

***SCHEDULE 2B – MODIFICATION REQUIRED***

***PLEASE SEE GENERAL REQUIREMENTS APPLICABLE TO SCHEDULE 2B SET OUT IN APPENDIX 1 AND SPECIFIC REQUIREMENTS SET OUT IN IDA'S ANNOTATIONS BELOW.***

**SCHEDULE 2B**

**CALL TERMINATION SERVICE**

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## SCHEDULE 2B – CALL TERMINATION SERVICE

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## SCHEDULE 2B

### CALL TERMINATION SERVICE

#### *SCHEDULE 2B – GENERAL COMMENTS*

*IDA directs SingTel to modify Schedule 2B to incorporate the following requirements. SingTel has proposed modifications throughout Schedule 2B to treat calls to access dial-up Internet services as Transit Interconnection Calls and not Terminating Interconnected Calls. These proposed modifications are clearly inconsistent with IDA’s 14 February 2003 decision titled “Review of Interconnection Charging Model for Internet Dial-up Traffic”, in which IDA decided to retain the treatment of classifying internet dial-up traffic as call terminating traffic. If SingTel wants IDA to review the decision of a concluded regulatory proceeding, SingTel must provide IDA with the basis for doing so. It is improper of SingTel to seek a review of concluded decisions in the RIO proceeding. Accordingly, IDA rejects all of the proposed modification by SingTel throughout Schedule 2B to treat calls to access dial-up Internet services as Transit Interconnection Calls and not Terminating Interconnected Calls.*

#### **1. GENERAL**

- 1.1 The Supplier will supply the Call Termination Service to the Supplier’s Network in accordance with clause 11.1 of the main body of the RIO Agreement in respect of the Call Types for which the process in clause 2 has been followed and, in the case where SingTel is the Acquirer, in respect of the Call Types specified in Annex 2B-4 (**Terminating Interconnected Calls**).
- 1.2 For the avoidance of doubt, the process in clause 2 must be initiated by the Acquirer if it wishes to acquire the Call Termination Service in respect of Calls from Acquirer the origin of which has not been previously covered by a request under clause 2 or, in the case where SingTel is the Acquirer, in respect of the Call Types not specified in Annex 2B-4.
- 1.3 Notwithstanding the Interconnection of the SingTel Network and the Requesting Licensee’s Network, the Supplier shall have no obligation to provide the Call Termination Service in respect of Calls of any type other than Terminating Interconnected Calls.
- 1.4 The Supplier will only be required to provide the Call Termination Service to the Acquirer to the extent that the Acquirer has complied with Schedule 1 and this Schedule 2B.

- 1.5 The Acquirer shall provide and maintain the Interconnection Links for the conveyance of Termination Interconnected Calls.

**SingTel Comments: New clause 1.5**

*SingTel has inserted new clause 1.5 to make it clear that the Acquirer is responsible for the provision and maintenance of Interconnection Links.*

**PROPOSED NEW CLAUSE 1.6 – REJECTION**

- 1.6 For the avoidance of doubt, Terminating Interconnected Calls do not include Calls to access dial-up internet services. Calls to access dial-up internet services are Transit Interconnected Calls to be acquired and supplied under Schedule 2C.

**SingTel Comments: New clause 1.6**

*SingTel has previously submitted that SingTel cannot treat Calls to access dial-up internet services as Terminating Interconnected Calls, as such a categorisation would result in SingTel being unable to recover the costs associated with providing such Calls. Calls to access dial-up internet services are to be treated as Transit Interconnected Calls and as such are to be subject to Schedule 2C.*

*New clause 1.6 makes it clear that Calls to access dial-up internet services are to be dealt with under Schedule 2C.*

*Please refer to IDA's general comments to Schedule 2B above. IDA rejects SingTel's proposed new Clause 1.6.*

**2. CALL TYPES**

- 2.1 This clause 2 applies where the Acquirer wishes to extend the use of the Call Termination Service provided by the Supplier to a Call Type in respect of which the process in this clause 2 has not already been undertaken or, in the case where SingTel is the Acquirer, has not been specified in Annex 2B-4.
- 2.2 The Acquirer shall notify the Supplier by means of the request form set out in Annex 2B-1 of its request to extend the use of the Call Termination Service to a particular Call Type.

