

PROPOSED AMENDMENTS TO SINGAPORE TELECOMMUNICATIONS LIMITED'S REFERENCE INTERCONNECTION OFFER ('RIO') TO OFFER LOCAL LEASED CIRCUITS ('LLC') AS A WHOLESALE SERVICE

APPENDIX 7

PARAGRAPH 7 SCHEDULE – MODIFICATION REQUIRED

7. SCHEDULE 7 –WHOLESALE SERVICES

7A SYSTEM SET UP CHARGE

The Requesting Licensee shall be liable to pay and shall pay SingTel a one time System Set Up Charge of the amount of [S\$ - to be determined] on the first occasion that a Requesting Licensee accepts Schedule 7A and/or Schedule 7B.

SCHEDULE 7A – WHOLESALE LOCAL LEASED CIRCUITS (FULL CIRCUITS) SERVICE

7.1 General

7.1.1 The Requesting Licensee shall be liable to pay and shall pay SingTel the relevant Charges for the Wholesale Local Leased Circuits (Full Circuits) Service as provided in Schedule 7A for point-to-point (**PTP**) circuits and/or point-to-multipoint (**PTMP**) circuits.

7.1.2 Application Charge

The Requesting Licensee shall pay to SingTel the Application Charge for processing each Wholesale Local Leased Circuits (Full Circuits) Service Activation Request. The Application Charge shall consist of a Per Order Charge for processing the request and a Per Circuit Charge for the circuit requested. The Application Charge shall be waived if the Service requested in the application (after having received SingTel's in-principle approval) is provisioned. However, the Application Charge shall be applied if the Wholesale Local Leased Circuits (Full Circuit) Service Activation Request is not approved by SingTel or prematurely cancelled or terminated by the Requesting Licensee. Where a single Wholesale Local Leased Circuits (Full Circuits) Service Activation Request is submitted in respect of multiple circuits, all with the same A-end and the same B-end, the Requesting Licensee shall

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pay a Per Order Charge for processing the request and Per Circuit Charge for each of the circuits requested.

7.1.3 Installation Charge

The Requesting Licensee shall pay to SingTel a one-time Installation Charge for provisioning each Wholesale Local Leased Circuits (Full Circuits) Service Activation Request.

For express provisioning, the Requesting Licensee shall pay to SingTel an amount equivalent to twice the one-time Installation Charge for provisioning each Wholesale Local Leased Circuits (Full Circuits) Service Activation Request.

7.1.4 Full Local Leased Circuit (Point-to-Point)

The Requesting Licensee shall pay to SingTel the recurring license Charge for each Full Local Leased Circuit (Point-to-Point) circuit provisioned.

7.1.5 Full Local Leased Circuit (Point-to-Multipoint)

The Requesting Licensee shall pay to SingTel the recurring license Charge for each Full Local Leased Circuit (Point-to-Multipoint) circuit provisioned.

7.1.6 Deactivation Charge

SingTel may charge, and the Requesting Licensee shall be liable to pay, a Deactivation Charge for each FLLC Service Deactivation Request. The Requesting Licensee's liability for the Deactivation Charge will only take effect after the expiry of the FLLC Central Term or the FLLC Non-Central Term (whichever occurs first).

7.1.7 Relocation Charge

The Requesting Licensee shall pay to SingTel a one-time Relocation Charge as follows:

For internal relocation (any relocation within the same building), the Internal Relocation Charge would be applicable.

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For external relocation (any relocation out of the building), the External Relocation Charge would be applicable.

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><i>MODIFICATION REQUIRED</i></p> <p>Application Charge</p> <p>Per Order Charge</p> <p>For 64Kbps and 128Kbps bandwidth – Per order</p> <p>For bandwidths other than 64Kbps and 128Kbps - Per order</p> <p>Per Circuit Charge</p> <p>For 64Kbps and 128Kbps bandwidth – Per circuit</p> <p>For bandwidths other than 64Kbps and 128Kbps - Per circuit</p> <p><u>IDA:</u></p> <p><i>Please refer to IDA’s annotations to clauses 2, 3 and 4 generally of Appendix 2 of this Direction. Requesting Licensees must be allowed to submit a single application form to request for activation of multiple circuits terminating at the same site. In such a case, 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. SingTel must modify the Application Charge in the manner as specified.</i></p>		

