# APPENDIX 1 DIRECTED AMENDMENTS TO SCHEDULE 9 (WITHOUT PRICE CHANGES)

# SCHEDULE 9 CHARGES

# **SCHEDULE 9**

# **CHARGES**

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#### **SCHEDULE 9**

#### **CHARGES**

# REQUIRED AMENDMENT

THE CHARGES CONTAINED IN THIS SCHEDULE 9 SHALL APPLY FOR THE PERIOD OF FDATE; 18 DECEMBER 2023 TO FDATE; 31 MARCH 2024.

*IMDA Directed Amendments:* Prior to the effective date of the revised prices (i.e., 1 April 2024), the existing prices will continue to be valid. Single is required to reflect the validity dates accordingly herein.

#### **GENERAL:**

- (a) The Parties agree to pay the following Charges where applicable in accordance with clauses 5 & 6 of the main body of this RIO Agreement, and the Billing and settlement requirements set out in Schedule 10.
- (b) Except where otherwise indicated, if Charges are expressed to be estimates in this Schedule or elsewhere in this RIO Agreement, SingTel reserves the right to adjust these Charges from time to time subject to approval from the Authority, and the Parties agree to pay the Charges as adjusted from time to time.
- (c) For the avoidance of doubt, if SingTel incurs additional costs in relation to the provision of IRS or Wholesale Services to the Requesting Licensee which cannot otherwise be recovered by SingTel as a Charge under Schedule 9, SingTel may recover these costs from the Requesting Licensee in accordance with the procedures set out in the relevant Schedule.
- (d) Where SingTel has to determine Charges payable by the Requesting Licensee in this Schedule 9 on a one-time and case-by-case basis, SingTel shall determine the Charges in accordance with the provisions of this RIO Agreement. Where the Requesting Licensee disputes SingTel's determination of such Charges, the parties shall resolve such dispute in accordance with Schedule 11 of the RIO Agreement.

#### 1. SCHEDULE 1 – PHYSICAL AND VIRTUAL INTERCONNECTION

#### 1.1 Interconnect Testing

In the provision of SingTel's Facilities and engineering support for the Interconnect Testing and the eventual connection to SingTel Network, the Requesting Licensee shall pay SingTel the Application Charges for requesting Interconnection Testing and the testing Charges based on the testing duration inclusive of any extension period, as set out below.

CHARGES (S\$)
79.75
982.35

#### 1.1.1 Extension of Interconnect Testing

The Charges for any testing period will be inclusive of any extension requested by the Requesting Licensee.

# 1.1.2 Call fees during Interconnect Testing

All Calls made during Interconnect Testing shall be chargeable to the Requesting Licensee at the applicable rates for the conveyance of Calls in accordance with Schedules 2A, 2B & 2C and as outlined below.

# 1.1.3 Cancellation of Interconnect Testing

Any request for cancellation of Interconnect Testing shall be made in writing to SingTel and the Requesting Licensee shall pay SingTel the cancellation Charges as follows, depending on the number of Calendar Days (from the receipt of the cancellation notice to the date of commencement of testing):

Number of days:	% of Testing fee to be paid:
<7	100%
7-13	80%
14-20	35%
>21	20%

#### 1.1.4 Delay or cancellation of Interconnect Testing

The Requesting Licensee is liable for all Charges that may arise from any delay or cancellation of Interconnect Testing if the RIO Agreement is not executed prior to the test, except in instances where the delay or cancellation is occasioned by SingTel.

#### 1.1.5 Completion or termination of Interconnect Testing

In the event that Interconnect Testing is completed or is terminated by the Requesting Licensee before the last day of the agreed testing period, the Requesting Licensee shall pay SingTel the Charges for the testing duration up to and including the day on which testing was completed or terminated and such other reasonable costs as may be incurred by SingTel for early completion of the Interconnect Testing.

# 1.2 Recovery for over-forecasting

1.2.1 The cost recovery for over-forecasting shall be based on the number of 2Mbps circuits augmented in the Interconnect Link and SingTel Network to meet the committed Forecast.

# 1.2.2 The Charges shall be as follows:

Description	Charges (S\$)
Recovery for over-forecasting	
Per augmented 2Mbps trunk for Origination Call Type per day	53.43
Per augmented 2Mbps trunk for Termination Call Type per day	53.43
Per augmented 2Mbps trunk for Transit Call Type per day	16.32

# 1.3 Reconnection of Interconnection Link

1.3.1 Following the lifting of any suspension of this RIO Agreement or Schedule 1, the following charges shall apply:

Description	Charges (S\$)
Reconnection Per Interconnection Link	on a case-by- case basis

# 2. SCHEDULE 2 – CALL ORIGINATION, TERMINATION AND TRANSIT

#### 2.1 General

- 2.1.1 The below rates shall be based on circuit utilisation from the time the circuit is seized until the time the circuit is released. The Charges shall be accounted in per second blocks. All Calls whether successful or unsuccessful are chargeable.
- 2.1.2 The "Off-Peak Hour Rate" is applicable to the period of time between 1800 hours and 0800 hours, Monday to Friday and all day Saturday to Sunday inclusive, and gazetted public holidays. The "Peak Hour Rate" is applicable to the period of time between 0800 hours and 1800 hours, Monday to Friday inclusive, but not including gazetted public holidays.

# **SCHEDULE 2A - ORIGINATION**

**2.2** Call Charges payable by the Parties for Call Origination Service shall be as follows for all Calls:

DESCRIPTION	CHARGES (S\$)
IGS/SGS Origination Charge per call minute	
Peak Hour Rate	0.0078
Off-Peak Hour Rate	0.0039
Implementation Charge for Call Type request	
Per Application	694.31
Per IGS	2,131.48
Per SGS or Integrated IGS (with Local Switch functionality)	2,158.92
Per Local Switch	388.15
Cessation of Call Type	
Per Application	440.98
Per IGS	1,917.32
Per SGS or Integrated IGS (with Local Switch functionality)	1,944.75
Per Local Switch	362.46
Reconnection <sup>1</sup>	
Per IGS	on a case-by-case basis
Per SGS or Integrated IGS (with Local Switch functionality)	on a case-by-case basis
Per Local Switch	on a case-by-case basis

**2.3** For any Call Origination Service that terminates directly to the Acquirer, the Supplier will collect the Origination Charge directly from the Acquirer.

<sup>&</sup>lt;sup>1</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 2A.

# **SCHEDULE 2B - TERMINATION**

**2.4** Call Charges payable by the Parties for Call Termination Service shall be as follows for all Calls:

DESCRIPTION	CHARGES (S\$)
IGS/SGS Termination Charge per call minute	
Peak Hour Rate	0.0078
Off-Peak Hour Rate	0.0039
Implementation Charge for Call Type request	
Per Application	694.31
Per IGS	2,131.48
Per SGS or Integrated IGS (with Local Switch functionality)	2,158.92
Per Local Switch	388.15
Cessation of Call Type	
Per Application	440.98
Per IGS	1,917.32
Per SGS or Integrated IGS (with Local Switch functionality)	1,944.75
Per Local Switch	362.46
Reconnection <sup>2</sup>	
Per IGS	on a case-by-case basis
Per SGS or Integrated IGS (with Local Switch functionality)	on a case-by-case basis
Per Local Switch	on a case-by-case basis

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 $<sup>^2</sup>$  These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 2B.

# **SCHEDULE 2C - TRANSIT**

**2.5** Call Charges payable by the Parties for Call Transit Service shall be as follows for all Calls:

DESCRIPTION	CHARGES (S\$)
IGS/SGS Transit Charge per call minute	
Peak Hour Rate	0.0005
Off-Peak Hour Rate	0.0002
Implementation Charge for Call Type request	
Per Application	694.31
Per IGS	2,131.48
Per SGS or Integrated IGS (with Local Switch functionality)	2,158.92
Implementation Charge for change in amount of Interconnection Capacity  Per Application	on a case-by-case basis
Cessation of Call Type	
Per Application	440.98
Per IGS	1,917.32
Per SGS or Integrated IGS (with Local Switch functionality)	1,944.75

Reconnection <sup>3</sup>	
Per IGS	on a case-by-case basis
Per SGS or Integrated IGS (with Local Switch functionality)	on a case-by-case basis
Additional Interconnection Capacity	
One-time installation Charge per E1 Interconnection Link	on a case-by-case basis
Recurring Charge per E1 Interconnection Link	on a case-by-case basis

 $<sup>^3</sup>$ These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 2C.

