

## **SCHEDULE 7A**

### **WHOLESALE LOCAL LEASED CIRCUITS (FULL CIRCUITS)**

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## SCHEDULE 7A

### WHOLESALE LOCAL LEASED CIRCUIT (FULL CIRCUITS) SERVICE

#### 1. SCOPE

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 enables the Requesting Licensee to establish a connection for the carriage of digital communications from one or more End User sites to the Requesting Licensee's network site. Notwithstanding anything in this Schedule, the Requesting Licensee may use the FLLC Service as an input for the provision of any telecommunication product or service to itself or its affiliates where the Requesting Licensee offers or intends to offer that telecommunication product or service (whether or not using the same FLLC Service) to non-affiliated third party Customers. For the avoidance of doubt, any reference in this Schedule to the term "End User" shall, where appropriate, include the Requesting Licensee or its affiliates.

1.2 The FLLC Service is a dedicated A-end to B-end digital 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.

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.

1.4 For the avoidance of doubt:

- (a) the A-end of the FLLC Service may not terminate at any premise that is not used for the purpose set out in clauses 1.1, 1.2 and 1.3. Specifically, the A-end of the FLLC Service may not terminate at cable stations, earth stations, SingTel

exchanges, manholes, Power Rooms, lead-in pipes, ducting, and sites outside mainland Singapore (for the avoidance of doubt, sites within mainland Singapore include Sentosa Island and Jurong Island) (**Excluded Sites**). For the avoidance of doubt, the following sites are deemed to be Excluded Sites: base stations for mobile network and wireless broadband access network, FBO exchanges, building MDF/TER/Riser rooms, and outdoor cabinets. The FLLC Service will not be provided in respect of any Excluded Sites; and

- (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 Requesting Licensee must provide SingTel with a master list of all Pre-Notified Sites in the form set out in Annexure 7A-10 (**Master List**). The Requesting Licensee must update the Master List whenever there is a change in relation to a Pre-Notified Site and must provide the revised Master List to SingTel. The Requesting Licensee must ensure that the Pre-Notified Sites in the Master List are correct. For the avoidance of doubt, eligible Pre-Notified Sites include points-of-presence, exchanges and data hubs. The Requesting Licensee shall pay the costs incurred by SingTel in processing the Requesting Licensee's Master List.

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 itself, its affiliates and 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 FLLC Service activation specified in clauses 3.1 and 4A are subject to delays caused by events outside SingTel's reasonable control, in which case such failure to meet the timeframes shall not constitute a breach of this RIO Agreement and clause 1.8(a) shall not apply, provided that SingTel must notify the Requesting Licensee as soon as practicable upon the occurrence of such events, stating the cause of the events and specifying a new service activation date by extending the relevant timeframes for a period equal to the period of such delays.

- (b) For the purpose of sub-clause (a) above, in the event that SingTel is unable to activate service in relation to an FLAR received under this Schedule 7A within the timeframe specified in clause 3.1, and such failure is caused by the cumulative number of FLARs received from all Requesting Licensees exceeding the resources that SingTel has committed

to processing the FLARs, such event shall not be considered outside of SingTel's reasonable control, unless SingTel can satisfy the Authority of the following:

- (i) the anticipated cumulative number of FLARs that SingTel expects to receive from all Requesting Licensees is reasonable in the circumstances; and
    - (ii) SingTel has committed sufficient resources to process such anticipated cumulative number of FLARs.
  - (c) For the avoidance of doubt and subject to clause 1.4, SingTel must complete the FLLC Service activation by the new service activation date notified to the Requesting Licensee and clause 1.8(a) shall apply to such new service activation date.
- 1.8 (a) If SingTel fails to meet any timeframes in this Schedule relating to installation work or maintenance work to be undertaken by SingTel in relation to the FLLC Service, and the failure to meet the timeframe is caused by events within SingTel's reasonable control, SingTel will provide a remedy to the Requesting Licensee in accordance with:
- (i) section 2 of the Annexure 7A-6 and any terms and conditions contained therein in respect of installation work;
  - (ii) section 3 of Annexure 7A-6 and any terms and conditions contained therein in respect of maintenance work; and
  - (iii) section 4 of Annexure 7A-6 in respect of claims made under Annexure 7A-6.
- (b) 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 timeframes in relation to installation work and maintenance work and shall be SingTel's sole and exclusive liability to the Requesting Licensee for such failure.

## **2. ORDERING AND PROVISIONING PROCEDURE**

- 2.1 The Requesting Licensee shall submit a request for a FLLC Service activation in the form of a FLLC Activation Request (**FLAR**) provided in Annex 7A-3.
- 2.2 In the case of regular provisioning, the Requesting Licensee must submit the FLAR to SingTel no less than fifteen (15) Business Days prior to the requested date of activation for the FLLC Service.
- 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.
- 2.4 SingTel will only process FLARs if the processing timeframe will result in activation of the FLLC Service for that FLAR prior to the expiry of either the FLLC Central Term or the FLLC Non-Central Term (as the case may be).
- 2.5 The FLARs from all Requesting Licensees will be processed on a non-discriminatory “first come first served” basis.

