

SCHEDULE 7A
WHOLESALE LOCAL LEASED CIRCUITS (FULL CIRCUITS)

SCHEDULE 7A

CONTENTS

1. SCOPE	1
2. ORDERING AND PROVISIONING PROCEDURE	4
3. PROJECT STUDY	7
4. DELIVERY	11
5. FLLC RE-ROUTING, RELOCATION AND CHANGE OF BANDWIDTH	13
6. DEACTIVATION	15
7. STANDARD TERMS AND CONDITIONS	16
8. ACCESS AND APPROVALS REQUIRED	22
9. PROTECTION AND SAFETY	22
10. REQUESTING LICENSEE RIGHTS	23
11. TERM	23
12. SUSPENSION	25
13. TERMINATION	26
14. EXPIRY OF TERM	28
15. ASSIGNMENT	29
ANNEX 7A-1 FLLC (POINT-TO-POINT CIRCUIT) BANDWIDTH	
ANNEX 7A-2 FLLC (POINT TO MULTI-POINT CIRCUIT) BANDWIDTH	
ANNEX 7A-3 REQUEST FORM FOR FLLC SERVICE ACTIVATION	
ANNEX 7A-4 REQUEST FORM FOR FLLC SERVICE DEACTIVATION	
ANNEX 7A-5 FLLC TECHNICAL INFORMATION OF FUL LOCAL LEASED CIRCUIT	
ANNEX 7A-6 FAULT RESTORATION PROCEDURE FOR FULL LOCAL LEASED CIRCUIT	

ANNEX 7A-7 DERIVATION OF ZONING

SCHEDULE 7A

WHOLESALE LOCAL LEASED CIRCUIT (FULL CIRCUITS) SERVICE

1. SCOPE

CLAUSE 1.1 – MODIFICATION REQUIRED

1.1 This Schedule sets out the terms and conditions under which SingTel will provide the Requesting Licensee with the Wholesale Local Leased Circuits (Full Circuits) Service (**FLLC Service**). The FLLC Service is a service for the carriage of digital communications between an End User's site and the Requesting Licensee's network site. The FLLC Service is provided for the sole purpose of enabling the Requesting Licensee to establish a connection between its network site and the End User's site for use as a transparent input in the provision of a telecommunications service to the End User.

SingTel must modify clause 1.1 to align the definition of an FLLC with the definition specified in paragraphs 7.2.4.1 and 7.2.5.1 of Appendix Two of the Code. In this respect, SingTel must define an FLLC Service as a service for the provision of full local leased circuits to allow the Requesting Licensee to establish a connection between its network site and one or more End User's site. SingTel must not impose any other restriction on the manner in which the Requesting Licensee may use the full local leased circuits.

CLAUSE 1.2 – MODIFICATION REQUIRED

1.2 The FLLC Service is a dedicated A-end to B-end transmission service, where:

- (a) the A-end is a SingTel network interface point connecting to the End User's active equipment located at the End User's site; and
- (b) the B-end is a SingTel network interface point connecting to the Requesting Licensee's active equipment located at the Requesting Licensee's network site,

where the End User's site and Requesting Licensee's network site are each a valid legal address within mainland Singapore.

Paragraph 7.2 of Appendix Two of the Code does not restrict an End User's site and the Requesting Licensee's network site to sites that have a "valid legal address". IDA's position is

that, so long as the A-end and B-end terminate at an End User's site and a Requesting Licensee's network site respectively, SingTel must provide the FLLC Service to the Requesting Licensee. SingTel must not impose any other restriction including the requirement of "valid legal address". For example, a bank's automated teller machines may not be located at sites that have any valid postal address and these are End User's sites. Furthermore, it is legally uncertain what constitutes a "valid legal address". Finally, IDA also notes that SingTel's retail LLCs offering does not impose any similar restriction. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel's retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction).

1.3 The FLLC Service is available as either:

- (a) a point-to-point (PTP) circuit; or
- (b) a point-to-multipoint (PTMP) circuit,

each at the bandwidth options set out in Annexes 7A-1 and 7A-2 respectively.

CLAUSE 1.4 – MODIFICATION REQUIRED

1.4 For the avoidance of doubt:

- (a) neither the A-end nor B-end of the FLLC Service may terminate at any premises not approved by SingTel for the purpose set out in clauses 1.1, 1.2 and 1.3, including but not limited to cable stations, earth stations, SingTel exchanges, SingTel FM sites, manholes, MDF Rooms, rooms housing Distribution Points, Power Rooms, lead-in pipes, ducting, at any outdoor site, sites outside mainland Singapore or at any premises not owned or leased by the Requesting Licensee or the End User (**Excluded Sites**). The FLLC Service will not be provided in respect of any Excluded Sites; and

IDA will not permit SingTel to unilaterally approve or restrict the list of premises for which the A-end and B-end of the circuit may terminate. The Code specifies that, so long as the A-end and B-end terminate at an End User's site and a Requesting Licensee's network site respectively, SingTel must provide the FLLC Service to the Requesting Licensee. In this respect, subject to the modification required by IDA, clauses 1.1 to 1.3 above already specify the purposes for which the FLLC Service must be provided. Therefore, SingTel must delete clause 1.4(a) in its entirety. Finally, IDA also notes that SingTel's retail LLCs offering does not impose any similar

restriction. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel's retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction).

- (b) the B-end of the FLLC Service may only terminate at Requesting Licensee network sites for which the Requesting Licensee has provided pre-notification to SingTel (**Pre-Notified Sites**). The FLLC Service will only be provided in respect of Pre-Notified Sites.

IDA notes that SingTel's retail LLCs offering does not require pre-notification. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel's retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, SingTel must delete clause 1.4(b) in its entirety.

CLAUSE 1.5 – MODIFICATION REQUIRED

- 1.5 The technical means of delivery (including routing) of the FLLC Service shall be at the sole discretion of SingTel, provided that it shall be no less favourable than the routing which SingTel provides to its Customers.

Consistent with the Code's requirement that a Dominant Licensee must not discriminate against competing licensees vis-à-vis itself, its affiliates and its customers in the provision of mandated wholesale services, SingTel must amend clause 1.5 to state that the technical means of delivery (including routing) of the FLLC service will be no less favourable than that which SingTel provides to itself, its affiliates and its customers.

- 1.6 This Schedule only applies to the Requesting Licensee if it is an FBO.

- 1.7 (a) The timeframes in this Schedule relating to pre-provisioning work to be undertaken by SingTel under clauses 2.3, 3.1 and 3.3 (such as the completion of Project Studies and the assessment of applications) are subject to delays caused by events outside SingTel's reasonable control, in which case SingTel may extend these timeframes for a period equal to the period of such delays.
- (b) For the avoidance of doubt, a failure to meet these timeframes caused by events outside SingTel's reasonable control does not constitute a breach of this Schedule or this RIO Agreement.

CLAUSE 1.8 – MODIFICATION REQUIRED

- 1.8 (a) If SingTel fails to meet any timeframes in this Schedule relating to provisioning work to be undertaken by SingTel under this Schedule, and the failure to meet the timeframe is solely caused by SingTel, SingTel will provide a remedy to the Requesting Licensee.
- (b) Such remedy will be in the form of a credit to the Requesting Licensee of the recurring Charges payable for the delayed services over a period equal to the period of the delay.
- (c) The Requesting Licensee acknowledges that this remedy is a genuine pre-estimate of the Requesting Licensee’s loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet provisioning timeframes and shall be SingTel’s sole and exclusive liability to the Requesting Licensee for such failure.

IDA notes that SingTel’s retail LLCs offering provides for service level guarantees. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel’s retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee’s obligation of non-discrimination, SingTel must modify clause 1.8 to provide for service level guarantees on terms that are no worse off than what SingTel provides under its retail LLCs offering.

CLAUSES 2, 3 AND 4 GENERALLY – MODIFICATION REQUIRED

IDA is of the view that the existing ordering, provisioning, project study and delivery procedures set out in clauses 2 to 4 are cumbersome and can be significantly streamlined to provide for a more efficient process. In this connection, IDA notes that under its retail LLCs offering, SingTel is able to activate LLCs within 3 weeks from the date of request in the case of regular provisioning, and within 3 days from the date of request in the case of “express” provisioning. IDA’s findings are supported by the feedback received from the industry. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel’s retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee’s obligation of non-discrimination, SingTel must streamline the ordering, provisioning and delivery processes in clauses 2, 3 and 4 to provide for (a) service

activation within 3 weeks for regular provisioning; and (b) service activation within 3 days for “express” provisioning, and to ensure that these processes are no worse off than those under its retail LLCs offering.

