

**EXTENDED INTERIM FRAMEWORK GOVERNING INTERCONNECTION
BETWEEN IP TELEPHONY OPERATORS AND EXISTING PUBLIC SWITCHED
TELEPHONE NETWORK OPERATORS**

1. BACKGROUND

- 1.1 On 14 June 2005, IDA announced its Policy Framework for the provisioning of IP telephony services, specifically that it will issue licenses and 8-digit level '3' numbers blocks to IP Telephony Operators ("**IPTO**"s) who wish to provide IP telephony services. Subsequent to the announcement, IDA issued a number of Services-Based Operator ("**SBO**") (Individual) licenses for IP telephony services and 8-digit level '3' number blocks to the IPTOs.
- 1.2 However, when some IPTOs sought to interconnect with the existing Fixed-line and Mobile Operators ("**FMO**"s) for the provision of IP telephony services using level '3' numbers, it became apparent to IDA in early 2006 that there were various points of disagreement between the IPTOs and the FMOs, which prevented the parties from concluding their necessary interconnection agreements. This resulted in a delay of the roll-out of IP telephony services by these IPTOs in Singapore.
- 1.3 In light of the unsatisfactory situation and given the prospect of an indefinite delay to the roll out of IP telephony services in Singapore, IDA decided that it was in the market and public's interest to intervene and commence a process to resolve the points of disagreement that were preventing the conclusion of interconnection agreements between IPTOs and FMOs.
- 1.4 On 26 May 2006, IDA issued a direction to the FMOs and IPTOs which had prior to that date kept IDA informed of their active interconnection efforts with the FMOs. The direction set out an interim interconnection framework to ensure that calls can be made between the subscribers of the IPTOs and FMOs, while IDA conducts a resolution process that would eventually establish a final interconnection framework for IP telephony services.
- 1.5 Pursuant to the direction, two of the IPTOs have achieved interconnection with the FMOs. Further to the direction, IDA understands that new IPTOs which are not subject to our direction of 26 May 2006, have sought to interconnect with the FMOs. In addition, IDA also notes that with the impending launch of nationwide wireless broadband Internet access providers, these providers may also be potential IPTOs which would need to interconnect with the FMOs.
- 1.6 To facilitate market entry and promote competition, IDA is of the view that it would be fair, reasonable and in the market and public interests to allow all interested IPTOs to rely on an interim interconnection framework to establish their interconnection with the FMOs. IDA refers to this interim interconnection framework as the "**Extended Interim Framework**".
- 1.7 IDA is also of the view that all interested IPTOs and FMOs should be able to participate in the process to determine the final interconnection framework for IP telephony services. This inclusive approach would also allow all relevant parties an opportunity to put forth their views on interconnection for IP

telephony services. As such, IDA shall be holding a public consultation exercise to solicit feedback and input to assist IDA in its establishment of the final interconnection framework for IP telephony services.

2. EXTENDED INTERIM FRAMEWORK

- 2.1 Consistent with the objective of allowing IP telephony services to be rolled out in Singapore expeditiously and that calls can be made between the subscribers of the IPTOs and FMOs, interconnection arrangements between IPTOs and FMOs (where the parties are unable to agree on mutually acceptable terms or where interconnection had not been achieved pursuant to IDA's 26 May 2006 direction) prior to the determination of the final interconnection framework shall be governed by the Extended Interim Framework as set out in Annexes A, B or C (as appropriate) herein. For the avoidance of doubt, an IPTO that seeks to interconnect with the FMOs may choose to do so under Annex A, B or C of the Extended Interim Framework.
- 2.2 For the purpose of establishing interconnection arrangements pursuant to the Extended Interim framework, the interconnecting parties shall supply to each other reasonable traffic forecast. In addition, the interconnecting IPTO must provide, at its sole cost, to the interconnecting FMO with either a banker's guarantee or security deposit (at the IPTO's option) for 2.5 times the amount of the recurring charges that the IPTO would incur in a month. The requirement of a banker's guarantee or security deposit is to secure the IPTO's payment of the recurring transit and termination charges (if any).
- 2.3 The parties are reminded that any payments made by one party to another pursuant to the Extended Interim Framework shall be subject to any necessary adjustments and amendments so as to comply with the final interconnection framework. Any directions, instructions or orders issued by IDA in connection with such adjustments may have retrospective effect. In order to facilitate any adjustments to the sums paid by one party to another under the Extended Interim Framework, each party shall maintain all records, logs and all other information necessary for the computation of such adjustments.
- 2.4 For the avoidance of doubt, the Extended Interim Framework will not apply to the conveyance of calls between the subscribers of each IPTO. This will be left to the commercial arrangements between the IPTOs.
- 2.5 For the purposes of the Extended Interim Framework, the following terms have the following meanings:
- a. **"Current RIO"** Singapore Telecommunications Limited's Reference Interconnection Offer as submitted by Singapore Telecommunications Limited ("**ST**") to IDA on 30 October 2000 and approved by IDA on 31 January 2001, with further amendments approved by IDA on 20 March 2001, 27 November 2001, 21 August 2002, 8 October 2002, 31 October 2002, 10 January 2003, 13 October 2004, 15 October 2004, 16 November 2005, 24 February 2006, 15 April 2006 and 16 August 2006;
 - b. **"FMO Subscriber"** means a subscriber of an FMO's services;