## **3. PROJECT STUDY**

- 3.1 SingTel will perform a Project Study in relation to the FLAR submitted by the Requesting Licensee. 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. Following completion of the Project Study, and in any event not later than ten (10) Business Days from the date of the Requesting Licensee’s submission of the FLAR under clause 2.2, SingTel must notify the Requesting Licensee that either:
  - (a) the FLAR has been accepted, in which case SingTel will notify the Requesting Licensee of the FLLC Service activation date. For the avoidance of doubt, the FLLC Service activation date must be no later than fifteen (15) Business Days from the date of the Requesting Licensee’s submission of the FLAR under clause 2.2 (**Service Activation Date**); or
  - (b) the FLAR has been rejected in accordance with clause 3.3.
- 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) 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;
- (b) security and confidentiality requirements or restrictions imposed on SingTel by Governmental Agencies; or
- (c) whether SingTel has plans or otherwise proposes to decommission the network equipment for the provision of the FLLC Service within six (6) months from the date of the Requesting Licensee's submission of the FLAR under clause 2.2.

3.3 SingTel may reject a FLAR (and will provide a written statement of reasons for rejection to the Requesting Licensee) if:

- (a) the A-end is in respect of an Excluded Site or the B-end is not a Pre-Notified Site;
- (b) SingTel reasonably determines that the Requesting Licensee's Pre-Notified Site is not a network site;
- (c) the Requesting Licensee is not an FBO;
- (d) the FLAR is not in the prescribed form;
- (e) the FLAR does not contain all the required information;
- (f) SingTel reasonably determines that it does not have available network infrastructure or equipment;
- (g) the processing timeframe will result in activation of the FLLC Service for the FLAR after the expiry of either the FLLC Central Term or the FLLC Non-Central Term (as the case may be); or
- (h) the FLLC Service requested will be used by the Requesting Licensee as an input for the provision of any telecommunication product or service to itself or its affiliates, and it is shown that the Requesting Licensee has no intention of offering that telecommunication product or service (whether or not using the same FLLC Service) to non-affiliated third party Customers.

3.4 If the Requesting Licensee cancels its request for FLLC Service prior to the completion of the Project Study undertaken in clause 3.1, the Requesting Licensee must pay SingTel the Application Charge in Schedule 9.



#### **4. DELIVERY**

- 4.1 If the Requesting Licensee requests cancellation of the FLLC Service before service activation, SingTel reserves the right to charge and the Requesting Licensee shall be liable to pay an amount not exceeding the full amount of the Installation Charges as set out in Schedule 9, and calculated according to the amount of installation work undertaken by SingTel up to the requested date of such cancellation.
- 4.2 If the Requesting Licensee requests a deferment of the Service Activation Date:
- (i) before SingTel has commenced installation work, SingTel shall accept the deferment request, subject to the Requesting Licensee's payment of a deferment fee equivalent to 50% of the Installation Charges set out in Schedule 9, and provided the revised Service Activation Date shall be no more than thirty (30) Calendar Days from the Service Activation Date notified in clause 3.1(a). If the Requesting Licensee requests that the revised Service Activation Date be beyond the said thirty (30) Calendar Days, SingTel reserves the right to reject the deferment request 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 Application Charge; and
  - (ii) after SingTel has commenced installation work, SingTel reserves the right to reject the deferment request. For the avoidance of doubt, where SingTel rejects the deferment request, SingTel will complete provisioning the FLLC by the Service Activation Date notified in clause 3.1(a), unless the Requesting Licensee requests for cancellation under clause 4.1.
- 4.3 Notwithstanding clause 4.2, SingTel will not consider any request by the Requesting Licensee for deferment of the Service Activation Date submitted on or after the date notified as the Service Activation Date under clause 3.1(a) (or such other date as determined under clause 4.2(i)).
- 4.4 SingTel reserves the right to refuse to install or supply the FLLC Service if SingTel has evidence to substantiate a reasonably held belief to suggest that the end points do not conform to the FLLC Service as set out in clauses 1.1 to 1.4. In such an event, SingTel must provide a written response to the Requesting Licensee explaining the basis of its belief and the evidence it has relied upon.
- 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.

#### **4A. EXPRESS PROVISIONING**

- 4A.1 The Requesting Licensee may request express provisioning of the FLLC Service from SingTel. On receipt of such a request, SingTel will promptly and in good faith discuss with the Requesting Licensee its requirements.
- 4A.2 If SingTel accepts the Requesting Licensee's request for express provisioning, SingTel must activate service within three (3) Business Days from the date of its acceptance.
- 4A.3 Nothing in this Schedule shall prevent the Requesting Licensee from submitting a FLAR under clause 2.2 and concurrently requesting SingTel for express provisioning of the same circuit under clause 4A.1. In the event that the Requesting Licensee subsequently obtains express provisioning from SingTel, the FLAR shall be deemed cancelled and any Installation Charge payable upon cancellation of the FLAR shall be waived. For the avoidance of doubt, the Requesting Licensee shall remain liable to pay the Application Charge upon cancellation of the FLAR.

