

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

APPENDIX 8

SCHEDULE 12

DICTIONARY

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SCHEDULE 12

DICTIONARY

MODIFICATION REQUIRED (PLEASE REFER TO IDA'S ANNOTATIONS BELOW TO THE TERM "END USER")

1. INTERPRETATION

- 1.1 A term or expression used in this RIO Agreement that starts with a capital letter and is defined in this Dictionary, has the meaning given to it in this Dictionary.
- 1.2 In this RIO Agreement, unless the context otherwise requires:
- (i) the singular includes the plural and vice versa;
 - (ii) words which are gender neutral or gender specific include each gender;
 - (iii) other parts of speech and grammatical forms of a word or phrase defined in this RIO Agreement have a corresponding meaning;
 - (iv) an expression importing a natural person includes a company, partnership, joint venture, association, corporation or other body corporate and a Government Agency;
 - (v) a reference to a thing (including, but not limited to, a chose-in-action or other right) includes a part of that thing;
 - (vi) a reference to a clause, party, Schedule, Annex or Attachment is a reference to a clause of this RIO Agreement, and a party, schedule, Annex or Attachment to, this RIO Agreement, and a reference to this RIO Agreement includes a Schedule, Annex or Attachment to this RIO Agreement;
 - (vii) a reference to a law includes a constitutional provision, treaty, decree, convention, statute, regulation, ordinance, by-law, judgment, rule of common law or equity or a rule of an applicable regulatory authority or stock exchange and is a reference to that law as amended, consolidated or replaced;
 - (viii) a reference to a document includes all amendments or supplements to that document, or replacements or novations of it;
 - (ix) a reference to a party to a document includes that party's successors and permitted assigns;

(x) an agreement on the part of two or more persons binds them jointly and severally; and

(xi) a reference to an agreement, other than this RIO Agreement, includes an undertaking, deed, agreement or legally enforceable arrangement or understanding, whether or not in writing.

1.3 Where the day on or by which something must be done is not a Business Day, that thing must be done on or by the following Business Day.

1.4 Headings are for convenience only and do not affect the interpretation of this RIO Agreement.

1.5 This RIO Agreement may not be construed adversely to a Party because that Party prepared or drafted it.

2. DEFINITIONS

The following definitions apply to words and phrases used in this RIO Agreement unless an alternative context is stated to apply:

“**Acquirer**” has the meaning given to that term in Schedule 2;

“**Act**” means the Telecommunications Act 1999;

“**Actual Usage**” means the percentage of E1s in a Capacity Commitment which are utilised at the end of a Forecast period;

“**Additional Calling Line Identification**” or “**ACLI**” means the Additional Calling Line Identification to be generated for a Ported Number in accordance with Schedule 6;

“**Additional Services**” are Services as defined in this RIO Agreement but are not currently being supplied to the Requesting Licensee and as defined in clause 4.1 of Part 1 of this RIO Agreement;

“**Administration Charge**” refers to the Charges payable by Requesting Licensees for various services as listed in Schedule 9;

“**Advice**” means notice of planned engineering works with a Requesting Licensee’s Network in accordance with the Advice form process specified in Appendix 3 to Annex B of Schedule 1B;

“**Altering Party**” means the Party which proposes to undertake a Network Change;

“**Annex**” means any document attached to this RIO Agreement, and is usually used to describe an attachment to a Schedule rather than an attachment to the main RIO Agreement. The words “**this Annex**” refer to the numbered Annex in which those words appear;

“**Answer [ANM]**” means an ISUP answer message as defined in ITU-T.Rec.Q.762 and ITU-T.Rec.Q.763;

“**Arbitration**” means the procedure described in the Arbitration Rules of Singapore International Arbitration Centre (**SIAC Rules**) under Schedule 11;

“**Arbitrator**” means the arbitrator appointed pursuant to clause 5 of Schedule 11;

“**Authorised Persons**” has the same meaning ascribed to it in clause 23.5 of this RIO Agreement;

“**Authority**” means the Info-communications Development Authority of Singapore or its successor organisations in the administration of telecommunications policy, law and regulation in the Republic of Singapore;

“**Best Practice**” means a generally accepted practice by the industry;

“**Biennial Review**” means a review which is conducted every second year;

“**Billing**” means the processes specified in Schedule 10;

“**Billing and Settlement Procedures**” means the general billing and settlement procedures in respect of Charges as well as the procedures for the settlement of disputes as specified in Schedule 10;

“**Billing Dispute**” means the dispute of an invoice prepared by a Party to the other Party which is made in good faith;

“**Billing Dispute Escalation Procedure**” means the procedures outlined in Schedule 10, clause 6.7;

“**Billing Dispute Notice**” means the written notification made by a Party to the other Party in relation to a Billing Dispute;

“**Billing Dispute Notification Period**” means the fourteen (14) Calendar Day period after the date of an invoice which is the subject of a Billing Dispute;

“**Billing Dispute Resolution Procedure**” means the process relating to Billing Disputes specified in clause 6 of Schedule 10;