# 3. SCHEDULE 3 – [Deleted Intentionally blank] UNBUNDLED NETWORK ELEMENTS

# SCHEDULE 3A - LICENSING OF LOCAL LOOP/SUB LOOP

#### **General**

The Requesting Licensee shall pay SingTel the Charges listed in this Schedule and any other Charges incurred in the provision of Local Loop or Sub Loop and works performed by SingTel.

If, at any time during the licence period, the Authority notifies Licensees that the rates and Charges determined by it no longer apply in circumstances or areas where Local Loop or Sub Loop is being licensed, then SingTel may give one (1) month's written notice of a change in the rates and Charges. Within ten (10) Business Days of receiving SingTel's written notice, the Requesting Licensee shall elect in writing to SingTel that the Requesting Licensee wishes:

to terminate the licence, and the licence shall terminate upon the expiry of ten (10) Business Days thereafter, or such other period as the Parties may agree; or

to continue the period of licence at such new rates and Charges, and the licence shall so continue.

# **Charges**

Prices for licensing of Local Loop are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	
—————Per order <sup>4</sup>	41.36
Per order (applicable where the application is rejected by SingTel pursuant to clause 5.2 of Schedule 3A	15.63
Sing for parsuant to clause 5.2 or senedate 511	
Provisioning Charges	
Per loop <sup>5</sup>	<del>87.63</del>
Per subsequent loop at same address using the same DP <sup>6</sup>	46.99
Cancellation Charge (per loop) (before performance of jumpering works)	
Jumpering world,	11.99
Recurrent Charges (per loop per year)	
——————————————————————————————————————	42.73
Other Commercial Areas	114.37
	175.34

<sup>&</sup>lt;sup>4</sup> This charge will not apply where the order is rejected pursuant to clause 5.2 of Schedule 3A.

<sup>&</sup>lt;sup>5</sup> This charge will not apply where the order is cancelled prior to jumpering works performed by SingTel. In such cases, only the Cancellation Charge will apply.

	T
Request for SingTel to Perform Additional Jumpering Work	
at Exchange MDF Charges	
Per request	
refrequest	15 11
	15.11
Jumpering Work per Loop	
	<del>26.08</del>
Fault Reporting Charges	
- and respecting changes	
	55.00
Charges for fault found to be with the Reporting Party (per	<del>55.28</del>
activation per loop)	
Termination Charges (per address)	
Per order	41.36
<del>Fer order</del>	41.30
Per loop	86.08
Per subsequent loop at same address using the same DP	45.44
Reconnection Charges <sup>6</sup> (per address)	
Per loop	on a case by case
Ter loop	basis
Per subsequent loop at same address using the same	on a case by case
DP	basis
SingTol Evolution Deleted Information	
SingTel Exchange Related Information	
Application Fee per application	13.79
The overall percentage of SingTel's copper local	
loops available within the boundary at each local	<del>18.39</del>
exchange (per exchange)	
For each Building MDF served by each local	
exchange, the percentage of available SingTel's	<del>19.38</del>
copper loop feeders for that Building MDF (per	
Building MDF)	

<sup>&</sup>lt;sup>6</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 3A.

For each Outdoor cabinet served by each local exchange, the percentage of available SingTel's copper loop feeders for that Outdoor cabinet (per Outdoor cabinet)	<del>19.38</del>
The overall percentage of SingTel's copper loop distribution available at the Building MDF (per Building MDF)	<del>19.38</del>
The overall percentage of SingTel's copper loop distribution available at the Outdoor cabinet (per Outdoor cabinet)	<del>19.38</del>
The overall percentage of SingTel's copper loop distribution available at a Distribution Point (per distribution point)	<del>19.05</del>
The address of each Building MDF for each local exchange (per Building MDF)	<del>18.72</del>
The address and type of each Outdoor cabinet for each local exchange (per Outdoor cabinet)	<del>18.72</del>

# 3.1.1 Prices for licensing of Sub Loop Feeder are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	41.36
Per order <sup>7</sup>	15.63
Per order (applicable where the application is rejected by	
SingTel pursuant to clause 5.2 of Schedule 3A	
Provisioning Charges	
	<del>87.63</del>
Per sub loop feeder <sup>8</sup> Per subsequent sub loop feeder at same	46.23
address <sup>9</sup>	<del>11.99</del>
Cancellation Charge (per sub loop feeder) (before performance of jumpering works)	
Recurrent Charges (per Sub Loop Feeder per year)	
Central Business District	<del>25.05</del>
Other Commercial Areas	50.95
Residential	32.75

<sup>&</sup>lt;sup>7</sup> This charge will not apply where the order is rejected pursuant to clause 5.2 of Schedule 3A.

<sup>&</sup>lt;sup>8</sup> This charge will not apply where the order is cancelled prior to jumpering works performed by SingTel. In such cases, only the Cancellation Charge will apply.

Request for SingTel to Perform Additional Jumpering Work	
Charges	<del>15.11</del>
	13.11
	49.55
<del>Per request</del>	
Additional immediate and the Delidina MDE and Colodinate	<del>11.46</del>
Additional jumpering work at Building MDF per Sub-Loop Feeder	<del>26.08</del>
T code:	20.00
Additional jumpering work at Building MDF per	<del>23.53</del>
subsequent Sub Loop Feeder at same address	
Additional jumpering work at Exchange MDF per Sub-	
Loop Feeder	
Additional jumpering work at Exchange MDF per	
subsequent Sub-Loop Feeder at same address	
Fault Reporting Charges	
Charges for fault found to be with the Reporting	<del>36.95</del>
Party (per activation per Sub Loop Feeder)	30.72
Termination Charges	
<del>Per order</del>	41.36
	11.50
——————————————————————————————————————	86.08
Per subsequent Sub Loop Feeder at same address using the	45.44
same DP	

Reconnection Charges <sup>9</sup>	
Per Sub Loop Feeder	on a case-by-case
	<del>basis</del>
Per subsequent Sub Loop Feeder at same address using	
the same DP	on a case-by-case
	<del>basis</del>

# Prices for licensing of Sub Loop Distribution are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	41.36
Per order <sup>10</sup>	15.63
Per order (applicable where the application is rejected by	
SingTel to pursuant to clause 5.2 of Schedule 3A)	
Provisioning Charges	
Per sub loop distribution <sup>11</sup>	61.55
Per subsequent sub loop distribution at same address using the same DP <sup>12</sup>	23.45
Cancellation Charge (per sub loop distribution) (before performance of jumpering works)	11.99

<sup>&</sup>lt;sup>9</sup> These charges shall apply in the event of the lifting of suspension of this RIO agreement or Schedule 3A.

10 This charge will not apply where the order is rejected pursuant to clause 5.2 of Schedule 3A.

11 This charge will not apply where the order is cancelled prior to jumpering works perform.

<sup>&</sup>lt;sup>11</sup> This charge will not apply where the order is cancelled prior to jumpering works performed by SingTel. In such cases, only the Cancellation Charge will apply.

Recurrent Charges (per Sub Loop Distribution per year)	
Central Business District	17.60
Other Commercial Areas	<del>17.68</del>
Residential	63.41
	142.59
Request for SingTel to Perform Additional Jumpering Work	
Charges	15.11
<del>Per request</del>	49.55
Additional jumpering work at Building MDF per Sub Loop Distribution	11.46
Additional jumpering work at Building MDF per subsequent Sub Loop Distribution	
Fault Reporting Charges  Charges for fault found to be with the Reporting Party (per activation per Sub Loop Distribution)	43.02
	13.02
Termination Charges Per order	
Per Sub Loop Distribution	41.36
Per subsequent Sub Loop Distribution at same address and same Building MDF	61.29
	23.20
Reconnection Charges 12	
Per Sub Loop Distribution	on a case by case basis
Per subsequent Sub Loop Distribution at same address and same Building MDF	on a case-by-case basis

 $<sup>^{12}</sup>$  These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 3A.

#### **SCHEDULE 3B - LINE SHARING**

#### **General**

The Requesting Licensee shall be liable to pay and shall pay to SingTel the Charges listed in this Schedule and any other Charges incurred in the provision of Line Sharing and works performed by SingTel.