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

- 5.1 Subject to clause 5.2, SingTel reserves the right to re-route the FLLC at any time. SingTel will implement any re-routing on a non-discriminatory basis and as it would carry out re-routing for itself, its affiliates and Customers.
- 5.2 Where SingTel proposes to re-route the FLLC, SingTel will provide the Requesting Licensee with fourteen (14) Calendar Days prior notice. In the case of emergency re-routing, SingTel will provide the Requesting Licensee with notice as soon as practicable.
- 5.3 If the Requesting Licensee makes a request for any FLLC Service to be relocated, such request will be subject to:

- (a) the Requesting Licensee providing the FLAR to SingTel no less than fifteen (15) Business Days prior to the requested date of relocation for FLLC Service;
- (b) the Requesting Licensee being liable to pay to SingTel, where applicable, a Relocation Charge as set out in Schedule 9 of the RIO; and
- (c) only the A-end of the circuit would be relocated for which the Requesting Licensee must produce evidence that the End User is relocating from the original End User Site to the new End User site.

5.4 If the Requesting Licensee makes a request for a change of FLLC bandwidth, such request shall be deemed to be:

- (a) a request for the deactivation 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 6.3; and
- (b) a new request for FLLC Service at the bandwidth requested, in which event that new request shall be subject to the procedures in clauses 2 to 4A.

## **6. DEACTIVATION**

6.1 If the Requesting Licensee wishes to deactivate a FLLC Service (including any partial deactivation of a point-to-multipoint circuit as the case may be) 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. Subject to clause 6.3, the Requesting Licensee may deactivate a FLLC Service at any time upon giving SingTel thirty (30) Calendar Days prior written notice.

6.2 SingTel shall process the FLDR and advise the Requesting Licensee of its acceptance or rejection within three (3) Business Days of its receipt. SingTel may reject the FLDR if:

- (i) the request for FLLC deactivation is not in the prescribed form; or
- (ii) the FLDR does not contain all the required information.

6.3 If the Requesting Licensee requests deactivation of a FLLC Service before the expiry of the notice period of thirty (30) Calendar Days, the Requesting Licensee shall remain liable for the recurring charges specified in Schedule 9 for that FLLC Service until the expiry of the thirty (30) Calendar Days notice period. Such

liability for recurring charges in the event of deactivation shall commence from the date of deactivation for the remainder of the thirty (30) Calendar Days notice period.

## **7. STANDARD TERMS AND CONDITIONS**

7.1 SingTel is responsible for the maintenance and administration of the FLLC Service under this Schedule. For the avoidance of doubt, if the CPE is not bought from SingTel, SingTel is not responsible for the maintenance of such equipment. Any fault due to such equipment is not SingTel's responsibility and treated as no fault found case.

7.2 The Requesting Licensee must at its own expense:

- (a) procure and maintain any equipment or software that it requires to implement, receive and use the FLLC Service, unless SingTel expressly agrees otherwise in writing;
- (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 is able to work with the FLLC Service;
- (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 where applicable, is connected or used in accordance with the law and shall obtain the prior written approval of

SingTel (such approval not to be unreasonably withheld) 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;

- (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) provide and maintain, when so required by SingTel and under the operating conditions and specifications set out in Annex 7A-8 and, as amended by SingTel from time to time, 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;
- (j) use and keep all SingTel equipment that is provided to the Requesting Licensee and that is within the Requesting Licensee's custody and control 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 reasonable request of SingTel;
- (k) 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;
- (l) promptly comply with all directions given by the IDA and reasonable notices and instructions given by SingTel in respect of the installation, use or operation of the FLLC Service, SingTel equipment and all relevant equipment;
- (m) in relation to any equipment supplied by SingTel to the Requesting Licensee in connection with the FLLC Service and which is not covered by any applicable warranty, 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 such equipment, for each visit and/or for the work carried out by personnel or contractor of SingTel at any such premises at a rate to be determined by SingTel at the relevant time;

- (n) ensure adequate preventive measures to avoid radiations and interferences that may disrupt other SingTel services; and
- (o) be fully responsible for and shall procure that its Customers comply with clauses 7.2(i), 7.2(j) and 7.2(m) 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.

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;
- (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;
- (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 (such consent 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 (such consent not to be unreasonably withheld); and
- (f) use any equipment supplied by SingTel for any purpose other than that for which such equipment was supplied.

- 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.

## **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**

- 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
  - (d) does not threaten the security and accessibility of SingTel's Local Leased Circuit or the FLLC Service.
- 9.2 The Requesting Licensee must comply with SingTel's standard operating procedures specified in Annex 7A-9 in relation to the use of the FLLC Service, as amended by SingTel time to time.

## **10. REQUESTING LICENSEE RIGHTS**

- 10.1 Except to the extent expressly conferred under this Schedule 7A, the approval and provision of the FLLC Service does not vest in the Requesting Licensee any right, title or proprietary interest in any FLLC.

## **11. TERM**

- 11.1 This Schedule commences on the Wholesale LLC Commencement Date and shall continue until the expiry of:

- (a) eighteen months (18) months from the Wholesale LLC Commencement Date for;
  - (i) FLLC supplied as a point-to-point circuit that terminates at an End User's site within the Central Zone (hereinafter, as defined in Annex 7A-7); and
  - (ii) FLLC supplied as a point-to-multipoint circuit that terminates at multiple End Users' sites which are all located within the Central Zone,

(together, "**FLLC Central Term**"); or

- (b) twenty-four (24) months from the Wholesale LLC Commencement Date for all other FLLC not included in clause 11.1(a) (**FLLC Non-Central Term**).