“**Billing Period**” means, unless otherwise agreed in writing, the period of a calendar month commencing on the first day of a month;

“**Billing Representative**” means a representative of either Party appointed in accordance with the billing Manual;

“Billing System” means a system to issue invoices relating to Charges payable by each Party under this RIO Agreement;

“Billing Unit” means each second of Call Duration;

“Billing Verification Information” or **“BVI”** means such information provided pursuant to the individual service Schedules by one Party to the other as is necessary to ascertain the Charges payable by each Party under this RIO Agreement;

“Building Lead-in Duct” means the duct that connects the manhole for the installation of telecommunication cables into the building;

“Building MDF” means an MDF located within residential or non-residential premises;

“Business Day” means any day other than Saturday, Sundays or the gazetted public holidays of the Republic of Singapore;

“Cable System” means the applicable cable system as listed in clauses 2.1(a) and 2.1(b) of Schedule 4B;

“Calendar Day” means any day of the week;

“Calendar Quarter” means the periods commencing on 1 January and ending on 31 March, commencing on 1 April and ending on 30 June, commencing on 1 July and ending on 30 September, commencing on 1 October and ending on 31 December;

“Call” means a transmission path through telecommunication systems related to the delivery of a Message and any reference to the conveyance of a Call by a Party means the establishment by that Party of such a transmission path through that Party's Network and the conveyance by that Party over such transmission path;

“Call Attempt” means an incident at the originating IGS whereby the Initial Address Message (IAM) is sent or at the terminating IGS whereby an IAM is received;

“Call Duration” means at the terminating IGS, the time when the IAM is received to the time when the REL is sent or received, or at the originating IGS, the time when the IAM is sent to the time when the REL is sent or received;

“Call Origination Service” is a service provided by the Supplier in respect of Originating Interconnected Calls from a customer directly connected to the Supplier's Network to the relevant Point of Interconnection with the Acquirer's Network;

“**Call Termination Service**” is a service provided by the Supplier in respect of Terminating Interconnected Calls from a relevant Point of Interconnection with the Acquirer’s Network to a Customer directly connected to the Supplier’s Network;

“**Call Transit Service**” is the service provided by the Supplier in respect of Transit Interconnected Calls from the Acquirer’s Network to a Third Party Network;

“**Call Types**” means a specific type of Call;

“**Called Party**” means a person who, or apparatus which, receives a Call. The term “**Called Party Number**” has a corresponding meaning;

“**Calling Line Identification**” or “**CLI**” means information identifying the number of the telephone line or apparatus on which a Call originates and which is transmitted between and within Networks;

“**Calling Party**” means a person who, or apparatus which, initiates a Call;

“**Capacity**” means in relation to an Interconnect Link, 2 Mbps (or such other bit rates agreed in writing between the Licensee) ports for each Interconnect Link allowing access to the Supplier’s Network;

“**Capacity Commitment**” means the first quarter of each Forecast provided under Annex 6L of Schedule 6;

“**CCS**” means Common Channel Signalling as specified in Annex A of Schedule 1B;

“**CDR**” means Call Detail Record;

“**Central Zone**” has the meaning given to it in Annexes 7A-7 and 7B-6 of Schedules 7A and 7B respectively;

“**Change Process**” means the process set out in Schedule 2A, 2B & 2C to extend the use of Call Origination/Call Termination/Call Transit Services to a Call Type;

“**Charge(s)**” means a fee payable by a Licensee for goods or services set out or referred to in this RIO Agreement and as specified in Schedule 9 or elsewhere in the RIO Agreement, as amended from time to time;

“**Chargeable Call Duration**” means a fee payable for Call Duration;

“**Circuit Reference**” is the distinct reference alphanumeric character used to identify the service;

“**CLIP/CLIR**” means Calling Line Identification presentation and restrictions fields;

“Code” means the Code of Practice for Competition in the Provision of Telecommunication Services issued by the Authority pursuant to section 26(1) of the Telecommunications Act 1999 and as published on 15 September 2000;

“Co-Located Equipment” means the equipment that has been co-located under this RIO Agreement;

“Co-Location” means the location of Co-Location Equipment in Co-Location Sites under this RIO Agreement;

“Co-Location Equipment” means the equipment that is approved for Co-Location under this RIO Agreement;

“Co-Location Exchange Building” means Co-Location Site;

“Co-Location Request” means a request for Co-Location made under this RIO Agreement;

“Co-Location Request Form” means the application form prescribed in Attachment G of Schedule 8;

“Co-Location Site” means any site at which Co-Location is permitted pursuant to Schedules 5B and 8;

“Co-Location Space” means space and such facilities as may be agreed to by the Parties to be provided by SingTel at the Co-Location Site for the installation and operation of Co-Located Equipment;

“Committed Forecast” has the same meaning as a Capacity Commitment;

“Companies Act” means the Companies Act, (Cap 50) of Singapore;

“Confidential Information” of a Licensee means all information know-how, ideas, concepts, technology, manufacturing processes, industrial, marketing and commercial knowledge of a confidential nature (whether in a tangible or intangible form) relating to or developed in connection with or in support of the business of that Licensee (and any matter concerned with or arising out of this RIO Agreement) but does not include:

- (a) information which is or becomes part of the public domain (other than through any breach of this RIO Agreement);
- (b) information rightfully received by the other Licensee from a third person without a duty of confidentiality being owed by that other Licensee to that Third Party, except where that other Licensee has knowledge that the third person has obtained that information either

directly or indirectly as a result of a breach of any duty of confidence owed to the first mentioned Licensee;

- (c) information which has been independently developed by the other Licensee; or
- (d) information which is in the possession of, or is known to, the other Licensee prior to the date of this RIO Agreement, to the extent that the other Licensee is not bound by any existing obligation of confidentiality in respect of such information to the first mentioned Licensee;

“Connection Duct” means one (1) 110mm diameter duct of one (1) metre length constructed by SingTel to connect the Requesting Licensee’s duct to SingTel’s manhole;

“Connection Service” means the service described in clause 1.2 of Schedule 4B;

“Consequential Loss” includes without limitation:

- (a) loss of revenue;
- (b) loss of profit;
- (c) loss of anticipated savings or business;
- (d) loss of data or goodwill;
- (e) loss of value of any equipment, including software;
- (f) claims of third parties; and
- (g) costs and expenses associated with or incidental to any of the above;

“Conveyance Charge” means a Charge imposed by the DNO on the RNO for the provision of Number Portability services;

“COP” has the same meaning as **“Code”**;

“COP Date” or **“Code Date”** means the effective date of the COP, being 29 September 2000;

“Critical Problem” refers to a problem affecting the conveyance of interconnected calls between SingTel’s Network and the Requesting Licensee’s Network including, but not limited to, problems that result from deviations by the Requesting Licensee from the specifications that it provided to SingTel;

“**Cross Connection**” means the method of access for a Cable System specified in Annex 4B.2 of Schedule 4B;

“**Customer**” for the purposes of this RIO Agreement, means, in relation to a Party, a person who is connected to the Party's Network or utilises a telecommunication service provided by that Party;

“**Daily**” means once per Calendar Day;

“**Data Base**” or “**DB**” means within the present document, the storage place located in the SCP where a translation of a Fixed Network Directory Number to a Routing Number takes place. Other Number Portability related information might exist in same place. The other information might be of either traffical or administrative nature. The other traffical information might be retrieved/used at same time as retrieving the Routing Number;

“**DDF**” means Digital Distribution Frame;

“**DDI Number**” means a Direct-Dial-Number in the Numbering Scheme allocated to a customer for DID on an ISDN PABX;

“**Decommissioning**” means:

- (a) the closure, replacement or relocation of an Interconnect Exchange and/or an IGS in respect of which an Interconnect Link is connected;
- (b) closure, replacement or relocation of an Interconnect Link; and/or
- (c) closure of a Point of Interconnection.

The word “**Decommission**” has a corresponding meaning;

“**Decommissioning Party**” means a Party undertaking Decommissioning in accordance with clause 9 of Schedule 1A and clause 7.6 of Schedule 8A of this RIO Agreement;

“**Detailed Billing Verification Information**” means the detailed information requirements for billing purposes set out in the relevant Schedules in the sections headed “Detailed Billing Verification Information”;

“**DID Number**” means a number in the numbering scheme allocated to a customer for DID;

“**Direct Inward Dialling**” or “**DID**” means a telecommunications service which enables a caller to call directly a user on a PABX or other private system without the need for intervention or assistance by an licensee or other attendant;

“Direction” has the same meaning as that given to it in the Telecommunications Act 1999;

“Disclosing Party” means a Party making a disclosure of Confidential Information in the context of clause 23 of this RIO Agreement;

“Dispute Resolution” or **“Dispute Resolution Procedure”** refers to the procedures outlined in Schedule 11 of this RIO Agreement;

“Distribution Frame Mounting” means the horizontal bar on the MDF frame for the mounting of Termination Blocks;

“Distribution Frame Vertical” means the vertical bar on the MDF frame which includes the horizontal bar used for the mounting of a Termination Block;

“Distribution Point” or **“DP”** means the point where Loop Distribution cables from an MDF are terminated;

“Dominant Licensee” has the same meaning as under the Code;

“Donor Network” means the initial Network where a number was located before ever being ported to another Network;

“Donor Network Operator” or **“DNO”** means the Licensee from whose Network a Fixed Network Directory Number is ported (in this RIO Agreement being SingTel except in the case of a port-back);

“Due Date” means the date which is thirty (30) Calendar Days after the date of an invoice;

“Dummy CLI” means a list of non-subscriber CLI to be notified by each Party to the other Party used in the resolution of service issues in accordance with clause 18.6 of this RIO Agreement;

“E1” means a unit of 2Mbps of Capacity;

“Effective Date” means the date on which this RIO Agreement is submitted to the Authority in accordance with the Code;

“Emergency Call” means a Call to a 999 or 995 number or such other number as may be designated by the Authority for Calls to Emergency Service Organisations;

“Emergency Event” means an event which causes or is likely to cause significant damage to the Network of a Party or which endangers or is likely to endanger the health or safety of any person;

“Emergency Service Organisation” means the relevant police, fire, ambulance and coastguard services and other similar organisations providing assistance to the public in emergencies;

MODIFICATION REQUIRED

“**End User**” means a customer who is a business or residential end user who subscribes for and consumes a service from a Licensee that is provided using the FLLC or TLLC Service;

IDA:

Sub-section 3.1.1 of the Code defines an “End User”. Accordingly, SingTel must modify the definition of “End User” in Schedule 12 to make reference to the definition adopted in the Code.

