



**LICENCE TO PROVIDE  
FACILITIES-BASED OPERATIONS GRANTED BY  
THE INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY  
TO STARHUB MOBILE PTE LTD UNDER SECTION 5 OF THE  
TELECOMMUNICATIONS ACT (CHAPTER 323)**

**ISSUED ON 5 MAY 1998  
RENEWED ON 1 APRIL 2017**

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**LICENCE TO PROVIDE  
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**PART I: THE LICENCE**

- A. On 5 May 1998, the Telecommunication Authority of Singapore (hereinafter referred to as “TAS”), in exercise of its powers under Section 26 of the Telecommunication Authority of Singapore Act 1992 (hereinafter referred to as the “TAS Act”), issued this telecommunication licence (the “Licence”) to StarHub Mobile Pte Ltd (hereinafter referred to as the “Licensee”) to establish, install and maintain the telecommunication systems and to operate and provide the telecommunication services as then specified in the Licence.
- B. On 1 December 1999, TAS was re-constituted as the Info-communications Development Authority of Singapore (hereinafter referred to as “IDA”) by the enactment of the Info-communications Development Authority of Singapore Act 1999 (hereinafter referred to as the “IDA Act”). The TAS Act was repealed and the Telecommunications Act (Cap. 323) was enacted (hereinafter referred to as the “Act”). Section 75 of the Act preserves the validity of the Licence and deems the Licence as having been granted by IDA under Section 5 of the Act.
- C. On 2 July 2002, the IDA, in the exercise of its powers under Section 7 of the Act, made modifications to the Licence in connection with the Licensee’s acceptance of the imposition of additional terms and conditions arising from IDA’s approval of the consolidation application submitted by the Licensee, StarHub Pte Ltd and Singapore Cable Vision Limited to IDA on 17 May 2002.
- D. On 2 September 2016, the Licensee submitted its confirmation to renew the Licence.

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- E. On 1 October 2016, IDA was re-constituted as the Info-communications Media Development Authority (hereinafter referred to as the “Authority”) by the enactment of the Info-communications Media Development Authority Act 2016 (the “IMDA Act”). Section 91(1) of the IMDA Act preserves the validity of the Licence and deems the Licence as having been granted by the Authority under Section 5 of the Act.
- F. The Licence is renewed and for the avoidance of doubt, shall include all terms and conditions herein and in the Schedules annexed hereto, which shall be collectively referred to and taken by all parties concerned as the Licence.
- G. On 17 February 2020, the Licensee and M1 Limited (“M1”) (collectively referred to as “the Consortium”) submitted its Proposal in response to the Authority’s Call for Proposal Documents for the Provision of Fifth-Generation (5G) Mobile Networks and Services in Singapore issued by the Authority on 17 October 2019, as described in Volume 1 (Instructions to Mobile Network Operators (“MNOs”)) as amended, supplemented or varied by the Authority (“CFP Documents”). The Consortium’s Proposal for the Provision of Fifth-Generation (“5G”) Mobile Networks and Services in Singapore and subsequent Clarifications between the Authority and the Consortium regarding its Proposal, as well as the Licensee’s individual submissions to, and clarifications with, the Authority for both the 3.5 GHz and mmWave Spectrum, are collectively referred to as the “5G CFP Submissions”.
- H. As part of the 5G CFP Submissions, the Licensee and M1 established a joint venture company, Antina Pte. Ltd. (“Antina”) to build and operate a shared Radio Access Network (“RAN”), and provide wholesale telecommunication services (including transmission services leased from StarHub Ltd and M1 connecting the RAN to the respective 5G core networks of the Licensee and M1)<sup>1</sup> to enable the Licensee and M1 to operate each of their own 5G Mobile Networks and provide 5G Mobile services in accordance with their respective Facilities-Based Operations Licences. To regulate the affairs of Antina and the rights of M1 and the Licensee as shareholders of Antina, the

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<sup>1</sup> As set out in Schedule A of the Facilities-Based Operations Licence issued to Antina Pte. Ltd. dated 2 November 2020.

Licensee, M1, and Antina entered into a Subscription and Shareholders' Agreement dated 19 October 2020.

- I. Separate from the shared RAN and the transmission services that Antina will build, operate and provide, the Licensee shall build and / or operate its own 5G Core networks, transmission and other network elements, to enable the Licensee to provide 5G Mobile services, in accordance with the terms and conditions of this Licence.

## **1 Period of Licence**

- 1.1 The Licence is renewed on 1 April 2017 and shall be valid for a period of fifteen (15) years, unless suspended or cancelled by the Authority in accordance with Condition 42 or terminated by the Licensee in accordance with Condition 43 of this Licence.
- 1.2 The Licence may be further renewed for such period as the Authority thinks fit and subject to such terms and conditions as may be specified by the Authority under Section 5 of the Act.

## **2 Payment of Licence Fee**

- 2.1 The Licensee shall pay to the Authority an annual fee which is based on the audited annual gross turnover ("AGTO") for the provision of the services during the Licensee's financial year. The annual fee payable shall be the total of –
  - (a) a minimum sum of \$80,000;
  - (b) 0.8% of such amount of the Licensee's audited AGTO for the provision of the services during the Licensee's financial year that is more than \$50 million up to \$100 million; and
  - (c) 1% of such amount of the Licensee's audited AGTO for the provision of the services during the Licensee's financial year that is more than \$100 million.

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- 2.2 The licence fees payable under Condition 2.1 shall be forfeited if the Licence is terminated or cancelled at any time during the term of the Licence.
- 2.3 For the first year of operation, the minimum annual licence fee of \$80,000 shall be payable by the Licensee within two (2) weeks of the grant of the Licence and shall be adjusted at the end of the Licensee's financial year based on the Licensee's audited AGTO submitted to the Authority.
- 2.4 For the subsequent years, the annual licence fee based on the last available audited AGTO, shall be paid in advance on the first day of the Licensee's financial year, subject to the minimum fee of \$80,000 and subject to adjustment when more recent audited AGTO are available.
- 2.5 In the event of a default by the Licensee in the payment of any fee when due under the Licence, the Licensee shall pay to the Authority interest on the amount from time to time outstanding in respect of the overdue sum for the period beginning on (and including) its due date and ending on (and excluding) the date of its receipt in full by the Authority, which interest shall accrue from day to day and shall be calculated on the basis of the actual number of days elapsed and a three hundred and sixty-five (365) day year. The applicable rate of interest shall be the average of the prevailing prime lending rates of the banks and finance companies quoted and published by the Monetary Authority of Singapore. For the avoidance of doubt, the Licensee shall continue to be subject to its obligations under the Licence and shall not be released from such obligations by reason of any late payment of licence fee.
- 2.6 The Licensee shall submit to the Authority an audited AGTO statement, not later than six (6) months after the end of each financial year.
- 2.7 In the event that the Licensee fails to submit its audited AGTO statement within the timeframe stipulated in Condition 2.6, the Licensee shall be under a continuing obligation to submit the same immediately notwithstanding any penalties imposed by the Authority for breach of Condition 2.6 or this Condition 2.7.



### **3 Licence is not Transferable**

- 3.1 The Licensee shall not assign, transfer, sublet or otherwise dispose of its rights, duties, liabilities, obligations and privileges under this Licence to any person or persons except with the prior approval of the Authority.
- 3.2 Any such approval shall be given subject to terms and conditions, which the Authority at its discretion may impose.

### **4 Description of Systems and Services**

- 4.1 The Licensee shall maintain and operate the systems as described in Schedule A (herein referred to as the “Systems”), for the provision of the services as described in Schedule B (herein referred to as the “Services”), subject to the specific terms and conditions set out in Schedules C and D. For the avoidance of doubt, the terms and conditions listed in Schedules A to D of this Licence shall form part of this Licence and are terms and conditions that are binding and enforceable on the Licensee. The Licensee shall not operate or provide any system or service not described in Schedules A and B except with the prior approval of the Authority.
- 4.2 Where the Licensee wishes to introduce a new system and/or service or makes changes to any system and/or service, the Licensee shall provide the Authority such technical and/or non-technical information as may be required by the Authority within such period as may be specified by the Authority.

### **5 Performance Bond**

- 5.1 The Licensee shall provide the Authority with a performance bond to secure the obligations of the Licensee (“PB”). This PB shall be in the form of a Banker’s Guarantee made in favour of the Authority and shall contain the provisions set out in Schedule E and such other provisions which will be specified by the Authority at a later date (the “Required PB Form”).
- 5.2 The Licensee shall provide the PB within twenty-eight (28) days from the date the Authority issues the finalised Required PB Form. If the Licensee fails to provide the PB within this time, the Authority shall be entitled to

suspend the Licensee's right to operate or provide the 5G systems and services described in Schedules A and B of this Licence (or any part thereof) immediately by notice in writing.

- 5.3 The Licensee shall not be released from any of its obligations under the Licence by any breach of forfeiture of the performance bond.

## **PART II:**

## **BASIC OBLIGATIONS OF LICENSEE**

### **6 Service Coverage**

- 6.1 The Licensee shall provide coverage for the whole island of Singapore (including MRT underground stations/lines and road tunnels), the offshore islands and the territorial waters up to 15km from the coast line of the island of Singapore, except where limitations in service coverage are due to technical requirements imposed by the Authority (e.g., to limit interference with neighbouring countries).

### **7 Public Emergency Call Services**

- 7.1 The Licensee shall ensure that any person through functioning mobile equipment may at any time and without charge, contact the relevant police service (namely 999 or its substitute number), the fire and ambulance services (namely 995 or its substitute number) and any other national emergency services which the Minister may from time to time designate, for the purpose of notifying them of any emergency.

### **8 Public Maritime Emergency Services**

- 8.1 The Licensee shall ensure that it is possible for any person to contact at any time and without charge, distress, urgency and safety services for shipping for the purpose of notifying them of an emergency and shall, subject to fair and proper payment by the relevant Government ministry, department, statutory board or official agency, provide the necessary facilities for distress, urgency and safety services in accordance with the Radio Regulations of the International Telecommunications Union.