In addition, Requesting Licensees must also be allowed to submit a single application form to request for activation of multiple circuits terminating at the same site (consequential amendments must also be made to Annex 7A-3 to clarify that the Requesting Licensee may order multiple circuits to the same site in each request). In relation to the application charge under Schedule 9 for each request to activate multiple circuits, SingTel may only levy a single charge for processing the request, but may levy a separate charge for each circuit the Requesting Licensee requests activation.

2. ORDERING AND PROVISIONING PROCEDURE

2.1 The Requesting Licensee shall submit a request for FLLC Service activation in the form of a FLLC Activation Request (**FLAR**) provided in Annex 7A-3 containing the following information:

- (a) PTP or PTMP A-end End User’s name and address(es);
- (b) the bandwidth required for PTP or PMTP circuit;
- (c) the B-end Requesting Licensee’s Pre-Notified Site;
- (d) the interface type required; and
- (e) the Requesting Licensee’s contact details.

CLAUSE 2.2 – MODIFICATION REQUIRED

2.2 The FLAR must be provided to SingTel no less than thirty (30) Business Days prior to the requested date of activation for FLLC Service.

SingTel must modify clause 2.2 to address the following requirements:

- (a) ***Please see IDA’s annotations above to clauses 2, 3 and 4 generally, requiring SingTel to activate service within 3 weeks in the case of regular provisioning and 3 days in the case of “express” provisioning. In this connection, IDA’s assessment is that the***

current lead-time of 30 Business Days for an FLLC Service activation in clause 2.2 is unreasonable and IDA's findings are supported by the feedback received from the industry.

(b) Should SingTel reject the FLAR form, SingTel must provide a written explanation to substantiate the rejection.

2.3 SingTel shall acknowledge the receipt of the FLAR by 5pm on the next Business Day after it is submitted by providing the Requesting Licensee with a request identification number and the date for processing the FLAR (**Processing Date**).

CLAUSE 2.4 – MODIFICATION REQUIRED

2.4 For administrative reasons, SingTel will only process FLARs that are submitted at least sixty (60) Business Days before the expiry of either the FLLC Central Term or the FLLC Non-Central Term.

IDA's assessment is that clause 2.4 does not comply with the Code's requirements (please refer to paragraph 2.3 of Annex 1 to this Direction). The Requesting Licensee must have the ability to assess for itself if it is feasible to obtain an FLLC for the remaining period prior to the expiry of the FLLC Central Term or FLLC Non-Central Term, taking into account the period of time SingTel requires to process its request. SingTel must delete clause 2.4 in its entirety. However, SingTel may provide for its ability to reject an FLAR on the basis that the service activation will take place after the expiry of either the FLLC Central Term or the FLLC Non-Central Term, as the case may be.

CLAUSE 2.5 – MODIFICATION REQUIRED

2.5 The FLARs from all Requesting Licensees will be processed on a "first come first served" basis, subject to the total cumulative number of applications to be processed in clause 2.6.

Please refer to IDA's annotations below to clause 2.6. SingTel must modify clause 2.5 by deleting the reference to the restriction on the total cumulative number of applications provided for in clause 2.6. In addition, consistent with a Dominant Licensee's obligation of non-discrimination, SingTel must clarify that it will process the FLARs on a "non-discriminatory first come first served" basis.

CLAUSE 2.6 – MODIFICATION REQUIRED

2.6 The cumulative numbers of FLARs submitted under this Schedule 7A and TLARs submitted under Schedule 7B in respect of the TLLC Service from all Requesting Licensees are:

- (a) five (5) requests from any Requesting Licensee shall be accepted on each Business Day, with subsequent requests overflowing to the next Business Day; and
- (b) twenty (20) requests from all Requesting Licensees shall be accepted each week, with subsequent requests overflowing to the next week.

IDA notes that SingTel’s retail LLCs offering does not limit the number of requests per day and per week. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel’s retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee’s obligation of non-discrimination, SingTel must delete clause 2.6 in its entirety.

3. PROJECT STUDY

CLAUSE 3.1 – MODIFICATION REQUIRED

3.1 SingTel will perform a Project Study in relation to the FLAR submitted by the Requesting Licensee within ten (10) Business Days after the Processing Date. The Project Study will normally entail a site survey to the End User’s site and the Requesting Licensee’s network site to determine and assess any technical and/or operational issues amongst other matters with respect to space, cable routing and equipment.

Please refer to IDA’s annotations above to clauses 2, 3 and 4 generally. SingTel must streamline its processes to comply with IDA’s stated requirements (including service activation within 3 weeks for regular provisioning and within 3 days for “express” provisioning).

CLAUSE 3.2 – MODIFICATION REQUIRED

3.2 For the purposes of this Schedule and the processing of each FLAR, SingTel may have regard to the following when assessing the availability of the FLLC Service:

- (a) SingTel’s reasonably anticipated requirements in the next two (2) years for the FLLC Service for the provision to itself and its Customers;
- (b) SingTel’s reasonably anticipated requirements in the next two (2) years for the FLLC Service for operations and maintenance purposes;

The Code imposes an obligation on SingTel to provide mandated wholesale LLCs to Requesting Licensees. In this respect, SingTel cannot prevent a Requesting Licensee from obtaining mandated wholesale LLCs by “reserving” any available circuit for future use. Therefore, SingTel must delete clauses 3.2(a) and 3.2(b) in their entirety.

- (c) the Requesting Licensee’s and other Licensees’ requirements (including for operations and maintenance purposes) which have been ordered but not yet delivered or which have been provided;
- (d) security and confidentiality requirements imposed on SingTel by Governmental Agencies; and
- (e) whether SingTel has plans or otherwise proposes to decommission the FLLC Service.

IDA’s position is that SingTel should only reject a request for an FLLC on the basis that the FLLC has been earmarked by SingTel for decommissioning, if such decommissioning will occur within a reasonable timeframe from the date of request. The Requesting Licensee should be given the flexibility to decide if it is feasible to obtain an FLLC for the remaining period prior to decommissioning. IDA’s view is that providing for decommissioning 6 months in advance is reasonable. SingTel must modify clause 3.2(e) to incorporate the above requirements.

CLAUSE 3.3 – MODIFICATION REQUIRED

- 3.3 Following completion of the Project Study, SingTel will notify the Requesting Licensee that either:
- (a) the FLAR has been given in-principle approval (in which case SingTel will provide an estimated RFS Date); or
 - (b) the FLAR has been rejected.

Please refer to IDA’s annotations above to clauses 2, 3 and 4 generally. SingTel must streamline its processes to comply with IDA’s stated requirements (including service activation within 3 weeks for regular provisioning and within 3 days for “express” provisioning).

CLAUSE 3.4 – MODIFICATION REQUIRED

3.4 SingTel may reject a FLAR if:

(a) the FLAR is in respect of an Excluded Site;

Please refer to IDA’s annotations above to clause 1.4(a). As a consequential amendment, SingTel must delete clause 3.4(a) in its entirety.

(b) the FLAR does not conform with the timeframes in clause 2.4;

Please refer to IDA’s annotations above to clause 2.4. As a consequential amendment, SingTel must delete clause 3.4(b) in its entirety.

(c) the FLAR is not in respect of a Pre-Notified Site, or SingTel reasonably determines that the Requesting Licensee’s Pre-Notified Site is not a network site;

Please refer to IDA’s annotations above to clause 1.4b. As a consequential amendment, SingTel must delete clause 3.4(c) in its entirety.

(d) the Requesting Licensee is not an FBO;

(e) the FLAR is not in the prescribed form;

(f) the FLAR does not contain all the required information;

(g) if any work, operation or use by the Requesting Licensee in relation to the FLLC Service causes (or SingTel reasonably believes will cause) SingTel to incur additional costs beyond the normal provisioning of the FLLC Service;

Sub-section 5.3.5.7 and paragraph 7 of Appendix Two of the Code impose an obligation on SingTel to provide FLLC Service to a Requesting Licensee. As a general principle, any cost that SingTel wants to recover must be approved by IDA and consistent with the requirements of the Code. IDA will not permit SingTel to reject any request for an FLLC on a case-by-case

basis, based on SingTel's unilateral assessment that it will "incur additional costs beyond the normal provisioning of the FLLC Service". Accordingly, SingTel must delete clause 3.4(g) in its entirety.