SINGTEL RESPONSE:

Noted and amended.

“**Essential Support Facilities**” or “**ESF**” has the meaning ascribed to it in the Code;

“**Exchange Building**” means a building housing an exchange;

“**Exchange MDF**” means an MDF in an exchange;

“**Experts**” means those persons appointed in accordance with clause 5.8 of Schedule 11 ;

“**Facilities**” means installation and plant used for telecommunications as defined in the Act;

“**Facilities-based Licensee**” or “**FBO**” means the holder of a Facilities-based Operator Licence issued by the Authority under the Act;

“**Fault Identification Number**” means a unique combination of alpha-numeric characters used to identify an individual fault report;

“**Fault Control Centre**” or “**FCC**” means a single point of contact for the reporting and management for fault reporting and clearing;

“**FCI**” means the Forward Call Indicator parameter as defined in ITU-T Rec Q. 762 and ITU-T Requesting Licensee Q.763;

“**FDF**” means a Fibre Distribution Frame;

“**Final Acceptance**” means the procedure referred to in clause 4.9 of Schedule 5B;

“**Financial Year**” means a period of twelve (12) months ending on a specific recurring date in each year that is used by the Parties for accounting purposes;

“**Fixed Network Directory Number**” or “**FNDN**” means any 7-digit telephone number, and DID/DDI Number in the Singapore numbering plan associated with a physical telephony line or trunk;

“FLAR” has the meaning given to it in clause 2.1 of Schedule 7A;

“FLLC” means (in respect of the FLLC Service) full local leased circuit;

“FLLC Central Term” has the meaning given to it in clause 11.1(a) of Schedule 7A;

“FLLC Non-Central Term” has the meaning given to it in clause 11.1(b) of Schedule 7A;

“FLLC Service” means the Service supplied under Schedule 7A, as described in clause 1.1 of that Schedule;

“Forecast” means, in the context of:

- (a) Schedule 1, forecast in relation to Interconnect Capacity;
- (b) Schedule 2C, forecast in relation to Network Capacity; and
- (c) Schedule 6, forecast in relation to Fixed Network Directory Number.

“Forecast Date” means, as the context may require, the periods specified in:

- (a) clause 8.4 of Schedule 1A;
- (b) clause 2.3 of Schedule 2C; or
- (c) clause 2.1 of Annex 6L of Schedule 6;

“Forecast Delivery Date” means the date specified in clause 8.5 of Schedule 1A;

“Frontier Station” means a submarine cable station;

“Government Agency” means any department or statutory board operated by or accountable to a ministry or organ of state within the Republic of Singapore. The term **“Governmental Agency”** has the same meaning;

“GST” means Goods and Services Tax imposed under the Goods and Services Tax Act, (Chapter 117A) of Singapore;

“IAM” means Initial Address Message;

“IDA” has the same meaning as **“Authority”**;

“IDA Act” means the Info-communications Development Authority of Singapore Act 1999;

"Implementation Charge" means the reasonable chargeable direct costs, which SingTel will incur in making necessary software and hardware modifications to effect the requested extension of the use of Interconnection Related Services to Call Types;

"Indemnifying Party" has the meaning ascribed to it in clause 16.4 of this RIO Agreement;

"IDF" means an Intermediate Distribution Frame;

"Individualised Agreement" means an Interconnection agreement arrived at pursuant to clause 5.5 of the Code;

"Initial Address Message or **"IAM"** means an ISUP initial address message as defined in ITU-T.Rec.Q.762 and ITU-T.Rec.Q.763;

"Interconnected Calls" means Originating Interconnected Calls, Terminating Interconnected Calls, and Transit Interconnected Calls.

"Interconnect Capacity" means the amount of 2Mbps E1 links necessary for interconnection between a Requesting Licensee to a SingTel IGS as specified in Schedule 1 of this RIO Agreement. The term **"Minimum Interconnect Capacity"** has the corresponding meaning for the minimum amount of 2Mbps E1 links necessary for interconnection;

"Interconnect Exchange" means the telecommunication systems in SingTel's and the Requesting Licensee's Networks as designated respectively by SingTel and the Requesting Licensee to handle Interconnected Calls exchanged between the two Networks;

"Interconnect Gateway Switch" or **"IGS"** means:

- (a) in relation to SingTel, an Interconnect Exchange that has the level equivalent to a tandem exchange in its Network hierarchy;
- (b) in relation to the Requesting Licensee, any Requesting Licensee Switch,

designated by the relevant Licensee or directed by the Authority as being available for interconnection and from which Messages are handed over from Network to Network via an Interconnect Link;