- 11.2 The FLLC Service shall commence on the Service Activation Date and continue for a period of thirty (30) Calendar Days from the Service Activation Date, after which it will be renewed automatically on a monthly basis until the occurrence of one of the following events, which ever is the earlier:

- (a) the Requesting Licensee gives notice to SingTel to deactivate the relevant FLLC Service under clause 6.1;



- (b) an event of termination occurs under clause 13; or
- (c) the expiry of the FLLC Central Term or FLLC Non-Central Term.

11.3 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 AND PLANNED OUTAGES**

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 on fourteen (14) Calendar Days notice to the Requesting Licensee if 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.

12.2 SingTel may carry out repairs or upgrades to any equipment or facility used to provide the FLLC Service by giving fourteen (14) Calendar Days notice to the Requesting Licensee (such repair or upgrades to be assessed and performed on the same criteria as SingTel provides to itself, its affiliates and Customers).

## **13. TERMINATION**

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 (in relation to a specific circuit) if:

- (a) the Requesting Licensee uses that circuit for a purpose other than that set out in clauses 1.1 to 1.4 or as prohibited under clause 7.3(a);
- (b) the Requesting Licensee has committed a service affecting material breach of this Schedule and SingTel has given seven (7) Calendar Days notice of such breach and the Requesting Licensee has failed to rectify such breach within that time;
- (c) the Requesting Licensee has committed a non-service affecting material breach of this Schedule (including but not limited to failure to pay any sum for which the Requesting Licensee has been Invoiced) and SingTel has given fourteen (14) Calendar Days notice of such breach and the Requesting Licensee has failed to rectify such breach within that time;
- (d) in SingTel's reasonable opinion, the Requesting Licensee is using that circuit 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;
- (e) the Requesting Licensee abandons that circuit, provided that the Requesting Licensee has received ten (10) Business Days prior notice of SingTel's intention to terminate on such grounds and the Requesting Licensee did not dispute such notice by SingTel;
- (f) supply or use of that circuit has become unsafe for its purpose;
- (g) SingTel's right to own, maintain or operate that circuit or the FLLC Service is revoked or terminates or expires; or
- (h) use of that circuit 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.

13.2 If during the term of supply of the FLLC Service (in relation to a specific circuit), SingTel has plans to decommission that circuit, SingTel may provide the Requesting Licensee with at least (6) months prior notice of its intention to terminate the supply of that circuit.

- 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**

- 14.1 Upon expiry or termination of the supply of a FLLC Service, the Requesting Licensee must discontinue the use of the FLLC Service immediately.
- 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.

## **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. If purchased or leased from SingTel, the network terminating equipment must be separately purchased or leased at the Charges listed in Schedule 9 under Generic Components.

## **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 network) and the Requesting Licensee's network site (whereby a trunk circuit connects SingTel's network with the Requesting Licensee's network site).

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. If purchased or leased from SingTel, the network terminating equipment must be separately purchased or leased at the prices listed in Schedule 9 under Generic Components.

**ANNEX 7A.3 REQUEST FORM FOR FLLC SERVICE ACTIVATION**



Date: \_\_\_\_\_

Application Reference Number: \_\_\_\_\_

**FLLC Service Activation Request**

To: Manager, Network Integration and Interconnect

Fax: 65-6848 4113

**1. Requesting Licensee Particulars**

Requesting Licensee Name: \_\_\_\_\_

Requesting Licensee's BRN: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Billable Account No: \_\_\_\_\_

Company Stamp: \_\_\_\_\_

**Please tick relevant box:**

☐

**Point to Point Connection**

☐

**Point to Multipoint Connection**

**2. Requesting Licensee Contacts for Test/Maintenance**

A-end Name: \_\_\_\_\_

B-end Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**3. Intended Activation Date: \_\_\_\_\_ (Normal/Express)**

**4. A-End (Customer Location)** For multiple circuits, please complete and attach additional sections of the form for this purpose.

**B-End (Requesting Licensee Location)**

4.1 Customer Name: \_\_\_\_\_

4.2 Site address (with unit number, where available): \_\_\_\_\_

Site address: \_\_\_\_\_

Specific description of installation location where the unit number is unavailable (eg automatic teller machines): \_\_\_\_\_

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: \_\_\_\_\_

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**FLLC Service Activation Request**

Application Reference Number: \_\_\_\_\_

4.7 NTU (applicable only for 64 kbps and 128 kbps)

☐ Outright Purchase☐ Outright Purchase☐ Rental☐ Rental☐ Own NTU; Please specify: \_\_\_\_\_☐ Own NTU; Please specify: \_\_\_\_\_**5. For Point to Multipoint Connection only**

Low Speed Grooming

☐ New 1984 kbps trunk circuit☐ Existing 1984 kbps trunk circuit reference: \_\_\_\_\_

Time slot: \_\_\_\_\_

**6. SingTel's Reply to the Requesting Licensee**☐ Application returned – incomplete/illegible☐ Not Approved Reason for Rejection: \_\_\_\_\_☐ Approved SingTel Approval Code: \_\_\_\_\_