- (h) SingTel reasonably determines that any geographical or technical limitations of the SingTel network or its delivery systems will not enable the FLLC Service to be activated at the time requested by the Requesting Licensee;

In the event that any FLLC Service activation should be delayed by events beyond SingTel's reasonable control, clause 1.7 of this Schedule 7A will apply to govern the matter. IDA will not permit SingTel to reject any request for an FLLC on a case-by-case basis, based on SingTel's unilateral determination that it cannot activate service in time. Sub-section 5.3.5.7 and paragraph 7 of Appendix Two of the Code imposes an obligation on SingTel to provide FLLC Service to a Requesting Licensee. Accordingly, SingTel must delete clause 3.4(h) in its entirety.

- (i) SingTel reasonably determines that it does not have available resources including, without limitation, availability of suitable network infrastructure; or

SingTel must modify clause 3.4(i) to specify the instances where SingTel does not have available resources (for example, in the case of network unavailability because SingTel's existing network does not serve the End User's site), otherwise clause 3.4(i) must be deleted in its entirety. As drafted, IDA's assessment is that this provision is vague and unreasonable.

- (j) the Requesting Licensee has not obtained access to the End User's site at the A-end or to the Requesting Licensee network site at the B-end for connection of the FLLC Service.

IDA notes the typographical error in clause 3.4(j) – reference to the word "Licensee" should be replaced with the word "Licensee's".

CLAUSE 3.5 MODIFICATION REQUIRED

- 3.5 The Requesting Licensee acknowledges that a grant by SingTel of the in-principle approval under clause 3.3(a) is SingTel's best-estimate only and does not require SingTel to ensure that the FLLC Service will be available at the requested time stated in the FLAR.

IDA's assessment is that clause 3.5 is unreasonable. In the event that any FLLC Service activation will be delayed by events beyond SingTel's reasonable control, clause 1.7 of this

Schedule 7A should govern the matter. Subject to clause 1.7, SingTel is under an obligation to activate the FLLC Service in a timely manner and within the requested time stated in the FLAR. Accordingly, SingTel must delete clause 3.5 in its entirety.

3.6 If the Requesting Licensee cancels its request for FLLC Service prior to the completion of the Project Study undertaken in clause 3.3, the Requesting Licensee must pay SingTel the Application Charge in Schedule 9.

4. DELIVERY

CLAUSE 4.1 – MODIFICATION REQUIRED

4.1 If the Requesting Licensee requests termination of the FLLC Service after the completion of the Project Study, SingTel reserves the right to charge and the Requesting Licensee shall be liable to pay twice the Installation Charges as set out in Schedule 9, or such other amount calculated by SingTel as necessary to cover the losses incurred by SingTel (including administrative costs) as a result of the Requesting Licensee's request for termination of the FLLC Service.

IDA notes that under SingTel's retail LLCs offering, where an End User terminates the service request prior to activation, the End User will be charged a portion of or up to a maximum of the installation charge, depending on the amount of installation work SingTel has completed. IDA will not permit SingTel to impose discriminatory terms such that the relevant charges for a mandated wholesale service is worse off than the corresponding retail position (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee's obligation of non-discrimination, SingTel must modify the termination liability under clause 4.1 so that it is no worse off than that provided for in its retail LLCs offering.

CLAUSE 4.2 – MODIFICATION REQUIRED

4.2 If the Requesting Licensee requests a deferment of the RFS Date after SingTel provides its in principle approval under clause 3.3(a):

- (i) SingTel reserves the right to reject the RFS Date deferment request and in such an event, the FLLC ordered as specified in the FLAR shall be deemed cancelled and the Requesting Licensee shall pay to SingTel the cancellation charges set out in clause 4.1; or

- (ii) in the event that SingTel accepts the request for deferment of the RFS Date:
 - A. the revised RFS Date shall be no more than thirty (30) Calendar Days from the RFS Date initially estimated and advised in clause 3.3(a) following completion of the Project Study. If the Requesting Licensee requests that the revised RFS Date be beyond the said thirty (30) Calendar Days, SingTel reserves the right to discontinue any installation work in relation to the affected FLLC and in such an event, the FLLC ordered as specified in the relevant FLAR shall be deemed cancelled and the Requesting Licensee shall pay to SingTel the amounts stated in clause 4.1; and
 - B. SingTel reserves the right to charge, and the Requesting Licensee shall be liable to pay, an additional RFS Date deferment fee equivalent to 50% of the Installation Charges set out in Schedule 9 (which shall be applied in addition to the Installation Charges).

IDA notes that under SingTel's retail LLCs offering, SingTel's customers have the right to request for deferment subject to SingTel's recovery of a charge for processing the deferment request. However, IDA also recognises that there must be a reasonable timeframe specified within which Requesting Licensees may request for deferment. Otherwise, SingTel's network resources may be unnecessarily tied down by periods of long deferment requests by Requesting Licensees. Therefore, consistent with a Dominant Licensee's obligation of non-discrimination, SingTel must modify clause 4.2 to provide as follows:

- (a) SingTel must accept any deferment request provided that the revised RFS Date does not extend beyond 30 calendar days from the initial RFS Date. SingTel may also impose a reasonable charge (no worse off than the applicable charge specified under SingTel's retail LLCs offering) for processing the deferment request. In such event, SingTel must include such charge in Schedule 9 for IDA's approval; and***
- (b) Where the revised RFS Date extends beyond 30 calendar days from the initial RFS Date, the FLLC ordered as specified in the relevant FLAR will be deemed cancelled. In this case, SingTel may only recover from the Requesting Licensee the charge specified in clause 4.1. SingTel must not impose any other charge.***

- 4.3 Notwithstanding clause 4.2, SingTel will not consider any request by the Requesting Licensee for deferment of the RFS Date submitted on or after the date estimated as the RFS Date under clause 3.3(a) (or such other date as determined under clause 4.2(ii)(A)).

CLAUSE 4.4 – MODIFICATION REQUIRED

- 4.4 SingTel reserves the right to refuse to install or supply the FLLC Service if SingTel has any reason to believe that the end points do not in conform with the FLLC Service as set out in clauses 1.1 to 1.4.

SingTel must not refuse to install or supply an FLLC that has been ordered but not yet activated, unless SingTel has evidence to substantiate its reasonable belief that the use of the FLLC will not comply with clauses 1.1 to 1.3. In such a case, SingTel must promptly provide written notice to the Requesting Licensee explaining clearly and in sufficient detail, the basis of SingTel's belief and the evidence relied upon to substantiate its belief. SingTel must modify clause 4.4 to comply with the above requirements.

- 4.5 The Requesting Licensee shall:

- (a) provide its own associated cables/patch cords to connect to SingTel's network interface points located at the A-end and B-end premises; and
- (b) be solely responsible for installation and maintenance of the associated cables/patch cords to connect to SingTel's network interface points located at the A-end and B-end premises.

5. FLLC RE-ROUTING, RELOCATION AND CHANGE OF BANDWIDTH

CLAUSES 5.1 AND 5.2 – MODIFICATION REQUIRED

- 5.1 Subject to clause 5.2, SingTel reserves the right to, at any time, re-route the FLLC without prior notification given to the Requesting Licensee. SingTel will implement any re-routing on a non-discriminatory basis.
- 5.2 Where SingTel proposes to re-route the FLLC, SingTel will use its reasonable endeavours to provide prior notice of such re-routing to the Requesting Licensee.

SingTel must modify clauses 5.1 and 5.2 to incorporate the following requirements:

- (a) *SingTel must address re-routing under two situations:*
- (i) *In the case of non-emergency re-routing, SingTel must provide prior reasonable notice to the Requesting Licensee. IDA considers a notice period of 14 calendar days to be reasonable as SingTel ought to be aware of its planned re-routing schedule well in advance.*
 - (ii) *In the case of emergency re-routing, SingTel must provide notice to the Requesting Licensee as soon as practicable.*
- (b) *SingTel must carry out re-routing in a non-discriminatory manner and as it would carry out such works for itself, its affiliates and its customers. SingTel must also prevent service disruption from occurring during the process of re-routing.*

CLAUSE 5.3 – MODIFICATION REQUIRED

- 5.3 If the Requesting Licensee makes a request for any FLLC Service to be relocated or a change of FLLC bandwidth, such request shall be deemed to be:
- (a) a request for the termination of that FLLC Service, in which event the Requesting Licensee shall be liable to pay to SingTel all recurring Charges in relation to that FLLC Service as specified in clause 11.3; and
 - (b) a new request for FLLC Service at the new location and/or bandwidth requested, in which event that new request shall be subject to the ordering and provisioning procedures in clause 2.