**SingTel Comments: Former clause 2.3**

*SingTel has removed the requirement for the Supplier to acknowledge receipt of a request in order to streamline ordering and provisioning processes, as required by the IDA. SingTel notes that requests must still be notified in accordance with clause 28.1 of the main body of the RIO Agreement, as amended.*

### **CLAUSE 2.3 – MODIFICATION REQUIRED**

- 2.3 Following receipt of a request form under clause 2.2, the Supplier shall assess that request and notify the Acquirer that either:
- (a) the implementation of the request in respect of the requested Call Type involves only Network Conditioning in the Supplier's Network, in which case the Negotiation Period shall be thirty (30) Business Days; or
  - (b) the implementation of the request in respect of the requested Call Type involves work in addition to or as an alternative to Network Conditioning in the Supplier's Network, in which case the Negotiation Period shall be sixty (60) Business Days.

*IDA requires SingTel to modify Clause 2.3 to incorporate the following requirements:*

- (a) *Clause 2.3 requires the Supplier to assess the request and notify the Acquirer whether the implementation of the request involves any work aside from the Network Conditioning in the Supplier's Network. However, it does not specify the timeframe within which the Supplier must so notify the Acquirer. IDA's position is that this leads to business uncertainty for the Acquirer. In this respect, IDA considers it reasonable to require SingTel to notify the Acquirer within a fixed timeframe of 5 Business Days.*
  - (b) *IDA is of the view that the existing Negotiation Period specified in Clauses 2.3(a) and 2.3(b) are overly lengthy. Given that the RIO has been effective for almost five years, SingTel should have reasonably sufficient experience in processing and negotiating such requests. IDA considers a period of 15 Business Days (in the case of Clause 2.3(a)) and 30 Business Days (in the case of Clause 2.3(b)) as reasonable.*
- 2.4 The Parties shall negotiate in good faith the requirements, implementation Charges and timetable for extending the use of the Call Termination Service provided by the Supplier to the requested Call Type for the Negotiation Period notified in clause 2.3, failing which either Party may commence the Dispute Resolution Procedure in accordance with Schedule 11.

2.5 Where the Parties have reached an agreement in accordance with clause 2.4 above, the Supplier will commence implementation in accordance with the agreed timetable.

***CLAUSE 2.6 – MODIFICATION REQUIRED***

2.6 The Acquirer shall be liable for the costs incurred by the Supplier in processing and implementing the Acquirer's request to extend the use of the Call Termination Service to a particular Call Type.

**SingTel Comments: New clause 2.6**

*Please refer to our comments in relation to clause 2.8 below.*

*IDA recognises that a Supplier may incur certain costs in processing and implementing the Acquirer's request to extend the use of the Call Termination Service to a particular Call Type. However, the Supplier is already imposing a Charge under Schedule 9 and the recovery of all such costs has been built into this Schedule 9 Charge. Accordingly, IDA directs SingTel to modify Clause 2.6 to specifically refer to the Charge under Schedule 9.*

2.7 Nothing in this clause 2 requires the Supplier to perform any changes in its Network or to commence the supply of Call Termination Services for a Call Type until the Parties have completed the Change Process for that Call Type and all Network Conditioning Charges have been agreed to by the Acquirer.

***CLAUSE 2.8 – MODIFICATION REQUIRED***

2.8 The Acquirer may, at any time, request the Supplier cease to supply the Call Termination Service in respect of a Call Type, in which case the Supplier shall cease to supply the Call Termination Service in respect of that Call Type as soon as reasonably practicable or at such later time as specified by the Acquirer. The Acquirer shall be liable for the costs incurred by the Supplier in ceasing the supply of the Call Termination Service in respect of that Call Type.

**SingTel Comments: Clause 2.8**

*A Supplier incurs certain unavoidable costs:*

- *in processing and implementing an Acquirer's request to extend the use of the Call Termination Service to a particular Call Type; and*

- *when the Acquirer ceases to acquire the Call Termination Service in respect of a Call Type.*

*As the Supplier provides the Call Termination Service at cost to the Acquirer, the Supplier should be entitled to recover the costs associated with processing a request to extend the use of the Call Termination Services to a particular Call Type and the cessation of the Call Termination Service in respect of a Call Type.*

*SingTel considers that this amendment is fair and reasonable. In particular, this clause will operate reciprocally – SingTel would be liable to the Supplier for its costs in ceasing to supply the Call Termination Service in respect of a Call Type when SingTel is the Acquirer.*

*Please refer to Paragraph 2 of Appendix 1. IDA disagrees with SingTel's proposal to recover costs associated with ceasing supply of Call Termination Service. Instead, it is reasonable to require each party to bear its own cost arising from the termination. As such, IDA rejects SingTel's proposed amendment to insert the following sentence: "(T)he Acquirer shall be liable for the costs incurred by the Supplier in ceasing the supply of the Call Termination Service in respect of that Call Type".*

### **3. NUMBER LEVEL ACTIVATION**

- 3.1 Each Party shall provide the other Party with at least two (2) weeks' notice prior to any request to open new Number Levels.
- 3.2 The process for the opening of Number Levels shall be in accordance with the flowchart shown in Annex 2B-5.