- c. **"IPTO Subscriber"** means a Subscriber of an IPTO's IP telephony Services;
- d. **"Subscriber"** means a subscriber of an IPTO's IP telephony Services or an FMO's services;
- e. **"working day"** means any day that is not a Saturday, Sunday, or gazetted public holiday in Singapore;
- f. **"Non Discriminatory Prevailing Rates"** means the most favourable rates which an FMO has offered to or charged any person or entity for the FMO's services or for the termination or transit of voice calls in or through the FMO's network and which must be offered to all other Parties on a non- discriminatory basis; and
- g. In computing the time for the purposes of this Extended Interim Framework, a period of days from the happening of an event or the doing of any act or thing will be deemed to be exclusive of the day on which the event happens or the act or thing is done.

3. COMPLIANCE WITH THE EXTENDED INTERIM FRAMEWORK

Unless otherwise agreed by IDA, parties shall comply with this Extended Interim Framework pursuant to the licence conditions contained in each party's licence and pursuant to sections 5 and 8 of the Telecommunications Act (Chapter 323).

Annex A

Interconnection through a commercial wholesale service offered by a PSTN operator

Where any IPTO has entered or wishes to enter into a Wholesale Agreement with ST¹ (“**WS IPTO**”) and wishes to interconnect with the other FMOs pending the final interconnection framework, the WS IPTO and all FMOs must comply with the following in respect of calls between the WS IPTO’s Subscribers and the FMO’s Subscribers:

1. Subject to paragraphs 2 and 3:
 - a. Within **2 working days of an application made by the WS IPTO** to StarHub Ltd (“**SH**”), StarHub Mobile Pte Ltd (“**SHM**”) and MobileOne Ltd (“**M1**”) (each a “**Non-ST FMO**”)², each Non-ST FMO shall provide the WS IPTO with a quote for the cost of opening up the WS IPTO’s number level in their respective networks (“**Number Level Cost**”) such that calls may be conveyed between the WS IPTO’s Subscribers and their respective Subscribers. Each Non-ST FMO must also forward a copy of the Number Level Cost quote to IDA. For the avoidance of doubt, the quoted Number Level Cost must be based on the Non-ST FMO’s Non Discriminatory Prevailing Rates for opening up number levels or access codes in its network;
 - b. The Number Level Cost quote shall state the validity period of the quote (“**Validity Period**”), which period shall be at least **20** working days from day on which the WS IPTO received the Number Level Cost quote;
 - c. Within the Validity Period, if the WS IPTO wants the Non-ST FMO to proceed with opening up the WS IPTO’s number level in the Non-ST FMO’s network, the WS IPTO must:
 - i. pay the Non-ST FMO the Number Level Cost quoted by the Non-ST FMO; and
 - ii. provide written confirmation to the Non-ST FMO to proceed with the number level opening works; and
 - d. Within **15 working days from the Non-ST FMO’s receipt of the payment and written confirmations from the WS IPTO under paragraph 1b**:
 - i. the Non-ST FMO must:

¹ IDA notes that currently, only ST offers a wholesale service to IPTOs for interconnection to the FMOs. Should any other FMO wishes to offer a similar wholesale service, the same interim interconnection framework shall apply as if the other FMO is ST.