IDA notes that under SingTel's retail LLCs offering, a request to re-locate merely incurs a re-location charge, whereas a request for a change of bandwidth is deemed to be a termination and new service activation. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel's retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee's obligation of non-discrimination, SingTel must modify clause 5.3 so that the applicable provisions governing requests for re-location and change of bandwidth (including the charges) are no worse off as compared to SingTel's retail LLCs offering.

6. DEACTIVATION

CLAUSE 6 GENERALLY – MODIFICATION REQUIRED

SingTel must modify clause 6 to incorporate the following requirements:

- (a) *Please refer to paragraph 2.4 of Annex 1 of this Direction. SingTel must not impose any minimum service commitment term for the FLLC Service and charge any premature termination liability linked to any minimum service commitment term. Instead, the term of the FLLC Service shall be for a period of one month and renewed automatically on a monthly basis until the occurrence of the earlier of the following events: (i) the Requesting Licensee serves notice to deactivate the relevant FLLC Service under clause 6; (ii) any specified event of termination provided for in clauses 11.4 or 13 applies; or (iii) upon the expiry of FLLC Central Term or FLLC Non-Central Term, as the case may be.*
 - (b) *The Requesting Licensee may serve notice to deactivate a circuit at any time during the term of service by giving SingTel one month prior written notice. Where the Requesting Licensee requires deactivation of a circuit before the expiry of the one month notice period, the Requesting Licensee shall remain liable for the recurring charges for that circuit until the date of expiry of the notice period.*
 - (c) *For the same reasons that multiple circuits to the same site may be ordered in each request (please see IDA's annotations to clauses 2, 3 and 4 generally above), multiple circuits to the same site may be deactivated in the same deactivation request. Accordingly, SingTel must modify clause 6 (and propose any other appropriate consequential amendments to Annex 7A-4) to clarify that the Requesting Licensee may request deactivation of multiple circuits in each request to the same site.*
 - (d) *With reference to clause 6.2 below, IDA's view is that the processing of the FLDR should be a straightforward process, and hence it is unreasonable for SingTel to take up to 5 Business Days to revert on the outcome of the FLDR. IDA considers a period of 3 Business Days to be reasonable for SingTel to revert with its acceptance or rejection of the FLDR.*
- 6.1 If the Requesting Licensee wishes to deactivate a FLLC Service under this Schedule, it must submit a request for FLLC deactivation in the form of a FLLC Service Deactivation Request (**FLDR**) provided in Annex 7A-4. The FLDR must be provided to SingTel no

less than twenty five (25) Business Days prior to the requested date of deactivation of the FLLC Service.

- 6.2 SingTel shall process the FLDR and advise the Requesting Licensee of its acceptance or rejection within five (5) Business Days of its receipt. SingTel may reject the FLDR if:
- (i) the request for FLLC deactivation is not in the prescribed form;
 - (ii) the FLDR does not contain all the required information; or
 - (iii) the FLDR is submitted less than twenty five (25) Business Days prior to the requested date of deactivation of the FLLC Service, as stated in the FLDR.
- 6.3 SingTel shall be entitled to levy and receive the processing charge specified in Schedule 9 for each FLDR that is rejected in accordance with clause 6.2.
- 6.4 If the Requesting Licensee requests deactivation of a FLLC Service during the Minimum Term (derived in accordance with clause 11.2) the Requesting Licensee shall remain liable for the recurring charges specified in Schedule 9 for that FLLC Service. Such liability for recurring charges in the event of deactivation shall commence from the date of deactivation or partial deactivation (as the case may be) for the remainder of the Minimum Term.

7. STANDARD TERMS AND CONDITIONS

- 7.1 SingTel is responsible for the maintenance and administration of the FLLC Service under this Schedule.

CLAUSE 7.2 – MODIFICATION REQUIRED

- 7.2 The Requesting Licensee must at its own expense:
- (a) procure and maintain any equipment or software needed to implement, receive and use the FLLC Service, unless SingTel expressly agrees otherwise in writing;

For the avoidance of doubt, SingTel must modify clause 7.2(a) to clarify that “equipment or software” refers to the Requesting Licensee’s own equipment and software.

- (b) follow the specifications for the FLLC Service as set out in Annex 7A-5 without modification;
- (c) use its reasonable efforts to ensure that its equipment (and services supplied and operated by it and used in connection with the FLLC Service) are fault-free, including conducting its own tests to detect any possible faults with such equipment and services it supplies and operates, before reporting any transmission malfunction to SingTel;
- (d) ensure that its equipment complies with the standards adhered to by SingTel in its provision of the FLLC Service;

The relevant standards used by SingTel under clause 7.2(d) must be objective and transparent, and not be at SingTel's sole discretion. SingTel must propose for inclusion into Schedule 7A, the applicable "standards" in a clear and detailed manner, failing which clause 7.2(d) must be deleted in its entirety.

- (e) raise fault reports to the SingTel representative in accordance to the Fault Restoration Procedures provided in Annex 7A-6 or otherwise as notified by SingTel;
- (f) assume sole responsibility for liaising with End Users for all faults reported or enquiries raised by them and shall not refer those End Users to SingTel (acknowledging that SingTel assumes no responsibility for and will not interface nor liaise with the End Users);
- (g) ensure that all its equipment connected to or used in conjunction with FLLC Service is approved for use by the Authority, is connected or used in accordance with the law and shall obtain the prior written approval of SingTel before connecting (or permitting any person to connect) any equipment to any telecommunications system operated by SingTel or any SingTel equipment, except where SingTel has dispensed with the requirement for such approval;

SingTel must modify clause 7.2(g) to incorporate the following requirements:

- (a) ***As IDA does not type-approve every equipment that a Requesting Licensee may use to connect to SingTel's network, SingTel must add the words "where applicable" after "Authority".***

- (b) ***With reference to IDA’s annotations above to clause 7.2(d), SingTel must specify upfront in its RIO the standards required of the equipment to be used by the Requesting Licensee to connect to its network. In this respect, so long as the equipment complies with the standards proposed by SingTel, it is unreasonable for SingTel to further require the Requesting Licensee to obtain SingTel’s prior approval in every case before installing its equipment. At most, SingTel may only impose a prior approval process in respect of any equipment that does not comply with the standards proposed by SingTel.***
- (h) ensure that its equipment (other than SingTel equipment) used or installed by or for it in conjunction with the FLLC Service is compatible and may properly function and operate with all other equipment (including SingTel equipment) used or installed in connection with the FLLC Service;
- (i) carry out such additions, improvements, adjustments, modifications, alterations or replacements to its equipment (other than SingTel equipment) and software which is connected to any telecommunications system operated by SingTel to any SingTel equipment, as and when required by SingTel for the purpose of maintaining the quality or increasing the efficiency of the FLLC Service, or for efficient handling of the volume (or increased volume) of telecommunications traffic, or for any other purpose whatsoever;

IDA’s assessment is that clause 7.2(i) imposes an onerous and unreasonable obligation on the Requesting Licensee to carry out any manner of works on its equipment and software as may be dictated by SingTel for any purpose. IDA will not permit SingTel to take any action that has the effect of raising the Requesting Licensee’s costs without any legitimate operational or technical justification. Therefore, unless SingTel can provide IDA with satisfactory justification for imposing such an obligation on the Requesting Licensee, SingTel must delete clause 7.2(i) in its entirety.

- (j) provide and maintain, when so required by SingTel and under the operating conditions and specifications stipulated by SingTel to the Requesting Licensee, all facilities and resources whatsoever necessary for the proper installation, operation and maintenance of the FLLC Service and all SingTel equipment including, but not limited to, power points, electricity, conduits, pipes and appropriate access, licence, way-leave, or easement rights;

The relevant “operating conditions and specifications stipulated by SingTel” under clause 7.2(j) must be objective and transparent, and not at SingTel’s sole discretion. SingTel must propose for inclusion into Schedule 7A the applicable “operating standards and conditions” in

a clear and detailed manner, failing which clause 7.2(j) must be deleted in its entirety. In addition, SingTel must clarify that the Requesting Licensee's obligation does not extend to providing and maintaining "all SingTel equipment", as implied by the current drafting language.