### **9 Co-operation with Civil/Public Bodies**

- 9.1 The Licensee shall co-operate with the relevant Government ministries, departments, statutory boards or official agencies in all possible ways to support national security, and public safety and security.

## **10 Provision of Directory Enquiry Services**

- 10.1 The Licensee shall provide, on request, to any person to whom it provides telecommunication services, directory enquiry services based on an integrated customer database. The Authority reserves the right to require the Licensee to obtain the Authority's prior written approval on any charges it intends to levy for the provision of the directory enquiry services and the Licensee shall comply with such requirement imposed.
- 10.2 The Authority reserves the right to require the Licensee to provide directory enquiry services for subscribers of other licensees.

## **11 Provision of Integrated Directories**

- 11.1 The Authority reserves the right to require the Licensee to provide integrated directories for all subscribers at no charge (except with the approval of the Authority) and at annual intervals or any other intervals to be agreed with the Authority.
- 11.2 The Licensee shall, if necessary, and subject to charges, terms and conditions to be agreed with other licensees, provide integrated directories for their subscribers. In the event that agreement cannot be reached, the matter shall be determined by the Authority, whose decision is final.

## **12 Integrated Directories and Directory Enquiry Services**

- 12.1 The Licensee shall exchange all relevant customer data with other licensees free-of-charge for the purpose of providing integrated directories and providing integrated directory enquiry services.

### **PART III: TECHNICAL OBLIGATIONS**

#### **13 Use of Telecommunication Equipment in the Systems**

- 13.1 Prior to the operation of the Systems, the Licensee shall in accordance with Section 9 of the Act, submit for the Authority's approval all telecommunication infrastructure, technology and any telecommunication equipment which is part of the Systems or which is to be connected to the Systems.
- 13.2 The Licensee shall seek the Authority's prior approval from time to time for any other telecommunication equipment to be used in the operation of the Systems for which the approval has not been granted under Section 9 of the Act, whether such other equipment is in addition to or intended to replace the existing equipment or part thereof.

#### **14 Operation of Radio-communication Stations**

- 14.1 The Licensee shall apply for all necessary licences under the Telecommunications (Radio-communication) Regulations for the operation of any radio-communication stations comprised in the Systems and shall abide by any conditions imposed thereunder, including the payment of station licence fees and frequency fees for the allocation and management of frequencies by the Authority.
- 14.2 Any change to the location, equipment, frequencies, emissions, power, polarisation, aerial characteristics and other technical parameters of any radio-communication station comprised in the Systems shall be submitted in writing for the Authority's prior approval.
- 14.3 The Licensee shall comply, at its own cost, with any requirements and guidelines established by the Authority and the relevant authorities on the height of the antenna of any radio-communication station comprised in the Systems.

## **15 Use of Radio Frequencies**

- 15.1 The Licensee shall, in its application to the Authority, justify the use of radio frequencies and shall, subject to payment of the required frequency fees, be provided with the necessary frequencies to enable the effective and efficient operation of the Systems and the provision of the Services by the Licensee.
- 15.2 The Licensee shall take all necessary steps to ensure that the use of its Systems is safe and does not cause interference to other existing radio-communication networks operating in the same band or in other bands. The Licensee shall also take appropriate measures to ensure that its Systems are adequately protected from interference that may be caused by networks operating in the same band or in other bands.

## **16 Assignment of Numbers**

- 16.1 The Licensee shall comply with the Authority's National Numbering Plan and the Authority's framework and guidelines on the usage, allocation and assignment of numbers. The Licensee shall, in its submission to the Authority, justify the use of numbers and shall, subject to payment of the required fees for Golden Numbers, be provided with the necessary numbers to enable the effective and efficient operation of the Systems and provision of the Services. The Licensee shall take all necessary steps to ensure that the numbers assigned are efficiently utilised.
- 16.2 Any number(s) assigned to the Licensee is the property of the Authority and the Licensee shall have no proprietary right to any of the number(s) assigned. The Licensee shall take all necessary steps to ensure that the number(s) assigned is efficiently utilised.
- 16.3 The Authority reserves the right to alter and/or reallocate any number(s) given to the Licensee at any time, upon written notice, without being liable for any loss or inconvenience directly or indirectly attributable to the alteration or reallocation of such number(s).

## **PART IV: ACCESS AND INTERCONNECTION OBLIGATIONS**

### **17 Requirement to Provide Access**

- 17.1 The Licensee shall provide to any person licensed by the Authority to provide telecommunication services in Singapore, means of access to the Systems.
- 17.2 The Licensee may, with the prior approval of the Authority, impose an access charge upon any person licensed by the Authority to provide telecommunication services in Singapore through or with the use of the Systems.
- 17.3 The Licensee shall comply with the Authority's interconnection & access framework, arrangements and requirements, including all relevant codes of practice, directions and notifications which the Authority may issue from time to time.

### **18 Connection to Other Systems**

- 18.1 The Licensee shall connect to the Systems on request and at appropriate connection points, which it shall provide for this purpose:
- (a) any equipment approved or exempted from approval by the Authority for connection to the Systems; and
  - (b) any public or private telecommunication systems approved or licensed by the Authority which systems also meet any other requirements, which the Authority may impose from time to time.
- 18.2 Notwithstanding Condition 18.1, the Licensee shall cease to connect or refuse to connect to the Systems any equipment or system that:
- (a) has not been approved, licensed or exempted from approval or licensing by the Authority; or
  - (b) no longer meets the requirements for approval or licensing by the Authority, in respect of which the Authority has issued a notice to that

effect to the person who has under his control such equipment or system.

- 18.3 The terms and conditions for the connection of equipment or systems to the Systems of the Licensee shall be determined by agreement between the Licensee and the owner or operator of the equipment or system except in so far as the conditions are prescribed in the Act or in this Licence. In the event that the parties cannot reach an agreement, the matter shall be determined by the Authority whose decision shall be final.

## **19 Arrangements for Connection to Systems**

- 19.1 The Licensee shall not impose technical or other conditions or employ any arrangements for the connection of equipment or systems to the Systems other than those set by the Authority. In particular, the Licensee shall not, except where the Authority is satisfied that it is reasonable, exercise any Intellectual Property Rights which it owns or is licensed to use in a manner which prevents or inhibits the connection of approved equipment or systems to the Systems.

- 19.2 In this Condition, ‘Intellectual Property Rights’ means, without prejudice to its generality, the rights to patents, trademarks, designs, know-how and copyright.

- 19.3 The Licensee is required to comply with the following technical requirements and safeguards:

- (a) the Licensee shall not manipulate the Calling Line Identity of the original calling party and the original calling party Calling Line Identity shall be passed on in the conveyance of a call accordingly;
- (b) the Licensee shall not, in the handling of outgoing traffic, manipulate the access code dialled by the calling party; and
- (c) the A-bit of the Forward Call Indicator of the Initial Access Message on the ITU-T Signalling System Number 7 ISDN User Part signalling should be set to the value “1” to identify an international incoming call for systems inter-working. Where the Licensee operates a system which



does not support ITU-T Signalling System Number 7 signalling, then the Licensee shall route such international incoming calls on specified circuits.

## **20 Changes to Systems**

20.1 The Licensee shall give notice in writing to the Authority and shall notify all parties affected of any changes it intends to implement in the specification or performance of the Systems which would require changes to any equipment or systems connected to the Systems or which would have the effect of making such connections inoperable. The period of notice given shall be appropriate to the likely impact on the parties affected and on connected equipment or systems and shall be decided in consultation with the Authority.

20.2 Where the Authority considers that a change in the Systems referred to in Condition 20.1 would cause another person licensed to provide telecommunication services in Singapore to make major changes in its own systems in order to connect its systems to the Systems, and notifies the Licensee thereof, the Licensee shall obtain the prior approval of the Authority before implementing such a change.

## **21 Infrastructure Sharing and Deployment**

21.1 The Licensee shall comply with the Authority's framework for facilities sharing and deployment, including all relevant codes of practice, directions and notifications which the Authority may issue from time to time.

21.2 Where the Authority considers it necessary for the Licensee to share infrastructure with other licensees in designated areas in the national and/or public interest or otherwise, the Authority shall inform the licensees accordingly so that licensees can make the necessary arrangements before submitting their infrastructure sharing plans to the Authority for approval. The Licensee shall share infrastructure whenever and wherever mandated by the Authority in accordance with the framework for facilities sharing and deployment, including codes of practice.

## **22 Use of and Access to Space and Facilities for Mobile Deployment**

22.1 The Licensee shall comply with the Authority's requirements for the use of and access to space and facilities for mobile deployment, including but not limited to the codes of practice, directions and notifications, which the Authority may issue from time to time.

## **23 Requirement for Underground Telecommunication Systems**

23.1 The Licensee shall comply with any requirements by the Authority and the relevant authorities on its underground telecommunication systems in Singapore, including the provision of information on such systems in the format specified by the authorities.

## **PART V: SERVICE OBLIGATIONS**

### **24 Price Control/Tariffing Arrangements/Quality of Service Standards**

- 24.1 The Authority reserves the right to establish price control arrangements and Quality of Service Standards for the Services provided by the Licensee with which the Licensee shall comply.
- 24.2 The Authority reserves the right to require the Licensee to maintain separate financial data and accounts for the Services and shall submit on request these data and accounts to the Authority for inspection.
- 24.3 The Authority reserves the right to require the Licensee to file its schemes of service, including non-price terms and conditions for the provisioning of Services and price schemes with the Authority before commercial launch or announcement of such Services.

### **25 Publication of Charges, Terms and Conditions and Other Information**

- 25.1 The Licensee shall publish information about the Services it provides, covering inter alia, descriptions and pricing of the Services available, the terms and conditions thereof, and the provision of fault repair and any other commercial and technical services and such other information as the Authority may require the Licensee to publish in relation to the Services.