Service Activation Date: \_\_\_\_\_

Circuit Reference Number: \_\_\_\_\_

Wiring Date &amp; Time: \_\_\_\_\_

Sign: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Name: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**7. Processing Status**

Received Date: \_\_\_\_\_ Queue Status: \_\_\_\_\_ Processed Date: \_\_\_\_\_

**ANNEX 7A.4 REQUEST FORM FOR FLLC SERVICE DEACTIVATION**



Date: \_\_\_\_\_

Application Reference Number: \_\_\_\_\_

**FLLC Service Deactivation Request**

To: Manager, Network Integration and Interconnect

Fax: 65-6848 4113

**1. Requesting Licensee Particulars**

Requesting Licensee Name: \_\_\_\_\_

Requesting Licensee BRN: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Billable Account No: \_\_\_\_\_

Company Stamp: \_\_\_\_\_

**Please tick relevant box:**

☐

**Point to Point Connection**

☐

**Point to Multipoint Connection**

**2. Requesting Licensee Contacts for Test/Maintenance**

A-end Name: \_\_\_\_\_

B-end Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_

Facsimile: \_\_\_\_\_

Facsimile: \_\_\_\_\_

**3. Intended Deactivation Date: \_\_\_\_\_**

**4. A-End (Customer Location)** For multiple circuits, please complete and attach additional sections of the form for this purpose.

**B-End (Requesting Licensee Location)**

4.1 Customer Name: \_\_\_\_\_

4.2 Site address (with unit number, where available): \_\_\_\_\_

Site address: \_\_\_\_\_

Specific description of installation location where the unit number is unavailable (eg automatic teller machines): \_\_\_\_\_

4.3 Postal Code: \_\_\_\_\_

Postal Code: \_\_\_\_\_

4.4 Bandwidth: \_\_\_\_\_

Bandwidth: \_\_\_\_\_

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



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**FLLC Service Deactivation Request**

Application Reference Number: \_\_\_\_\_

4.5 Equipment Type: \_\_\_\_\_ Equipment Type: \_\_\_\_\_

4.6 Equipment Interface Type: \_\_\_\_\_ Equipment Interface Type: \_\_\_\_\_

**5. For Point to Multipoint Connection only**

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: \_\_\_\_\_

**6. SingTel's Reply to the Requesting Licensee**☐ Application returned – incomplete/illegible☐ Not Approved Reason for Rejection: \_\_\_\_\_☐ Approved SingTel Approval Code: \_\_\_\_\_

Deactivation Date: \_\_\_\_\_

Sign: \_\_\_\_\_

Contact Number: \_\_\_\_\_

Name: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**7. Processing Status**

Received Date: \_\_\_\_\_ Queue Status: \_\_\_\_\_ Processed Date: \_\_\_\_\_

## 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:

For FLLC Service (Point to Point circuits)

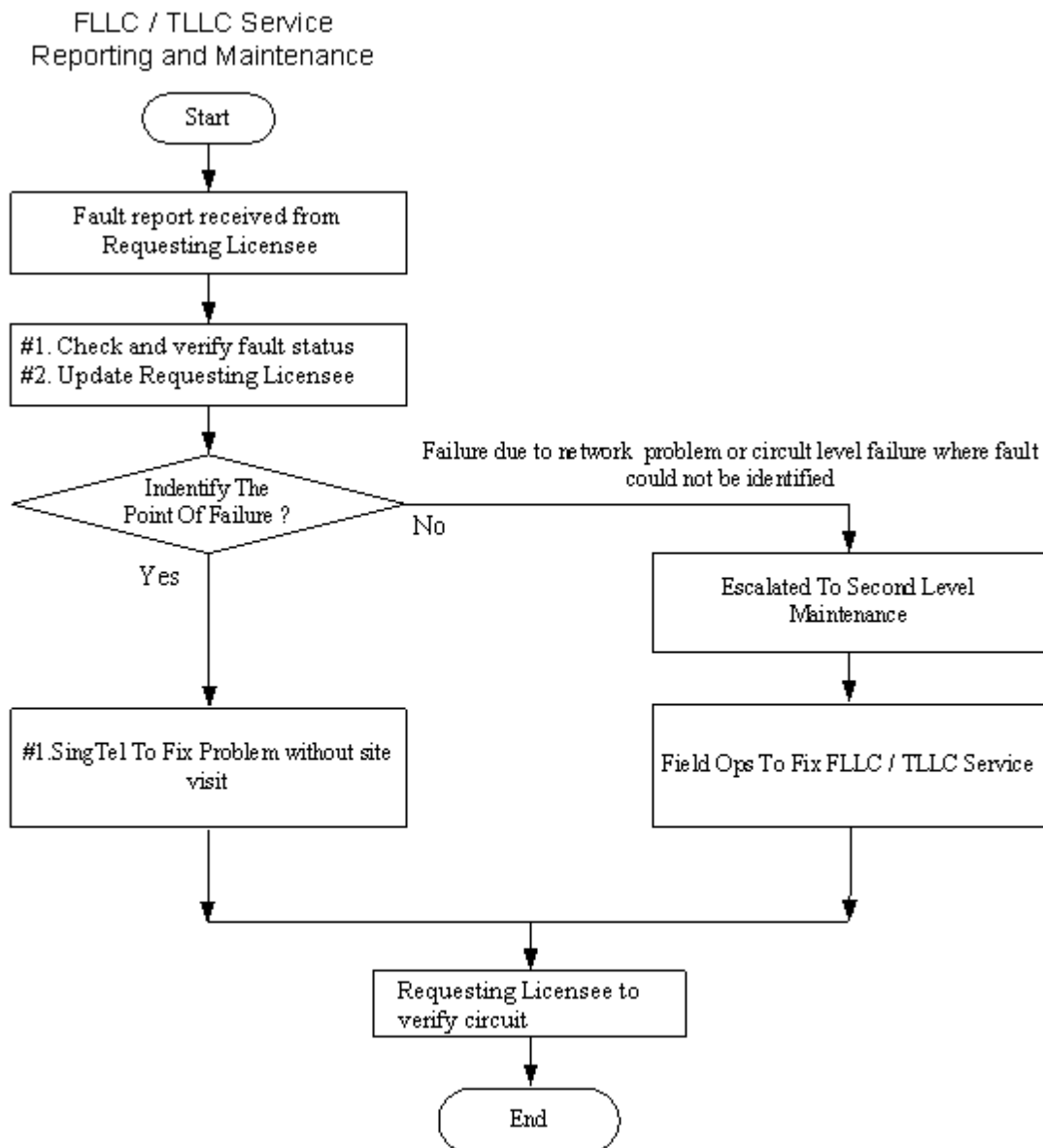
Speed	Default Interface Standard	Network Interface Point (and other interface options where available)
64 kbps 128 kbps 192 kbps 256 kbps 384 kbps 512 kbps 768 kbps 1024 kbps	V35	34-pin Winchester type connector. Other options (X21) are subject to availability.
1536 kbps 1984 kbps	V35	34-pin Winchester type connector. Other options (X21 or G.703) are subject to availability.
2 Mbps	G.703	120-ohm balanced, 4 wire twisted pair
45 Mbps	G.703	75-ohm unbalanced, BNC coaxial
155 Mbps	G.957/958 and G.707	1310nm, fibre connector: SC-PC