- (k) use and keep all SingTel equipment in good working condition (fair wear and tear excepted) in accordance with the specifications, guidelines and recommendations of the manufacturer or distributor thereof and of SingTel, and shall disconnect or cease to use any such equipment at the request of SingTel;

SingTel must insert the word "reasonable" before the word "request". In addition, IDA's assessment is that the Requesting Licensee's responsibility to maintain any SingTel equipment must be limited to such equipment that is provided to the Requesting Licensee and which is within the Requesting Licensee's custody and control. SingTel must modify clause 7.2(k) to incorporate the above requirements.

- (l) retain all SingTel equipment at all times in the custody and control of the Requesting Licensee at the site occupied by the End User and the Requesting Licensee;
- (m) promptly comply with all notices, instructions or directions given by SingTel or the Authority in respect of the installation, use or operation of the FLLC Service, SingTel equipment and all relevant equipment;

For clarity and reasonableness, SingTel must substitute the phrase "notices, instructions or directions given by SingTel or the Authority" with the phrase "directions given by IDA and reasonable notices and instructions given by SingTel".

- (n) pay to SingTel any charges, in the event that any personnel or contractor of SingTel is required to visit any site to inspect, test, repair, install, remove or replace any equipment used by the Requesting Licensee in connection with the FLLC Service, for each visit and/or for the work carried out by personnel or contractor of SingTel at any such premises for the purpose at such rate or in such amount and calculated in such manner as SingTel may determine at the time unless such visit is made to repair or replace any SingTel equipment in discharge of any obligation by SingTel under any warranty given by SingTel to the Requesting Licensee with respect to that SingTel equipment;

As a general principle, any cost that SingTel wants to recover from the Requesting Licensee must be approved by IDA and consistent with the requirements of the Code. Accordingly,

unless SingTel can provide IDA with satisfactory justification for retaining clause 7.2(n), SingTel must delete clause 7.2(n) in its entirety.

- (o) ensure adequate preventive measures to avoid radiations and interferences that may disrupt other SingTel services; and
- (p) be fully responsible for and shall procure that its Customers comply with clauses 7.2(i), 7.2(j), 7.2(k) and 7.2(n) as set out above and shall indemnify SingTel for any loss or damages that it may suffer as a result of any breach, or default by the End User.

CLAUSE 7.3 – MODIFICATION REQUIRED

7.3 The Requesting Licensee shall not:

- (a) use the FLLC Service other than in accordance with the sole purpose set out in clauses 1.1 to 1.4. For the avoidance of doubt, the resale or otherwise re-supply of the FLLC Service “as is” by the Requesting Licensee to any Third Party is outside the scope of this sole purpose;

Please refer to paragraph 3 of Annex 1 of this Direction. Clause 7.3(a) imposes a restriction on resale and does not comply with the Code’s requirements, which permits Requesting Licensees to resell the FLLC Services on an “as is” basis. SingTel must modify clause 7.3(a) to comply with the Code’s requirements.

- (b) use SingTel’s brand, name, logo, trademarks, service marks (whether registered or not) or the fact that the FLLC Service is provided using SingTel’s network, in promoting or re-providing the Requesting Licensee’s services or otherwise, or purport to own the network used to provide the FLLC Service;
- (c) use or permit the use of the FLLC Service or install, connect, link or use (or permit the installation, connection, linking or use) of any telecommunications equipment in contravention of any law or in any manner which would or is likely to cause any irritation, annoyance, embarrassment, harassment, disturbance or nuisance of any kind whatsoever to any person or which would disrupt the provision or operation of any telecommunications service by SingTel or other Licensee;

Unless SingTel can provide satisfactory justification as to why the second limb of clause 7.3(c) – “which would disrupt the provision or operation of any telecommunications service by

SingTel or other Licensee” – should be retained given that clause 9.1(b) already deals with network interference, SingTel must delete the second limb of clause 7.3(c).

- (d) carry out or permit to be carried out any additions, improvements, adjustments, modifications, alterations or replacements to any SingTel equipment or equipment supplied by SingTel to the Requesting Licensee without the prior written consent of SingTel;

SingTel must modify clause 7.3(d) to provide that its consent is not to be unreasonably withheld.

- (e) use or permit the FLLC Service or any telecommunications equipment to be used in any manner or for any activity whatsoever which generates or is likely to generate telecommunications traffic or usage which causes or is likely to cause congestion in or disruption to the provision or operation of any telecommunications service by SingTel or other Licensees, without the prior written consent of SingTel; and

SingTel must modify clause 7.3(e) to provide that its consent is not to be unreasonably withheld.

- (f) use any equipment supplied by SingTel for any purpose other than that for which such equipment was supplied.

CLAUSE 7.4 – MODIFICATION REQUIRED

- 7.4 If any work, operation or use by the Requesting Licensee in relation to the FLLC Service causes (or SingTel reasonably believes will cause) SingTel to incur additional costs beyond the normal provisioning of the FLLC Service, SingTel reserves the right to advise the Requesting Licensee of such additional costs which would be incurred by SingTel in connection with such work, operation or use and if the Requesting Licensee decides to pursue such work, operation or use, the Requesting Licensee shall reimburse SingTel for such costs.

As a general principle, any cost that SingTel wants to recover from the Requesting Licensee must be approved by IDA and consistent with the requirements of the Code. Accordingly, unless SingTel can provide IDA with satisfactory justification for retaining clause 7.4, SingTel must delete clause 7.4 in its entirety.

8. ACCESS AND APPROVALS REQUIRED

8.1 At the B-end located at a Requesting Licensee's network site, the Requesting Licensee must:

- (a) provide SingTel with safe and reasonable access to the Requesting Licensee's premises as reasonably required to enable SingTel to install, test, inspect, repair, modify and maintain its equipment at the premises in connection with the provision of the FLLC Service; and
- (b) not permit any person other than a person reasonably identified as an authorised representative of SingTel to maintain, modify, repair or interfere with such equipment.

8.2 At the A-end located at an End User's site, the Requesting Licensee must obtain the permission of that End User to allow SingTel to physically access the site and deal with the equipment in the same manner as required at the Requesting Licensee's sites under clause 8.1.

9. PROTECTION AND SAFETY

CLAUSE 9.1 – MODIFICATION REQUIRED

9.1 The Requesting Licensee is responsible for the safe operation of its equipment and shall be responsible for the safe operation of the FLLC Service and shall, so far as reasonably practicable, take all necessary steps to ensure that the FLLC Service use and its equipment:

- (a) does not endanger the safety of any person, including the employees, contractors, Customers or Third Party;
- (b) does not cause physical or technical harm to SingTel's Network, including but not limited to causing damage, interfering with or causing deterioration in the operation of SingTel's Network;
- (c) does not jeopardise the integrity or confidentiality of communications within SingTel's Network; or

Unless SingTel can provide IDA with satisfactory justification for retaining clause 9.1(c) (including the specific circumstances envisaged under this clause), SingTel must delete clause 9.1(c) in its entirety.

(d) does not threaten the security and accessibility of the FLLC Service.

Unless SingTel can provide IDA with satisfactory justification for retaining clause 9.1(d) (including the specific circumstances envisaged under this clause), SingTel must delete clause 9.1(d) in its entirety.

CLAUSE 9.2 – MODIFICATION REQUIRED

9.2 The Requesting Licensee must comply with SingTel’s standard operating procedures in relation to the use of the FLLC Service, as amended by SingTel time to time.

The relevant “standard operating procedures” stipulated by SingTel under clause 9.2 must be objective and transparent, and not at SingTel’s sole discretion. SingTel must propose for inclusion into Schedule 7A, the applicable “standard operating procedures” in a clear and detailed manner, failing which clause 9.2 must be deleted in its entirety.

10. REQUESTING LICENSEE RIGHTS

CLAUSE 10.1 – MODIFICATION REQUIRED

10.1 The approval and provision of the FLLC Service does not vest in the Requesting Licensee any right, title or proprietary interest in any FLLC.

The Requesting Licensee must have an exclusive right to the use of the circuits acquired from SingTel under this Schedule 7A. Accordingly, SingTel must modify clause 10.1 to clarify that, save as provided in Schedule 7A, the FLLC Service does not vest in the Requesting Licensee any right, title or proprietary interest in any FLLC.

