

APPENDIX 6

REQUIRED MODIFICATIONS TO SCHEDULE 4 OF SINGTEL'S RIO

SCHEDULE 4A – MODIFICATION REQUIRED

PLEASE SEE GENERAL REQUIREMENTS APPLICABLE TO SCHEDULE 4A SET OUT IN APPENDIX 1 AND SPECIFIC REQUIREMENTS SET OUT IN IDA'S ANNOTATIONS BELOW.

SCHEDULE 4A

EMERGENCY CALL SERVICE

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SCHEDULE 4A

EMERGENCY CALL SERVICE

SingTel Comments: General comments on amendments to Schedule 4A

New clauses 2, 3 and 4 and new Annexes 4B-1, 4B-2 and 4B-3 have been added to make the terms of SingTel's Emergency Call Service consistent with the Call Termination Services provided by SingTel under Schedule 2B.

1. GENERAL

- 1.1 In addition to the conveyance of Interconnected Calls pursuant to Schedule 2, SingTel will convey, in accordance with clause 11.1 of the main body of this RIO Agreement, Emergency Calls that are handed over to SingTel at a POI by the Requesting Licensee, for which the process in clause 2 has been followed, to the appropriate Emergency Service Organisation (**Emergency Call Service**).
- 1.2 For the avoidance of doubt, the process in clause 2 must be initiated by the Requesting Licensee if it wishes to acquire the Emergency Call Service in respect of Emergency Calls from Requesting Licensee origins not previously covered by a request under clause 2.
- 1.3 Notwithstanding the Interconnection of the SingTel Network and the Requesting Licensee's Network, SingTel shall have no obligation to provide the Emergency Call Service in respect of Calls of any type other than Emergency Calls.
- 1.4 SingTel will only be required to provide the Emergency Call Service to the Requesting Licensee to the extent that the Requesting Licensee has complied with Schedule 1 and this Schedule 4A.
- 1.5 The Requesting Licensee shall provide and maintain sufficient Dedicated Emergency Call Interconnection Links for the conveyance of Emergency Calls.
- 1.6 The Requesting Licensee will route Emergency Calls to POIs in accordance with specifications notified to that Requesting Licensee by SingTel from time to time.
- 1.7 The Requesting Licensee must provide SingTel with CLI for all Emergency Calls for the purpose of enabling an Emergency Service Organisation to locate and identify the Calling Party of, and trace an Emergency Call.

- 1.8 The Requesting Licensee shall co-operate with the Emergency Service Organisation to assist in the investigation to locate and identify the Calling Party of, and trace an Emergency Call as and when required.
- 1.9 The Requesting Licensee shall be responsible to Forecast and order sufficient Interconnect Capacity under Schedule 1 to enable the Emergency Calls to be carried across the Dedicated Emergency Call Interconnection Links to SingTel's Network.
- 1.10 The Requesting Licensee shall not conduct any testing of Emergency Calls unless with the prior arrangement and express permission from the Emergency Service Organisation and SingTel.
- 1.11 The Requesting Licensee shall pay to SingTel the Charges for the conveyance of Emergency Calls handed over at the Interconnect Gateway Switch as provided in Schedule 9.

2. CALL TYPES

PROPOSED NEW CLAUSE 2.1 – MODIFICATION REQUIRED

- 2.1 This clause 2 applies where the Requesting Licensee wishes to extend the use of the Emergency Call Service provided by SingTel to a Call Type in respect of which the process in this clause 2 has not already been undertaken.

Under certain circumstances involving public emergency, IDA may direct SingTel and Requesting Licensees to implement Emergency Calls and open up additional Call Types on an expedited basis. Accordingly, IDA directs SingTel to modify proposed new Clause 2.1 by qualifying that proposed new Clause 2 applies unless the Authority directs otherwise. In addition, SingTel must also make consequential modifications to the definition of "Emergency Call" in Schedule 12 by deleting from that definition the reference to the process set out in Clause 2 of Schedule 4A.

- 2.2 The Requesting Licensee shall notify SingTel by means of the request form set out in Annex 4A-1 of its request to extend the use of the Emergency Call Service to a particular Call Type.

PROPOSED NEW CLAUSE 2.3 – MODIFICATION REQUIRED

- 2.3 Following receipt of a request form under clause 2.20, SingTel shall assess that request and notify the Requesting Licensee that either:

- (a) the implementation of the request in respect of the requested Call Type involves only Network Conditioning in SingTel'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 SingTel's Network, in which case the Negotiation Period shall be sixty (60) Business Days.

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

- (a) ***Proposed new Clause 2.3 requires the SingTel to assess the request and notify the Requesting Licensee whether the implementation of the request involves any work aside from the Network Conditioning in SingTel's Network. However, it does not specify the timeframe within which SingTel must so notify the Requesting Licensee. IDA's position is that this leads to business uncertainty for Requesting Licensee. In this respect, IDA considers it reasonable to require SingTel to notify the Requesting Licensee within a fixed timeframe of 5 Business Days.***
- (b) ***IDA is of the view that the existing Negotiation Period specified in proposed new 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 proposed new Clause 2.3(a)) and 30 Business Days (in the case of proposed new 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 Emergency Call Service provided by SingTel 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, SingTel will commence implementation in accordance with the agreed timetable.

PROPOSED NEW CLAUSE 2.6 – MODIFICATION REQUIRED

2.6 The Requesting Licensee shall be liable for the costs incurred by SingTel in processing and implementing the Requesting Licensee's request to extend the use of the Emergency Call Service to a particular Call Type.

SingTel Comments: Clause 2.6

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

IDA recognises that SingTel may incur certain costs in processing and implementing the Requesting Licensee's request to extend the use of the Call Origination Service to a particular Call Type. However, SingTel 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 proposed new Clause 2.6 to specifically refer to the Charge under Schedule 9.