For FLLC Service (Point to Multi-Point circuits)

<b>Speed</b>	<b>Default Interface Standard</b>	<b>Network Interface Point (and other interface options where available)</b>
<u>Trunk Circuit</u> 1984 kbps	G.703	120-ohm balanced, 4 wire twisted pair or 34-pin Winchester type connector.
<u>Tail Circuit</u> 64 kbps 128 kbps 192 kbps 256 kbps 384 kbps 512 kbps 768 kbps 1024 kbps	V35	34-pin Winchester type connector. Other options (X21) are subject to availability.
Tail Circuit 1536 kbps	V35	34-pin Winchester type connector. Other options (X21 or G.703) are subject to availability.

**ANNEX 7A.6 FAULT REPORTING PROCEDURE, INSTALLATION AND MAINTENANCE  
REBATES FOR FULL LOCAL LEASED CIRCUIT**

**1. FAULT REPORTING PROCEDURE**



**NOTE:** 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.

## 2. REBATES FOR FLLC INSTALLATION WORK

<b>Missed Service Activation Date By</b>	<b>Rebates (as a percentage of the installation charge in Schedule 9)</b>
1 Day	10 % of installation charge
2 Days	20 % of installation charge
3 Days	50 % of installation charge
4 Days	75 % of installation charge
5 Days or more	100 % of installation charge

- (a) The Installation Work under this section covers the provision of the FLLC Service up to SingTel's network interface points.
- (b) If the End User's premises are not under SingTel's telecommunication cabling distribution scheme or the cabling network within the said premises is not provided by SingTel, then SingTel shall propose for it to provision and install wiring and socket(s) for the Requesting Licensee from SingTel's network interface points to the End User's premises, which shall form part of the installation work, and SingTel shall charge and the Requesting Licensee shall be liable to pay an additional cost as prescribed by SingTel from time to time.
- (c) If the Requesting Licensee wishes to decline SingTel's proposal in respect of the provision and installation of wiring and/or socket(s), then the Requesting Licensee may either:
  - (i) appoint, at its own cost, a licensed contractor to carry out the said work and perform the necessary testing with SingTel upon completion of the said work, by the agreed upon Service Activation Date; or
  - (ii) terminate the FLLC Service.
- (d) If the Requesting Licensee's licensed contractor fails to complete the said work and testing by the Service Activation Date, then the Requesting Licensee shall be required to request for a deferment of the Service Activation Date. If the Requesting Licensee terminates the FLLC Service before the relevant Service Activation Date, then the Requesting Licensee shall pay to SingTel such amounts as stipulated in clause 4.2 of this agreement.