11. TERM

CLAUSE 11.1 – MODIFICATION REQUIRED

11.1 This Schedule commences on 20 July 2004 and shall continue until the expiry of:

- (a) eighteen months (18) months from 20 July 2004 for all FLLC that terminate at End User sites within the Central Zone as defined in Annex 7A-8 (**FLLC Central Term**); or
- (b) twenty-four (24) months from 20 July 2004 for all other FLLC not included in paragraph (a) (**FLLC Non-Central Term**).

Please refer to paragraph 2.2 of Annex 1 of this Direction. Clause 11.1 provides for Schedule 7A to commence from 20 July 2004. This does not comply with the Code’s requirements on the commencement date of the FLLC Service. As provided for in paragraphs 7.2.1 and 7.2.2 of Appendix Two of the Code, SingTel must modify clause 11.1 to specify that the commencement date of the FLLC Service shall be the date specified by IDA by separate notice in the Gazette.

In addition, for clarity, SingTel must modify clause 11.1 by deleting the word “all” before “FLLC that terminate” in clause 11.1(a), and amend the reference to “Annex 7A-8” to refer to “Annex 7A-7” instead. In this respect, IDA reminds SingTel that, in the case of an FLLC (Point to Multi-Point Circuit), as provided for in paragraph 7.2.2 of Appendix Two of the Code, the FLLC Central Term only applies in the case where all the A-ends of the circuit terminate at End User sites “which are all located within the CBD proxy-region”.

CLAUSES 11.2 AND 11.3 – MODIFICATION REQUIRED

- 11.2 The FLLC Service shall commence on the date activated by SingTel (**Commencement Date of Service**) and remains effective for the minimum period of one (1) year from the Commencement Date of Service (**Minimum Term**) or the expiry of the FLLC Central Term or FLLC Non-Central Term, which ever is the earlier.
- 11.3 If, for any reason, the Requesting Licensee purports to terminate a FLLC Service during the Minimum Term, the Requesting Licensee shall be liable to SingTel for the monthly recurring Charges specified in Schedule 9 from the date of such termination (or part thereof) for the remainder of the Minimum Term or until the expiry of the FLLC Central Term or FLLC Non-Central Term, which ever is the earlier.

Please refer to paragraph 2.4 of Annex 1 of this Direction and IDA’s annotations above to clause 6. SingTel must modify clauses 11.2 and 11.3 to incorporate the following requirements:

- (a) *SingTel must not impose any minimum service commitment term for the FLLC Service and charge any premature termination liability linked to any minimum service*

commitment term. Instead, the term of the FLLC Service shall be for a period of one month and renewed automatically on a monthly basis until the occurrence of the earlier of the following events: (i) the Requesting Licensee serves notice to deactivate the relevant FLLC Service under clause 6; (ii) any specified event of termination provided for in clauses 11.4 or 13 applies; or (iii) upon the expiry of FLLC Central Term or FLLC Non-Central Term, as the case may be.

(b) The Requesting Licensee may serve notice to deactivate a circuit at any time during the term of service by giving SingTel one month prior written notice. Where the Requesting Licensee requires deactivation of a circuit before the expiry of the one month notice period, the Requesting Licensee shall remain liable for the recurring charges for that circuit until the date of expiry of the notice period.

11.4 The Parties acknowledge that the Authority may terminate SingTel's obligation to provide the FLLC Service at any time and in particular on or before the expiry of the FLLC Central Term and/or FLLC Non-Central Term. Notwithstanding any provision in this Schedule 7A, in the event that the Authority modifies or removes the requirement for SingTel to provide the FLLC Service to the Requesting Licensee prior to the expiry of the FLLC Central Term and/or FLLC Non-Central Term, SingTel shall have the right, as the case may be, to:

- (i) modify the terms and conditions contained in this Schedule 7A for the supply of the FLLC Service; or
- (ii) terminate the supply of the FLLC Service,

in compliance with the Authority's direction.

12. SUSPENSION

CLAUSE 12.1 – MODIFICATION REQUIRED

12.1 Subject to clause 12.2 of the main body of this RIO Agreement, SingTel may suspend the supply of the FLLC Service until further notice if:

- (a) in the reasonable opinion of SingTel, it is necessary to suspend the supply of the FLLC Service in order for SingTel to carry out repair or upgrading of any equipment or facility used to provide the FLLC Service; or

IDA will not permit SingTel to suspend the supply of the FLLC Service on the basis that SingTel needs to carry out repair or upgrading works. Any suspension of service involves service disruption to End Users. However, SingTel may propose a provision for IDA's approval to specify the applicable process when SingTel needs to carry out repair or upgrading works to its equipment or facility used to provide the FLLC Service. In this respect, any such provision proposed by SingTel must incorporate the following requirements:

- (a) SingTel must address repairs and upgrades under two situations:*
 - (i) In the case of planned repairs and upgrades, SingTel must provide prior reasonable notice to the Requesting Licensee. IDA considers a notice period of 14 calendar days to be reasonable as SingTel ought to be aware of its planned repairs and upgrading works schedule well in advance.*
 - (ii) In the case of emergency repairs and upgrades, SingTel must provide notice to the Requesting Licensee as soon as practicable.*
- (b) SingTel must carry out the repairs and upgrading works in a non-discriminatory manner and as it would carry out such works for itself, its affiliates and its customers. SingTel must also prevent service disruption from occurring during the process of repairs and upgrading.*
- (b) the FLLC Service causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of SingTel or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the SingTel Network.

13. TERMINATION

CLAUSE 13.1 – MODIFICATION REQUIRED

- 13.1 Subject to clause 13.2 of the main body of the RIO Agreement, SingTel may immediately terminate the supply of the FLLC Service if:
- (a) the Requesting Licensee uses the FLLC Service for a purpose other than that set out in clauses 1.1 to 1.4 or as prohibited under clause 7.3(a);

Please refer to IDA's annotations to clause 1.4 above. As SingTel must delete clause 1.4 in its entirety, the reference to clause 1.4 must be correspondingly removed.

(b) the Requesting Licensee is no longer an FBO;

As the event for termination specified in clause 13.1(b) above is already provided for in clause 13.1(a) of the Main Body of the RIO, SingTel should delete clause 13.1(b).

(c) the Requesting Licensee is in breach of this Schedule and such breach remains unremedied for a period of five (5) Business Days after receiving notice from SingTel to do so;

IDA notes that clause 13.1(d) of the Main Body of the RIO provides a Requesting Licensee with 7 Calendar Days to remedy a breach. Accordingly, SingTel must modify clause 13.1(c) to provide for a similar period of 7 Calendar Days for the Requesting Licensee to remedy the breach.

(d) in SingTel's reasonable opinion, the Requesting Licensee is using the FLLC Service in contravention of an applicable law, licence, code, regulation or direction and SingTel has the necessary confirmation from the relevant Governmental Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;

As the event for termination specified in clause 13.1(d) above is already provided for in clause 13.1(g) of the Main Body of the RIO, SingTel should delete clause 13.1(d).

(e) the Requesting Licensee abandons the FLLC Service;

As the event for termination specified in clause 13.1(e) above is already provided for in clause 13.2(a) below, SingTel must delete clause 13.1(e). Instead, the provisions of clause 13.2(a) will apply to govern such an event.

(f) supply or use of the FLLC has become unsafe or unsuitable for its purpose;

Please refer to IDA's annotations below to clause 13.2. Unless SingTel can provide IDA with satisfactory justification for retaining clause 13.1(f), SingTel must delete clause 13.1(f) in its entirety.

- (g) SingTel's right to own, maintain or operate the FLLC or the FLLC Service is revoked or terminates or expires; or
- (h) use of the FLLC Service causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of SingTel or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the SingTel Network.

CLAUSE 13.2 – MODIFICATION REQUIRED

13.2 Subject to clause 13.2 of the main body of this RIO Agreement, if during the term of supply of the FLLC Service, the FLLC is:

- (a) no longer in use by the Requesting Licensee;
- (b) no longer suitable for use in SingTel's opinion; or
- (c) no longer available to be used as determined by SingTel,

three (3) months prior notice may be given by SingTel to the Requesting Licensee for termination of the supply of the FLLC Service.

SingTel must specify clearly for IDA's approval, the grounds on which SingTel may determine that the FLLC Service is "no longer suitable" or "no longer available", otherwise SingTel must delete clauses 13.2(b) and 13.2(c). In addition, if any circuit is no longer in use by the Requesting Licensee, any right of termination exercised by SingTel must be in respect of that circuit only. SingTel must not terminate the provision of the FLLC Service altogether. SingTel must modify clause 13.2 to comply with the above requirements.