### **26 Confidentiality of Subscriber Information**

- 26.1 The Licensee shall ensure the confidentiality of subscriber information, especially for ex-directory numbers, and comply with any codes of practice or guidelines issued by the Authority in relation to the use of subscriber information.
- 26.2 Notwithstanding Condition 26.1, the Licensee shall disclose subscriber information where deemed necessary by the Authority or any relevant law enforcement or security agencies in the exercise of their functions and duties.

## **PART VI: OTHER OBLIGATIONS**

### **27 Codes of Practice and Advisory Guidelines**

27.1 The Licensee shall comply with the codes of practice issued by the Authority as well as any additional or supplemental guidelines, which the Authority may issue from time to time.

### **28 Number Portability**

28.1 The Licensee shall implement number portability from commencement of service subject to the Authority's number portability requirements and charging principles.

28.2 The Licensee shall comply, at its own cost, with any requirements and guidelines established by the Authority on number portability to be implemented by the Licensee.

### **29 Accounting Separation**

29.1 The Licensee shall comply with the practices, principles and requirements set out in the Accounting Separation Guidelines established by the Authority, and any additional or supplemental guidelines issued by the Authority from time to time.

### **30 Restriction on Undue Preference and Undue Discrimination**

30.1 The Licensee shall not show undue preference towards, or exercise undue discrimination against any person or class of persons in, inter alia, the price and performance characteristics of the Services provided or the terms and conditions under which the Services are provided. In particular, the Licensee shall not give any undue preference to, or receive an unfair advantage from, a business carried on by it or an associated or affiliated company, service or person, if the Authority is of the opinion that the Licensee's competitor could be placed at a significant competitive disadvantage or that competition would be prevented or substantially restricted.

## **31 Restriction Against Anti-Competitive Arrangements**

31.1 The Licensee shall not enter into any agreement or arrangement, whether legally enforceable or not, which shall in any way prevent or restrict competition in relation to the operation of the Systems or provision of the Services by the Licensee or any other telecommunication system and/or services licensed by the Authority.

## **32 Restriction on Exclusive Arrangement for International Services**

32.1 The Licensee shall not enter into any agreement or arrangement with a person running an Authorised Overseas System on terms or conditions which unfairly preclude or restrict, to the detriment of the national and/or public interest, the provision of any international telecommunication services by any person licensed by the Authority to provide those services.

32.2 In this Condition, 'Authorised Overseas System' means a system, which is recognised by the Government or any competent authority of a foreign country as authorised to provide telecommunication services by or through that system.

32.3 The Licensee shall comply with the Authority's requirements on the international settlement regime and seek the Authority's endorsement and/or approval to the arrangements reached with other licensees, before implementation.

## **33 Contracts with Third Parties to Operate or Provide Licensed Systems or Services**

33.1 Where the Licensee intends to enter into any joint venture, association, contract or arrangement with a third party, the effect or purported effect of which would be to permit a person who is not originally a party to this Licence to share in the benefits of, or otherwise gain any rights or privileges under this Licence, or which would otherwise result in a breach or circumvention of Condition 3.1, the Licensee shall seek the Authority's approval for the joint venture, association, contract or arrangement in question.

- 33.2 The Authority may direct at any time the Licensee to effect any changes it deems necessary in the terms and conditions of the joint venture, association, contract or arrangement referred to above.
- 33.3 If the Licensee fails to effect the necessary changes referred to in Condition 33.2, the Authority may direct the Licensee to terminate any such joint venture, association, contract or arrangement.
- 33.4 Nothing in Condition 33.1 shall be construed as requiring the Licensee to obtain the approval of the Authority for the appointment of agents or for the employment of independent contractors or sub-contractors to carry out any works or provide any services which enable the Licensee to discharge its duties and obligations under this Licence provided that the Licensee shall be liable to the Authority for any act, omission, default, neglect or otherwise of the agents and independent contractors or sub-contractors in carrying out any such works or providing any such services.

#### **34 Board Directorship and Management Appointments**

- 34.1 The Licensee shall seek the Authority's written approval at least one (1) month in advance of any change in the appointment of its Chairman, Board of Directors or Chief Executive Officer and shall for this purpose provide the Authority with the details of any such change and any further information requested by the Authority.

#### **35 Direction by the Authority**

- 35.1 The Licensee shall strictly and without any undue delay comply with any directions, which the Authority may from time to time issue in exercise of its powers, functions or duties under the Act, or in this Licence.
- 35.2 The Authority may, by notice in writing to the Licensee amend, vary or revoke wholly or in part any directions given by it pursuant to Condition 35.1.

35.3 Unless otherwise expressly specified, the Licensee shall safeguard the secrecy of all directions given by the Authority. The Licensee shall not during the currency and after the expiry, termination or cancellation of the Licence disclose or permit the disclosure of any of the said directions to any person not authorised to receive the same without the prior written consent of the Chief Executive Officer of the Authority. The Licensee shall further take all reasonable precautions in dealing with the said directions so as to prevent any unauthorised person from having access to the same.

## **36 Dispute Resolution**

36.1 In the event that the Licensee fails to reach an agreement with other licensees on matters relating to the requirements of this Licence or the Act, the matter shall be determined by the Authority whose decision shall be binding on all parties concerned.

36.2 The Authority reserves the right to levy a fee for work undertaken in this respect.

## **37 Provision of Information to the Authority**

37.1 The Licensee shall provide the Authority with any document and information within its knowledge, custody or control, which the Authority may, by notice or direction require. The Licensee undertakes to the Authority that any such document and information provided to the Authority shall be true, accurate and complete.

37.2 For the purposes of ensuring the Licensee's compliance with the conditions of the Licence, the Authority may from time to time require the Licensee to arrange at its own expense, for a separate and independent audit of its activities. The Licensee shall, at the Authority's request, submit the audited accounts and reports prepared under this Condition 37.2 to the Authority for inspection and verification.

37.3 The Licensee shall keep in strict confidence any document and information furnished to or so required by the Authority pursuant to Condition 37.1, as well as the fact that the Authority has requested for such document and/or information.

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37.4 The Authority may use and disclose any such document or information provided to the Authority pursuant to Condition 37.1 as the Authority deems fit. Where the Authority proposes to disclose any document or information obtained pursuant to Condition 37.1 and the Authority considers that the disclosure would result in the release of information concerning the business, commercial or financial affairs of the Licensee or which disclosure would or could reasonably be expected to adversely affect the Licensee's lawful business, commercial or financial affairs, the Authority will give the Licensee a reasonable opportunity to make representations on the proposed disclosure before the Authority makes a final decision on whether to disclose the information.

### **38 Participation in Emergency Activities**

38.1 The Licensee shall, where directed by the Authority, participate in any emergency activities or preparations thereof in collaboration with other relevant agencies, organisations and Government ministries and departments, in accordance with the written law in Singapore.

38.2 The Licensee shall, unless expressly notified otherwise, keep in strict confidence any information or document pertaining to Condition 38.1 as well as the fact that the Authority has requested the Licensee to participate in such emergency activities and preparations.

38.3 The Authority, may from time to time, require the Licensee to submit to the Authority for approval any changes to any telecommunication system, installation or plant and any service plans, together with such technical and non-technical information as may be required by the Authority, at least one (1) month before such change is intended to be implemented.

### **39 International Obligations**

39.1 The Licensee shall exercise its rights and powers and perform its duties and obligations under this Licence in a manner, which is consistent with the Government's obligations under any convention, agreement, arrangement or treaty to which Singapore is or shall become a party.

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39.2 The Authority shall notify the Licensee from time to time of any such convention, agreement, arrangement or treaty to which Condition 39.1 applies for its compliance.

## **PART VII: SUSPENSION, VARIATION AND TERMINATION**

### **40 Penalty Framework for Breach of Licence Conditions**

40.1 Where the Licensee breaches any licence condition, the Authority may impose a financial penalty on the Licensee in accordance with Section 8 of the Act.

### **41 Variation of Terms of Licence**

41.1 Pursuant to Section 7(1) of the Act, the Authority may vary or amend any of the terms of this Licence by giving the Licensee at least one (1) month's notice in writing.

### **42 Suspension/Cancellation**

42.1 The Authority may, in any of the events specified in Section 8 of the Act, by notice in writing given to the Licensee, suspend or cancel the Licence in whole or in part, or impose a financial penalty in such amounts the Authority thinks fit.

### **43 Termination of Licence or Cessation of Systems or Services**

43.1 In the event that the Licensee desires to terminate its Licence, or cease its operation of the Systems or the provision of any of the Services, the Licensee shall seek the Authority's approval in writing at least six (6) months in advance.

43.2 The Authority reserves the right to require the Licensee to facilitate the migration of its customers to suitable alternatives so as to minimise any service disruption that may be caused to its customers.

43.3 The Licensee shall continue the operation of the Systems and provision of the Services until the Authority's written approval has been obtained under Condition 43.1 and the Licensee has satisfactorily met the Authority's requirements, if any, to which the Authority's approval is made subject to.

#### **44 Rights upon Termination, Suspension or Cancellation**

44.1 Any termination, suspension or cancellation of the Licence shall be without prejudice to the rights and remedies which may accrue to the Licensee or the Authority under the Licence or any written law as at the date of termination, suspension or cancellation except that the Licensee shall not have the right to seek a refund of the licence fee or any other fee paid in advance.

#### **45 Exceptions and Limitations on Obligations**

45.1 The Licensee shall not be held to have failed to comply with its obligations in this Licence if and to the extent that the Authority is satisfied that it is prevented from complying with those obligations for the following reasons: -

- (a) malfunction or failure of any equipment where the Authority determines that reasonable measures were taken beforehand;
- (b) the act or omission of any national authority, local authority or international organisation; or
- (c) any other factor, which, in the opinion of the Authority is beyond the Licensee's reasonable control and which notwithstanding the exercise by it of reasonable diligence and foresight, the Licensee was unable to prevent or overcome.