If, at any time during the licence period, the Authority notifies Licensees that the rates and Charges determined by it no longer apply in circumstances or areas where Line Sharing is being provided, then SingTel may give one (1) month's written notice of a change in the rates and Charges. Within ten (10) Business Days of receiving SingTel's written notice, the Requesting Licensee shall elect in writing to SingTel that the Requesting Licensee wishes:

to terminate the Line Sharing and the Line Sharing shall terminate upon the expiry of ten (10) Business Days thereafter or such other period as the Parties may agree; or

to continue the period of Line Sharing at such new rates and Charges and the sharing shall so continue.

# **Charges**

# Prices for Line Sharing are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	
Per order <sup>13</sup>	41.36
Per order (applicable where the application is rejected by SingTel pursuant to clause 4.2 of Schedule 3B)	15.63
Provisioning Charges	
Per Shared Line accessed at exchange MDF <sup>14</sup>	50.35
Per Shared Line accessed at Building MDF	71.84
Per Subsequent Shared Line accessed at same Building MDF	46.54
Cancellation Charge (per Shared Line) (before performance of jumpering works)	11.99
Recurrent Charges for Line Sharing	N.A.
Request for SingTel to Perform Additional Jumpering Work	
Charges	
——————————————————————————————————————	15.11
Additional jumpering at Exchange MDF	

<sup>&</sup>lt;sup>13</sup> This charge will not apply where the order is rejected pursuant to clause 4.2 of Schedule 3B.

<sup>&</sup>lt;sup>14</sup> This charge will not apply where the order is cancelled prior to jumpering works performed by SingTel. In such cases, only the Cancellation Charge will apply.

	T
Additional jumpering at Building MDF	38.36
	<del>59.85</del>
Fault Reporting Charges	
Charges for fault found to be within the Reporting Party's	
Network (per activation per line):	
The state of the s	
For work to be performed at Exchange MDF only	<del>17.79</del>
Tot work to be performed at Exchange WDT only	17.77
	26.50
For work to be performed at Building MDF only.	<del>36.50</del>
Termination Charges	
<del>Per order</del>	41.36
Per Shared Line accessed at Exchange MDF	44.23
Ter Shared Eline decessed at Exchange 14151	77.23
D. Ch. 11' ANDE	64.61
Per Shared Line accessed at Building MDF	64.61
Per subsequent Shared Line accessed at Building MDF	<del>39.31</del>
Reconnection Charges <sup>45</sup>	
Per Reconnection Request for Shared Line	on a case-by-case
•	•
accessed at Exchange MDF	<del>basis</del>
Per Reconnection Request for Shared Line accessed at	on a case by case
Building MDF	<del>basis</del>

<sup>&</sup>lt;sup>15</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 3B.

#### **SCHEDULE 3C - SALE OF INTERNAL WIRING**

#### General

The Requesting Licensee shall pay the application fee to SingTel in accordance with this Schedule.

If, at any time the Authority notifies Licensees that the rates and Charges determined by it no longer apply in circumstances, then SingTel may give one (1) month's written notice of a change in the rates and Charges. The new rates and Charges would be applicable one (1) month from the notice.

# **Charges**

Charges for Internal Wiring are as follows:

DESCRIPTION	CHARGES (S\$)
Internal Wiring	
Purchase price per pair	52.37
Fault Reporting Charges	
Charges for fault found to be caused by Requesting Licensee's use of Internal Wiring (per pair)	<del>36.50</del>
Fault Restoration Charges	
Damage and/or modification to Internal Wiring or the associated equipment	on case by case basis

# **Other Charges:**

While the Requesting Licensee is accessing SingTel's Internal Wiring before purchasing the Internal Wiring, the Requesting Licensee shall not do or permit to do anything which

will result or may result in damage and/or modification to the Internal Wiring or the associated equipment. Failing which SingTel shall restore the Internal Wiring and the Requesting Licensee shall pay SingTel the Charges for the works carried out.

#### SCHEDULE 3D - LICENSING OF BUILDING MDF DISTRIBUTION FRAME

#### **General**

The Requesting Licensee shall be liable to pay and shall pay to SingTel the Charges listed in this Schedule and any other Charges incurred in the provision of SingTel's Building MDF Distribution Frame Mountings.

If at any time during the licence period, the Authority notifies Licensees that the rates and Charges determined by it no longer apply in circumstances or areas where Distribution Frame Mountings are being provided, then SingTel may give one (1) month's written notice of a change in the rates and Charges. Within ten (10) Business Days of receiving SingTel's written notice, the Requesting Licensee shall elect in writing to SingTel that the Requesting Licensee wishes:

to terminate the Distribution Frame Mounting and the Distribution Frame Mounting shall terminate upon the expiry of ten (10) Business Days thereafter or such other period as the Parties may agree;

to continue the period of Distribution Frame Mounting at such new rates and Charges and the licence shall so continue.

# 3.2 Charges

# 3.2.1 Prices for Distribution Frame Mountings are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	
Per order <sup>16</sup>	186.74
Per order (applicable where the application is rejected by SingTel pursuant to clause 4.2 of Schedule 3D)	15.63
Recurrent Charges (per Distribution Frame Mounting per	
<del>year)</del>	
Central Business District	
	97.82
Other Commercial Areas	<del>97.82</del>
Residential	97.82
	<del>91.82</del>
Request for SingTel to Construct Distribution Frame Vertical	
Per Construction Order	<del>274.38</del>
——————————————————————————————————————	on a case by case
	basis
Reconnection Charges <sup>17</sup>	
Per Reconnection Request	on a case by case basis

<sup>&</sup>lt;sup>16</sup> This charge will not apply where the order is rejected pursuant to clause 4.2 of Schedule 3D.

<sup>&</sup>lt;sup>17</sup> This charge is applicable upon the lifting of suspension of this RIO Agreement or Schedule 3D.

Tormi	ination	<b>Charges</b>
TUTT	mation	<del>Onarges</del>

Per Termination Request including recovery of Equipment, Termination Units, M&E works (where applicable) upon termination of Distribution Frame Mounting

on a case by case basis

#### SCHEDULE 3E - LICENSING OF OUTDOOR CABINET DISTRIBUTION FRAME

#### **General**

The Requesting Licensee shall be liable to pay and shall pay to SingTel the Charges listed in this Schedule and any other Charges incurred in the provision of SingTel's Outdoor Cabinet Distribution Frame Mountings.

If at any time during the licence period, the Authority notifies Licensees that the rates and Charges determined by it no longer apply in circumstances or areas where Outdoor Cabinet Distribution Frame Mountings are being provided, then SingTel may give one (1) month's written notice of a change in the rates and Charges. Within ten (10) Business Days of receiving SingTel's written notice, the Requesting Licensee shall elect in writing to SingTel that the Requesting Licensee wishes:

to terminate the Outdoor Cabinet Distribution Frame Mounting and the Distribution Frame Mounting shall terminate upon the expiry of ten (10) Business Days thereafter or such other period as the Parties may agree;

to continue the period of Outdoor Cabinet Distribution Frame Mounting at such new rates and Charges and the licence shall so continue.

# <u>Charges</u>

Prices for Outdoor Cabinet Distribution Frame Mountings are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering Charges	
Per order 18 Per order (applicable where the application is rejected by SingTel pursuant to clause 4.4 of Schedule 3E) Per order for cancellation of application	216.36 15.63
	33.94

<sup>&</sup>lt;sup>18</sup> This charge will not apply where the order is rejected pursuant to clause 4.4 of Schedule 3E.