13.3 If this Schedule in whole or in part is terminated or expires for any reason, or the RIO Agreement is terminated for any reason, the supply of the relevant FLLC Service is also terminated.

14. EXPIRY OF TERM

CLAUSE 14.1 – MODIFICATION REQUIRED

- 14.1 Upon expiry or termination of the supply of a FLLC Service, the Requesting Licensee must have discontinued the use of the FLLC Service within three (3) Business Days of expiry or termination.

Please refer to paragraph 4 of Annex 1 of this Direction. SingTel must provide in this Schedule for clear and detailed processes to enable “service migration” under the circumstances specified in paragraphs 4.1 (a) to (c) of Annex 1 of this Direction. SingTel must ensure that during the process of “service migration”, there would be no service disruption to any End User.

- 14.2 Where the Requesting Licensee fails to discontinue the use of the FLLC Service, SingTel shall disconnect the FLLC Service and the Requesting Licensee shall pay any reasonable costs associated with its disconnection.

15. ASSIGNMENT

- 15.1 The Requesting Licensee must not assign its rights or obligations in respect of any FLLC under this Schedule.

IDA notes that clause 15.1 duplicates clause 26 of the Main Body of the RIO. Accordingly, SingTel must delete this clause for reason of redundancy.

ANNEX 7A-1 – MODIFICATION REQUIRED

ANNEX 7A-1 FLLC (POINT-TO-POINT CIRCUIT) BANDWIDTH

The FLLC Service supplied as a single point-to-point (PTP) circuit connects a End User's site and the Requesting Licensee's network site at the following bandwidths:

1. 64 Kbps;
2. 128 Kbps;
3. 192 Kbps;
4. 256 Kbps;
5. 384 Kbps;
6. 512 Kbps;
7. 768 Kbps;
8. 1024 Kbps;
9. 1536 Kbps;
10. 1984 Kbps;
11. 2 Mbps;
12. 45 Mbps; and
13. 155 Mbps.

For the 64 Kbps and 128 Kbps bandwidth circuits, the Charges for the network terminating equipment are not included in the listed monthly recurring charges and the one-time Installation Charges related to the Full Local Leased Circuit Point-to-Point (PTP) in Schedule 9. The network terminating equipment must be separately purchased or leased from SingTel at the Charges listed in Schedule 9 under Generic Components.

SingTel must modify the last sentence of the above proviso to clarify that a Requesting Licensee may purchase its own network terminating equipment from any party other than SingTel.

ANNEX 7A-2 – MODIFICATION REQUIRED

ANNEX 7A-2 FLLC (POINT TO MULTI-POINT CIRCUIT) BANDWIDTH

The FLLC Service supplied as a point-to-multipoint (PTMP) circuit connects multiple End Users' sites (whereby tail circuits connect the End Users' sites and a SingTel exchange) and the Requesting Licensee's network site (whereby a trunk circuit connects SingTel's exchange with the Requesting Licensee's network site).

For clarity, SingTel must delete the wordings in brackets above – “(whereby tail circuits connect the End Users' sites and a SingTel exchange)” – and – “(whereby a trunk circuit connects SingTel's exchange with the Requesting Licensee's network site)”. The words in brackets may be misconstrued to restrict a Requesting Licensee to only obtaining all of its PTMP circuits that connect to a single SingTel exchange.

In relation to the FLLC (Point-to Multipoint Circuit) tail circuits, SingTel shall provide circuits at the following bandwidth:

1. 64 Kbps;
2. 128 Kbps;
3. 192 Kbps;
4. 256 Kbps;
5. 384 Kbps;
6. 512 Kbps;
7. 768 Kbps;
8. 1024 Kbps;
9. 1536 Kbps; and
10. 1984 Kbps.

In relation to the FLLC (Point-to-Multipoint Circuit) trunk circuits, SingTel shall only provide circuits of 1984 Kbps bandwidth.

For the 64 Kbps and 128 Kbps bandwidth circuits, the Charges for the network terminating equipment are not included in the listed monthly recurring Charges and the one-time Installation Charges related to the Full Local Leased Circuit Point-to-Multipoint (**PTMP**) in Schedule 9. The network terminating equipment will have to be separately purchased or leased from SingTel at the prices listed in Schedule 9 under Generic Components.

SingTel must modify the last sentence of this proviso to clarify that a Requesting Licensee may purchase its own network terminating equipment from any party other than SingTel.

ANNEX 7A-3 – MODIFICATION REQUIRED

Please see IDA’s annotations to clauses 2, 3 and 4 generally. SingTel must modify this Annex 7A-3 to provide for the ability of a Requesting Licensee to submit a single application form to request for activation of multiple circuits terminating at the same site.

ANNEX 7A-3 REQUEST FORM FOR FLLC SERVICE ACTIVATION



SingTel

FLLC Service Activation Request

Date: _____

Application Reference Number: _____

To: Manager, Network Integration and Interconnect
Fax: 65-6848 4113

1. Requesting Licensee Particulars

Name: _____

Signature: _____

Telephone: _____

Facsimile: _____

Company Stamp: _____

Billable Account No (For SingTel Use): _____

Please tick relevant box:

Point to Point Connection

Point to Multipoint Connection

2. Requesting Licensee Contacts for Test/Maintenance

Name: _____

Telephone: _____

Facsimile: _____

3. Intended Activation Date: _____

4. A-End (Customer Location)

B-End (Requesting Licensee Location)

4.1 Customer Name: _____

4.2 Site address: _____

Site address: _____

4.3 Postal Code: _____

Postal Code: _____

4.4 Bandwidth: _____

Bandwidth: _____

(Please refer to Annexes 7A-1 and 7A-2 for the bandwidth required)

4.5 Equipment Type: _____

Equipment Type: _____

4.6	Equipment Interface Type: _____	Equipment Interface Type: _____
4.7	NTU (applicable only for 64kbps and 128kbps)	
	<input type="checkbox"/> Outright Purchase	<input type="checkbox"/> Outright Purchase
	<input type="checkbox"/> Rental	<input type="checkbox"/> Rental

FLLC Service Activation Request

Application Reference Number: _____

5.	<p>For Point to Multipoint Connection only (For activation of additional A-End address, please submit new FLLC Service Activation Request Form) Low Speed Grooming</p> <p><input type="checkbox"/> New 1984 Kbps trunk circuit</p> <p><input type="checkbox"/> Existing 1984 Kbps trunk circuit reference: _____</p> <p>Time slot: _____</p>
6.	<p>SingTel's Reply to the Requesting Licensee</p> <p><input type="checkbox"/> Application returned – incomplete/illegible</p> <p><input type="checkbox"/> Not Approved Reason for Rejection: _____</p> <p><input type="checkbox"/> Approved SingTel Approve Code: _____</p> <p>RFS Date: _____</p> <p>Circuit Reference Number: _____</p> <p>Sign: _____ Contact Number: _____</p> <p>Name: _____ Fax Number: _____</p>
8.	<p>Processing Status</p> <p>Received Date: _____ Queue Status: _____ Processed Date: _____</p>

Please refer to IDA's annotations above to Annexes 7A-1 and 7A-2 – requiring SingTel to permit the Requesting Licensee to provide its own NTU. In this respect, consequential amendments must be made to item 4.7 above to reflect the ability of the Requesting Licensee to provide its own NTU.

IDA notes the following typographical error in item 6 above – reference to the phrase “SingTel

Approve Code” should be replaced with the phrase “SingTel Approval Code”.

ANNEX 7A-4 – MODIFICATION REQUIRED

Please see IDA’s annotations to clauses 2, 3 and 4 generally. SingTel must modify this Annex 7A-4 to provide for the ability of a Requesting Licensee to submit a single application form to request for deactivation of multiple circuits terminating at the same site.