Provided that the Licensee shall use all reasonable endeavours to resolve with all reasonable speed the factor(s) preventing the carrying out of its obligations and shall resume the performance of its obligations as soon as the factor(s) which prevented the performance thereof is resolved.

#### **46 Compliance with the Law**

46.1 The Licensee shall observe and comply with all local laws, including but not limited to the Act, the Telecommunications (Radio-communication) Regulations, the International Telecommunication Convention and any other treaty or convention to which Singapore is a party.

46.2 Nothing in this Licence shall be taken as discharging the Licensee from its obligations to obtain any other right, licence, permit or approval that may be required under any written law in force in Singapore.

**47 Governing Law**

47.1 This Licence shall be governed by and construed according to the law of Singapore.

**48 Service of Notices**

48.1 All notices under this Licence shall be in writing and shall be deemed to have been given if sent by hand or pre-paid post or by facsimile to the Licensee's registered address as lodged with the Accounting and Corporate Regulatory Authority or by electronic mail to the Licensee's electronic mail address as stated in its licence application to the Authority, or such other electronic mail address as notified to the Authority from time to time.

**49 Severability**

49.1 Every condition and part thereof shall be construed as a separate and severable provision so that if any condition and part thereof is held invalid, unenforceable or illegal for any reason, the remainder of the Licence shall remain in full force in every respect.

**Issued on 5 May 1998**

**Renewed on 1 April 2017**



**Aileen Chia**

**Director-General (Telecoms & Post)**

**Deputy CE (Policy, Regulation & Competition Development)**

**Info-communications Media Development Authority**

**Modified on 2 November 2020**

## **SCHEDULE OF INTERPRETATION**

In this Licence, unless the context otherwise requires:

- (a) Words importing the singular or plural shall be deemed to include the plural or singular respectively;
- (b) The titles to the provisions of this Licence are for convenience of reference only and are not part of this Licence and shall not in any way affect the interpretation thereof;
- (c) Any word or expression used in this Licence shall have the same meaning as it has in the Act;
- (d) Any reference in this Licence to the Act shall include any regulations made thereunder;
- (e) Any reference in this Licence to any regulations made under the Act shall include any regulations made under the Act until such regulations are revoked or repealed by subsidiary legislation made under the Act;
- (f) Any reference in this Licence to a person shall be deemed to include natural and legal persons;
- (g) Any reference to monetary amounts in this Licence shall be deemed to be denominated in Singapore Dollars; and
- (h) Any reference to any guidelines, codes of practice or framework or other rules or documents promulgated by the Authority shall be read as reference to such as may be amended from time to time.

**Modified on 2 November 2020**

## **SCHEDULE A**

### **DESCRIPTION OF THE TELECOMMUNICATION SYSTEMS TO BE ESTABLISHED BY STARHUB MOBILE PTE LTD**

[Licensee specific details have been removed]

**SCHEDULE B**

**DESCRIPTION OF THE TELECOMMUNICATION SERVICES TO BE  
PROVIDED BY STARHUB MOBILE PTE LTD**

[Licensee specific details have been removed]

## **SCHEDULE C**

### **SPECIFIC TERMS AND CONDITIONS FOR 4G AND/OR INTERNATIONAL MOBILE TELECOMMUNICATIONS- ADVANCED SYSTEMS AND SERVICES**

#### **1 Provision of 4G and/or International Mobile Telecommunications-Advanced (“IMT-Advanced”) Services**

1.1 The Licensee shall deploy 4G and/or IMT-Advanced telecommunication systems and provide 4G and/or IMT-Advanced telecommunication services using all or part of the radio frequency spectrum as allocated to it by the grant of spectrum rights for the provision of 4G and/or IMT-Advanced telecommunication services, in accordance with the following:

(a) Nationwide coverage<sup>1</sup> (except for MRT underground stations/ lines and road tunnels) by 30 June 2016; and

(b) Coverage in all MRT underground stations/lines and road tunnels by 30 June 2018.

1.2 The Licensee shall use all or part of the radio frequency spectrum as allocated to it by the grant of the 900 MHz Spectrum Right (2017) and 2.5 GHz Spectrum Right (2017) to augment its existing networks to provide nationwide 4G and/or IMT-Advanced telecommunication services by 31 December 2018.

1.3 The Licensee shall provide, as a minimum, a publicly available mobile voice telephony service which meets the requirements for levels “8” and “9” telephone numbers. The publicly available mobile voice telephony service shall include, but is not limited to, the provision of nationwide

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<sup>1</sup> The nationwide coverage must extend to the whole island of Singapore (excluding MRT underground stations/lines and road tunnels), the offshore islands and the territorial waters up to 15 kilometres from the coast line of the island of Singapore, except where limitations in service coverage are due to technical requirements imposed by the Authority, such as that to limit interference with neighbouring countries.



coverage in accordance with the timelines stipulated in Condition 1.1 above, free access to emergency services and uninterrupted, seamless call handover when moving from location to location at a speed of up to 100km/h. For the avoidance of doubt, the Licensee may use all or part of the spectrum in its 1800 MHz Spectrum Right (2013) to satisfy the aforesaid requirements. It is also not required to satisfy this requirement through the use of 4G technologies only.

- 1.4 In its deployment and provision of the 4G and/or IMT-Advanced telecommunication systems and services over all or part of the radio frequency spectrum as allocated to it by the grant of spectrum rights, the Licensee shall coordinate with other mobile telecommunications operators and take such steps as may be necessary to manage any potential interference that may be caused to any services provided over networks authorised by the Authority, including but not limited to setting aside appropriate guard band and carrier separation in respect of all systems operating in adjacent bands.

## **2 Wholesale 4G and/or IMT-Advanced Telecommunication Services**

- 2.1 The Licensee shall negotiate in good faith to provide wholesale 4G and/or IMT-Advanced telecommunication services to a mobile virtual network operator (“MVNO”), upon receiving a request for such provision from an MVNO.

## **3 Licence Fee Computation**

- 3.1 The Licensee shall include the revenue collected from the provision of 4G and/or IMT-Advanced telecommunication systems and services, including those provided over all or part of the radio frequency spectrum as allocated to it by the grant of spectrum rights (including 3G Spectrum Right), in the computation of the Licensee’s annual gross turnover, which will be subject to licence fee computation under the Licence.

## **SCHEDULE C**

### **SPECIFIC TERMS AND CONDITIONS FOR POSTPAID PUBLIC CELLULAR MOBILE TELECOMMUNICATION SERVICE**

#### **1 Definition of Postpaid Public Cellular Mobile Telephone Service**

- 1.1 In this Schedule, “Postpaid PCMT Service” refers to a Public Cellular Mobile Telephone Service provided by the Licensee in Singapore which involves the collection of payments from subscribers according to their usage of mobile services at the end of each billing cycle, which shall not be more than a month.

#### **2 Registration of Subscribers**

- 2.1 The Licensee shall provide procedures for Postpaid PCMT Service application or registration before any Postpaid PCMT Service activation, to ensure that subscribers are properly signed up for the Postpaid PCMT Service and that the right parties are being billed.
- 2.2 The Licensee shall maintain a register containing records of every subscriber who purchases the Licensee’s Postpaid PCMT Service (the “Register of Postpaid PCMT Service Subscribers”) which shall be made available for inspection by authorised Singapore government agencies. The Register of Postpaid PCMT Subscribers shall contain the following particulars of the subscribers:
- (a) Name;
  - (b) Identity Number (as applicable, NRIC number, 11B number, passport number, FIN of the subscriber and business registration number of the company for corporate customer);
  - (c) Billing Address;

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- (d) Service Address (where applicable);
- (e) Contact Information (landline number, mobile number, or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID (e.g., International Mobile Subscriber Identity (“IMSI”) numbers and Mobile Subscriber Integrated Services Digital Network Numbers (“MSISDN”) assigned to the subscriber);
  - (ii) Assigned Client IP address and User ID/User Name (where applicable); and
- (h) Equipment ID (where applicable).

2.3 The Authority reserves the right to require the Licensee to record any other details in the Register of Postpaid PCMT Service Subscribers.

2.4 Before recording the particulars referred to in Condition 2.2 of this Schedule, the Licensee shall require the production of the subscriber’s identity card issued under the National Registration Act (Cap. 201), the Singapore Armed Forces Act (Cap. 295), the Police Force Act (Cap. 235) or the Civil Defence Act (Cap. 42), passport or Employment Pass as applicable and make and keep a photocopy of such evidence of identity.

2.5 The Register of Postpaid PCMT Service Subscribers shall be kept by the Licensee in Singapore for a period of not less than twelve (12) calendar months from the date of termination of the Postpaid PCMT Service to the subscriber.

### **3 Registration of Retailers**

- 3.1 The Licensee shall maintain a register containing records of every retailer of its Postpaid PCMT Service (the “Register of Postpaid PCMT Service Retailers”), which shall be made available for inspection by authorised Singapore government agencies. The Register of Postpaid PCMT Service Retailers shall contain the following particulars of the retailer:
- (a) Name, business address, and, as applicable, NRIC number or passport number or business registration number of the retailer in Singapore;
  - (b) Where the retailer is not based in Singapore, the applicable identification details obtained through appropriate documents that are recognised by the authorised establishments in the country of origin, shall be used instead;
  - (c) Contact telephone number(s) of the retailer; and
  - (d) Postpaid PCMT Service number accounts allocated by the Licensee to the retailer by sale.
- 3.2 The Licensee shall ensure that retailers in Singapore selling its Postpaid PCMT Service obtain the information and observe the requirements set out in Conditions 2.2 and 2.3 of this Schedule before sales and forward such information to the Licensee upon verification of documents as set out in Condition 2.4 of this Schedule. Where the Licensee’s retailer conducts in-flight or overseas sales of the Licensee’s Postpaid PCMT Service, the Licensee shall ensure that such retailer forwards the subscribers’ information set out in Conditions 2.2 and 2.3 of this Schedule to the Licensee within seven (7) working days from the date of purchase of the Postpaid PCMT Service.
- 3.3 The Authority reserves the right to require the Licensee to record any other details in the Register of Postpaid PCMT Service Retailers.
- 3.4 The Register of Postpaid PCMT Service Retailers shall be kept by the Licensee in Singapore for a period of not less than twelve (12) calendar

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months from the date on which the retailer ceases to sell the Postpaid PCMT Service of the Licensee.