DESCRIPTION	CHARGES (S\$)
Site Preparation & Installation	
Site Preparation Work for M&E works etc	on a case by case basis.
Fire Safety Bureau Charges (where applicable)	on a case-by-case
	basis
Building & Construction Authority Charges (where	on a case-by-case
<del>applicable)</del>	basis
— Construction of Connection Duct—1 metre of 110mm diameter Connection Duct	1,449
Road Opening Application Fee (where applicable)	<del>165</del>
—— Provision, installation and termination of Subscriber Tie Cables, Terminal unit, Terminal block	on a case by case
Recurrent Charges	
Per Outdoor Cabinet Distribution Frame Mounting per year	
Central Business District	<del>47.19</del>
Other Commercial Areas	47.19
Residential	47.19
Lead in Ducts (per duct metre per year)	
Central Business District	8.81

DESCRIPTION	CHARGES (S\$)
Other Commercial Areas	8.54
Residential	<del>9.64</del>
Lead in Ducts without Manhole (per duct metre per year)	
Central Business District	6.41
Other Commercial Areas	6.82
Residential	<del>6.56</del>
Manpower Cost	
Supervision of work during installation, Site Inspection, Final Inspection	
During Office Hours (Minimum 2 hrs) per hour	46.10
After Office Hours (Minimum 2 hrs) per hour	69.15
After Office Hours (Minimum 4 hrs if recalled from home)  —per hour	69.15
Saturday (Minimum 4 hrs) — per hour	50.15
Sunday (requiring < 4 hrs) per activation	69.15
Sunday (requiring > = 4 hrs) per activation	405.71
y ( · 1 · 8 · · · · · · · · · · · · · · · ·	811.42
Public Holiday – per activation	

DESCRIPTION	CHARGES (S\$)
For all recalls/activations, the Requesting Licensee shall reimburse SingTel for its staff's reasonable transportation claim	` ,
Physical Access/Emergency Physical Access	
Application Fee (per Lead in Manhole)	13.79
Updating Master List	
Administrative Fee (per form)	13.79
Reconnection Charges <sup>19</sup>	
Per Reconnection Request	on a case by case basis
Termination Charges	
Per Termination Request including recovery of Equipment, Termination Units, M&E works (where applicable) upon termination of Outdoor Cabinet Distribution Frame Mounting	on a case by case basis
Miscellaneous Charges <sup>20</sup>	
Site survey/site meeting Half Day	<del>257.58</del>
Site survey/site meeting Full Day	515.15
Contractor Cost for Manhole Site Survey Half Day	<del>260.70</del>

<sup>&</sup>lt;sup>19</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule

<sup>3</sup>E.

20 These charges will apply for site inspections performed by SingTel during project studies or upon

Compared to the Proposition Licensees.

DESCRIPTION	CHARGES (S\$)
Contractor Cost for Manhole Site Survey Full Day	339.90
SingTel Exchange Related Information	
Application Fee per application	13.79
rippineation receiper application	13.77
The address and type of SingTel's Outdoor Cabinet at each location (per Outdoor Cabinet)	18.72

#### 4. SCHEDULE 4 – UNBUNDLED NETWORK SERVICES

#### **SCHEDULE 4A - EMERGENCY SERVICES**

#### 4.1 GENERAL

- 4.1.1 The Parties shall pay the Charges for the conveyance of Emergency Calls handed over at the Interconnect Gateway Switch as provided in Schedule 4A.
- 4.1.2 The below rate shall be based on the duration of use of the circuit and for the Call Duration of use of a circuit shall start at the time the circuit used for the Emergency Call is seized and end at the time the circuit is released. All Emergency Calls, regardless of successful or unsuccessful, are chargeable. The Charges shall be accounted in per second block.
- 4.1.3 "Off-Peak Hour Rate" is applicable to the period of time between 1800 hours and 0800 hours, Monday to Friday and all day Saturday to Sunday inclusive, and gazetted public holidays.
- 4.1.4 "Peak Hour Rate" is applicable to the period of time between 0800 hours and 1800 hours, Monday to Friday inclusive, but not including gazetted public holidays.

# 4.2 Charges

4.2.1 Call Charges payable by the Parties for the conveyance of Emergency Calls shall be as follows:

DESCRIPTION	CHARGES (S\$)
Emergency Calls Charges per call minute	
Peak Hour Rate	0.0037
Off-Peak Hour Rate	0.0019
Implementation Charge for Call Type request	
Per Application	694.31
Per IGS	2,131.48
Per SGS or Integrated IGS (with Local Switch functionality)	2,158.92
Cessation of Emergency Call Service	
Per Application	440.98
Per IGS	1,917.32
Per SGS or Integrated IGS (with Local Switch functionality)	1,944.75
Reconnection <sup>21</sup>	
Per IGS	on a case-by-case basis
Per SGS or Integrated IGS (with Local Switch functionality)	on a case-by-case basis

 $<sup>^{21}</sup>$  These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 4A.

#### SCHEDULE 4B - SUBMARINE CABLE CONNECTION SERVICE

#### 4.3 General

4.3.1 The Requesting Licensee shall be liable to pay and shall pay SingTel the relevant Charges for the Connection Service as provided in Schedule 4B. A link is referred to as a fibre pair or co-axial cable pair.

# 4.3.2 Application Charge

The Requesting Licensee shall pay to SingTel the Application Charge for processing each Request for Connection Service (including all requests that are rejected). The Application Charge shall be applied if the Request for Connection Service is not approved by SingTel or prematurely cancelled or terminated by the Requesting Licensee.

# 4.3.3 Activation Charge

The Requesting Licensee shall pay to SingTel a one-time Activation Charge for each link activation (for service or protection links) or each capacity activation or each concurrent link/capacity activation.

#### 4.3.4 Deactivation Charge

The Requesting Licensee shall pay to SingTel a one-time Deactivation Charge for each link deactivation (for service or protection links) or each capacity deactivation or each concurrent link/capacity deactivation.

# 4.3.5 Annual Charge for Group A Cable Systems

The Requesting Licensee shall pay to SingTel the recurring Annual Charge for the use of each link activated (for service or protection links).

# 4.3.6 Annual Charge for Group B Cable Systems

The Requesting Licensee shall pay to SingTel the recurring Annual Charge for the use of each STM-1 (or VC4) Input Port capacity. Additionally, the Requesting Licensee shall pay the recurring Annual Charge for the use of each STM-1 (or

VC4) Output Port capacity or the lower rate output port capacity such as VC3 or VC12 capacity.

# 4.4 Charges

4.4.1 Charges payable by the Requesting Licensee for the Submarine Cable Connection Services are as follows:

	DESCRIPTION	CHARGES (S\$)
Appl	ication Charge per Request	
-	Link Activation	407.30
-	Capacity Activation	407.30
-	Link and Capacity Activation	554.02
-	Link Deactivation	407.30
-	Capacity Deactivation	407.30
-	Link and Capacity Deactivation	554.02
Activ	vation Charge	
-	Link Activation per link activated (for each service or protection link)	2,536.23
-	Capacity Activation per capacity activated	2,075.10
-	Link and Capacity Activation per link and capacity activated	4,150.20
Dead	ctivation Charge	
-	Link Deactivation per link deactivated (for each service or protection link)	922.27
-	Capacity Deactivation per capacity deactivated	775.54
-	Link and Capacity Deactivation per link and capacity deactivated	1,697.81
Annı	ual Charge for Group A Cable Systems	
-	Per link activated (for each service or protection link)	194.84

DESCRIPTION	CHARGES (S\$)
Annual Charge for Group B Cable Systems	
- STM1 or VC4 (per Input Port)	4650.36
- STM1 or VC4 (per Output Port)	4650.36
- VC3 (per Output Port)	2325.18
- VC12 (per Output Port)	110.72

### SCHEDULE 4C - [Deleted Intentionally blank] IRS TAIL CIRCUIT SERVICE

#### 4.5 General

4.5.1 The Requesting Licensee shall be liable to pay and shall pay SingTel the relevant Charges for the IRS Tail Circuit Service as provided in Schedule 4C.

### 4.5.2 Application Charge

The Requesting Licensee shall pay to SingTel the Application Charge for processing each Tail Circuit Activation Request (TCDR) or Tail Circuit Deactivation Request (TCDR). The Application Charge shall consist of a Per Order Charge for processing the request and a Per Circuit Charge for the circuit requested. For the avoidance of doubt, the Application Charge will still be applied if the TCAR or TCDR is not approved by SingTel or is pre maturely cancelled or terminated by the Requesting Licensee. Where a single TCAR or TCDR is submitted in respect of multiple circuits, all terminating at the same End User's site, the Requesting Licensee shall pay a Per Order Charge for processing the request and a Per Circuit Charge for each of the circuits requested.

### 4.5.3 Installation Charge

The Requesting Licensee shall pay to SingTel a one time Installation Charge for provisioning each Tail Circuit.

For express provisioning, the Requesting Licensee shall pay to SingTel an amount equivalent to twice the one time Installation Charge for provisioning each TCAR

### 4.5.4 Deactivation Charge

The Requesting Licensee shall pay to SingTel a one time Deactivation Charge for terminating each Tail Circuit.