ANNEX 7A-4 REQUEST FORM FOR FLLC SERVICE DEACTIVATION



SingTel

FLLC Service Deactivation Request

Date: _____

Application Reference Number: _____

To: Manager, Network Integration and Interconnect
Fax: 65-6848 4113

1. Requesting Licensee Particulars

Name: _____

Signature: _____

Telephone: _____

Facsimile: _____

Company Stamp: _____

Billable Account No (For SingTel Use): _____

Please tick relevant box:

Point to Point Connection

Point to Multipoint Connection

2. Requesting Licensee Contacts for Test/Maintenance

Name: _____

Telephone: _____

Facsimile: _____

3. Intended Deactivation Date: _____

4. A-End (Customer Location)

B-End (Requesting Licensee Location)

4.1 Customer Name: _____

4.2 Site address: _____

Site address: _____

4.3 Postal Code: _____

Postal Code: _____

4.4 Bandwidth: _____

Bandwidth: _____

(Please refer to Annexes 7A-1 and 7A-2 for the bandwidth required)

4.5	Equipment Type: _____	Equipment Type: _____
4.6	Equipment Interface Type: _____	Equipment Interface Type: _____

FLLC Service Deactivation Request

Application Reference Number: _____

6. For Point to Multipoint Connection only
 (For deactivation of additional A-End address, please submit new FLLC Service Deactivation Request Form)
 Low Speed Grooming

Deactivate A-end tail circuit only Circuit Reference Number: _____

Deactivate A-end tail circuit and B-end trunk circuit

Existing 1984 Kbps trunk circuit reference: _____

Time slot: _____

7. SingTel's Reply to the Requesting Licensee

Application returned – incomplete/illegible

Not Approved Reason for Rejection: _____

Approved SingTel Approve Code: _____

Deactivation Date: _____

Sign: _____ Contact Number: _____

Name: _____ Fax Number: _____

8. Processing Status

Received Date: _____ Queue Status: _____ Processed Date: _____

IDA notes the following typographical error – reference to the phrase “SingTel Approve Code” should be replaced with the phrase “SingTel Approval Code”.

ANNEX 7A-5 – MODIFICATION REQUIRED

ANNEX 7A-5 TECHNICAL INFORMATION OF FULL LOCAL LEASED CIRCUIT

1. The FLLC Service provided shall be based on the specifications listed in the table below. The Requesting Licensee must follow the specifications with no modifications permitted.
2. Interface standard will be as follows:

Speed	Interface Standard	Network Interface Point
N X 64 Kbps	V35	34-pin Winchester type connector. Other options subject to availability: X21, V24
2Mbps	G.703	120-ohm balanced, 4 wire twisted pair
45Mbps	G.703	75-ohm unbalanced, BNC coaxial
155Mbps	G.957/958 and G.707	1310nm, fibre connector: SC-PC

In relation to the connection at the B-end of an FLLC, SingTel must offer the Requesting Licensee the option of either V35 or G.703 interface standard for n X 64 Kbps circuits. The G.703 standard is specified by the International Telecommunication Union as the interface standard for carrier-to-carrier connections.

ANNEX 7A-6 – MODIFICATION REQUIRED

ANNEX 7A-6 FAULT RESTORATION PROCEDURE FOR FULL LOCAL LEASED CIRCUIT

1. COMMON FAULT DESCRIPTION

Fault Type	Description
High Loss	a) Termination Fault at Requesting Licensee’s Customer site b) Termination Fault at Requesting Licensee’s site c) Termination Fault at SingTel Telephone Exchange d) Termination Fault at Transmission/Fibre Node (Building MDF)
Transmission/ Fibre Discontinuity	a) Transmission/Fibre breaks at Requesting Licensee premise b) Transmission/Fibre breaks at SingTel Telephone Exchange c) Transmission/Fibre breaks at Transmission/Fibre Node (Building MDF) d) Transmission/Fibre breaks outside building

Note: Termination Faults include but not limited to Connector fault, Patch-cord fault, Coupling problems, pigtails, etc.

2. AVERAGE SERVICE RESTORATION

Fault Description	Average Restoration Time	
	Office Hours	After Office Hours
High Loss	6 Hours	8 Hours
Transmission/ Fibre Discontinuity	8 Hours	12 Hours

IDA notes that SingTel's retail LLCs offering provides for shorter average restoration times. As a general principle, IDA will not permit SingTel to adopt any provision in its mandated wholesale offering of LLCs that is more onerous or worse off as compared to SingTel's retail LLCs offering (please also refer to paragraph 1 of Annex 1 of this Direction). Therefore, consistent with a Dominant Licensee's obligation of non-discrimination, SingTel must modify this Section 2 of Annex 7A-6 to provide for average restoration times that are no worse off than what SingTel provides under its retail LLCs offering.

3. CHECK LIST FOR FAULT REPORTING

Items	Description / Remarks
Identification of faulty segments	Fault report should identify the segment of the suspected Local Leased Circuit. Segment refers to the link between any two of the termination points at different locations.
Essential information	Circuit/Link reference, location, time of fault occurrence, etc.
High Loss Fault	To provide the Loss figure and the type of measurement.
Contact person	To provide contact person name and contact number for purpose of fault updates.
Access for SingTel staff	Security clearance for SingTel staff into Requesting Licensee's premises for the purpose of fault isolation.
Fault Management Centre (FMC)	Tel: 1800-7880022

Note: Fault Docket shall be issued upon fault reporting by the Requesting Licensee. Docket shall be the reference for all communication between Requesting Licensee and FMC.

IDA's view is that the check-list for fault reporting in this Section 3 of Annex 7A-6 is not sufficiently comprehensive. SingTel must provide a detailed set of fault reporting procedures.

4. FOUND NO FAULT

The Requesting Licensee shall compensate SingTel for the cost incurred in responding to a fault that is not caused by SingTel based on the Call Out Rates as provided in Schedule 9.

For reasons of accountability, SingTel must provide evidence that it has investigated the fault docket and found no fault at its end before it may recover costs.

ANNEX 7A-7 – MODIFICATION REQUIRED

ANNEX 7A-7 DERIVATION OF ZONING

SingTel is required under paragraph 7.2.2 of Appendix Two of the Code to provide LLCs as a mandated wholesale service for 18 or 24 months, depending on whether the circuit terminates at an End User’s site located in the “CBD proxy-region” or not. Paragraph 7.2.2 of Appendix Two of the Code defines “CBD proxy-region” to mean “the area within the CBD containing the locations where the Dominant Licensee, as at 20th July 2004, offers retail local leased circuits pursuant to its retail tariff for local leased circuits in the CBD area, as approved by IDA”. In this respect, SingTel has proposed to identify the “CBD proxy-region” by reference to the Singapore Postal Code’s Sector Code. IDA would reiterate that, notwithstanding any subsequent change to the Singapore Postal Code system or the zoning of geographical locations by reference to the Singapore Postal Code’s Sector Code, the “CBD proxy-region” must be identified by reference to the Singapore Postal Code in use as at 20th July 2004. For this purpose, only the Singapore Postal Code’s Sector Code applicable to the CBD proxy-region as at 20th July 2004 should be listed in this Annex 7A-7. All other geographical locations identified by reference to other Sector Codes not listed in this Annex 7A-7 shall be treated as outside the “CBD proxy-region”. SingTel must modify Annex 7A-7 to comply with the above requirements.

For the purpose of this Schedule, the derivation of Zone to determine whether a Local Leased Circuit A-end or B-end is located in the Central Zone (CTR) or Non-Central Zone (NCTR) is by Postal Code’s Sector Code (1st 2 digits of the 6-digit postal code or last 2 digits of the 4-digit postal code): -

Sector Code	Zone Code	Sector Code	Zone Code	Sector Code	Zone Code
03	CTR	01	NCTR	49	NCTR
04	CTR	02	NCTR	50	NCTR
05	CTR	12	NCTR	51	NCTR
06	CTR	19	NCTR	53	NCTR
07	CTR	20	NCTR	54	NCTR
08	CTR	21	NCTR	55	NCTR
09	CTR	25	NCTR	56	NCTR
10	CTR	26	NCTR	57	NCTR
11	CTR	28	NCTR	63	NCTR
13	CTR	29	NCTR	64	NCTR
14	CTR	30	NCTR	65	NCTR
15	CTR	31	NCTR	66	NCTR
16	CTR	32	NCTR	67	NCTR

17	CTR
18	CTR
22	CTR
23	CTR
24	CTR
27	CTR

33	NCTR
34	NCTR
35	NCTR
36	NCTR
37	NCTR
38	NCTR
39	NCTR
40	NCTR
41	NCTR
42	NCTR
43	NCTR
44	NCTR
45	NCTR
46	NCTR
47	NCTR
48	NCTR
52	NCTR
58	NCTR
59	NCTR
60	NCTR
61	NCTR
62	NCTR

68	NCTR
69	NCTR
70	NCTR
71	NCTR
72	NCTR
73	NCTR
74	NCTR
75	NCTR
76	NCTR
77	NCTR
78	NCTR
79	NCTR
80	NCTR
81	NCTR
82	NCTR
83	NCTR