### **4. CHARGING PRINCIPLES**

- 4.1 For any Terminating Interconnected Calls terminating into the Supplier's Network, the Supplier will collect the Termination Charge from the Acquirer. For the avoidance of doubt, the Call Termination Service is not provided for termination of Calls to Third Party Networks.
- 4.2 Each Party shall, for those Terminating Interconnected Calls for which it is providing (as the case may be) or receiving a Call Termination Service, collect a Call record for each individual Terminating Interconnected Call on a CDR basis and process such records in accordance with clause 5.

**SingTel Comment: Clause 4.2**

***Bulk metering is no longer used for Inter-Operator Billing at SingTel Interconnect Gateway Switches.***

- 4.3 The Call records collected by the Supplier in accordance with this clause 4 shall be the source of the data used by the Supplier to invoice for the Call Termination Service it provides under this RIO Agreement.
- 4.4 The calculation of Charges for the Call Termination Service will be based on the number of Call Durations recorded on the basis of the applicable Billing Unit, and in accordance with the applicable rates set out in Schedule 9.
- 4.5 Calls shall be charged for the duration of use of the circuit for the Call Duration of use of a circuit shall start at the time the circuit used for the Call is seized and end at the time the circuit is released. All Calls, regardless of whether they are successful or unsuccessful, are chargeable. The Charges shall be accounted in per second blocks.
- 4.6 The Parties shall agree that if a Chargeable Call Duration extends over two (2) or more Charge rate periods, the Call shall be recorded as a single Call in the Charge rate period which applies at the commencement of the Call and the Chargeable Call Duration will be determined by adopting the applicable rate set out in Schedule 9 for the applicable charging period in which the Call is answered.
- 4.7 The Parties shall agree that for Calls that cross over to the next Billing Period, the Calls shall be billed in the Billing Period in which those Calls end.

## **5. BILLING VERIFICATION INFORMATION**

- 5.1 The Supplier shall use its reasonable endeavours to provide Billing Verification Information for the Call Termination Service in accordance with the format set out in Annex 2B-2 within fourteen (14) Calendar Days from the end of each Billing Period, together with the invoice for the Call Termination Service to be issued in accordance with Schedule 9.
- 5.2 In addition to the obligation in clause 5.1, when there is a dispute in relation to invoices issued for the Call Termination Service, the Parties shall exchange the Detailed Billing Verification Information set out in Annex 2B-3.

- 5.3 In the event that the Supplier cannot record Billing Verification Information for the Call Termination Service due to a system error or other fault, upon the request of the Supplier, the Acquirer shall provide Billing Verification Information to the Supplier.
- 5.4 Where the Billing Verification Information collected by the Acquirer is not available under clause 5.3, the Parties shall negotiate in good faith such alternative Billing arrangements, such as an estimation based on the previous three (3) months' Billing Verification Information, appropriate in the circumstances.

## ***ANNEX 2B-1 – MODIFICATION REQUIRED***

### **ANNEX 2B-1 : REQUEST FORM FOR INTRODUCING NEW CALL TYPE (CALL TERMINATION SERVICE)**

#### **1. GENERAL**

##### **1.1 Call Type Name and Description**

*The Acquirer is to provide a general description of Call Type.*

##### **1.2 Date to be Introduced (Proposal)**

*The Acquirer is to indicate the preferred implementation date for access to be available.*

#### **2. CALL ORIGINS**

*The Acquirer is to indicate which Call origins (eg types of Calling subscribers) from its Network the Call Type is required from and which origins from its Network the Call Type is not required from (e.g. Acquirer international incoming Calls, Acquirer operator Calls; Acquirer PSTN/ISDN Calls).*

#### **3. NETWORK CONFIGURATION**

##### **3.1 Network Configuration/Routing Information**

*The Acquirer is to indicate the Network configuration (with a diagram) through which the Call Type is to be conveyed.*

