

SCHEDULE 5B

LICENCE OF TOWER SPACE & CO-LOCATION AT TOWER SITES

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1. SCOPE

- 1.1** This Schedule sets out the terms and conditions under which SingTel will provide the Requesting Licensee with a licence (**Tower Access Licence**) to use:
- (a) SingTel's Tower Space for the sole purpose of mounting a microwave dish and associated equipment (**Tower Equipment**) to allow the Requesting Licensee to provide telecommunication services to the Requesting Licensee's Customers; and
 - (b) Co-Location Space and physical access thereto at Tower Sites for equipment used to connect to the microwave dish referred to in clause 1.1(a).
- 1.2** The Requesting Licensee must have acquired any such licenses as required from time to time to operate any equipment it intends to locate within the Tower Site before SingTel will provide a Tower Access Licence.
- 1.3** Except as provided in this Schedule, the Requesting Licensee shall provide all installation materials and manpower needed for the installation of its Co-Location Equipment.
- 1.4** SingTel shall not be responsible for any damage to the Requesting Licensee's equipment caused by fire, water leakage, air-conditioning/mechanical ventilation failure, power fluctuation/interruption, or anything beyond SingTel's control at the Tower Site.
- 1.5** This Schedule 5B only applies to Requesting Licensees who are FBOs providing wireline and broadband services.
- 1.6** SingTel will provide Tower Access Licences on a per Tower basis.
- 1.7** SingTel shall only grant a Tower Access Licence to a Requesting Licensee where there is Tower Space and Co-Location Space available at the relevant Tower Site as determined under clause 2.
- 1.8** The Tower Space will be provided in its as-is-where-is condition.

2. AVAILABILITY OF TOWER SPACE & CO-LOCATION SPACE

2.1 For the purposes of this Schedule, SingTel may have regard to the following when assessing the availability of Tower Space & Co-Location Space:

- (a) SingTel's reasonably anticipated requirements in the next two (2) years for Tower Space and/or Co-Location Space for the provision to itself and its customers;
- (b) SingTel's reasonably anticipated requirements in the next two (2) years for Tower Space and/or Co-Location for operations and maintenance purposes;
- (c) the Requesting Licensee's and other Licensees requirements (including for operational and maintenance purposes) which have been ordered but not yet delivered or which have been provided;
- (d) any security and confidentiality requirements imposed on SingTel by Governmental Agencies and Customers; and
- (e) whether SingTel has plans or otherwise proposes to decommission the Tower (can also decommission the site).

3. ORDERING AND PROVISIONING PROCEDURE

3.1 The Requesting Licensee shall submit its request for a Tower Access Licence with regards to a Tower Site using the Tower Access Licence Request Form in the form of Attachment G containing the following information:

- (a) the location of the Tower Site in relation to which the Tower Access Licence is sought;
- (b) the number of microwave dishes to be installed in the Tower Space;
- (c) in the case of point-to-point, the orientation and distant end receiving point;
- (d) the model and specification of each microwave dish to be installed in the Tower Space;
- (e) the size, weight and wind load of each microwave dish to be installed in the Tower Space;

- (f) the transmitting and receiving frequency of the signal sent over each microwave dish to be installed in the Tower Space;
- (g) the transmission power of each microwave dish to be installed in the Tower Space;
- (h) the number of mounting positions required and their corresponding height in meters Average Mean Sea Level (AMSL).
- (i) the cable/waveguide type, gauge and specification of each cable that would be installed in or around the Tower Space;
- (j) whether power supply is required for equipment to be installed in the Tower Space; and
- (k) evidence of the satisfaction of the condition in clause 1.2;
- (l) the type of Co-Location Equipment proposed to be installed in the Co-Location Space at the Tower Site;
- (m) the technical characteristics of the transmitting and receiving equipment, including all relevant RF frequencies, power levels, receiver sensitivity;
- (n) In relation to the Co-Location Equipment:
 - (i) the characteristics of the Co-Location Equipment which require special consideration;
 - (ii) the space (subject to clause 3.2) and power requirements of the Co-Location Equipment;
 - (iii) the floor loading of the Co-Location Equipment;
 - (iv) the type of cable/waveguide to be used, and the diameter of the cable/waveguide;
- (o) the Requesting Licensee's contact details;
- (p) such other information as SingTel reasonably requires.

- 3.2** The Requesting Licensee must request Co-Location Space in a Co-Location Site of a minimum of one (1) square metre to a maximum of ten (10) square metres.
- 3.3** SingTel shall acknowledge receipt of the Tower Access Licence Request made under clause 3.1 within five (5) Business Days and indicate whether the Tower Access Licence Request is preliminarily accepted on a non-binding basis (subject to the completion of a Project Study under clause 4) or rejected. SingTel shall recover a Tower Access Licence Request Fee for the cost of processing the Tower Access Licence Request as provided Schedule 9, irrespective of the outcome of the Tower Access Licence Request.
- 3.4** SingTel may reject a Tower Access Licence Request if:
- (a) the Requesting Licensee is not an FBO providing wireline and broadband services;
 - (b) the Tower Access License Request is not in the prescribed form;
 - (c) the Tower Access License Request does not contain the required information;
 - (d) the Requesting Licensee has not satisfied clause 1.2;
 - (e) the size, weight and wind load of the microwave dish is not suitable;
 - (f) the transmitting and receiving frequency of the system is not suitable;
 - (g) the transmission power of each microwave dish is not suitable;
 - (h) the Co-Location Space requested is not within the limits prescribed by clause 3.2;
 - (i) there is no Co-Location Space available at the Tower Site as determined in accordance with clause 2;
 - (j) there is no Tower Space available space at the Tower Site as determined in accordance with clause 2; or
 - (k) acceptance of the Tower Access License Request will give rise to significant health, safety, technical or engineering issues.
- 3.5** The Requesting Licensee acknowledges that the Tower Space and Co-Location Space allocated and the actual placement of the Tower Equipment and Co-Location

Equipment shall be determined by SingTel. SingTel is not obliged to place the same Requesting Licensee's Tower Equipment or Co-Location Equipment adjacent to each other.