"Interconnect Link" means the optical fibre cable and the associated transmission equipment connecting SingTel's and the Requesting Licensee's Interconnect Gateway Switches for the purpose of exchanging Interconnected Calls between SingTel's Network and the Requesting Licensee's Network in accordance with Schedule 1. The term **"Interconnection Link"** has the corresponding meaning;

“Interconnect Testing” means the guidelines and test items in accordance with Section 1A of Annex A of Schedule 1;

“Interconnection” means the interconnection, whether direct or indirect (as the case may be), of the SingTel Network and the Requesting Licensee’s Network;

“Interconnection Related Service” or **“IRS”** means the services provided by SingTel to a Licensee under the terms of this RIO Agreement in the manner described in clause 1.1 of Part 1 of this RIO Agreement;

“Internal Wiring” means wiring provided by SingTel inside Housing Development Board buildings;

“International Correspondent” means a licensed licensee of another country with whom SingTel or the Requesting Licensee exchanges international traffic;

“ISDN” means Integrated Services Digital Network;

“ISUP” means ISDN User Part;

“Jumper Wires” means the copper wires installed at the MDF to cross-connect two termination points;

“Lead-in Manhole” means the first manhole that connects to the Building Lead-in Duct;

“Licensee” means the holder of a licence under the Act;

“Line Sharing” means the use by SingTel and the Requesting Licensee of the same Local Loop to provide analog voice service and xDSL service to a Customer;

“Local Leased Circuit” means SingTel’s dedicated transmission service;

“Local Loop” means the Loop Feeder and Loop Distribution;

“Local Loop Facilities” means cable, cable tray, MDF frame, optical equipment, Termination Block and such other equipment which may be located in a POA for the purpose of connecting to the Local Loop;

“Loop Distribution” means the line connecting an Exchange MDF, a Building MDF or a roadside cabinet to the Distribution Point;

“Loop Feeder” means the line connecting an Exchange MDF to a Building MDF or a roadside cabinet;

“**Loss**” means any and all losses (including but not limited to indirect or Consequential Loss and loss of profits, business and business opportunities) damages, claims, liabilities and demands and all expenses, legal and otherwise of any kind;

“**Manuals**” means the manuals in the Schedules of this RIO Agreement, including but not limited to SS7 Interworking Testing, as amended or substituted from time to time with this RIO Agreement of both Licensees or as a result of any changes introduced and/or such other manuals as are from time to time agreed between the Licensees to constitute "Manuals" for the purposes of this RIO Agreement;

“**MDF**” means Main Distribution Frame;

“**MDF Room**” means the room housing the MDF;

“**Mediation**” has the same context as the referral of a dispute to the Singapore Mediation Centre and in accordance with the same Mediation Rules;

“**Mediation Rules**” means the rules of the Singapore Mediation Centre;

“**Message**” has the meaning ascribed to it in the Act;

“**Minimum Interconnection Capacity**” has the meaning ascribed to it in clause 2.8 of Schedule 1A of this RIO Agreement;

“**Ministry of Manpower**” means the Ministry of that name operating within the Republic of Singapore or its successor departments or authorities;

“**Mobile Operators**” means operators licensed to provide public mobile telecommunications services;

“**MTP**” means a functional block of the common channel signalling as defined by ITU-T Rec Q.700 - Q.704, Q.706 and Q.707;

“**MUX**” is an abbreviation for a multiplexer, a device that sends multiple signals through a communications network on a carrier channel at the same time in the form of a single, complex signal to another device that recovers the separate signals at the receiving end;

“**Nature of Address (NOA)**” has the same meaning as defined in ITU-T Rec Q.762 and ITU-T Q.763.;

“**Negotiation Period**” means the period specified in the relevant Schedule for negotiation in relation to the provision of a Service;

“Network” refers to a telecommunication system of a Party which is used or intended to be used for telecommunications;

“Network Alteration” has the same meaning as Network Change;

“Network Capacity” means the equipment required to be installed in the Supplier’s Network for use in the provision of an IRS to the Acquirer, but does not include Interconnect Capacity;

“Network Change” means a change to a Party's Network, which requires a change to be made to the other Party's Network to allow the continuance of the end-to-end conveyance of Calls across a Point of Interconnection pursuant to and in the context of clause 10 of the main body of this RIO Agreement;

“Network Conditioning” means the conditioning, equipping and installation of equipment in SingTel Network to enable the provision of an IRS under this RIO Agreement;

“Network Facilities” in relation to a Party means Facilities that the Party operates or uses, or intends to operate or use, as part of, in or in connection with, a Network of the Party, even if another person also operates or uses, or intends to operate or use, some or all of the Facilities;

“New Services” means Services not previously included in this RIO Agreement and as defined in clause 5.1 of Part 1 of this RIO Agreement;

“NMC” means SingTel Network Management Centre;

“Number Level Activation” means the procedure specified in Annex 2B of Schedule 2B of this RIO Agreement;