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><u>SINGTEL RESPONSE:</u></p> <p><i>SingTel could agree to a fixed application processing charge and a separate charge for each circuit, but only in cases where the A-ends and B-ends are the same for each of the multiple circuits (eg if 3 circuits all have the same A-end and B-end). See amendment to clause 7.1.2.</i></p> <p><i>However, it would take substantially longer to process an application of multiple circuits in cases where all the A-end or B-ends are not at the same location. A single charge would not be an accurate processing charge.</i></p> <p>Deactivation Charge</p> <p>Per deactivation request per circuit</p> <p><u>IDA:</u></p> <p><i>IDA notes that SingTel’s retail LLCs offering does not impose any charge for deactivation. 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. Accordingly, SingTel must remove all charges for carrying out deactivation. Further, IDA’s policy position is that, in relation to any deactivation of service under SingTel’s RIO, each party must bear its own cost in carrying out the deactivation.</i></p> <p><u>SINGTEL RESPONSE:</u></p> <p><i>The Deactivation Charge will only apply when the deactivation of the circuit is carried out after the</i></p>		

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><i>expiry of the FLLC Central Term or the FLLC Non-Central Term, as the case may be. See clause 7.1.6.</i></p> <p><i>SingTel also highlights that a Deactivation Charge already applies for other RIO services without the limitations proposed for the FLLC Service (eg the Submarine Cable Connection Service).</i></p>		
<p>Full Local Leased Circuit (Point-to-Point) - per PTP circuit per month</p> <p>64 Kbps</p> <p>128 Kbps</p> <p>192 Kbps</p> <p>256 Kbps</p> <p>384 Kbps</p> <p>512 Kbps</p> <p>768 Kbps</p> <p>1024 Kbps</p> <p>1536 Kbps</p> <p>1984 Kbps</p> <p>2 Mbps</p> <p>45 Mbps</p> <p>155 Mbps</p>	<p>Monthly Recurring Charges</p>	<p>One-Time Installation Charges</p>
<p><i>MODIFICATION REQUIRED</i></p> <p>Full Local Leased Circuit (Point-to-Multipoint) – per PTMP circuit per month</p>	<p>Monthly Recurring Charges</p>	<p>One-Time Installation Charges</p>

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p>Trunk Circuit</p> <p>1984 Kbps</p> <p>Tail Circuit</p> <p>64 Kbps</p> <p>128 Kbps</p> <p>192 Kbps</p> <p>256 Kbps</p> <p>384 Kbps</p> <p>512 Kbps</p> <p>768 Kbps</p> <p>1024 Kbps</p> <p>1536 Kbps</p> <p>1984 Kbps</p> <p>Grooming Facility Charge (applicable for every PTMP tail and trunk circuit)</p> <p>* This charge is only applicable in the event that Grooming Reconfiguration is done. For avoidance of doubt, when a PTMP tail or trunk circuit is provisioned for the first time, this charge is not applicable.</p> <p><u>IDA:</u></p> <p><i>IDA notes that under SingTel's retail LLCs offering, grooming charges are set out separately from circuit charges. As the charges for mandated wholesale LLCs are based on a</i></p>		*

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><i>“retail minus” of the corresponding charges for retail LLCs, SingTel must also separately specify grooming and circuit charges for mandated wholesale LLCs.</i></p> <p><u>SINGTEL RESPONSE:</u></p> <p><i>Agreed</i></p>		
<p>Generic Components (for 64Kbps and 128Kbps)</p> <p>Sale</p> <p>Network Terminating Equipment Network Terminating Equipment Installation</p> <p>Lease</p> <p>Network Terminating Equipment Lease</p>	Monthly Recurring	One-Time Charge
<p>Internal Relocation Charges</p> <p>64 Kbps 128 Kbps 192 Kbps 256 Kbps 384 Kbps 512 Kbps 768 Kbps</p>	Monthly Charge	One-Time Charge

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
1024 Kbps		
1536 Kbps		
1984 Kbps		
2 Mbps		
45 Mbps		
155 Mbps		
External Relocation Charges	Monthly Charge	One-Time Charge
64 Kbps		
128 Kbps		
192 Kbps		
256 Kbps		
384 Kbps		
512 Kbps		
768 Kbps		
1024 Kbps		
1536 Kbps		
1984 Kbps		
2 Mbps		
45 Mbps		
155 Mbps		

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SCHEDULE 7B – WHOLESALE LOCAL LEASED CIRCUITS (TAIL CIRCUITS) SERVICE

7.2 General

7.2.1 The Requesting Licensee shall be liable to pay and shall pay SingTel the relevant Charges for the Wholesale Local Leased Circuits (Tail Circuits) Service as provided in Schedule 7B.