### ***CLAUSE 3.2 – MODIFICATION REQUIRED***

##### **3.2 Trunk Group (Circuit Assignment)**

*The Acquirer is to indicate how traffic to the Call Type will be routed, as well as which Trunk Groups are to be used at the IGSs.*

***IDA directs SingTel to modify Clause 3.2 to refer to both IGSs and SGSs.***

##### **3.3 Other Engineering Requirements**

*The Acquirer may list down other requirements required for the Call Type, such as routing of traffic to mass Calls on choked circuits.*

#### **4. SIGNALLING**

*The Acquirer is to provide details on the signalling requirements upon which Call Type is to be delivered. Attachment or reference to the relevant ITU-T Recommendations is required. If new Call flow signalling sequence is required to support the new Call, this is also to be captured in this section.*

#### **5. TESTING**

*The Acquirer is to specify the testing requirements, such as testing configuration, test numbers, etc. The preferred testing timeframe is also to be indicated.*

#### **6. BILLING AND CHARGING REQUIREMENT**

##### **6.1 Customer Billing**

*The Acquirer is to specify which Party is to bill the customer and how settlement is to occur.*

##### **6.2 Operator Billing**

*The Acquirer is to indicate how inter-operator Billing and settlement is to occur.*

#### **7. BILLING INTEGRATION**

*Both Parties are to look at the downstream billing requirements to cater for the settlement between the Parties. Both Parties have to ensure that the agreed arrangements for Customer and operator Billing and settlement can be implemented and establish timetables for their implementation.*

#### **8. OTHER REQUIREMENTS**

*The Acquirer may specify any other requirements for Call Type to be delivered.*

**ANNEX 2B-2 : BILLING VERIFICATION INFORMATION FOR CALL TERMINATION SERVICE**

**Billing Information for the Supplier**

<b>Call Description</b>	<b>Time Zone</b>	<b>Call Duration (in secs)</b>	<b>Call Charges (in S\$)</b>
<b>Originating from the Acquirer's Network terminating to the Supplier's Network (Termination Charge)</b>	<b>Peak</b>	<b>5400</b>	<b>\$xxx.xx</b>
	<b>Off Peak</b>	<b>2700</b>	<b>\$xxx.xx</b>
<b>Total</b>		<b>Xxxx</b>	<b>\$xxx.xx</b>

**ANNEX 2B-3 : DETAILED BILLING VERIFICATION INFORMATION**

**1. Billing Verification for Supplier IGS**

S/N	ExchID	System	Time Zone	Originating From Acquirer's Network	
				(Terminating to the Supplier's Network)	
				Termination Charge payable by the Acquirer	
				Attempts	Duration (in secs)
1	IGS1	FBO001	Peak	442	4442
			Off Peak	2334	23345
2	IGS1	FBO002	Peak	442	4442
			Off Peak	2334	23345
3	IGS2	FBO001	Peak	442	4442
			Off Peak	2334	23345
4	IGS2	FBO002	Peak	442	4442
			Off Peak	2334	23345
5	IGS3	FBO001	Peak	442	4442
			Off Peak	2334	23345
6	IGS3	FBO002	Peak	442	4442
			Off Peak	2334	23345
7	IGS4	FBO001	Peak	442	4442
			Off Peak	2334	23345
8	IGS4	FBO002	Peak	442	4442
			Off Peak	2334	23345

**2. Billing Verification for Supplier SGS**

S/N	ExchID	System	Time Zone	Originating From the Acquirer's Network	
				(Terminating to the Supplier's Network)	
				Termination Charge payable by the Acquirer	
				Attempts	Duration (in secs)
1	SGS1	SBO001	Peak	444	4442
			Off Peak	2334	23345
2	SGS1	SBO002	Peak	444	4442
			Off Peak	2334	23345
3	SGS2	SBO001	Peak	444	4442
			Off Peak	2334	23345
4	SGS2	SBO002	Peak	444	4442
			Off Peak	2334	23345

**ANNEX 2B-4 LIST OF CALL TYPES FOR CALL TERMINATION SERVICE**

SingTel International Incoming Call Service

SingTel Local Call Termination Service

SingTel Voice Mail "1383" Service

SingTel Enhanced System "1305" Service

SingTel Police Enquiries "1600" Service

SingTel Non-emergency Ambulance "1777" Service

SingTel Enhanced Call Routing "1822" Service

SingTel Single Number Service "7000" Service

**ANNEX 2B-5 : PROCEDURE FOR NUMBER LEVEL ACTIVATION**