“Number Level and Access Codes” means

(a) in relation to number levels, the 10,000-number block; and

(b) in relation to access codes, the three or four digit numbers,

allocated respectively by the Authority to its licensed telecommunications network licensees;

“Number Portability” or **“NP”** means the facility arising from the arrangement between two Licensees which would enable any customer to whom a Fixed Network Directory Number has been allocated to continue to be provided with any telecommunication service by reference to the same Fixed Network Directory Number irrespective of the Licensee providing such service;

“Number Portability Service” means the services provided by the Donor Network Operator to the Recipient Network Operator under Schedule 6 to allow for Number Portability;

“NP Application” or **“NP Application Form”** means the application form for Number Portability Service as set out in Schedule 6 of this RIO Agreement;

“NP Termination Form” means the application form for the termination of Number Portability Services as set out in Schedule 6 of this RIO Agreement;

“NP Termination Request” means a request made on an NP Termination Form in accordance with Schedule 6 of this RIO Agreement;

“NP Withdrawal Form” means the form for the withdrawal of an application for Number Portability Service as set out in Schedule 6 of this RIO Agreement;

“Numbering Scheme” means the Authority’s National Numbering Plan;

“Off Peak Hour” means the period of time between 1800 hours and 0800 hours, Monday to Friday and all day Saturday to Sunday inclusive, and gazetted public holidays;

“Ordering and Provisioning Procedures” means the various procedures for the ordering and provisioning of Services in the relevant Schedules;

“Origination Charge” mean the Charges applicable for the provision of the Origination Service specified in Schedule 2A;

“Originating Interconnected Calls” has the meaning ascribed to it in clause 1.1 of Schedule 2A of this RIO Agreement;

“Origination, Termination and Transit” (OT&T) means the network traffic between SingTel’s Network and the Requesting Licensee’s Network as described in Schedule 2 of this RIO Agreement and Appendix 1 of the Code;

“PABX” means Private Automatic Branch Exchange;

“Party” means either of SingTel or the Requesting Licensee;

“Peak Hour” means the time between 0800 hours and 1800 hours, Monday to Friday inclusive, but not including gazetted public holidays;

“Petition for Dispute Resolution” means the document and procedures specified in subsection 5.5.6.1 of the Code which may be submitted to the Authority by either Party in accordance with the provisions of that subsection;

“Physical Access Procedures” means the procedures to be adhered to for physical access to the Co-Location Space by persons nominated by the Requesting Licensee, as specified in Attachment C of Schedule 8;

“Physical Interconnection” has the meaning ascribed to it in Schedule 1A of this RIO Agreement;

“Point of Access” or **“POA”** means a physical point at which a Party's Network may be connected to the other Party's Exchange MDF, Building MDF, the roadside cabinet or any other technically feasible point agreed by the Parties or approved by the Authority;

“Point of Interconnection” or **“POI”** means the designated point as set out in Schedule 1 connecting the Parties' Network or any other point as agreed by the Parties or approved by the Authority;

“Ported Number” means a Fixed Network Directory Number to which Number Portability Services are rendered. The words **“Port”**, **“Ported”** and **“Porting”** have corresponding meanings;

“POTS” means ‘Plain Old Telephone Service’;

“Power Distribution Point” means a point at which a Requesting Licensee accesses power in a Co-Location Site;

“Power Room” means the room within the exchange building which houses power equipment;

“Prime Lending Rate” means, in relation to a Reference Bank on any day, the rate per annum which is the prime lending rate, for Singapore Dollars of that Reference Bank as announced by that Reference Bank from time to time, in force on such day and, for the purposes of this RIO Agreement, a change in such rate shall be effective on and from the day on which it is announced or, if such announcement provides for such change to come into effect on a later day, on and from such later day;

“Processing Date” means the date on which an application for Number Portability services is processed in accordance with Schedule 6;

“Project Study” means the process by which SingTel confirms its ability to provide a Service requested by the Requesting Licensee under the applicable Schedule;

“Project Study Fee” means a Charge for the provision of a request for a Project Study;

“PSTN” means a public switched telecommunications network of a Licensee;

“Quality of Service” or **“QOS”** has the meaning given in clause 11 of the main body of this RIO Agreement;

“Query on Release” or **“QoR”** means an intelligent network procedure in which the Donor Network, upon receipt of a call to a Ported Number, will send a Release Message with a specific cause value to the originating Network indicating that the called number has been ported, upon

which the originating Network would query its own Data Base for the Routing Number in order to correctly route the calls to the Recipient Network;

“**Ready for Service (RFS)**” means the date that SingTel completes the installation of the Services as notified to the Requesting Licensee in accordance with the relevant Schedules;

“**Receiving Party**” means a Party receiving Confidential Information from the Disclosing Party;

“**Recipient Exchange**” means the new exchange where a number is located after being Ported;

“**Recipient Network**” means the Network where a Fixed Network Directory Number is located after being Ported;

“**Recipient Network Operator**” means the Licensee to whom the Fixed Network Directory Number is Ported (in this RIO Agreement, the Requesting Licensee except in the case of a port-back);