² For the purpose of this interim interconnection framework, IDA has assumed that an IPTO who acquires the wholesale service from ST would gain interconnection to Singapore Telecom Mobile Pte Ltd (“**STM**”) via the wholesale service. If this is not the case, FMOs and IPTOs should treat the interconnection scenario with STM similar to the interconnection scenario with M1.

1.
 1. open up the WS IPTO's number level in its network; and
 2. provide written confirmation of completion of the number level opening works to the WS IPTO, ST, and IDA;
 - ii. the WS IPTO, the Non-ST FMO, and ST must carry out and complete all necessary interconnection testing as either the Non-ST FMO or ST may deem necessary to ensure the proper conveyance of calls between the WS IPTO's Subscribers and the Non-ST FMO's Subscribers, **provided that**:
 1. each Party must bear its own cost in respect of the interconnection testing; and
 2. upon the completion of the interconnection testing, the WS IPTO and the Non-ST FMO must jointly provide written confirmation of the testing completion to IDA;
 - iii. ST must:
 1. commence conveying to the Non-ST FMO's network all calls from the WS IPTO's Subscribers to the Non-ST FMO's Subscribers received by ST's network from the WS IPTO's network; and
 2. commence conveying to the WS IPTO's network all calls from the Non-ST FMO's Subscribers to the WS IPTO's Subscribers received by ST's network from the Non-ST FMO's network;
 - iv. the Non-ST FMO must:
 1. commence terminating to its Subscribers all calls from the WS IPTO's Subscribers to its Subscribers received by its network from ST's network; and
 2. commence conveying to ST's network, for onward conveyance to the WS IPTO's network, all calls from its Subscribers to the WS IPTO's Subscribers; and
 - v. the WS IPTO must commence terminating, to its Subscribers, all calls from the Non-ST FMO's Subscribers to its Subscribers received by its network from ST's Network.
 - e. The WS IPTO who had decided not to proceed with the opening up of the WS IPTO's number level in the Non-ST FMO's network or whose quote has expired (for any reason) may reapply to the Non-ST FMO for a fresh Number Level Cost quote based on the Non-ST FMO's Non Discriminatory Prevailing Rates.
2. Unless otherwise agreed between the relevant Parties, the inter-operator settlements and payments amongst the WS IPTO, ST, and the other FMOs, for calls between the WS IPTO's Subscribers and the other FMO's

Subscribers transiting through ST's network, must be made according to the following table:

FMO	Calls from the WS IPTO's Subscriber to FMO's Subscriber	Calls from FMO's Subscriber to the WS IPTO's Subscriber
M1	<p>WS IPTO → ST → M1</p> <ol style="list-style-type: none"> Call Transit in ST's Network: In respect of payment to ST by the WS IPTO, please see paragraph 3 Call Termination in M1's Network: No payment to M1 by the WS IPTO or ST. 	<p>M1 → ST → WS IPTO</p> <ol style="list-style-type: none"> Call Transit in ST's Network: M1 must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. Call Termination in the Wholesale IPTO's Network: No payment to the WS IPTO by M1.
SH	<p>WS IPTO → ST → SH</p> <ol style="list-style-type: none"> Call Transit in ST's Network: In respect of payment to ST by the WS IPTO, please see paragraph 3. Call Termination in SH's Network: ST must pay SH a call termination charge at rates equivalent to the "IGS/SGS Termination Charge per call minute" rates set out in Section 2B of Schedule 9 of the Current RIO. No payment to SH by the WS IPTO. 	<p>SH → ST → WS IPTO</p> <ol style="list-style-type: none"> Call Transit in ST's Network: SH must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. Call Termination in the WS IPTO's Network: No payment to the WS IPTO by SH.
SHM	<p>WS IPTO → ST → SH → SHM</p> <ol style="list-style-type: none"> Call Transit in ST's Network: In respect of payment to ST by the WS IPTO, please see paragraph 3. Call Transit in SH's Network: ST must pay SH a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. Call Termination in SHM's Network: No payment to SHM by the WS IPTO or ST. 	<p>SHM → SH → ST → WS IPTO</p> <ol style="list-style-type: none"> Call Transit in SH's Network: SHM must pay SH a call transit charge at rates equivalent to the rates, as may have been agreed between SHM and SH as of the date of this Extended Interim Framework, for calls from SHM's Subscriber to any other FMO's Subscriber that transit through SH's network. In the absence of any such agreed rates, SHM must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. Call Transit in ST's Network: SHM must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO, subject to any other agreement that SHM may have with SH concerning the payment of transit charges on behalf of SHM. Call Termination in the WS IPTO's Network: No payment to the WS IPTO by SHM or SH.
STM	<p>WS IPTO → ST → STM</p> <ol style="list-style-type: none"> Call Transit in ST's Network: In respect of payment to ST by the WS IPTO, please see paragraph 3. Call Termination in STM's Network: No payment to STM by the WS IPTO or ST. 	<p>STM → ST → WS IPTO</p> <ol style="list-style-type: none"> Call Transit in ST's Network: STM must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. Call Termination in the WS IPTO's Network: In respect of payment to