#### **4 Access to the Registration Information**

4.1 The Licensee shall ensure that all electronic systems (including systems used by its authorised retailers) connected to and used for the purposes of maintaining the Register of Postpaid PCMT Service Subscribers and Register of Postpaid PCMT Service Retailers under Conditions 2 and 3 of this Schedule, are in compliance with the ISO/IEC 27002:2013 Code of Practice for Information Security Controls including all amendments and revisions thereto from time to time in force.

4.2 The Licensee shall maintain records of all access by any persons to the Register of Postpaid PCMT Service Subscribers and Register of Postpaid PCMT Service Retailers where applicable (“Records of Access”). The Records of Access shall include the name, user ID and employer company of any person accessing the registers, the date and time of each incidence of access by such person, and any other information which the Authority may require the Licensee to include from time to time.

4.3 The Records of Access referred to in Condition 4.2 of this Schedule shall be submitted to authorised Singapore government agencies for audit checks where required by authorised Singapore government agencies.

4.4 The Authority reserves the right to require the Licensee to comply with any other security requirements as necessary on the Register of Postpaid PCMT Service Subscribers and Register of Postpaid PCMT Service Retailers.

#### **5 Public Emergency Call Services**

5.1 The Licensee shall comply with the technical requirements and safeguards as specified under Condition - “Arrangements for Connection to Systems” in the main body of the Licence, for all calls made to public emergency services via its Postpaid PCMT Service.

## **6 Data Retention Requirements**

- 6.1 The Licensee shall maintain Call Detail Records (“CDRs”) of all calls made and received through the Postpaid PCMT Service which are operated and/or provided in Singapore.
- 6.2 All data records including CDRs, shall be kept by the Licensee for a period of not less than twelve (12) calendar months.
- 6.3 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.

## **SCHEDULE C**

### **SPECIFIC TERMS AND CONDITIONS FOR PREPAID PUBLIC CELLULAR MOBILE TELECOMMUNICATION SERVICE**

#### **1 Definition of Prepaid Public Cellular Mobile Telephone Service**

- 1.1 In this Schedule, “Prepaid PCMT Service” refers to a Public Cellular Mobile Telephone Service provided by the Licensee in Singapore which involves the collection of advance payments from subscribers prior to, upon or after the supply of a Subscriber Information Module (“SIM”) card or other access device/code.

#### **2 Minimum Age of Subscribers**

- 2.1 The Licensee shall not provide the Prepaid PCMT Service to any person below 15 years of age.

#### **3 Registration of Subscribers**

- 3.1 The Licensee shall register subscribers of its Prepaid PCMT Service via the prescribed electronic registration system in accordance with Condition 3.2 of this Schedule.

- 3.2 The Licensee shall record the following particulars of its Prepaid PCMT Service subscribers when registering them and shall maintain such records (the “Register of Prepaid PCMT Service Subscribers”) in accordance with Condition 3.5 of this Schedule:

(a) where the subscriber purchased the Prepaid PCMT Service in Singapore:

(i) Name;

- (ii) Address;
  - (iii) Identity Number (as applicable, NRIC number, 11B number, passport number, FIN, work permit number, or relevant pass number<sup>1</sup> of the subscriber and business registration number of the company for corporate customer);
  - (iv) Contact Information (landline number, mobile number, or email address);
  - (v) Service Period (start and end date for each type of service);
  - (vi) Service Types:
    - (a) Service ID (e.g., International Mobile Subscriber Identity (“IMSI”) numbers and Mobile Subscriber Integrated Services Digital Network Numbers (“MSISDN”) assigned to the subscriber);
    - (b) Assigned Client IP address and User ID/User Name (where applicable);
  - (vii) Equipment ID (where applicable).
- (b) where the subscriber did not purchase the Prepaid PCMT Service in Singapore, the applicable identification details obtained through appropriate documents that are recognised by the authorised establishments in the country of purchase shall be used instead.

The Register of Prepaid PCMT Service Subscribers shall be made available for inspection by authorised Singapore government agencies. In the event that the prescribed electronic registration system is unavailable due to technical failure, the Licensee shall record the particulars stipulated in subparagraphs (a) to (b) in the prescribed forms and transfer them into the

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<sup>1</sup> The relevant pass number refers to the nine additional documents spelt out in Condition 3.4(a).



prescribed electronic registration system within three (3) working days from the date in which the system becomes available again.

3.3 The Authority reserves the right to require the Licensee to record any other details of its subscribers as necessary in the Register of Prepaid PCMT Service Subscribers.

3.4 Before recording the particulars referred to in Condition 3.2 of this Schedule, the Licensee shall:

(a) where the subscriber purchases the Prepaid PCMT Service(s) in Singapore, require the production of the subscriber's identity card issued under the National Registration Act (Cap. 201), the Singapore Armed Forces Act (Cap. 295), the Police Force Act (Cap. 235), the Civil Defence Act (Cap. 42), passport, or the following documentation as applicable:

- (i) S Pass
- (ii) Employment Pass
- (iii) EntrePass
- (iv) Training Employment Pass
- (v) Personalised Employment Pass
- (vi) Work Holiday Pass
- (vii) Dependant's Pass
- (viii) Long Term Pass
- (ix) Student's Pass

and make and keep a photocopy of such evidence of identity; or

(b) where the subscriber purchases the Prepaid PCMT Service(s) outside of Singapore, the Licensee shall use its best efforts to verify the identity of the subscriber through appropriate documents that are recognised by the authorised establishments in the country of purchase.

3.5 The Register of Prepaid PCMT Service Subscribers shall be kept by the Licensee in Singapore for a period of not less than twelve (12) calendar months from the date of termination of the Prepaid PCMT Service to the subscriber.

3.6 The Licensee shall not sell more than the prescribed limit of its Prepaid PCMT Service to a subscriber.

#### **4 Registration of Retailers**

4.1 The Licensee shall maintain a register containing records of every retailer of its Prepaid PCMT Service (the “Register of Prepaid PCMT Service Retailers”), which shall be made available for inspection by authorised Singapore government agencies. The Register of Prepaid PCMT Service Retailers shall contain the following particulars of the retailer:

- (a) Name, business address, and, as applicable, NRIC number or passport number or business registration number of the retailer in Singapore;
- (b) Where the retailer is not based in Singapore, the applicable identification details obtained through appropriate documents that are recognised by the authorised establishments in the country of origin, shall be used instead;
- (c) Contact telephone number(s) of the retailer; and
- (d) Prepaid PCMT Service number accounts allocated by the Licensee to the retailer for sale.

4.2 The Licensee shall ensure that retailers in Singapore selling its Prepaid PCMT Service obtain the information and observe the requirements set out in Conditions 2.1, 3.2, 3.3 and 3.6 of this Schedule before sales and submit such information through the prescribed electronic registration system upon verification of documents as set out in Condition 3.4 of this Schedule. Where the Licensee’s retailer conducts in-flight or overseas sales of the Licensee’s Prepaid PCMT Service, the Licensee shall ensure that such

retailer forwards the subscribers' information set out in Conditions 3.2 and 3.3 of this Schedule to the Licensee within seven (7) working days from the date of purchase of the Prepaid PCMT Service and the Licensee shall submit the same upon receipt through the prescribed electronic registration system.

4.3 The Authority reserves the right to require the Licensee to record any other details in the Register of Prepaid PCMT Service Retailers.

4.4 The Register of Prepaid PCMT Service Retailer shall be kept by the Licensee in Singapore for a period of not less than twelve (12) calendar months from the date on which the retailer ceases to sell the Prepaid PCMT Service of the Licensee.

## **5 Access to the Registration Information**

5.1 The Licensee shall ensure that all electronic systems (including systems used by its authorised retailers) connected to and used for the purposes of maintaining the Register of Prepaid PCMT Service Subscribers and Register of Prepaid PCMT Service Retailers under Conditions 3 and 4 of this Schedule, are in compliance with the ISO/IEC 27002:2013 Code of Practice for Information Security Controls including all amendments and revisions thereto from time to time in force.

5.2 The Licensee shall maintain records of all access by any persons to the Register of Prepaid PCMT Service Subscribers and Register of Prepaid PCMT Service Retailers where applicable ("Records of Access"). The Records of Access shall include the name, user ID and employer company of any person accessing the registers, the date and time of each incidence of access by such person, and any other information which the Authority may require the Licensee to include from time to time.

5.3 The Records of Access referred to in Condition 5.2 of this Schedule shall be submitted to authorised Singapore government agencies for audit checks where required by authorised Singapore government agencies.

5.4 The Authority reserves the right to require the Licensee to comply with any other security requirements as necessary on the Register of Prepaid PCMT Service Subscribers and Register of Prepaid PCMT Service Retailers.

## **6 Public Emergency Call Services**

6.1 The Licensee shall comply with the technical requirements and safeguards as specified under Condition - “Arrangements for Connection to Systems” in the main body of the Licence, for all calls made to public emergency services via its Prepaid PCMT Service.

## **7 Termination of Service**

7.1 In the event that the Licensee fails to comply with Conditions 2.1, 3.1 or 3.6 of this Schedule, the Licensee shall as soon as practicable, terminate the Prepaid PCMT Service to that subscriber, where applicable, within fourteen (14) days of the sale of the Prepaid PCMT Service to the subscriber, and/or after giving reasonable notice to the subscriber via Short Message Service (“SMS”) or other suitable means. The foregoing shall be without prejudice to the Authority’s right to take enforcement action against the Licensee for failing to comply with the said conditions.