### 4.5.5 Project Study Charge

The Requesting Licensee shall pay to SingTel the Project Study Charge, as well as the Application Charge, if it cancels its request for IRS Tail Circuit Service after commencement but prior to the completion of the Project Study. For the avoidance of doubt, if a Requesting Licensee cancels its request for IRS Tail Circuit Service

prior to the commencement of the Project Study, then the Requesting Licensee will only be responsible for the Application Charge.

### 4.5.6 Recurring Charge

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

### 4.5.7 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.

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

# 4.5.8 Change of Interface Standard Charge

The Requesting Licensee shall pay to SingTel a Change of Interface Standard Charge for each request for an IRS Tail Circuit Service to be provisioned with a new Interface Standard.

# 4.5.9 Tie-Cable Change Charge

The Requesting Licensee shall pay to SingTel a Tie Cable Change Charge for each request for an IRS Tail Circuit Service to be provisioned with a new Tie Cable.

# 4.5.10 No-Fault-Found Charge

The Requesting Licensee shall pay to SingTel a No Fault Found Charge for each fault report which SingTel determines to be not due to SingTel.

### 4.5.11 One-time System Set-up Charge

- The Requesting Licensee must pay SingTel the One Time System Set up Charge when it acquires the IRS Tail Circuit Service Schedule 4C. SingTel shall recover \$25,755.98 from all FBOs that acquire the IRS Tail Circuit Service Schedule 4C in accordance with the following:
- (a) The exact amount payable by the Requesting Licensee is determined by dividing \$25,755.98 by the total number of FBOs (including the Requesting Licensee) that have acquired the IRS Tail Circuit Service Schedule 4C at the time of acquisition of the IRS Tail Circuit Service Schedule 4C by the Requesting Licensee;
- (b) If any other FBO subsequently acquires the IRS Tail Circuit Service Schedule 4C, SingTel shall make a credit adjustment to the Requesting Licensee to take account of the change in the total number of FBOs that have acquired the IRS Tail Circuit Service Schedule 4C; and
- (c) The One Time System Set Up Charge is effective for a period of five (5) years from the date of payment of the One-Time System Set-Up Charge by the first FBO that acquired the IRS Tail Circuit Service under Schedule 4C (Effective Charge Period). For the avoidance of doubt:
  - (i) any Requesting Licensee that acquires the IRS Tail Circuit Service under Schedule 4C after the Effective Charge Period shall not be required to pay the One Time System Set up Charge; and
  - (ii) SingTel is not obliged to make any credit adjustments to the Requesting Licensee after the Effective Charge Period.

DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
Application Charge	One-Time Installation Charges	One-Time Deactivation Charges
Per Order Charge		
<del>Per order</del>	111.33	84.85
Per Circuit Charge		

DESCRIPTION	CHARGES	CHARGES
DESCRIPTION	<del>(S\$)</del>	<del>(S\$)</del>
For bandwidths between 64 kbps and 1984 kbps Per circuit	<del>31.95</del>	<del>11.98</del>
For bandwidths between 64 kbps and 1536 kbps Per circuit, applicable where the circuit is groomed to an existing physical handover circuit	<del>15.98</del>	11.98
For bandwidths between 2 Mbps and 155 Mbps Per circuit	<del>23.96</del>	<del>11.98</del>
Project Study Charge (not applicable where the application is cancelled prior to the commencement of the Project Study)		
For bandwidths between 64 kbps and 128 kbps Per order	<del>79.26</del>	
For bandwidths between 192 kbps and 1024 kbps Per order	<del>334.28</del>	
For bandwidths between 1536 kbps and 1984 kbps Per order	<del>533.96</del>	
For 2 Mbps bandwidth Per order	<del>521.83</del>	
For bandwidths between 45 Mbps and 155 Mbps Per order	<del>537.68</del>	
Tail Circuit - per Circuit (Without Grooming)	One-Time Installation Charges	One-Time Deactivation Charges
<del>64 kbps</del>	<del>1,011.91</del>	<del>467.83</del>
<del>128 kbps</del>	<del>1,011.91</del>	467.83
<del>192 kbps</del>	<del>1,417.13</del>	467.83
256 kbps	<del>1,417.13</del>	<del>467.83</del>
384 kbps	<del>1,417.13</del>	<del>467.83</del>
<del>512 kbps</del>	1,417.13	467.83
<del>768 kbps</del>	1,417.13	467.83
<del>1024 kbps</del>	<del>1,417.13</del>	<del>467.83</del>
<del>1536 kbps</del>	<del>1,637.12</del>	<del>556.77</del>
<del>1984 kbps</del>	<del>1,637.12</del>	<del>556.77</del>

DESCRIPTION	CHARGES	CHARGES
<del>DESCRIPTION</del>	<del>(S\$)</del>	<del>(S\$)</del>
2 Mbps	<del>1,338.69</del>	<del>503.67</del>
45 Mbps	<del>1540.84</del>	<del>387.50</del>
155 Mbps	<del>1540.84</del>	<del>387.50</del>
Tail Circuit - per Circuit (With Grooming)	One-Time Installation Charges	One-Time Deactivation Charges
<del>64 kbps</del>	<del>755.89</del>	<del>286.91</del>
<del>128 kbps</del>	<del>755.89</del>	<del>286.91</del>
<del>192 kbps</del>	1,143.23	<del>286.91</del>
256 kbps	1,143.23	<del>286.91</del>
<del>384 kbps</del>	1,143.23	<del>286.91</del>
<del>512 kbps</del>	1,143.23	<del>286.91</del>
768 kbps	1,143.23	<del>286.91</del>
<del>1024 kbps</del>	1,143.23	<del>286.91</del>
1536 kbps	1,357.90	<del>375.68</del>
Per Physical Handover Circuit (1984 kbps)	<del>338.63</del>	<del>252.72</del>
Grooming Charge (per Tail Circuit to be groomed to the Physical Handover Circuit)	<del>30.38</del>	
Tail Circuit - per Circuit (without Grooming)	Recurring Charges per circuit per year	
	CBD	Non-CBD
<del>64 kbps</del>	<del>1,736</del>	1,823
<del>128 kbps</del>	<del>1,871</del>	<del>1,979</del>
<del>192 kbps</del>	<del>2,159</del>	<del>2,286</del>
<del>256 kbps</del>	<del>2,196</del>	<del>2,347</del>
384 kbps	<del>3,037</del>	<del>3,235</del>
<del>512 kbps</del>	<del>3,166</del>	<del>3,409</del>
<del>768 kbps</del>	<del>3,520</del>	<del>3,859</del>
<del>1024 kbps</del>	<del>1,786</del>	<del>2,202</del>
<del>1536 kbps</del>	<del>1,401</del>	<del>2,003</del>

	CHARGES	CHARGES
<del>DESCRIPTION</del>	<del>(S\$)</del>	<del>(S\$)</del>
<del>1984 kbps</del>	<del>1,605</del>	<del>2,370</del>
2 Mbps	<del>678</del>	<del>1,443</del>
4 <del>5 Mbps</del>	<del>3,473</del>	<del>7,265</del>
155 Mbps	<del>5,201</del>	10,881
Tail Circuit - Per Circuit (with Grooming)	Recurring Charges per circuit per year	
	CBD	Non-CBD
<del>64 kbps</del>	1,392	1,433
<del>128 kbps</del>	<del>1,526</del>	<del>1,589</del>
<del>192 kbps</del>	<del>1,814</del>	<del>1,896</del>
<del>256 kbps</del>	<del>1,852</del>	<del>1,957</del>
<del>384 kbps</del>	<del>2,692</del>	<del>2,845</del>
<del>512 kbps</del>	<del>2,821</del>	<del>3,019</del>
<del>768 kbps</del>	<del>3,176</del>	<del>3,468</del>
<del>1024 kbps</del>	1,441	<del>1,812</del>
<del>1536 kbps</del>	<del>1,056</del>	<del>1,613</del>
Internal and External Relocation Charges		One-Time Charge
Per Order Charge		
<del>Per order</del>		101.94
Per Circuit Charge		
For bandwidths between 64 kbps and 1984 kbps Per circuit		<del>31.95</del>
For bandwidths between 2 Mbps and 155 Mbps Per circuit		<del>23.96</del>