FMO	Calls from the WS IPTO's Subscriber to FMO's Subscriber	Calls from FMO's Subscriber to the WS IPTO's Subscriber
		the WS IPTO by STM, please see paragraph 3.

3. For the avoidance of doubt, the prices, terms and conditions of the Wholesale Agreement, and not this Extended Interim Framework, will govern:
 - a. the call termination obligations and inter-operator settlements and payments for calls between the WS IPTO's Subscribers and ST's or STM's Subscribers;
 - b. the responsibilities and cost in respect of the interconnection links between the WS IPTO's network and ST's network necessary for carrying call traffic from the WS IPTO's network to ST's network (whether for termination within ST's network or for onward conveyance to another FMO's network) as well as from ST's network to the WS IPTO's network; and
 - c. the inter-operator settlements and payments between the WS IPTO and ST for calls between the WS IPTO's Subscribers and Subscribers of any FMO other than ST that transit through ST's network.

4. No conveyance of calls shall be provided by the Non-ST FMOs until and unless either (1) WS IPTO has provided to the Non-ST FMO written confirmation that it shall pay the Non-ST FMO the call transit and/or termination charges in accordance with the table above, or (2) ST has provided to the Non-ST FMO written confirmation that ST shall pay the Non-ST FMO the call transit and/or termination charges in accordance with the table above in relation to WS IPTO's traffic.

Annex B

Existing Interconnection Agreement between SH and any IPTO

Where any IPTO has entered into or wishes to enter into an Interconnection Agreement with SH (“**IN IPTO**”) and wishes to interconnect with the other FMOs pending the final interconnection framework, the IN IPTO and all FMOs must comply with the following in respect of calls between the IN IPTO’s Subscribers and the FMO’s Subscribers:

1. Subject to paragraphs 2 and 3:
 - a. Within **2 working days from an application made by the IN IPTO** to ST, STM and M1 (each a “**Non-SH FMO**”) ³, each Non-SH FMO shall provide the IN IPTO with a quote for the cost of opening up the IN IPTO’s number level in their respective networks (“**Number Level Cost**”) such that calls may be conveyed between the IN IPTO’s Subscribers and their respective Subscribers. Each Non-SH FMO must also forward a copy of the Number Level Cost quote to IDA. For the avoidance of doubt:
 - i. where Non-SH FMO is ST, the quoted Number Level Cost must be based on the “Implementation Charge for Call Type Request” rates set out in Section 2B of Schedule 9 of the Current RIO; and
 - ii. where the Non-SH FMO is not ST, the quoted Number Level Cost must be based on the Non-SH FMO’s Non Discriminatory Prevailing Rates for opening up number levels or access codes in its network;
 - b. The Number Level Cost quote shall state the validity period of the quote (“**Validity Period**”), which period shall be at least **20** working days from day on which the WS IPTO received the Number Level Cost quote;
 - c. Within the Validity Period, if the IN IPTO wants the Non-SH FMO to proceed with opening up the IN IPTO’s number level in the Non-SH FMO’s network, the IN IPTO must:
 - i. pay the Non-SH FMO the Number Level Cost quoted by the Non-SH FMO; and
 - ii. provide written confirmation to the Non-SH FMO to proceed with the number level opening works; and
 - d. Within **15 working days of the Non-SH FMO’s receipt of the payment and written confirmations from the IN IPTO under paragraph 1b**:

³ For the purpose of this interim interconnection framework, IDA has assumed that an IPTO who interconnect with SH would indirectly interconnect to SHM with the same Interconnection Agreement. If this is not the case, FMOs and IPTOs should treat the interconnection scenario with SHM similar to the interconnection scenario with M1.