7.2.2 Application Charge

The Requesting Licensee shall pay to SingTel the Application Charge for processing each Wholesale Local Leased Circuits (Tail Circuits) Service Activation Request. The Application Charge shall consist of a Per Order Charge for processing the request and a Per Circuit Charge for the circuit requested. The Application Charge shall be waived if the Service requested in the application (after having received SingTel's in-principle approval) is provisioned. However, the Application Charge shall be applied if the Wholesale Local Leased Circuits (Tail Circuit) Service Activation Request is not approved by SingTel or pre-maturely cancelled or terminated by the Requesting Licensee. Where a single Wholesale Local Leased Circuits (Tail Circuits) Service Activation Request is submitted in respect of multiple circuits, all with the same A-end and the same B-end, the Requesting Licensee shall pay a Per Order Charge for processing the request and Per Circuit Charge for each of the circuits requested.

7.2.3 Installation Charge

The Requesting Licensee shall pay to SingTel a one-time Installation Charge for provisioning each Wholesale Local Leased Circuits (Tail Circuits) Service Activation Request.

For express provisioning, the Requesting Licensee shall pay to SingTel an amount equivalent to twice the one-time Installation Charge for provisioning each Wholesale Local Leased Circuits (Tail Circuits) Service Activation Request.

7.2.4 Tail Local Leased Circuit

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The Requesting Licensee shall pay to SingTel the recurring license charge for each Tail Local Leased Circuit provisioned.

7.2.5 Deactivation Charge

With effect from the date that the TLLC Service is mandated as an IRS under the Code, the Requesting Licensee shall pay to SingTel the relevant Deactivation Charge.

7.2.6 Relocation Charge

The Requesting Licensee shall pay to SingTel a one-time Relocation Charge as follows:

For internal relocation (any relocation within the same building), the Internal Relocation Charge would be applicable.

For external relocation (any relocation out of the building), the External Relocation Charge would be applicable.

DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<i>MODIFICATION REQUIRED</i>		
Application Charge		
Per Order Charge		
For 64Kbps and 128Kbps bandwidth – Per order	\$50.07	
For bandwidths other than 64Kbps and 128Kbps - Per order	\$222.02	

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p>Per Circuit Charge</p> <p>For 64Kbps and 128Kbps bandwidth – Per circuit</p> <p>For bandwidths other than 64Kbps and 128Kbps - Per circuit</p> <p><u>IDA:</u></p> <p><i>Please refer to IDA’s annotations to clauses 2, 3 and 4 generally of Appendix 2 of this Direction. Requesting Licensees must be allowed to submit a single application form to request for activation of multiple circuits terminating at the same site. In such a case, 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. SingTel must modify the Application Charge in the manner as specified.</i></p> <p><u>SINGTEL RESPONSE:</u></p> <p><i>SingTel could agree to a fixed application processing charge and a separate charge for each circuit, but only in cases where the A-ends and B-ends are the same for each of the multiple circuits (eg if 3 circuits all have the same A-end and B-end). See amendments to clause 7.2.2.</i></p> <p><i>However, it would take substantially longer to process an application of multiple circuits in cases where all the A-end or B-ends are not at the same location. A single charge would not be</i></p>		

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><i>an accurate processing charge.</i></p> <p>Deactivation Charge</p> <p>Per deactivation request per circuit</p> <p><u>IDA</u></p> <p><i>IDA notes that SingTel's retail LLCs offering does not impose any charge for deactivation. 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. Accordingly, SingTel must remove all charges for carrying out deactivation. Further, IDA's policy position is that, in relation to any deactivation of service under SingTel's RIO, each party must bear its own cost in carrying out the deactivation.</i></p> <p><u>SINGTEL RESPONSE:</u></p> <p><i>SingTel also highlights that a Deactivation Charge already applies for other RIO services without the limitations proposed for the FLLC Service (eg the Submarine Cable Connection Service).</i></p> <p><i>The Deactivation Charge will apply for deactivations of TLLC after the TLLC Service is Gazetted as an IRS. See clause 7.2.5.</i></p>		
<p>MODIFICATION REQUIRED</p> <p>Tail Local Leased Circuit - per Tail Local Leased Circuit per month</p>	<p>Monthly Recurring</p>	<p>One-Time Installation</p>

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DESCRIPTION	CHARGES (S\$) Charges	CHARGES (S\$) Charges
64 Kbps		
128 Kbps		
192 Kbps		
256 Kbps		
384 Kbps		
512 Kbps		
768 Kbps		
1024 Kbps		
1536 Kbps		
1984 Kbps		
2 Mbps		
45 Mbps		
155 Mbps		
<p><u>IDA:</u></p> <p><i>Unlike SingTel’s retail DigiPlus offering where installation charges comprise both trunk and tail circuits, the TLLC Service in relation to circuits up to 1984 Kbps requires installation only for the tail but not the trunk circuits. IDA notes that the “One Time Installation Charges” are derived from SingTel’s DigiPlus offering. However, given that SingTel is not installing the trunk circuits, SingTel is effectively performing only half of the installation work that it must perform under the DigiPlus offering. Therefore, SingTel’s installation charges for TLLC circuits up to 1984 Kbps should reflect only the work done for installing the tail circuits. Accordingly,</i></p>		