	CHARGES	CHARGES
DESCRIPTION	<del>(S\$)</del>	<del>(S\$)</del>
Project Study Charge (not applicable where the application is cancelled prior to the commencement of the Project Study)		
For bandwidths between 64 kbps and 128 kbps Per order		<del>62.30</del>
For bandwidths between 192 kbps and 1024 kbps Per order		<del>340.77</del>
For bandwidths between 1536 kbps and 1984 kbps Per order		440.44
For 2 Mbps bandwidth Per order		435.53
For bandwidths between 45 Mbps and 155 Mbps Per order		433.10
		One-Time Relocation Charges
<del>64 kbps</del>		<del>751.72</del>
<del>128 kbps</del>		<del>751.72</del>
<del>192 kbps</del>		<del>1,169.95</del>
<del>256 kbps</del>		<del>1,169.95</del>
384 kbps		<del>1,169.95</del>
<del>512 kbps</del>		<del>1,169.95</del>
<del>768 kbps</del>		<del>1,169.95</del>
<del>1024 kbps</del>		<del>1,169.95</del>
<del>1536 kbps</del>		<del>1,343.85</del>
<del>1984 kbps</del>		<del>1,343.85</del>
2 Mbps		<del>1,261.00</del>
45 Mbps		<del>1,618.10</del>
155 Mbps		<del>1,618.10</del>
Change of Interface Standard Charge		One-Time Charge
Per application		<del>54.56</del>

	CHARGES	CHARGES
DESCRIPTION	<del>(S\$)</del>	<del>(S\$)</del>
Project Study Charge (per circuit)		<del>54.87</del>
Per Circuit		<del>781.25</del>
Tie-Cable Change Charge		One-Time Charge
Per Tie Cable Change request		
64 kbps		<del>209.17</del>
128 kbps		<del>209.17</del>
<del>192 kbps</del>		<del>231.97</del>
256 kbps		<del>231.97</del>
384 kbps		<del>231.97</del>
<del>512 kbps</del>		<del>231.97</del>
<del>768 kbps</del>		<del>231.97</del>
<del>1024 kbps</del>		<del>231.97</del>
<del>1536 kbps</del>		<del>244.16</del>
<del>1984 kbps</del>		<del>244.16</del>
2 Mbps		<del>377.24</del>
45 Mbps		<del>535.19</del>
155 Mbps		<del>535.19</del>
No-Fault-Found Charges		<del>One-Time</del> <del>Charge</del>
Office hours		
64kbps to 1984kbps		<del>317.37</del>
<del>2Mbps</del>		<del>508.31</del>
45Mbps & 155Mbps		949.68
After Office hours		
64kbps to 1984kbps		<del>567.81</del>
<del>2Mbps</del>		<del>798.48</del>
45Mbps & 155Mbps		<del>1,554.81</del>

DESCRIPTION	CHARGES (S\$)	CHARGES (S\$)
Sundays and Public Holidays		
64kbps to 1984kbps		913.03
<del>2Mbps</del>		<del>1,119.20</del>
45Mbps & 155Mbps		<del>1,923.89</del>
For all recalls, the Requesting Licensee shall reimburse SingTel for its staff's reasonable transportation claim.		
One-time System Setup Charge		One-Time Charge
Per Requesting Licensee		As determined in clause 4.5.11 of this Schedule.

### 5.4. SCHEDULE 5 – ESSENTIAL SUPPORT FACILITIES

### SCHEDULE 5A - LICENSING OF LEAD-IN DUCT AND LEAD-IN MANHOLES

### 5.1 GENERAL

- 5.1.1 Following the grant by SingTel of Final Approval under clause 5.3 of Schedule 5A, SingTel shall complete construction of the Connection Duct within twenty (20) Business Days or such longer time if SingTel notifies the Requesting Licensee, and the Requesting Licensee shall pay the Charges incurred in the construction of Connection Duct.
- 5.1.2 The Charges that SingTel would incur in the provision of Connection Duct includes:
- (a) laying of 110mm duct(s) ("Connection Duct") of one metre away from the Leadin Manhole;
- (b) printing of site plan;
- (c) constructing duct seal for the Connection Duct(s);
- (d) share of costs of Lead-in Manhole; and
- (e) labour costs.

### 5.2 Application Fee

5.2.1 The Requesting Licensee shall pay the Charges for ordering and processing the application regardless of the outcome of the application.

### 5.3 Project Study

5.3.1 SingTel shall proceed with a Project Study which would include a site survey conducted by SingTel to establish the availability of <a href="Building">Building</a> Lead-in Duct and Lead-in Manhole (where applicable), and the Requesting Licensee shall pay the Charges incurred in conducting the Project Study.

### 5.4 Other Fees and Charges

### 5.4.1 Cancellation Fee

If the Requesting Licensee cancels or postpones the cable installation date, it shall pay SingTel a cancellation Charge and any other Charges for the work that SingTel incurred up to the point the request is cancelled.

### 5.4.2 One-time System Set-up Charge

Subject to the Authority's approval, SingTel may charge the Requesting Licensee an apportioned one-time system set-up charge based on the number of <u>Building</u> Lead-in Ducts leased by the Requesting Licensee. The Requesting Licensee must pay SingTel in full and without delay, the apportioned one-time system set-up charge.

### 5.5 Request for Physical Access

5.5.1 The Requesting Licensee shall pay SingTel the Charges for processing and administering the request for physical access.

### 5.6 Unauthorised access to SingTel's Underground Plant

- 5.6.1 Where SingTel approves the order, after having identified that the Requesting Licensee has accessed its <a href="Building">Building</a> Lead-in Duct and Lead-in Manhole (where applicable) without having obtained approval in accordance with Schedule 5A of this RIO Agreement, the Requesting Licensee must pay, within ten (10) Business Days from the date of approval, SingTel's reasonable costs incurred in the investigation of the unauthorised access, and the Charges in arrears calculated from the date of access (including the date of deemed access).
- 5.6.2 Where SingTel rejects the request for access, after having identified that the Requesting Licensee has accessed its <a href="Building">Building</a> Lead-in Duct and Lead-in Manhole (where applicable) without having obtained approval in accordance with Schedule 5A of this RIO Agreement, the Requesting Licensee must pay, within ten (10) Business Days from the date of rejection, SingTel's reasonable costs incurred in the investigation of the authorised access, and the Charges in arrears calculated from the date of access (including the date of deemed access).

### 5.7 Expiry of Term of licence

5.7.1 Upon expiry or termination of the licence in respect of the Building Lead-in Duct and Lead-in Manhole (where applicable) and the removal of the Requesting Licensee's Underground Equipment, SingTel shall verify and restore the state of the Building Lead-in Duct and Lead-in Manhole (where applicable). The Requesting Licensee shall pay all reasonable costs incurred by SingTel in verifying and restoring the state of the Building Lead-in Duct and Lead-in Manhole (where applicable) including the costs of updating SingTel's records, other than in circumstances where the Requesting Licensee's discontinuation of the use of the Building Lead-in Duct and Lead-in Manhole (where applicable) is a direct result of SingTel's decommissioning of the Building Lead-in Duct and Lead-in Manhole (where applicable) under clause 2.3(f) of Schedule 5A.

### 5.8 Charges

5.8.1 Prices of Building Lead-in Ducts and Lead-in Manholes are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering and Provisioning Charges (excluding site survey Charges)	
Per order <sup>22</sup>	88.21
Per order (applicable where the application is rejected by SingTel pursuant to clause 4.2 of Schedule 5A)	15.63
Modified Underground Equipment  Application Fee (per Lead-in Manhole)	on a case-by-case basis
Shared use of <b>Building</b> Lead-in Duct with access to Lead-in Manhole (per Standard Cable Equivalent per metre per year)	
Central Business District*	1.80
Other Commercial Areas	1.80
Residential	1.80

<sup>&</sup>lt;sup>22</sup> This charge will not apply where the order is rejected pursuant to clause 4.2 of Schedule 5A.

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<sup>\*</sup> A <u>Building Lead-in Duct</u> is classified to be in Central Business District where the <u>Building Lead-in Duct</u> is located within the boundary served by Orchard Telephone Exchange, City Telephone Exchange, Central Telephone Exchange or East Telephone Exchange.