- i. the Non-SH FMO must:
 - 1. open up the IN IPTO's number level in its network; and
 - 2. provide written confirmation of completion of the number level opening works to the IN IPTO, SH, and IDA;
 - ii. The IN IPTO, the Non-SH FMO, and SH must carry out and complete all necessary interconnection testing as either the Non-SH FMO or SH may deem necessary to ensure the proper conveyance of calls between the IN IPTO's Subscribers and the Non-SH FMO's Subscribers, **provided that**:
 - 1. each Party must bear its own cost in respect of the interconnection testing; and
 - 2. upon the completion of the interconnection testing, the IN IPTO and the Non-SH FMO must jointly provide written confirmation of the testing completion to IDA;
 - iii. SH must:
 - 1. commence conveying to the Non-SH FMO's network all calls from the IN IPTO's Subscribers to the Non-SH FMO's Subscribers received by SH's network from the IN IPTO's network; and
 - 2. commence conveying to the IN IPTO's network all calls from the Non-SH FMO's Subscribers to the IN IPTO's Subscribers received by SH's network from the Non-SH FMO's network;
 - iv. the Non-SH FMO must:
 - 1. commence terminating to its Subscribers all calls from the IN IPTO's Subscribers to its Subscribers received by its network from SH's network; and
 - 2. commence conveying to SH's network, for onward conveyance to the IN IPTO's network, all calls from its Subscribers to the IN IPTO's Subscribers; and
 - v. the IN IPTO must commence terminating, to its Subscribers, all calls from the Non-SH FMO's Subscribers to its Subscribers received by its network from ST's Network.
 - e. The IN IPTO who had decided not to proceed with the opening up of the IN IPTO's number level in the Non-SH FMO's network or whose quote has expired (for any reason) may reapply to the Non-SH FMO for a fresh Number Level Cost quote based on the Non-SH FMO's Non Discriminatory Prevailing Rates.
2. Unless otherwise agreed between the relevant Parties, the inter-operator settlements and payments amongst the IN IPTO, SH and the other FMOs, for

calls between the IN IPTO's Subscribers and the other FMO's Subscribers transiting through SH's network, must be made according to the following table:

FMO	Calls from the IN IPTO's Subscriber to FMO's Subscriber	Calls from FMO's Subscriber to IN IPTO's Subscriber
M1	<p>IN IPTO → SH → M1</p> <ol style="list-style-type: none"> Call Transit in SH's Network: The IN IPTO must pay SH a call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. Call Termination in M1's Network: No payment to M1 by the IN IPTO or SH. 	<p>M1 → SH → IN IPTO</p> <ol style="list-style-type: none"> Call Transit in SH's Network: M1 must pay SH a call transit charge at rates equivalent to the rates, as may have been agreed between M1 and SH as of the date of this Extended Interim Framework, for calls from M1's Subscriber to any other FMO's Subscriber that transit through SH's network. In the absence of any such agreed rates, M1 must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. Call Termination in the IN IPTO's Network: No payment to the IN IPTO by M1.
SHM	<p>IN IPTO → SH → SHM</p> <ol style="list-style-type: none"> Call Transit in SH's Network: In respect of payment to SH by the IN IPTO, please see paragraph 3. Call Termination in SHM's Network: In respect of payment to SHM by the IN IPTO, please see paragraph 3. No payment to SHM by SH. 	<p>SHM → SH → IN IPTO</p> <ol style="list-style-type: none"> Call Transit in SH's Network: SHM must pay SH a call transit charge at rates equivalent to the rates, as may have been agreed between SHM and SH as of the date of this Extended Interim Framework, for calls from SHM's Subscriber to any other FMO's Subscriber that transit through SH's network. In the absence of any such agreed rates, SHM must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. Call Termination in the IN IPTO's Network: In respect of payment to the IN IPTO by SHM, please see paragraph 3.
ST	<p>IN IPTO → SH → ST</p> <ol style="list-style-type: none"> Call Transit in SH's Network: The IN IPTO must pay SH a call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. Call Termination in ST's Network: The IN IPTO must pay ST a call termination charge at rates equivalent to the "IGS/SGS Termination Charge per call minute" rates set out in Section 2B of Schedule 9 of the Current RIO. No payment to ST by SH. 	<p>ST → SH → IN IPTO</p> <ol style="list-style-type: none"> Call Transit in SH's Network: ST must pay SH a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. Call Termination in the IN IPTO's Network: No payment to the IN IPTO by ST.
STM	<p>IN IPTO → SH → ST → STM</p> <ol style="list-style-type: none"> Call Transit in SH's Network: The IN IPTO must pay SH a call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates 	<p>STM → ST → SH → IN IPTO</p> <ol style="list-style-type: none"> Call Transit in ST's Network: STM must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates

FMO	Calls from the IN IPTO's Subscriber to FMO's Subscriber	Calls from FMO's Subscriber to IN IPTO's Subscriber
	<p>for call transit.</p> <p>2. Call Transit in ST's Network: The IN IPTO must pay ST a call transit charge, at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. No payment to ST by SH.</p> <p>3. Call Termination in STM's Network: No payment to STM by the IN IPTO or SH.</p>	<p>set out in Section 2C of Schedule 9 of the Current RIO.</p> <p>2. Call Transit in SH's Network: STM must pay SH the transit charge at rates equivalent to the rates, as may have been agreed between STM and SH as of the date of this Extended Interim Framework, for calls from STM's Subscriber to any other FMO's Subscriber that transit through SH's network. In the absence of any such agreed rates, STM must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. The foregoing will be subject to any other agreement that STM may have with ST concerning the payment of transit charges or termination charges on behalf of STM.</p> <p>3. Call Termination in the IN IPTO's Network: No payment to the IN IPTO by STM or ST.</p>

3. For the avoidance of doubt, the prices, terms and conditions of the Interconnection Agreement, and not this Extended Interim Framework, will govern:
 - a. the call termination obligations and inter-operator settlements and payments for calls between the IN IPTO's Subscribers and SH's or SHM's Subscribers; and
 - b. the responsibilities and cost in respect of the interconnection links between the IN IPTO's network and SH's network necessary for carrying call traffic from the IN IPTO's network to SH's network (whether for termination within SH's network or for onward conveyance to another FMO's network) as well as from SH's network to the IN IPTO's network.

4. No conveyance of calls shall be provided by the Non-SH FMOs until and unless the IN IPTO has provided to the Non-SH FMO written confirmation that it shall pay the Non-SH FMO the call transit and/or termination charges in accordance with the table above in relation to IN IPTO's traffic.

Annex C

No existing interconnection agreement between the IPTO and any FMO

Where there is no existing interconnection agreement between an IPTO (“**Free IPTO**”) and any FMO and the Free IPTO wishes to interconnect with the FMOs pending the final interconnection framework, the Free IPTO and all FMOs must comply with the following in respect of calls between the Free IPTO’s Subscribers and the FMO’s Subscribers:

1. Subject to paragraph 2:
 - a. The Free IPTO shall make an application to the FMO in which it wishes to interconnect to. The Free IPTO shall inform the FMO the manner in which it wishes to interconnect (i.e. direct interconnection or indirect interconnection via another FMO);
 - b. Within **2 working days from an application made by the Free IPTO** to each FMO, each FMO shall provide the Free IPTO with a quote for the cost of opening up the Free IPTO’s number level in its network (“**Number Level Cost**”) such that calls may be conveyed between the Free IPTO’s Subscribers and its Subscribers. Each FMO must also forward a copy of the Number Level Cost quote to IDA. For the avoidance of doubt:
 - i. where the FMO is ST, the quoted Number Level Cost must be based on the “Implementation Charge for Call Type Request” rates set out in Section 2B of Schedule 9 of the Current RIO; and
 - ii. where the FMO is not ST, the quoted Number Level Cost must be based on the FMO’s Non Discriminatory Prevailing Rates for opening up number levels or access codes in its network;
 - c. The Number Level Cost quote shall state the validity period of the quote (“**Validity Period**”), which period shall be at least **20** working days from day on which the Free IPTO received the Number Level Cost quote;
 - d. Within the Validity Period, if the Free IPTO wants the FMO to proceed with opening up the Free IPTO’s number level in the FMO’s network, the Free IPTO must:
 - i. pay the FMO the Number Level Cost quoted by the FMO;
 - ii. provide written confirmation to the FMO:
 1. to proceed with the number level opening works; and
 2. on the manner in which it is interconnecting with the FMO and the other FMOs (i.e. directly or indirectly), including, for those cases where the Free IPTO is indirectly interconnecting with another FMO, the FMO whose network will be used to transit calls between the

Free IPTO's Subscribers and the other FMO's Subscribers ("Confirmed Routing Arrangement"); and

e. Within **15 working days from the FMO's receipt of the payment and written confirmations from the Free IPTO under paragraph 1b:**

- i. where the Free IPTO is directly interconnecting with the FMO:
 1. the Free IPTO and the FMO must negotiate in good faith and agree on the number and the capacity of the interconnection links to be installed for carrying call traffic from the Free IPTO's network to the FMO's network (whether for termination within the FMO's network or for onward conveyance to another FMO's network) as well as call traffic from the FMO's network to the Free IPTO's network; and if the Free IPTO and the FMO fail to agree on the number or capacity of the interconnection links to be installed, the Free IPTO and the FMO must install one E1 interconnection link between their networks; and
 2. the Free IPTO and the FMO must jointly bear the cost of any interconnection link or links installed under paragraph 1c.i.1;
- ii. where the Free IPTO is indirectly interconnecting with the FMO, the Free IPTO and the FMO must bear the cost of their own interconnection link or links to any other FMO whose network will be used to transit calls between the Free IPTO's Subscribers and the first-mentioned FMO's Subscribers;
- iii. the FMO must:
 1. open up the Free IPTO's number level in its network; and
 2. provide written confirmation of completion of the number level opening works to the Free IPTO, the other FMOs, and IDA;
- iv. the Free IPTO, the FMO, and any other FMO whose network is being used to transit calls between the Free IPTO's Subscribers and the first-mentioned FMO's Subscribers, must carry out and complete all interconnection testing as either the first-mentioned FMO or the transit FMO may deem necessary to ensure the proper conveyance of calls between the Free IPTO's Subscribers and the first-mentioned FMO's Subscribers, **provided that:**
 1. each Party must bear its own cost in respect of the interconnection testing; and
 2. immediately upon the completion of the interconnection testing, the Free IPTO and the FMO must jointly

provide written confirmation of the testing completion to IDA;

- v. the FMO must:
 - 1. commence terminating, to its Subscribers, all calls from the Free IPTO's Subscribers to its Subscribers received by its network in accordance with the Confirmed Routing Arrangement; and
 - 2. commence conveying to the Free IPTO's network, or to another FMO's network for onward conveyance to the Free IPTO's network (as the case may be), in accordance with the Confirmed Routing Arrangement, all calls from its Subscribers to the Free IPTO's Subscribers;

- vi. where the Free IPTO has provided written confirmation to the FMO that the FMO's network will be used to transit calls between the Free IPTO's Subscribers and the Subscribers of another FMO ("**Other FMO**"), the FMO must also:

- 1. commence conveying to the Other FMO's network, in accordance with the Confirmed Routing Arrangement, all calls from the Free IPTO's Subscribers to the Other FMO's Subscribers received by the FMO's network in accordance with the Confirmed Routing Arrangement; and
- 2. commence conveying to the Free IPTO's network, in accordance with the Confirmed Routing Arrangement, all calls from the Other FMO's Subscribers to the Free IPTO's Subscribers received by the FMO's network in accordance with the Confirmed Routing Arrangement; and

- vii. the Free IPTO must commence terminating, to its Subscribers, all calls from FMO Subscribers to its Subscribers received by its network in accordance with the Confirmed Routing Arrangement.