- (e) Subject to the Requesting Licensee agreeing to the proposal under paragraph (b) above, if SingTel fails to complete the installation work by the Service Activation Date owing to matters within SingTel's control, then the Requesting Licensee may make a claim in accordance with section 4 of this Annexure.
- (f) Where the FLLC Service is provided without a physical visit by SingTel's staff and/or agent to the End User's premises, SingTel shall notify the Requesting Licensee of the date and/or time (**Activation Time**) when the FLLC Service shall be activated. If the FLLC Service is not activated at or after the Activation Time, then the Requesting Licensee shall report such non-activation fault to SingTel within forty eight (48) hours (**First Period**) after the Activation Time to enable SingTel to check and rectify the fault leading to the non-activation, if necessary. When the Requesting Licensee reports such non-activation fault, then SingTel shall check and rectify the fault within forty eight (48) hours or such longer period that SingTel reasonably requires (**Second Period**) from the time such non-activation fault is reported by the Requesting Licensee, and the revised Activation Time shall be correspondingly extended to the end of the Second Period provided always that the fault lies within SingTel's network and its reasonable control.

### 3. REBATES FOR FLLC MAINTENANCE

Outage (x)	Rebates (as a percentage of the monthly rental charge in Schedule 9)
6 hrs < x < 12 hrs	10 % of monthly rental charge
12 hrs < x < 24 hrs	40 % of monthly rental charge
24 hrs < x < 48 hrs	75 % of monthly rental charge
x > 48 hrs	100 % of monthly rental charge

- (a) The scope of maintenance work under this paragraph covers:
- (i) restoration of the FLLC Service up to SingTel's network interface points; and
  - (ii) any replacement, if deemed necessary by SingTel, of such wiring and/or socket(s), which has been laid or installed by SingTel between SingTel's network interface points and the end-user's premises. Such replacement shall be payable by the Requesting Licensee to SingTel at a reasonable cost prescribed by SingTel from time to time. If the Requesting Licensee

does not agree to pay the said cost, then SingTel reserves the absolute right not to carry out any replacement work and shall be absolved from any obligation to maintain the FLLC Service. For the avoidance of doubt, if the Requesting Licensee or its licensed contractor provisions and installs the relevant wiring and/or sockets, then the Requesting Licensee is responsible for its own maintenance work.

- (b) If SingTel fails to restore the FLLC Service in accordance with paragraph (a)(ii) above owing to matters within SingTel's control, then the Requesting Licensee may make a claim in accordance with section 4 of this Annexure.

#### **4. CLAIM PROCEDURES**

- (a) The Requesting Licensee may claim a rebate of no more than the applicable installation Charges in respect of the FLLC Service affected at any one time for the period of delay of the installation work beyond Service Activation Date. For the purposes of this clause, the installation charges applicable as at the date of the completion of the installation work shall be used to determine the amount of the rebate. The claimable amount and the period of delay leading to such claim shall be as specified by SingTel from time to time.
- (b) Subject to paragraph (b)(i) and (b)(ii) below, the Requesting Licensee may claim a rebate of no more than the applicable monthly recurring Charges in respect of the FLLC Service with respect to which a fault reported by the Requesting Licensee to SingTel's designated fault reporting centre is confirmed at any one time and there is a delay of FLLC Service restoration by SingTel. The claimable amount and the period of delay of FLLC Service restoration leading to such claim shall be as specified by SingTel from time to time.
  - (i) The Requesting Licensee's claim under paragraph (b) above shall be limited to the failure of the FLLC Service only. The Requesting Licensee shall not be entitled to make any claim in respect of any other service whatsoever which may be or is directly or indirectly affected by the failure of the FLLC Service.
  - (ii) The aggregate of the claims made by the Requesting Licensee for the FLLC Service in any calendar month shall in no event exceed the latest monthly recurring Charges payable for that FLLC Service for that month. For the purpose of this clause, the fault restoration time for the FLLC Service is used to determine a claim made in that calendar month.

- (c) A claim by the Requesting Licensee shall be made in writing within fourteen (14) Calendar Days of the completion of either the installation work or the maintenance work. The amount in respect of any claim shall be paid to the Requesting Licensee in the form of a rebate.
- (d) If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, then the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by SingTel and will be reflected in SingTel's bill to the Requesting Licensee in accordance with SingTel's billing cycle.
- (e) The guarantee and rebates provided by SingTel under this Annexure:
  - (i) are of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
  - (ii) are subject to this Schedule, the Telecommunications Act (Cap. 323) and any rules or regulations made under the same.
- (f) Despite anything to the contrary in this section, if the Requesting Licensee qualifies to make any claim under this Annexure, SingTel shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies to make a claim or as to the quantum of the claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 11 of the RIO, or in the case of a Billing Dispute, in accordance with Schedule 10 of the RIO.



**5. INFORMATION TO BE PROVIDED BY THE REQUESTING LICENSEE BEFORE REPORTING FAULT**

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.
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
Any other information	Any other information that SingTel may require from time to time.

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.

**6. 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.

## ANNEX 7A.7 DERIVATION OF ZONING

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 (1<sup>st</sup> 2 digits of the 6-digit postal code or last 2 digits of the 4-digit postal code).

“CBD proxy-region” refers to the Singapore Postal Code in use as at the WLLC Commencement Date.