## **8 Data Retention Requirements**

8.1 The Licensee shall also maintain Call Detail Records (“CDRs”) of all calls made and received through the Prepaid PCMT Service which are operated and/or provided in Singapore.

8.2 All data records including CDRs, shall be kept by the Licensee for a period of not less than twelve (12) calendar months.

8.3 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.

**SCHEDULE C**  
(Where applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
INTERNATIONAL SIMPLE RESALE SERVICES**

**1 Metering**

1.1 The Licensee shall take all reasonable steps to ensure that any metering equipment used in connection with the International Simple Resale services (“ISR”) provided under the Licence is accurate and reliable.

1.2 Upon the written request of the Authority, the Licensee shall conduct tests on metering equipment to assess its accuracy, reliability and conformity to the technical standards, if any, as specified by the Authority. The Licensee shall submit the test results to the Authority within fourteen (14) days after the date of the test or within such other period as may be specified by the Authority.

**2 Short Access Code**

2.1 The Licensee may apply for a 4-digit access code that allow callers to gain access to the ISR. The allocation of the access code will be subject to the availability of such codes and consideration for other usage. The Licensee shall ensure that the access code allocated is used efficiently and effectively.

**3 Registration of Subscribers**

3.1 The Licensee shall provide procedures for service application or registration before any service activation to ensure that subscribers are properly signed up for the international call services and that the right parties are being billed. For the avoidance of doubt, this Condition 3.1 does not apply to prepaid card services.

3.2 The Licensee shall maintain a register containing records of its subscribers and their particulars, which shall be made available for inspection by

authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;
- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address;
- (d) Service Address;
- (e) Contact Information (landline number, mobile number, or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;
  - (ii) Assigned Client IP address and User ID/ User Name (where applicable); and
- (h) Equipment ID (where applicable).

3.3 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the ISR to the subscriber.

#### **4 Call Barring Facilities**

4.1 The Licensee shall provide international call barring facilities to any consumer who wishes to bar the Licensee's international call services, regardless of whether the consumer is a subscriber of any service provided by the Licensee, to further prevent any unauthorised or fraudulent activation of international call services.

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## **5 Data Retention Requirements**

- 5.1 The Licensee shall maintain the following data records, which shall be made available for inspection by authorised Singapore government agencies:
- (a) Assigned Source IP address and Date & Time Stamps; and
  - (b) Assigned User ID/User Name (e.g., subscriber records associated with (a)).
- 5.2 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.
- 5.3 All data records shall be kept by the Licensee for a period of not less than twelve (12) calendar months.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
IP TELEPHONY SERVICES**

**1 Scope of Services**

- 1.1 The Licence enables the Licensee to provide IP Telephony services using E.164 telephone numbers<sup>1</sup> for such services and assigning such numbers to the Licensee's subscriber (referred to in this Schedule as an "IP telephony number"). Such services allow subscribers to make and receive voice, data and/or video calls using the same telephone number from any domestic or overseas location where broadband Internet access is available.

**2 Public Emergency Call Services**

- 2.1 The Licensee shall disclose in advance to its subscribers whether the Services it provides may be used to contact the police emergency service (namely 999 or its substitute number), the fire and ambulance services (namely 995 or its substitute number) and any other national emergency services which the Minister may from time to time designate, for the purpose of notifying such services of any emergency.
- 2.2 The Licensee shall not charge its subscribers for any use of the Services to contact the emergency services referred to in Condition 2.1 of this Schedule.
- 2.3 The Licensee shall comply with the technical requirements and safeguards as specified under Condition – "Arrangements for Connection to Systems" in the main body of the Licence, for all calls made to the public emergency services referred to in Condition 2.1 of this Schedule.

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<sup>1</sup> An International Telecommunications Union Telecommunication Standardization Sector ("ITU-T") standard network addressing format for telephone numbers. The E.164 addresses are 15 decimal digits long and include a country code, area or city code, and a local number.



2.4 The Authority reserves the right to require the Licensee to comply with additional safety and security safeguards to enhance security measures for public and national safety.

### **3 Number Portability**

3.1 The Licensee shall comply, at its own cost, with any requirement and guidelines established by the Authority on number portability required to be implemented by the Licensee.

### **4 Registration of Subscribers**

4.1 The Licensee shall maintain a register containing records of its subscribers and their particulars which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;
- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address;
- (d) Service Address (where applicable);
- (e) Contact Information (landline number, mobile number or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;

(ii) Assigned Client IP address and User ID/User Name (where applicable); and

(h) Equipment ID (where applicable).

4.2 The Authority reserves the right to require the Licensee to record any other details as necessary in its register of subscribers.

4.3 Before recording the particulars referred to in Condition 4.1 of this Schedule, the Licensee shall:

(a) where the subscriber is in Singapore, require the production of the subscriber's identity card issued under the National Registration Act (Cap. 201), passport or Employment Pass and make and keep a photocopy of such evidence of identity; or

(b) where the subscriber is not in Singapore, the Licensee shall use its best efforts to verify the identity of the subscriber through appropriate documents that are recognised by the authorised establishments in the country of purchase.

4.4 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the Services to the subscriber.

## **5 Registration of Retailers**

5.1 The Licensee shall maintain a register containing records of its retailers and their particulars which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the retailer:

(a) Name, business address and, as applicable, NRIC number, passport number or business registration number of the retailer in Singapore;

(b) Where the retailer is not based in Singapore, the applicable identification details obtained through appropriate documents that are

recognised by the authorised establishments in the country of origin, shall be used instead;

- (c) Contact telephone number(s) of the retailer; and
- (d) IP telephony number accounts allocated by the Licensee to the retailer for sale.

5.2 The Licensee shall ensure that retailers selling its Services obtain the information set out in Conditions 4.1, 4.2 and 4.3 of this Schedule upon the registration of a subscriber and forward such information to the Licensee within two (2) days of the activation of the subscriber's account.

5.3 The Authority reserves the right to require the Licensee to record any other details as necessary in its register of retailers.

5.4 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of which the retailer ceases to sell the Services of the Licensee.

## **6 Data Retention Requirements**

6.1 The Licensee shall maintain the following data records, which shall be made available for inspection by authorised Singapore government agencies:

- (a) Assigned Source IP address and Date & Time Stamps; and
- (b) Assigned User ID/User Name (e.g., subscriber records associated with (a)).

6.2 The Licensee shall also maintain Call Detail Records ("CDRs") of all calls made and received through the Service, which are operated and/or provided in Singapore.

6.3 All data records including CDRs shall be kept by the Licensee for a period of not less than twelve (12) calendar months.

6.4 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.

**7 Additional Conditions for Provision of IP Telephony Services Utilising Level “6” Telephone Numbers**

7.1 Where the Licensee provides any of the Services utilising a level “6” telephone number, it shall comply with Conditions 7.2 to 7.8 in respect of such services (hereinafter referred to as “Level “6” Services”). For the purposes of these Conditions, ‘Fixed Network Telecommunication Services’ means fixed line basic telephony services associated with number level “6”.

7.2 The Licensee shall ensure that subscribers of its Level “6” Services must be able to receive and make voice calls from/to subscribers on any public switched telecommunication network, public mobile network or public digital voice network in Singapore.

7.3 The Licensee shall ensure that:

- (a) any person through customer premises equipment that enables the use of its Level “6” Services; and
- (b) any person through its public payphones that enables the use of its Level “6” Services,

may at any time and without charge, contact the relevant police emergency service (namely 999 or its substitute number), the fire and ambulance services (namely 995 or its substitute number) and any other national emergency services which the Minister may from time to time designate to be provided by operators of Fixed Network Telecommunication Services, for the purpose of notifying them of any emergency.

7.4 The Licensee shall ensure that its Level “6” Services are only provided to domestic subscribers (within Singapore) with a Singapore registered and billing address.

- 7.5 The Licensee shall ensure that its Level “6” Services comply with the same standards and requirements for number portability as may be established by the Authority from time to time for Fixed Network Telecommunication Services.
- 7.6 The Licensee shall:
- (a) provide directory enquiry services based on an integrated customer database upon request to any person to whom the Licensee provides its Level “6” Services; and
  - (c) provide directory enquiry services for subscribers of other licensees in relation to all persons to whom the Licensee provides its Level “6” Services.
- 7.7 The Licensee shall:
- (a) provide integrated directories to subscribers of its Level “6” Services in accordance with such requirements as may be established by the Authority; and
  - (b) exchange all relevant customer data of subscribers of its Level “6” Services with other licensees free-of-charge for the purpose of providing integrated directories and providing integrated directory enquiry services.
- 7.8 The Licensee shall, if necessary, and subject to charges, terms and conditions to be agreed with other licensees, provide integrated directories for their subscribers. In the event that agreement cannot be reached, the matter shall be determined by the Authority, whose decision shall be final.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
LIVE AUDIOTEX SERVICES**

**1 Transmission of the Live Audiotex Services**

- 1.1 The Licensee shall comply with the following transmission standards in the delivery of the announcement or programme:
- (a) there shall be no delay in starting the announcement or programme when a call is connected;
  - (b) each of the live Audiotex services shall be assigned a different telephone number;
  - (c) there shall be no interruptions during the announcement or programme; and
  - (d) such other standards as may be specified by the Authority.
- 1.2 The Licensee shall ensure that the number of attempted calls at any time does not significantly exceed the number of call-in lines for the live Audiotex services and shall subscribe for additional lines from licensed Facilities-Based Operators to adequately handle calls for the live Audiotex services and to prevent congestion to other users of the public telecommunication network.
- 1.3 The Licensee shall not, except with the prior arrangement with the licensed Facilities-Based Operator, organise any mass calling event which will generate a high influx of calls to the live Audiotex services.
- 1.4 The Licensee shall not enable callers to communicate amongst themselves directly in real-time.