- f. The Free IPTO who had decided not to proceed with the opening up of the Free IPTO's number level in the FMO's network or whose quote has expired (for any reason) may reapply to the FMO for a fresh Number Level Cost quote based on the FMO's Non Discriminatory Prevailing Rates.

- 2. Unless otherwise agreed between the relevant Parties, the inter-operator settlements and payments amongst the Free IPTO and the FMOs for calls between the Free IPTO's Subscribers and any FMO's Subscribers must be made according to the following table:

FMO	Calls from the Free IPTO's Subscriber to FMO's Subscriber (whether transiting through another FMO's network or not)	Calls between the Free IPTO's Subscriber and Other FMO's Subscriber transiting through FMO's network (payment to transit FMO)	Calls from FMO's Subscriber to the Free IPTO's Subscriber (whether transiting through another FMO's network or not)
SH	<p>Free IPTO → SH</p> <p>The Free IPTO must pay SH a call termination charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call termination.</p>	<p>The Party whose Subscriber originates the call must pay SH a call transit charge as follows:</p> <ol style="list-style-type: none"> 1. ST → SH → Free IPTO Calls to the Free IPTO's Subscriber from ST's Subscriber. ST must pay SH the call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. 2. FMO (not ST) → SH → Free IPTO Calls to the Free IPTO's Subscriber from Subscriber of any Other FMO other than ST: The Other FMO must pay SH the call transit charge at rates equivalent to the rates, as may have been agreed between the Other FMO and SH as of the date of this Extended Interim Framework, for calls from the Other FMO's Subscriber to any other FMO's Subscriber that transit through SH's network. In absence of any such agreed rates, the Other FMO must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit. In the event that the Other FMO is STM, the foregoing will be subject to any other agreement that STM may have with ST concerning the payment of transit charges by ST on behalf of STM. 3. Free IPTO → SH → FMO Calls to any Other FMO's Subscriber from the Free IPTO's Subscriber. The Free 	<p>SH → Free IPTO</p> <p>No payment to the Free IPTO by SH.</p>

FMO	Calls from the Free IPTO's Subscriber to FMO's Subscriber (whether transiting through another FMO's network or not)	Calls between the Free IPTO's Subscriber and Other FMO's Subscriber transiting through FMO's network (payment to transit FMO)	Calls from FMO's Subscriber to the Free IPTO's Subscriber (whether transiting through another FMO's network or not)
		IPTO must pay SH the call transit charge at rates equivalent to SH's Non Discriminatory Prevailing Rates for call transit.	
SHM	Free IPTO → SHM No payment to SHM by the Free IPTO.	N/A*	SHM → Free IPTO No payment to the Free IPTO by SHM.
ST	Free IPTO → ST The Free IPTO must pay ST a call termination charge, at rates equivalent to the "IGS/SGS Termination Charge per call minute" rates set out in Section 2B of Schedule 9 of the Current RIO.	FMO → ST → Free IPTO Free IPTO → ST → FMO The Party whose Subscriber originates the call must pay ST a call transit charge at rates equivalent to the "IGS/SGS Transit Charge per call minute" rates set out in Section 2C of Schedule 9 of the Current RIO. In the event that SHM is the Party whose Subscriber originates the call, the foregoing will be subject to any other agreement that SHM may have with SH concerning the payment of transit charges by SH on behalf of SHM.	ST → Free IPTO No payment to the Free IPTO by ST.
STM	Free IPTO → STM No payment to STM by the Free IPTO.	N/A*	STM → Free IPTO No payment to the Free IPTO by STM.
M1	Free IPTO → M1 No payment to M1 by the Free IPTO.	N/A*	M1 → Free IPTO No payment to the Free IPTO by M1.

* IDA assumes that the Free IPTO will not be transiting via Mobile FMO. However, should this assumption be wrong, the parties should refer to IDA for further directions.

- No conveyance of calls shall be provided by any FMOs until and unless the Free IPTO has provided to the FMO written confirmation that it shall pay the FMO the call transit and/or termination charges in accordance with the table above in relation to Free IPTO's traffic.