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
<p><i>SingTel must modify the “One Time Installation Charges” by reducing the stated charges of circuits up to 1984 Kbps by 50%.</i></p> <p><u>SINGTEL RESPONSE:</u></p> <p><i>The Minister’s decision is that the Charges for the TLLC and FLLC would be at retail-minus level. The decision does not require discount on the one-time installation charges. SingTel would be concerned if IDA attempted to impose its own pricing terms in addition to (and inconsistent with) the Minister’s decision.</i></p> <p><i>In Annex 1 to IDA’s Decision on Designation of SingTel’s Local Leased Circuits as a Mandated Wholesale Service of 16 December 2003, Clause 14 stipulated that “The specified discounts will apply to the monthly recurring charges only. One-time charges for work done to set-up the service will be charged at applicable retail rates.”</i></p> <p><i>In any case, the amount of work done by SingTel in the TLLC installation is comparable to the FLLC installation. The only difference is that one end is a SingTel’s exchange address instead of a Requesting Licensee network site.</i></p>		
<p>Generic Components (for 64Kbps and 128Kbps)</p> <p>Sale</p> <p>Network Terminating Equipment</p> <p>Network Terminating Equipment Installation</p> <p>Lease</p> <p>Network Terminating Equipment Lease</p>	<p>Monthly Recurring</p>	<p>One-Time Charge</p>

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
Internal Relocation Charges	Monthly Charge	One-Time Charge
64 Kbps		
128 Kbps		
192 Kbps		
256 Kbps		
384 Kbps		
512 Kbps		
768 Kbps		
1024 Kbps		
1536 Kbps		
1984 Kbps		
2 Mbps		
45 Mbps		
155 Mbps		
External Relocation Charges	Monthly Charge	One-Time Charge
64 Kbps		
128 Kbps		
192 Kbps		
256 Kbps		
384 Kbps		
512 Kbps		
768 Kbps		
1024 Kbps		

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DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
1536 Kbps		
1984 Kbps		
2 Mbps		
45 Mbps		
155 Mbps		

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7.3 Other Charges

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 below:

- a. The Call Out Rate applicable shall be based on per visit charge.
- b. Per visit charge is S\$___ per man per hour, for a minimum of 2 hours. Subsequent ¼ hour blocks are charged at S\$__ per man, basis.
- c. The above charges are applicable only for call out jobs during weekdays (ie Mondays to Fridays) and during office hours only.
- d. Different charges (based on “Visitation charge x Factor”) will be applied during other periods and/or times – see table below.

Period	Time	FACTOR
Monday to Friday	8.30am to 6.00pm	1.0
Saturday	8.30am to 1.00pm	
Monday to Friday	After 6.00pm	1.5
Saturday	After 1.00pm	
Sundays and Public Holidays	Throughout	2.0

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8. SCHEDULE 8 – CO-LOCATION

TABLE 1 - COMMON CHARGES FOR CO-LOCATION AT:

POI/POA/SATELLITE EARTH STATION/SUBMARINE CABLE LANDING STATION/TLLC

DESCRIPTION	CHARGES (\$\$)
<p>Ordering And Provisioning</p> <p>Application Fee (Per Co-location Site)</p> <p>Project Study (Per Co-location Site)</p>	
<p>Site Preparation & Installation</p> <p>Site Preparation Work –for M&E works etc</p> <p>Fire Safety Bureau Charges</p>	
<p>Building & Construction Authority Charges</p> <p>Construction of Connection Duct – 1 metre of 110mm diameter Connection Duct</p> <p>Installation of Optical Fibre</p> <p>Provision, installation and termination of Transmission Tie Cables, Power and Earth comms cables</p>	
<p>Provision, installation and termination of Tie Cables for TLLC Service (n x 64 kbps, 2 Mbps, 45Mbps and 155Mbps)</p>	
<p>Usage / License Charges</p> <p>Co-location Space (minimum of 1 square metre to maximum of 10 square metre) per square metre per year</p>	
<p>Power (minimum of 13 fused amp for AC and minimum of 20 fused amp for DC) per fused amp per year</p>	

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DESCRIPTION	CHARGES (\$\$)
Lead-in Ducts (per duct metre per year)	
Manpower Cost <ul style="list-style-type: none">- Supervision of work during installation- Site Inspection- Final Inspection- Escort Service for Physical Access	
Recovery Recovery of Equipment, Cable Trays, M&E works (where applicable) upon termination of Co-location.	