“**Redirecting Number**” means the number from which the call was diverted as defined in ITU-T Rec Q.762 and ITU-T Q.763;

“**Reference Banks**” means the principal Singapore offices of The Development Bank of Singapore Limited, Overseas-Chinese Banking Corporation Limited and United Overseas Bank Limited;

“**Related Corporation**” means a company which is the Holding Company or Subsidiary of either Party or a company which shares a common Holding Company with that Party;

“**Release Message [REL]**” means an ISUP release message as specified in ITU-T.Rec.Q.766;

“**Request for Co-Location Space**” means a written application seeking access to a Co-Location Site in the manner and form set out in Attachment G of Schedule 8;

“**Request for Connection Service**” means a written application submitted by a Requesting Licensee to SingTel in respect of a Connection Service in the manner and form specified in Schedule 4B.

“**Request for Building Lead-in Duct and its associated Lead-in Manhole**” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex D of Schedule 5A;

“**Request for Distribution Frame Mounting**” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex 3D.2 of Schedule 3D;

“Request for Internal Wiring” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex 3C.2 of Schedule 3C;

“Request for Interconnect Capacity without Forecast” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex 1B of Schedule 1A;

“Request for Line Sharing” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex 3B.1 of Schedule 3B;

“Request for Local Loop or Sub Loop” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Annex 3A.8, Annex 3A.9 and Annex 3A.10 of Schedule 3A;

“Requesting Licensee” means an FBO or SBO which uses switching or routing equipment to provide telecommunication services to the public and which submits a written application to acquire IRS and/or Wholesale Services under this RIO Agreement;

“Requesting Licensee’s Network” means a Network owned or operated by the Requesting Licensee;

“RIO” means the Reference Interconnection Offer submitted to the Authority by SingTel in accordance with subsection 5.3.1 of the Code, including all Schedules, Attachments, Annexes and Appendices as amended, modified or supplemented from time to time;

“RIO Agreement” or **“this RIO Agreement”** means the agreement entered into between SingTel and the Requesting Licensee on the terms and conditions specified in SingTel’s approved RIO;

“RLC” means Release Complete Message as specified in Annex A of Schedule 1 of this RIO Agreement;

“RNO” means Recipient Network Operator;

“Routing Number” or **“RN”** means within this document, a specific number that is derived and used by the Network to route the call towards a ported customer;

“Satellite Earth Station” has the meaning ascribed to it in Schedule 8C;

“SBO” means the holder of a Services-based Operator Licence issued by the Authority under the Act;

“Schedule” means any of the documents entitled Schedule 1 in numerical order up to and including Schedule 12 which is attached to and forms part of this RIO Agreement. The words **“this Schedule”** refer to the numbered Schedule in which those words appear;

“**SCP**” means Service Control Point;

“**Security Requirement**” means the security required by SingTel under clause 22 (as the case may be) of this RIO Agreement;

“**Service**” means an **Additional Service, Interconnection Related Service, Number Portability Service, Origination, Termination and Transit service, Wholesale Service** or **Working Service** as described herein and **Services** means any, all or combination of them as the context requires;

“**SGS**” means SBO Gateway Switch;

“**Shared Line**” means the line subject to Line Sharing under Schedule 3B;

“**SIAC Rules**” means the arbitration rules of the **SIAC**;

“**Signalling Link**” means a digital path between two signalling points/nodes, of which necessary specifications are contained in Annex A of Schedule 1B of this RIO Agreement. The term “**Signalling Linkset**” has the corresponding meaning;

“**Signalling Link Code (SLC)**” indicates the Signalling Link connecting the terminating and originating points to which the Message is related;

“**Signalling Network Management**” means the interface specification contained in Annex A of Schedule 1B of this RIO Agreement;

“**Signalling Point Code**” means a unique identification assigned to the exchange used for the routing of Messages as described in ITU-T Q.704.

“**Signalling Route Management**” means the interface specification contained in Annex A of Schedule 1B of this RIO Agreement;

“**Singapore Dollar**” and “**S\$**” mean the currency of Singapore;

“**Singapore International Arbitration Centre**” or “**SIAC**” means the centre referred to in clause 5 of Schedule 11 which can be contacted at 1 Coleman St, #05-08 Adelphi, Singapore 179803, Tel: (65) 334 1277, Fax: (65) 334 4940 or such other address or contact particulars as may be notified from time to time;

“**Singapore Mediation Centre**” or “**SMC**” means the centre referred to in the Arbitration Rules of Singapore International Arbitration Centre (**SIAC Rules**), which can be contacted at Third Level City Hall Building, St Andrews Road, Singapore 178957, Tel: (65) 332 4366, Fax: (65) 334 4940 or such other address or contact particulars as may be notified from time to time;

“SingTel” means Singapore Telecommunications Limited, company registration number 199201624D;

“SingTel Licence” means the licence dated 1st April 1992 issued by the Authority to SingTel, as amended or supplemented from time to time;

“SingTel Network” or “SingTel’s Network” refers only to the PSTN and ISDN telecommunication systems operated by SingTel;