2.7 Nothing in this clause 2 requires SingTel to perform any changes in its Network or to commence the supply of Emergency Call 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 Requesting Licensee.

PROPOSED NEW CLAUSE 2.8 – MODIFICATION REQUIRED

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

Please refer to Paragraph 2 of Appendix 1. IDA disagrees with SingTel's proposal to recover costs associated with ceasing supply of a Call Type. 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: "The Requesting Licensee shall be liable for the costs incurred by SingTel in ceasing the supply of the Emergency Call Service in respect of that Call Type".

SingTel Comments: New clause 2.8

SingTel incurs certain unavoidable costs:

- *in processing and implementing a Requesting Licensee's request to extend the use of the Emergency Call Service to a particular Call Type; and*
- *when the Requesting Licensee ceases to acquire the Emergency Call Service in respect of a Call Type.*

As SingTel provides the Emergency Call Service to the Requesting Licensee at cost, SingTel should be entitled to recover the costs associated with processing a request to extend the use of the Emergency Call Service to a particular Call Type and the cessation of the Emergency Call Service in respect of a Call Type.

SingTel considers that this amendment is fair and reasonable.

3. CHARGING PRINCIPLES

3.1 For any Emergency Calls terminating into SingTel's Network, SingTel will collect the Emergency Charge from the Requesting Licensee. For the avoidance of doubt, the Emergency Call Service is not provided for termination of Calls to Third Party Networks.

3.2 SingTel shall collect a Call record for each individual Emergency Call it receives on a CDR basis and process such records in accordance with clause 4.

SingTel Comment: Clause 3.2

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

3.3 The Call records collected by SingTel in accordance with this clause 3 shall be the source of the data used by SingTel to invoice for the Emergency Call Service it provides under this RIO Agreement.

3.4 The calculation of Charges for the Emergency Call 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.

3.5 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.

3.6 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.

3.7 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.

4. BILLING VERIFICATION INFORMATION

4.1 SingTel shall use its reasonable endeavours to provide Billing Verification Information for the Emergency Call Service in accordance with the format set out in Annex 4B-2 within fourteen (14) Calendar Days from the end of each Billing Period, together with the invoice for the Emergency Services to be issued in accordance with Schedule 9.

4.2 In addition to the obligation in clause 4.1, when there is a dispute in relation to invoices issued for the Emergency Services, the Parties shall exchange the Detailed Billing Verification Information set out in Annex 4B-3.

4.3 In the event that SingTel cannot record Billing Verification Information for the Emergency Call Service due to a system error or other fault, upon the request of SingTel, the Requesting Licensee shall provide Billing Verification Information to SingTel.

4.4 Where the Billing Verification Information collected by the Requesting Licensee is not available under clause 4.3, 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.

PROPOSED NEW ANNEX 4A-1 – MODIFICATION REQUIRED

GENERAL COMMENT

IDA notes the following typographical error – references to "Annex 4B-1" should be replaced with the reference to "Annex 4A-1" instead.

ANNEX 4B-1 : REQUEST FORM FOR INTRODUCING NEW CALL TYPE (EMERGENCY CALL SERVICE)

1. GENERAL

1.1 Call Type Name and Description

The Requesting Licensee is to provide a general description of Call Type.

1.2 Date to be Introduced (Proposal)

The Requesting Licensee is to indicate the preferred implementation date for access to be available.

2. CALL ORIGINS

The Requesting Licensee 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. Requesting Licensee international incoming Calls, Requesting Licensee operator Calls; Requesting Licensee PSTN/ISDN Calls).

3. NETWORK CONFIGURATION

3.1 Network Configuration/Routing Information

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

PROPOSED NEW CLAUSE 3.2 – MODIFICATION REQUIRED

3.2 Trunk Group (Circuit Assignment)

The Requesting Licensee 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 proposed new Clause 3.2 to refer to both IGSs and SGSs.

3.3 Other Engineering Requirements

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

4. SIGNALLING

The Requesting Licensee 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 Requesting Licensee 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 Requesting Licensee is to specify which Party is to bill the customer and how settlement is to occur.

6.2 Operator Billing

The Requesting Licensee 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 Requesting Licensee may specify any other requirements for Call Type to be delivered.

PROPOSED NEW ANNEX 4A-2 – GENERAL COMMENT

IDA notes the following typographical error – references to "Annex 4B-2" should be replaced with the reference to "Annex 4A-2" instead.

ANNEX 4B-2 : BILLING VERIFICATION INFORMATION FOR EMERGENCY CALL SERVICE

Billing Information for SingTel

Call Description	Time Zone	Call Duration (in secs)	Call Charges (in S\$)
Emergency Calls originating from the Requesting Licensee's Network terminating to SingTel's Network (Emergency Charge)	Peak	5400	\$xxx.xx
	Off Peak	2700	\$xxx.xx
Total		xxxx	\$xxx.xx

PROPOSED NEW ANNEX 4A-3 – GENERAL COMMENT

IDA notes the following typographical error – references to "Annex 4B-3" should be replaced with the reference to "Annex 4A-3" instead.

ANNEX 4B-3 : DETAILED BILLING VERIFICATION INFORMATION (EMERGENCY CALL SERVICE)

1. Billing Verification for SingTel IGS

S/N	ExchID	System	Time Zone	Originating From Requesting Licensee's Network	
				(Terminating to SingTel's Network)	
				Emergency Charge payable by the Requesting Licensee	
				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 SingTel SGS

S/N	ExchID	System	Time Zone	Originating From the Requesting Licensee's Network	
				(Terminating to SingTel's Network)	
				Emergency Charge payable by the Requesting Licensee	
				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