1.5 The Licensee shall ensure that the Value-Added Network and/or the live Audiotex services provided through it are not used for any unlawful purpose.

## **2 Content and Accuracy of Announcements/Programmes**

2.1 The Licensee shall be solely responsible for the content and its accuracy and shall obtain all necessary approvals from the relevant authorities in Singapore.

2.2 The Licensee shall indemnify and keep indemnified at all times the Authority against all claims for libel, slander, infringement of Intellectual Property rights or any other liability whatsoever arising from or in connection with the information transmitted or received through the Value-Added Network.

## **3 Announcement of Call Duration**

3.1 The Licensee shall arrange for the live operator to announce the call duration to callers at regular intervals of a maximum of 15 minutes or less. The Licensee may either charge an information fee on per minute basis or a fixed fee on a per call basis. If the Licensee decides not to make regular announcements of call duration, it shall only charge a fixed fee on a per call basis. The fixed fee shall also be applicable to mixed pre-recorded and live Audiotex services that provide an option for a caller to talk to a live operator after listening to a pre-recorded information or programme.

## **4 Announcement of Call Charges**

4.1 The Licensee shall ensure that its current call charges are published in all advertisements for the live Audiotex services.

4.2 The Licensee shall, in addition, announce the current call charges for the live Audiotex services at the beginning of the call. The Licensee shall provide a grace period during which calls are not charged for:

- (a) the first 6 seconds of a call where the charge announcement lasts 4 seconds; or
- (b) the first 12 seconds of a call where the charge announcement lasts 10 seconds.

## **5 Data Retention Requirements**

- 5.1 The Licensee shall maintain Call Detail Records (“CDRs”) of all calls made and received through the Service, which are operated and/or provided in Singapore.
- 5.2 All CDRs shall be kept by the Licensee for a period of not less than twelve (12) calendar months.
- 5.3 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.



**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
MANAGED DATA NETWORK SERVICES**

**1 Technical Compatibility**

- 1.1 The Licensee shall comply with any technical specifications prescribed by the Authority for the purposes of ensuring technical compatibility, avoiding technical harm to the telecommunication network and/or systems of Facilities-Based Operators or preventing safety hazards to personnel in the connection of telecommunication equipment and/or systems to the network.

**2 Metering**

- 2.1 The Licensee shall take all reasonable steps to ensure that any metering equipment used in connection with the Managed Data Network Services (“MDNS”) provided under the Licence is accurate and reliable.
- 2.2 Upon the written request of the Authority, the Licensee shall conduct tests on metering equipment to assess its accuracy, reliability and conformity to the technical standards, if any, as specified by the Authority. The Licensee shall submit the test results to the Authority within fourteen (14) days after the date of the test or within such other period as may be specified by the Authority.

**3 Registration of Subscribers**

- 3.1 The Licensee shall maintain a register containing records of its subscribers and their particulars, which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;

- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address;
- (d) Service Address;
- (e) Contact Information (landline number, mobile number, or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;
  - (ii) Assigned Client IP address and User ID/User Name (where applicable); and
- (h) Equipment ID (where applicable).

3.2 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the MDNS to the subscriber.

#### **4 Data Retention Requirements**

4.1 The Authority reserves the right to require the Licensee to retain any details as part of data records as necessary.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
PUBLIC INTERNET ACCESS SERVICES**

**1 Scope of Services**

- 1.1 The Licence enables the Licensee to establish, install and maintain a public Internet access facility or system for the provision of public Internet access services in Singapore.

**2 Electronic-mail Address Portability**

- 2.1 The Licensee shall comply, at its own cost, with any guidelines established by the Authority, on electronic-mail address portability.

**3 Content**

- 3.1 The Licensee shall comply with any term and condition as may be imposed by the Authority for the content that is transmitted through the Systems.

**4 Publication of Information in Relation to Broadband Internet Access Services**

- 4.1 The Licensee shall comply with such frameworks as may be established by the Authority for the publication of information pertaining to broadband Internet access services offered by the Licensee, including but not limited to the access speeds, throughput, round-trip latency, webpage loading time and any other information that the Authority may require the Licensee to publish.

## **5 Registration of Subscribers**

5.1 The Licensee shall maintain a register containing records of its subscribers and their particulars which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;
- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address (where applicable);
- (d) Service Address (where applicable);
- (e) Contact Information (landline number, mobile number, or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;
  - (ii) Assigned Client IP address and User ID/User Name (where applicable); and
- (h) Equipment ID (where applicable).

5.2 The Authority reserves the right to require the Licensee to record any other details as necessary in its register of subscribers.

5.3 Before recording the particulars referred to in Condition 5.1 of this Schedule, the Licensee shall:

- (a) where the subscriber is in Singapore, require the production of the subscriber's identity card issued under the National Registration Act (Cap. 201), passport or Employment Pass and make and keep a photocopy of such evidence of identity; or
- (b) where the subscriber is not in Singapore, the Licensee shall use its best efforts to verify the identity of the subscriber through appropriate documents that are recognised by the authorised establishments in the country of purchase.

5.4 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the Services to the subscriber.

## **6 Registration of Retailers**

6.1 The Licensee shall maintain a register containing records of its retailers and their particulars which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the retailer:

- (a) Name, business address, and as applicable, NRIC number, passport number or business registration number of the retailer in Singapore;
- (b) Where the retailer is not based in Singapore, the applicable identification details obtained through appropriate documents that are recognised by the authorised establishments in the country of origin, shall be used instead; and
- (c) Contact telephone number(s) of the retailer.

6.2 The Licensee shall ensure that retailers selling its Services obtain the information set out in Conditions 5.1, 5.2 and 5.3 of this Schedule upon the registration of a subscriber and forward such information to the Licensee within two (2) days of the activation of the subscriber's account.

6.3 The Authority reserves the right to require the Licensee to record any other details as necessary in its register of retailers.

6.4 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of which the retailer ceases to sell the Services of the Licensee.

## **7 Data Retention Requirements**

7.1 The Licensee shall maintain the following data records, which shall be made available for inspection by authorised Singapore government agencies:

(a) Assigned Source IP address and Date & Time Stamps; and

(b) Assigned User ID/User Name (e.g., subscriber records associated with (a)).

7.2 The Authority reserves the right to require the Licensee to retain any other details as part of data records as necessary.

7.3 All data records shall be kept by the Licensee for a period of not less than twelve (12) calendar months.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
RESALE OF LOCAL LEASED FIXED-LINE CONNECTIVITY SERVICES**

**1 Declaration of Usage**

- 1.1 The Licensee shall ensure that the subscribers declare, in writing, the usage of the local leased fixed-line connection and their compliance with all licensing and regulatory conditions and requirements of the Authority. The Licensee shall terminate its agreement with the subscribers if such subscribers are found to infringe any term and condition of the Licence or any provision of the Act.

**2 Registration of Subscribers**

- 2.1 The Licensee shall maintain a register containing records of its subscribers and their particulars which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;
- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address;
- (d) Service Address;
- (e) Contact Information (landline number, mobile number, or email address);

- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;
  - (ii) Assigned Client IP address and User ID/User Name (where applicable); and
- (h) Equipment ID (where applicable).

2.2 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the Services to the subscriber.

### **3 Marketing**

3.1 The Licensee shall state clearly in all marketing and promotional communications that the Licensee is a local leased fixed-line connectivity reseller.

### **4 Data Retention Requirements**

4.1 The Authority reserves the right to require the Licensee to retain any details as part of data records as necessary.



**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
STORE-AND-FORWARD VALUE-ADDED NETWORK SERVICES**

**1 Establishment of Service Nodes**

- 1.1 The Licensee is required to establish a service node in Singapore and make available the information on the routing table, subscriber database, call traffic statistics and/or other records maintained by the service node for inspection whenever requested. The Licensee without a service node in Singapore may provide Store & Forward Value-Added Network services through a local access node which is connected to the public switched telecommunication networks provided by a Facilities-Based Operator licensed by the Authority.

**2 Transmission of Value-Added Network traffic over the Internet**

- 2.1 The Licensee may choose to carry its Value-Added Network traffic over dedicated leased circuits or switched/permanent virtual circuits such as frame relay circuits. The Licensee may also choose to transmit its VAN traffic through virtual private network links over the Internet.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
VIRTUAL PRIVATE NETWORK SERVICES**

**1 Technical Compatibility**

- 1.1 The Licensee shall comply with any technical specifications prescribed by the Authority for the purposes of ensuring technical compatibility, avoiding technical harm to the telecommunication network of any Facilities-Based Operator or preventing safety hazards to the personnel in the connection of telecommunication equipment and/or systems to the network.

**2 Metering**

- 2.1 The Licensee shall take all reasonable steps to ensure that any metering equipment used in connection with the Virtual Private Network (“VPN”) services operated under the Licence is accurate and reliable.
- 2.2 Upon the written request of the Authority, the Licensee shall conduct tests on metering equipment to assess its accuracy, reliability and conformity to the technical standards, if any, as specified by the Authority. The Licensee shall submit the test results to the Authority within fourteen (14) days after the date of the test or within such other period as may be specified by the Authority.

**3 Registration of Subscribers**

- 3.1 The Licensee shall maintain a register containing records of its subscribers and their particulars, which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the following particulars of the subscribers:

- (a) Name;

- (b) Identity Number (as applicable, NRIC number, FIN, passport number of the subscriber and business registration number of the company for corporate customer);
- (c) Billing Address;
- (d) Service Address;
- (e) Contact Information (landline number, mobile number, or email address);
- (f) Service Period (start and end date for each type of service);
- (g) Service Types:
  - (i) Service ID;
  - (ii) Assigned Client IP address and User ID/User Name (where applicable); and
- (h) Equipment ID (where applicable).

3.2 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the VPN services to the subscriber.

