, as they do not satisfy the Minister's Guidelines:
 - (a) IDA would reiterate the second limb of the Minister's 23 Jan 07 Decision wherein the Minister unequivocally required SingTel to "fully account" (emphasis ours) for "all charges and individual cost components". IDA further reiterates that the Minister, in his 23 Jan 07 Decision, made it abundantly clear that "SingTel does not have an absolute right to recover all the costs it claims...SingTel's right to recover additional costs incurred is contingent on SingTel being able to identify and justify such costs." (Please see paragraph 32 of Minister's 23 Jan 07 Decision).
 - (b) In this respect, SingTel did not provide any form of objective and verifiable evidence to support its claim, even though IDA had

repeatedly requested SingTel to provide IDA with the relevant documents to identify and account for the costs purportedly incurred. As mentioned at Paragraph 6 above, IDA's 5 Feb 07 Direction specifically required SingTel to provide all detailed justification and substantiation and to include, at the minimum, all documentation to support its claim. Further, IDA's officers made verbal requests for SingTel to account for the said costs while conducting on-site audits. SingTel has, to-date, only provided IDA with a verbal and unsubstantiated account of the costs it incurred – SingTel has not provided IDA with any form of verifiable evidence to identify and account for the number of man-hours or man-days expended.

- (c) This is clearly in contradiction to the Minister's 23 Jan 07 Decision. IDA would stress that its ability to audit and draw reasonable conclusions on SingTel's incurrence of costs is wholly dependent on SingTel providing IDA with the relevant evidence allowing IDA to identify and account for the cost components.
- 36. For the reasons above, IDA's position is that SingTel should bear the alleged manpower costs associated with changes to its billing systems, notwithstanding that SingTel has also wholly failed to substantiate and account for the alleged manpower costs in accordance with the Minister's Guidelines.

Manpower Costs - Briefing and Training SingTel's staffs

- 37. IDA understands that this component comprises of manpower costs purportedly expended to brief and train SingTel's staffs involved in the work processes relevant to the provision of IRS TLLCs. According to SingTel, this was done so that all staff involved in the provisioning of IRS TLLCs would be aware of the differences in provisioning procedures between IRS and MWS TLLCs. ("Briefing and Training Costs").
- 38. However, IDA considers that Briefing and Training Costs should be borne by SingTel for the following reasons:
 - (a) First, they do not satisfy the Minister's Guidelines. SingTel will need to train and brief all relevant staff whenever SingTel introduces a new service or modifies an existing one. Therefore, training and briefing is not a new process that is unique to the introduction of IRS TLLCs. If SingTel's submission was accepted, then SingTel will recover training and briefing costs from all RLs whenever it is required to introduce or alter an IRS under its RIO.

- (b) Secondly, all licensees incur certain costs in complying with their obligations under the Code 2005. SingTel's obligation to provide IRS TLLCs stems from the Code 2005. Accordingly, the Briefing and Training Costs arise from SingTel's obligation to comply with the Code 2005 to provide RLs with IRS when requested. IDA is of the view that these are ancillary compliance costs that should not be passed on to RLs. Instead, it is reasonable for any licensee incurring the same to bear its own costs. If SingTel were permitted to recover its ancillary compliance costs from RLs, the latter would be over-burdened by having to bear SingTel's compliance costs in addition to their own.
- (c) Thirdly, if IDA were to allow SingTel to recover the costs of briefing and training its staff, a dangerous precedent (similar to the recovery of IS Billing Costs and IS Journaling Costs) would be set whereby SingTel would be permitted to recover the Briefing and Training Costs via one-time charges each time new IRS are required to be offered by SingTel. Given that IDA reviews the list of IRS to be offered under SingTel's RIO triennially, the imposition of such onetime charges for SingTel to train and brief its staff for changes to its obligations to offer IRS under its RIO could be at least once every 3 years. Such frequent variations in the one-time charges would have an unintended adverse effect on competition - the Code 2005 specifically provides that IRS are to be provided at cost-based prices because they usually involve bottleneck facilities; if a licensee was permitted to include its training and briefing costs in pricing its IRS, the cost of obtaining that IRS will be inflated; this will discourage take-up of that same IRS and defeat the legislative intent behind designating certain services as IRS.
- (d) Last but not least, there are some RLs that have taken up reciprocal RIO services with SingTel. If IDA were to permit SingTel to recover its Briefing and Training Costs from RLs, IDA would also be required to allow each and every RL (present and future alike) to recover similar training and briefing costs from SingTel for reciprocal RIO services provided by them to SingTel. Notwithstanding the fact that any such cost recovery is on a one-off basis, SingTel will be susceptible to such a cost recovery exercise in every instance that a reciprocal RIO service is introduced or altered, or when a new RL wishes to take up a reciprocal RIO service with SingTel.

Mechanism to recover OTSSC

39. In its letter dated 30 March 2007, SingTel proposed to recover the OTSSC from all RLS equally by dividing the total IDA-audited costs equally

between RLs who had already obtained IRS TLLCs, and then making necessary credit adjustments for existing RLs when new RLs acquired IRS TLLCs. In this way, the burden of the charge shared by all RLs would continue to be equal. Further, SingTel also proposed to restrict the recovery period of the OTSSC, and any subsequent credit adjustments, to 5 years from the first imposition of the OTSSC ("**Proposed Cost Recovery Mechanism**").

- 40. After careful review and assessment, IDA considers that the Proposed Cost Recovery Mechanism is reasonable.
- 41. This is because the only other alternative is for SingTel or IDA to estimate the total number of RLs expected to acquire IRS TLLCs, and to divide the total recoverable costs by such a number, so that the OTSSC could be finalised on a per RL basis. Such an alternative runs the likely risk of under-recovery or over-recovery of costs, should the number of RLs which eventually take up IRS TLLCs fall below or above the estimates.
- 42. In contrast, SingTel's Proposed Cost Recovery Mechanism ensures that SingTel fully recovers the OTSSC without the risk of RLs over-compensating or under-compensating.

Annex A – Derivation of OTSSC Quantum

	IDA's Audited Cost
IS Request	\$11,250
Product Management	\$511.13
Product Development	\$648.84
Global Services Delivery Team	\$1,296.37
Global Technical Assistance Centre	\$299.03
Corporate Customer Services and	\$1,420.24
Operations (Field Operations)	
Transmission Network Planning	\$219.74
Transmission Operations	\$569.94
Network Integration and Interconnect	\$915.66
Total System Set-up Charge	\$17,130.98