Shared use of Building Lead-in Duct without access to Lead-in Manhole (per Standard Cable Equivalent per metre per year)  Central Business District*  Other Commercial Areas Residential  Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct  LTA road work application and other related fees	1.40 1.40 1.40 1,449 on a case-by-case basis
Central Business District* Other Commercial Areas Residential  Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct	1.40 1.40 1,449 on a case-by-
Other Commercial Areas Residential  Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct	1.40 1,449 on a case-by-
Residential  Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct	1,449 on a case-by-
Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct	on a case-by-
of 110mm diameter Connection Duct	on a case-by-
LTA road work application and other related fees	
Miscellaneous Charges <sup>23</sup>	
Site survey/site meeting — Half Day	257.58
Site survey/site meeting -Full Day	515.15
Contractor Cost for Manhole Site Survey – per manhole	782.88
Physical Access/Emergency Physical Access	
Application Fee (Per request)	13.79
Updating Master List	13.77
Administrative Fee (per form)	13.79
Reconnection Charges	
Per Reconnection Request <sup>24</sup>	on a case-by-case basis
Termination Charges	
Per Termination Request including recovery of Equipment, M&E works (where applicable) upon termination of Lead-in-Manhole	on a case-by-case basis

<sup>&</sup>lt;sup>23</sup> These charges will apply for site inspections performed by SingTel during project studies or upon additional requests from Requesting Licensees.

<sup>&</sup>lt;sup>24</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 5A.

DESCRIPTION	CHARGES (S\$)
One-time System Setup Charge <sup>25</sup>	25,614

# SCHEDULE 5B – [INTENTIONALLY BLANK]

<sup>&</sup>lt;sup>25</sup> This charge will apply with reference to clause 5.4.2 of Schedule 9.

# SCHEDULE 5C - [<u>DeletedIntentionally blank</u>] LICENCE OF ROOF SPACE AND CO-LOCATION AT ROOF SITES

### 5.9 General

- 5.9.1 Upon successful application of a request for Roof Space, SingTel shall:
- (a) proceed with a Project Study which would include a site survey conducted by SingTel to establish the availability of the Roof Space; and
- (b) the Requesting Licensee shall pay the Charges incurred in conducting the Project Study.

### 5.9.2 Charges

DESCRIPTION	CHARGES (S\$)
Ordering And Provisioning	
———Per order <sup>26</sup>	43.21
Per order (applicable where the application is rejected by SingTel pursuant to clause 3.4 of Schedule 5C)	15.63
Project Study (per Roof Site)	on a case by case basis
Modified Roof Equipment	
Per Request (per Roof Site)	on a case by case basis
Site Preparation & Installation	
Site Preparation Work – for M&E works etc	on a case-by-case basis
Fire Safety Bureau Charges (where applicable)	on a case by case basis
Building & Construction Authority Charges (where applicable)	on a case by case basis
Installation of Optical Fibre	on a case by case basis

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<sup>&</sup>lt;sup>26</sup> This charge will not apply where the order is rejected pursuant to clause 3.4 of Schedule 5C.

DESCRIPTION	CHARGES (S\$)
Provision, installation and termination of Power and Earth comms cable	on a case by case basis
Recurrent Charges (paid quarterly)	
Roof Space (minimum of 1 square metre to maximum 10 square metre) per square metre per year	3,225.21
Power (minimum of 13 fused amp for AC and minimum of 20 fused amp for DC) per fused amp per year	444.74
Manpower cost	
Supervision of work during installation, Site Inspection, Final Inspection, Escort Service for Physical Access	
During Office Hours (Minimum 2 hrs) per hour	<del>46.10</del>
After Office Hours (Minimum 2 hrs) per hour	<del>69.15</del>
After Office Hours (Minimum 4 hrs if recalled from home) – per hour	<del>69.15</del>
Saturday (Minimum 4 hrs) per hour	<del>69.15</del>
Sunday (requiring < 4 hrs) per activation	<del>405.71</del>
Sunday (requiring $> = 4 \text{ hrs}$ ) per activation	811 42
Public Holiday per activation	737.65
For all recalls/activations, the Requesting Licensee shall reimburse SingTel for its staff's reasonable transportation claim	737.03
Physical Access/Emergency Physical Access	
Per Request	<del>13.79</del>
Updating Master List	
Administrative Fee (per form)	<del>13.79</del>
Reconnection Charges	
Per Reconnection Request <sup>27</sup>	on a case by case basis
Termination Charges	
Per Termination Request including recovery of Equipment, Cable Trays, M&E works (where applicable) upon termination of access to Roof Space or Co Location.	on a case by case basis

<sup>&</sup>lt;sup>27</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 5C.

### 5.10 Provisioning of Roof Space

5.10.1 The Requesting Licensee shall pay for the Charges reasonably incurred by SingTel for the provisioning of Roof Space.

# 5.11 Cancellation of request or approval for Roof Space

5.11.1 SingTel may charge an administrative fee for processing such cancellation as well as the cost that SingTel incurred up to the point of cancellation.

6. SCHEDULE 6 – [INTENTIONALLY BLANK]

# 7. SCHEDULE 7 – [INTENTIONALLY BLANK]

### 8. SCHEDULE 8 - CO-LOCATION

- 8.1 General
- 8.1.1 The Charges applicable for Co-location are provided in Table 1 and 2.
- 8.1.2 Table 1 sets out the common Charges applicable for access to SingTel's Exchange Building for the purposes of Co-location for Point of Interconnection (POI), Point of Access (POA), and Submarine Cable Landing Station, and access to Mandated Services.
- 8.1.3 [<u>DeletedIntentionally blank</u>] Table 2 sets out the additional Charges applicable for Co location for Point of Access (POA).
- 8.1.4 Requesting Licensee confirms its acceptance of the Charges for Site Preparation Work and shall be paid in advance of the licence period.

### 8.2 Charges

# 8.2.1 The Charges are as follows:

TABLE 1 - COMMON CHARGES FOR CO-LOCATION ATPOI / POA /SUBMARINE CABLE LANDING STATION, AND ACCESS TO MANDATED SERVICES AT SINGTEL'S EXCHANGE BUILDING

DESCRIPTION	CHARGES (S\$)
Ordering And Provisioning	
Per order <sup>28</sup>	43.21
Per order (applicable where the application is rejected by SingTel pursuant to clause 3.3 of Schedules 8A, 8B and 8D)	15.63
Project Study (per Co-location Site)	1,528.54
Project Study (per order for Access to Mandated Services)	on a case-by-case basis
Modified Co-Location Equipment	
Per Request	on a case-by-case
	basis
Site Preparation & Installation	•
Site Preparation & Installation  Site Preparation Work –for M&E works etc	•
·	basis on a case-by-case
Site Preparation Work –for M&E works etc	on a case-by-case basis on a case-by-case basis
Site Preparation Work –for M&E works etc  Fire Safety Bureau Charges (where applicable)  Building & Construction Authority Charges (where	on a case-by-case basis on a case-by-case basis on a case-by-case

<sup>&</sup>lt;sup>28</sup> This charge will not apply where the order is rejected pursuant to clause 3.6 of Schedule 8A, clause 3.3 of Schedule 8B, or clause 3.6 of Schedule 8D.

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DESCRIPTION	CHARGES (S\$)
Installation of fibre cables or patch cords (including installation of additional cable trays or ladders)	on a case-by-case basis
Provision, installation and termination of Transmission Tie Cables, Power and Earth comms cables	on a case-by-case basis
Provision, installation and termination of Tie Cables for IRS Tail Circuit Service (n x 64 kbps, 2 Mbps, 45 Mbps and 155 Mbps)	on a case-by-case basis
Recurrent Charges (paid quarterly)	
Co location Space (minimum of 1 square metre to maximum of 10 square metre) per square metre per year (where the Requesting Licensee also leases Roof Space under Schedule 5C)	3,225.21
Co-location Space (minimum of 1 square metre to maximum of 10 square metre) per square metre per year (where the Requesting License leases only Co-location Space under Schedules 8A, 8B and 8D)	3,547.73
Power (minimum of 13 fused amp for AC and minimum of 20 fused amp for DC) per fused amp per year	444.74
Llead-in dDucts (per duct metre per year)	
Central Business District	6.41
Non-Central Business District	6.69
Lead-in Manholes (per duct bore per year)	
Central Business District	68.25
Non-Central Business District	69.90

DESCRIPTION	CHARGES (S\$)
Manpower Cost	
Supervision of work during installation, Site Inspection, Final Inspection, Escort Service for Physical Access	
During Office Hours (Minimum 2 hrs) – per hour	46.10
After Office Hours (Minimum 2 hrs) – per hour	69.15
After Office Hours (Minimum 4 hrs if recalled from home) – per hour	69.15
Saturday (Minimum 4 hrs) – per hour	69.15
Sunday (requiring < 4 hrs) – per activation	405.71
Sunday (requiring $> = 4$ hrs) – per activation	811.42
Public Holiday – per activation	737.65
For all recalls/activations, the Requesting Licensee shall reimburse SingTel for its staff's reasonable transportation claim	
Physical Access/Emergency Physical Access	
Per Request	13.79
Updating Master List	
Administrative Fee (per form)	13.79
Termination Charges	
Per Termination Request including recovery of Equipment, Cable Trays, M&E works (where applicable) upon termination of Co-location.	on a case-by-case basis
Reconnection Charges	
Per Reconnection Request <sup>29</sup> (per Co-location Site)	on a case-by-case basis
SingTel Exchange Related Information	
Application Fee per application	13.79
Address of SingTel Exchange Building and diagram of network boundary per SingTel Exchange	62.60

<sup>&</sup>lt;sup>29</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedules 8A or 8D.