#### **4 Data Retention Requirements**

4.1 The Authority reserves the right to require the Licensee to retain any details as part of data records as necessary

## **SCHEDULE C**

### **SPECIFIC TERMS AND CONDITIONS FOR WHITE SPACE GEO-LOCATION DATABASE SERVICES**

#### **1 Scope of Services**

- 1.1 The Licence enables the Licensee to establish, install, maintain and operate a white space (“WS”) geo-location database system for the provision of WS geo-location database services.
- 1.2 The Licensee shall ensure that the System is capable of the following functions:
- (a) upon request by WS devices (“WSDs”), determine and provide to WSDs, the available channels and maximum transmission power level at the WSDs’ locations; and
  - (b) provide a registration platform and repository for information relating to WSDs and the contact details of WSD users in accordance with Condition 8.
- 1.3 The Licensee shall ensure that the Services are hosted by servers that are physically located in Singapore.

#### **2 Co-Channel and Cross-border Coexistence**

- 2.1 To facilitate co-channel coexistence of WSDs with other radio-communication services, as well as cross-border coexistence of WSDs at or near the borders of Singapore, the Licensee shall comply with the following in the provision of the Services:
- (a) determine the separation distance between the WSD and the receiver station of each protected service as obtained from the Authority in accordance with Condition 5.1 (“Protected Service”), as well as between the WSD and the set of coordinates as notified by the Authority to the Licensee (the “Coordinates”);

- (b) calculate the path loss using the propagation model as notified by the Authority to the Licensee between the WSD and the receiver station of each Protected Service, as well as between the WSD and the Coordinates;
- (c) use the path loss information calculated in Condition 2.1(b) and the noise floor level, which shall for the purposes herein be fixed at -115 dBm or such other value as notified by the Authority to the Licensee, as the basis to compute the maximum permissible transmission power level for the WSD for each available WS channel using the formula as notified by the Authority to the Licensee; and
- (d) return the spectrum availability information and the maximum transmission power for the respective channels to the WSD that is requesting this information.

### **3 Management of High Priority Channels**

3.1 Where the Licensee has obtained the Authority's prior written approval for the Licensee to manage access to the high priority channels as notified by the Authority to the Licensee ("HPCs"), the Licensee shall comply with the following:

- (a) not allocate any HPC to any WSD unless there is no common WS channel<sup>1</sup> available to a WSD at the WSD's location at that point in time;
- (b) allocate all HPCs using a fair process and in accordance with the allocation method which has been notified by the Licensee to the Authority;
- (c) notify the Authority in writing prior to changing the allocation method of any HPC; and

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<sup>1</sup> Common WS channels refer to the authorised radio frequency bands as set out for WSDs in the Telecommunications (Exemption from Sections 33, 34(1)(b) and 35) Notification but excluding the channels designated as HPCs as notified by the Authority to the Licensee.

(d) take reasonable precautions to prevent interference between the Licensee's WSD users and other licensees' WSD users. Without prejudice to the generality of the foregoing, the Licensee shall cooperate and coordinate with other licensees who are also managing access to the HPCs, to prevent any such interference.

3.2 Where the Licensee is managing access to the HPCs, the Licensee shall obtain the Authority's prior written approval before ceasing to manage such access.

3.3 The Authority reserves the right to require the Licensee to change its allocation method for any HPC as necessary.

3.4 Where the Licensee has not obtained the Authority's prior written approval for the Licensee to manage access to the HPCs, the Licensee shall not provide any WSD with any access to any HPC.

#### **4 Accuracy of Information**

4.1 The Licensee shall ensure that the information on available channels and maximum transmission power that the Licensee provides to any WSD is accurate.

4.2 Where there is any inaccuracy in respect of the information described in Condition 4.1, the Licensee shall act promptly to resolve the inaccuracy.

#### **5 Obtaining Current Information relating to Protected Services**

5.1 The Licensee shall obtain from the Authority, once every six (6) hours, current information in relation to the Protected Services.

5.2 The Authority reserves the right to require the Licensee to obtain current information in relation to the Protected Services on a more frequent basis or at such specific timings as notified by the Authority.

## **6 Pricing, Terms and Conditions**

6.1 The Licensee shall inform the Authority of its pricing, terms and conditions for the provision of the Services prior to any commercial launch or public announcement for the provision of the Services.

6.2 The Authority reserves the right to regulate any of the pricing, terms and conditions as the Authority deems fit.

## **7 Security Requirements**

7.1 The Licensee shall establish communications authentication procedures, and notify the Authority in writing of the communications authentication procedures adopted by the Licensee, for the purpose of ensuring that data received by any WSD in connection with the provision of the Services by the Licensee is from an authorised source.

7.2 The Licensee shall take all reasonable precautions to ensure that all communications between the System and the WSDs cannot be accessed, altered or otherwise affected by any unauthorised person.

7.3 The Authority reserves the right to require the Licensee to comply with any other security requirement as necessary.

## **8 Registration and Repository of WSD Information**

8.1 The Licensee shall provide and maintain a registry for users of Fixed WSDs<sup>2</sup> to register and store the following information:

- (a) unique Device Identifier (“Unique ID”);
- (b) device geographic coordinates such as the latitude and longitude;
- (c) height of the WSD antenna;

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<sup>2</sup> “Fixed WSD” refers to a device which is operating in a fixed geographic location and with a maximum transmission power of 4 W EIRP.

- (d) name of individual or business that is responsible for the device;
- (e) name of a contact person responsible for the device's operation;
- (f) address of the contact person;
- (g) email address of the contact person; and
- (h) phone number of the contact person.

8.2 The Licensee shall provide and maintain a registry for users of Mode I WSDs<sup>3</sup> to register and store the Unique ID of the Mode I WSD, and the Unique ID of the relevant Fixed WSD or Mode II WSD<sup>4</sup> through which the Mode I WSD is accessing the Services provided by the Licensee.

8.3 The Licensee shall provide and maintain a registry for users of Mode II WSDs to register and store the Unique ID of the Mode II WSD.

8.4 The Licensee shall store and maintain the information in the registries described in Conditions 8.1, 8.2 and 8.3 for a period of not less than twelve (12) calendar months from the date of termination of the Services to the customer, and the registries shall be made available for inspection by the Authority.

8.5 The Authority reserves the right to require the Licensee to record any other details as necessary in its registries.

## **9 Discontinuation of Operations**

9.1 The Licensee shall not transfer the control or ownership of the System or any of its records to any other person unless prior written approval has been obtained from the Authority.

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<sup>3</sup> "Mode I WSD" refers to a device which is operating on a portable basis, in conjunction with a Fixed or Mode II WSD, and with a maximum transmission power of 100 mW EIRP.

<sup>4</sup> "Mode II WSD" refers to a device which is operating on a portable basis and with a maximum transmission power of 100 mW EIRP.



- 9.2 The Licensee shall ensure that it has an adequate business continuity plan (“BCP”) in place, and submit a copy of such BCP to the Authority. Where the Licensee makes any change to its BCP, the Licensee shall also promptly provide the Authority with an updated copy.
- 9.3 The Authority reserves the right to require the Licensee to include additional steps, measures or precautions as part of the Licensee’s BCP as necessary.
- 9.4 In any event where the business continuity of the Licensee is or may be affected, the Licensee shall follow its BCP to the fullest extent possible and as appropriate under the circumstances in order to ensure the continuity of the provision of its Services.

## **10 Access to WSD Information**

- 10.1 The Licensee shall provide the Authority with the relevant rights to obtain current WSD information that is stored within its System for the purpose of investigating any alleged or actual interference with the operation of any authorised station or network.
- 10.2 The Licensee shall, where required by the Authority, restrict the availability of WS channels for WSDs that do not conform to the Authority’s Technical Specifications, or that interfere with the operation of any authorised station or network.

**SCHEDULE C**  
(Where Applicable)

**SPECIFIC TERMS AND CONDITIONS FOR  
SIM-BASED MACHINE-TO-MACHINE (M2M) SERVICES**

**1 Conditions of Operation**

- 1.1 The Licensee shall ensure that all SIM cards which are used in the provision of M2M Services by the Licensee are configured to be used only for the automated communication between machines and devices (including voice communication within the scope of a pre-defined service feature and within a closed user group), and not for other purposes (such as voice communication with an external person) unless the prior written approval of the Authority has been obtained.
- 1.2 Prior to the commencement of the provision of M2M Services, the Licensee shall notify the Authority in writing, the particulars of all local mobile telecommunication operator(s) that the Licensee will be working with in relation to the provision of M2M Services (for example, in connection with roaming) and the Licensee shall also promptly notify the Authority of any subsequent change thereof.

**2 Register of SIM Cards**

- 2.1 The Licensee shall maintain a register containing full and accurate records of all SIM cards which are used in connection with the provision of M2M Services by the Licensee, which shall be made available for inspection by authorised Singapore government agencies. The records shall contain the International Mobile Subscriber Identity (“IMSI”) numbers and Mobile Subscriber Integrated Services Digital Network Numbers (“MSISDN”) of the SIM cards. The Licensee shall also provide the above particulars of the SIM cards to the Authority as and when requested by the Authority.
- 2.2 The Authority reserves the right to require the Licensee to record any other details as necessary in its register of SIM cards.

2.3 The records in the register shall be kept by the Licensee for a period of not less than twelve (12) calendar months from the date of termination of the M2M Services to the subscriber.

### **3 Support to Government Agencies**

3.1 The Licensee shall work and cooperate fully with the authorised Singapore government agencies to render assistance in any investigation in connection with the provision of M2M Services by the Licensee.

**SCHEDULE D**

**SPECIFIC TERMS AND CONDITIONS FOR  
5G AND/OR INTERNATIONAL MOBILE TELECOMMUNICATIONS-2020  
SYSTEMS AND SERVICES**

[Licensee specific details have been removed]

**SCHEDULE E**

**REQUIRED PERFORMANCE BOND FORM**

[Licensee specific details have been removed]