Sector Code	Zone Code
03	CTR
04	CTR
05	CTR
06	CTR
07	CTR
08	CTR
09	CTR
10	CTR
11	CTR
13	CTR
14	CTR
15	CTR
16	CTR
17	CTR
18	CTR
22	CTR
23	CTR
24	CTR
27	CTR

Sector Code	Zone Code
01	NCTR
02	NCTR
12	NCTR
19	NCTR
20	NCTR
21	NCTR
25	NCTR
26	NCTR
28	NCTR
29	NCTR
30	NCTR
31	NCTR
32	NCTR
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

Sector Code	Zone Code
49	NCTR
50	NCTR
51	NCTR
53	NCTR
54	NCTR
55	NCTR
56	NCTR
57	NCTR
63	NCTR
64	NCTR
65	NCTR
66	NCTR
67	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

## **ANNEX 7A.8 OPERATING CONDITIONS AND SPECIFICATIONS**

The following operating conditions and specifications apply to the Requesting Licensee's provision and maintenance of all facilities and resources necessary for the proper installation, operation and maintenance of the FLLC Service and all SingTel equipment under clause 7.2(i).

### **1. LOCATION**

The following factors shall be considered in determining the location for the installation of the SingTel's equipment:

- (a) whether the Requesting Licensee's equipment and/or service emits or is likely to emit any electromagnetic radiation and the likely effect that that equipment and/or service (or its proximity to SingTel's equipment) may have on the operation of SingTel's equipment;
- (b) the proximity of any materials that could be hazardous to equipment and/or personnel or which carry a potential hazard, such as fire;
- (c) whether suitable site access is available, including but not limited direct access to the site room and access to the loading bay and goods lift;
- (d) the location should be weather protected and not subject to flooding.

### **2. SPACE**

- (a) The space for SingTel's equipment should have a clear height for the equipment rack. Beams below this height must be clear of the equipment rack. Both beams and pillars should not affect or disrupt the movement of operations personnel.
- (b) The space with SingTel's equipment installed in it should be large enough to permit:
  - (i) all the installed equipment to be accessed;
  - (ii) doors to be opened freely; and
  - (iii) the movement of the installed equipment in the event that new equipment is installed or removed.

### **3. SECURITY**

- (a) The equipment room must have adequate security to restrict access.
- (b) SingTel's staff must be allowed access to the room at all times.

### **4. POWER SUPPLY**

- (a) The site must be equipped with an AC power supply. The deviation specifications of the power supply shall be as follows:

<b>AC Power Supply</b>	
100Vac-240Vac	Voltage deviation - 10% plus or minus
50Hz / 60 Hz	Frequency deviation - 1% plus or minus

### **5. EQUIPMENT GROUNDING**

- (a) Where SingTel's equipment requires Building Principle Grounding, the Building Principle Ground must be less than 5 ohms.
- (b) The Building Principle Ground within the building premises must follow the Power Grid Code of Practice CP 5 and be endorsed by the Professional Engineer (PE).

### **6. LIGHTING**

- (a) A main and emergency lighting system must be installed by the Requesting Licensee for the space to ensure that the area is provided with lighting.
- (b) Fluorescent lighting fixtures (or equivalent) will be provided by the Requesting Licensee at regular spacing intervals mounted in the ceiling grid. The lighting fixture shall not be installed right above the cabinet.

### **7. FLOORING**

- (a) An anti-static dust free floor is required (a tiled floor is recommended). The floor should be capable of supporting 600 Kg per square metre. Overhead racking is required for cabling.

- (b) Raised computer type flooring with the same load rating as set out in paragraph 7(a) above can be substituted in lieu of the overhead cable racks. The space under the raised floor should be provided with drainage to protect against flooding or trapped water.
- (c) A water detection system is required for raised flooring.

#### **8. TEMPERATURE AND HUMIDITY**

Common space must have air-conditioning 24 hours a day at all times.

#### **9. FIRE ALARM SYSTEM AND FIRE PROTECTION SYSTEM**

- (a) The space shall be protected by a fire alarm system and a smoke detection system.
- (b) Water sprinkler-type fire extinguishing equipment is not to be used. A fire extinguishing system for electrical and computer-type environments must be provided. A Halon or equivalent system is highly recommended.

## **ANNEX 7A.9 STANDARD OPERATING PROCEDURES IN RELATION TO USE OF THE FLLC SERVICE**

In using SingTel's equipment, the Requesting Licensee must ensure that:

- (a) SingTel's equipment is protected from the elements (e.g. rain and sun) at all times;
- (b) SingTel's equipment is not exposed to dusty conditions;
- (c) SingTel's equipment is not subject to hazardous conditions that may or may be likely to damage or affect its normal operation (e.g. proximity to electromagnetic radiation);
- (d) SingTel's equipment is protected from fire with a fire extinguishing system that is appropriate for use in electrical and computer-type environments (i.e. not water sprinkling type system);
- (e) SingTel's equipment is operated in accordance with the operating conditions and specifications set out in Annex 7A-8;
- (f) SingTel's equipment is not moved to a location other than the location to which it was delivered;
- (g) SingTel's equipment is not altered, added, improved or interfered with in any way whatsoever;
- (h) SingTel's equipment is not switched off or powered off after it has been put into operation;
- (i) the labels or markings attached to SingTel's equipment are not changed, defaced, obscured or removed.

**ANNEX 7A.10 MASTER LIST FOR PRE-NOTIFIED SITES**

**MASTER LIST FOR PRE-NOTIFIED SITES**

S/n	Name of Office, Building	Full Address	Use
1	XXX data centre, A to Z Building	#123-01, 123 Road, Singapore (123456)	Data Centre