“Site Preparation Works” means any work undertaken by SingTel to permit Co-location;

“SP” means Signalling Point;

“SS7” means the CCS No. 7 Signalling System required for transmission and signalling between the Parties;

“Standard Operating Procedures” or “SOP” means the procedures as specified in the Annexes or Attachments to the relevant Schedules;

“Sub Loop” is the Loop Feeder or Loop Distribution which includes the distribution point;

“Submarine Cable Landing Station/Frontier Station” has the meaning ascribed to it in Schedule 8D of this RIO Agreement;

“Subscriber” means any person who is provided with a telecommunication service by the Requesting Licensee or SingTel;

“Subscriber Loop Tie Cable” or “Subscriber Tie Cable” means a tie cable that connects Co-Located Equipment and a POA;

“Subscriber Number” means the number identifying a Subscriber or apparatus in a Network or numbering area;

“Subsidiary” has the meaning ascribed to it by section 5 of the Companies Act;

“Successful Call” means a Call that reaches the Called Party's Network via the Interconnect Gateway Switch and receives an Answer [ANM] or a Connect [CON] from a Called Party's Network;

“Supplier” has the meaning given to that term in Schedule 2;

“Switch” means the telecommunication apparatus which performs the function of switching and routing of Calls;

“Telecommunications” shall have the meaning ascribed to it in the Act;

“Temporary Disconnect” or “TD” means status of the subscriber line which is temporarily disconnected and cannot make any outgoing or receive any incoming calls. **“Temporary Disconnected”** has a corresponding meaning;

“TER” means Telecommunication Equipment Room;

“Terminating Interconnected Calls” means the Call Types for which the process contained in clause 2 of Schedule 2B of this RIO Agreement has been followed;

“Termination Block” means the equipment at the MDF where the Local Loop or Sub Loop or Jumper Wire connects;

“Termination Charge” means the charge applicable for the provision of the Call Termination Service as described in Schedule 2;

“Termination Pin” means the connector on the Termination Block;

“Third Party” means any person or entity other than SingTel or the Requesting Licensee;

“Third Party Network” means the Network owned or operated by a Licensee other than SingTel or the Requesting Licensee;

“Third Party Network Operator” means a Licensee that owns or operates a telecommunications Network in Singapore other than SingTel or the Requesting Licensee.

“Tie Cable” means the cable used to connect the Requesting Licensee's equipment to SingTel's distribution frame or patch panel;

“Tie Termination Block” means the equipment at the licensed Distribution Frame Mounting where the Subscriber Tie Cable terminates;

“Tie Termination Pair” means a single pair on the Tie Termination Block;

“TLAR” has the meaning given to it in clause 2.1 of Schedule 7B;

“TLLC” means (in respect of the TLLC Service) tail local leased circuit;

“TLLC Central Term” has the meaning given to it in clause 11.1(a) of Schedule 7B;

“TLLC Non-Central Term” has the meaning given to it in clause 11.1(b) of Schedule 7B;

“TLLC Service” means the Service supplied under Schedule 7B, as described in clause 1.1 of that Schedule;

“Tower Access Licence” means a licence granted under Schedule 5B;

“Tower Access Licence Request” means a written application submitted by a Requesting Licensee to SingTel in the manner and form specified in Attachment G of Schedule 5B;

“Tower Equipment” has the same meaning given to that term in Schedule 5B;

“Transit Charge” means a Charge for the supply of Transit Interconnected Calls;

“Transit Interconnected Calls” has the meaning ascribed to it in clause 1.1 of Schedule 2C;

“Transmission Tie-Cable” means a screen cable that carries a 2Mbps service;

“Trunk Group” means a group of circuits between the Parties’ IGSs;

“Unbundled Network Element” or **“UNE”** has the meaning as ascribed to it in the Code;

“Unbundled Network Service” or **“UNSS”** has the meaning as ascribed to it in the Code;

“Underground Equipment” means the cables installed in Building Lead-in Ducts and their associated Lead-in Manholes as described in Schedule 5A;

“Underground Plant” means a Party's underground ducting system including manholes;

“Unsuccessful Call” means a Call that is sent from the Calling Party's Network via Interconnect Gateway Switch with the sending of the Initial Address Message (IAM), but is failed or released before the Calling Party's Network receives an Answer [ANM] or a Connect [CON] from the Called Party's Network;

“UTP” means Unscreened Twisted Pair;

“Virtual Interconnection” has the meaning ascribed to it in Schedule 1A and 1B of this RIO Agreement;

“Wholesale LLC Commencement Date” means the date lawfully specified by the Authority as being the date from which the FLLC Service and TLLC Service each become a Wholesale Service;

“Wholesale Service” means the service provided by SingTel to a Licensee under the terms of this RIO Agreement in the manner described in clause 1.1 of Part 1 of this RIO Agreement, where that service has been designated as a wholesale service pursuant to the Code;

“Working Day” has the same definition as Business Day;

“Working Service” means a service which is not in Temporary Disconnected (TD) status and has not been terminated; and

“xDSL” means Digital Subscriber Loop.