### **TABLE 2 - ADDITIONAL CHARGES FOR CO-LOCATION AT:**

### POA

DESCRIPTION	CHARGES (S\$)
Recurrent Charges (paid quarterly)	
Subscriber Loop Tie Cable per pair per year	<del>8.53</del>

### 9. SCHEDULE 13 - LICENSING OF CDN

### 9.1 GENERAL

- 9.1.1 Upon receipt of the Requesting Licensee's agreement under clause 5.7 of Schedule 13, SingTel shall complete construction of the Connection Duct within forty (40) Business Days or such longer time if SingTel notifies the Requesting Licensee, and the Requesting Licensee shall pay the Charges incurred in the construction of Connection Duct.
- 9.1.2 The Charges that SingTel would incur in the provision of Connection Duct includes:
- (a) laying of 110mm duct(s) ("Connection Duct") of one metre away from the manhole(s) at the start and/or the end of the CDN;
- (b) printing of site plan;
- (c) constructing duct seal for the Connection Duct(s); and
- (d) labour costs.
- 9.1.3 The scope of activities covered under the O&M Charges and which SingTel shall perform thereunder are as follows:
- (a) maintain a manhole access system to control the access to the manholes, cable pulling and maintenance activities within the CDN for all Requesting Licensees;
- (b) control and manage the manhole keys for the access to the manholes within the CDN;
- (c) maintenance of the manholes within the CDN on environmental issues such as mosquitos breeding, excessive mud and gas leak; and
- (d) replacement of manhole covers within the CDN when they are faulty;

- (e) repair of ducts within the CDN when there is a pipe blockage due to soil movement and penetration of tree roots, or when the duct damage is not caused by the Requesting Licensee;
- (f) support other authority requirements such as the opening of manhole covers within the CDN for mosquito inspection by the National Environment Agency of Singapore (**NEA**) or gas detection by the gas department;
- (g) maintain an up-to-date records of the GPS of the manhole location and pipe route;
- (h) coordinating with government agencies and the Requesting Licensee on any plant diversion request;
- (i) coordinating with Land Transport Authority (**LTA**) on any request to re-surface the road or raising of manhole level; and
- (j) all other CDN operations and maintenance works where the damage is not caused by the Requesting Licensee.

### 9.2 Application Fee

9.2.1 The Requesting Licensee shall pay the Charges for ordering and processing the application regardless of the outcome of the application.

# 9.3 Project Study

9.3.1 SingTel shall proceed with a Project Study which would include a site survey conducted by SingTel to establish the location(s) where the Connection Duct(s) will be provisioned (where applicable), and the Requesting Licensee shall pay the Charges incurred in conducting the Project Study.

### 9.4 Cancellation Fee

9.4.1 If the Requesting Licensee cancels or postpones the cable installation date, it shall pay SingTel a cancellation Charge and any other Charges for the work that SingTel reasonably incurred up to the point the request is cancelled.

### 9.5 Request for Physical Access

9.5.1 The Requesting Licensee shall pay SingTel the Charges for processing and administering the request for physical access.

### 9.6 Unauthorised access to SingTel's Underground Plant

- 9.6.1 Where SingTel approves the order, after having identified that the Requesting Licensee has accessed the CDN without having obtained approval in accordance with Schedule 13 of this RIO Agreement, the Requesting Licensee must pay, within ten (10) Business Days from the date of approval, SingTel's reasonable costs incurred in the investigation of the unauthorised access, and the Charges in arrears calculated from the date of access (including the date of deemed access).
- 9.6.2 Where SingTel rejects the request for access, after having identified that the Requesting Licensee has accessed the CDN without having obtained approval in accordance with Schedule 13 of this RIO Agreement, the Requesting Licensee must pay, within ten (10) Business Days from the date of rejection, SingTel's reasonable costs incurred in the investigation of the authorised access, and the Charges in arrears calculated from the date of access (including the date of deemed access).

### 9.7 Expiry of Term of licence

9.7.1 Upon expiry or termination of the licence in respect of the CDN and the removal of the Requesting Licensee's Underground Equipment, SingTel shall verify and restore the state of the CDN. The Requesting Licensee shall pay all the reasonable costs incurred by SingTel in verifying and restoring the state of the CDN including the costs of updating SingTel's records, other than in circumstances where the Requesting Licensee's discontinuation of the use of the CDN is a direct result of SingTel's decommissioning of the CDN under clause 18.5 of Schedule 13.

### 9.8 Charges

9.8.1 Prices for the CDN are as follows:

DESCRIPTION	CHARGES (S\$)
Ordering and Provisioning Charges (excluding site survey Charges)	
Per order <sup>30</sup>	88.21
Per order (applicable where the application is rejected by SingTel pursuant to clause 4.2 of Schedule 13)	15.63
Modified Underground Equipment	
Application Fee (per Lead-in Manhole)	on a case-by-case basis
IRU Charges	
Per duct	914,000
O&M Charges (to be paid as a lump sum annually)	
Per duct per year	
<u>Year</u>	
2020 - 2022	73,120
2023 - 2025	76,776
2026 - 2028	80,615
2029 - 2031	84,646
2032 - 2034	88,878
2035 - 2037	93,322
2038 - 2040	97,988
Every 3 years	Increase by 5%
Construction of Connection Duct (per Connection Duct) - 1m of 110mm diameter Connection Duct	1,449
LTA road work application and other related fees	on a case-by-case basis

 $^{30}$  This charge will not apply where the order is rejected pursuant to clause 4.2 of Schedule 13.

DESCRIPTION	CHARGES (S\$)
Miscellaneous Charges <sup>31</sup>	
Site survey/site meeting $-\operatorname{Half} \operatorname{Day}$	257.58
Site survey/site meeting $-\operatorname{Full}\mathrm{Day}$	515.15
Contractor Cost for Manhole Site Survey – per manhole	782.88
Manpower Cost	
Escort Service for Physical Access	
During Office Hours (Minimum 2 hrs) – per hour	46.10
After Office Hours (Minimum 2 hrs) – per hour	69.15
After Office Hours (Minimum 4 hrs if recalled from home) – per hour	69.15
Saturday (Minimum 4 hrs) – per hour	69.15
Sunday (requiring < 4 hrs) – per activation	405.71
Sunday (requiring $> = 4$ hrs) – per activation	811.42
Public Holiday – per activation	737.65
For all recalls/activations, the Requesting Licensee shall reimburse SingTel for its staff's reasonable transportation claim	737.03
Physical Access/Emergency Physical Access	
Application Fee (Per request)	13.79
Updating Master List	
Administrative Fee (per form)	13.79
Reconnection Charges	
Per Reconnection Request <sup>32</sup>	on a case-by-case basis

<sup>&</sup>lt;sup>31</sup> These charges will apply for site inspections performed by SingTel during project studies or upon additional requests from Requesting Licensees.

<sup>&</sup>lt;sup>32</sup> These charges shall apply in the event of the lifting of suspension of this RIO Agreement or Schedule 13.

DESCRIPTION	CHARGES (S\$)
Termination Charges  Per Termination Request including recovery of Equipment, M&E works (where applicable) upon termination of CDN	on a case-by-case basis