4. PROJECT STUDY

4.1 The Requesting Licensee may request confirmation of the preliminary acceptance of the Tower Access License Request by way of a Project Study in writing within five (5) Business Days from the date of the preliminary acceptance of a Tower Access License Request by SingTel. The provision of such a request by the Requesting Licensee shall constitute its agreement to pay the Project Study Fee. If the Requesting Licensee does not request confirmation within this time, the Tower Access License Request will lapse.

4.2 The Project Study normally entails at least two (2) site visits:

- (a) a preliminary site survey by SingTel to determine and assess the space, power, earth, fibre and cable routing and any Site Preparation Works required for access to the Tower Space and the Co-Location Space; and
- (b) a joint site visit with the Requesting Licensee.

4.3 Following notification by the Requesting Licensee under clause 4.1, SingTel shall schedule the preliminary site survey and the joint survey. SingTel shall use its reasonable endeavours to complete the Project Study within fifteen (15) Business Days of receipt of the notice in clause 4.1.

4.4 The Requesting Licensee shall at its own cost engage Engineers and/or Consultants to access the Tower Space in accordance with the Physical Access Procedures in Attachment C for the purpose of performing structural analysis and electromagnetic tests to verify the feasibility of its proposed usage of the Tower Space.

4.5 The Requesting Licensee shall provide the results of the analysis performed under clause 4.4 to SingTel.

4.6 SingTel may engage its own engineers and/or consultants to verify the analysis performed under clause 4.4. The cost of this verification is to be borne by the Requesting Licensee.

4.7 Following completion of the Project Study, SingTel shall provide written notice of its Final Approval or rejection of the Tower Access Licence Request to the Requesting Licensee along with the following information where appropriate:

- (a) the estimated Charge for the Site Preparation Work;
- (b) the mounting position allocated for the microwave dish(es);
- (c) the location of the designated lead-in manhole to the Co-Location Space and the direction of the connection duct;
- (d) the estimated length of fibre cable required from the lead-in manhole to the Co-Location Space;
- (e) the number of Business Days expected to complete the Site Preparation Work;
- (f) such other information as SingTel considers relevant.

4.8 SingTel shall be entitled to levy and receive the Project Study Fee provided in Schedule 9 irrespective of the outcome of the Project Study or whether the Requesting Licensee proceeds with the Tower Access Licence Request after completion of the Project Study.

4.9 Where Final Approval is granted under clause 4.7 the Requesting Licensee shall confirm in writing to SingTel that it wishes to proceed with the Tower Access Licence Request (**Final Acceptance**) and that it agrees to pay the estimated charges for Site Preparation Work within five (5) Business Days from the date of notification of the result of the Final Approval. If the Requesting Licensee does not give such confirmation within five (5) Business Days, its Tower Access Licence Request will be deemed to be cancelled.

5. SITE PREPARATION WORK FOR THE CO-LOCATION SPACE

5.1 SingTel shall use its reasonable endeavours to complete the Site Preparation Work within the period advised under clause 4.7(e). If SingTel is unable to complete the Site Preparation Work within the advised period, SingTel shall notify the Requesting Licensee of a revised date for completion.

5.2 As part of the Site Preparation Work, SingTel shall construct two (2) 110mm ducts of one (1) metre from the designated manhole in the direction indicated in clause

4.7(c) for the Requesting Licensee to connect its ducts. SingTel shall construct the duct seal for the ducts constructed in SingTel's manhole.

5.3 Upon completion of the Site Preparation Work, SingTel will notify the Requesting Licensee and request the Requesting Licensee to attend the Co-Location Site for a final site inspection of the Co-Location Space.

6. INSTALLATION AND MAINTENANCE OF EQUIPMENT IN THE TOWER SPACE

6.1 Where the Requesting Licensee gives its Final Acceptance under clause 4.9 the Requesting Licensee shall provide its installation schedule, installation plan and work method statement within five (5) Business Days from the Final Approval.

6.2 SingTel shall review the installation schedule and plan provided under clause 6.1 and within five (5) Business Days shall either;

(a) an advice giving its approval; or

(b) an advice withholding its approval with the reason for refusal and an alternate installation schedule and/or plan.

6.3 The Requesting Licensee must commence installation of the Tower Equipment onto the Tower within thirty (30) Business Days of its Final Acceptance or as otherwise agreed by SingTel.

6.4 The Requesting Licensee shall request access to the Tower for the installation works in accordance with Attachment C.

6.5 SingTel may carry out an inspection of the completed installation and/or a supervision of the installation to confirm that the installation conforms to the approved plans. The cost for this inspection and/or supervision shall be borne by the Requesting Licensee.

6.6 Where an inspection under clause 6.5 reveals that the installation does not conform to the installation plan, or the installation disadvantages or jeopardises SingTel's plant, SingTel shall notify the Requesting Licensee of the results of the inspection.

6.7 Upon notification under clause 6.6 the Requesting Licensee shall reinstall its plant or take other corrective action within a reasonable time as agreed between the Parties, but in any event within ten (10) Business Days. The Requesting Licensee shall bear

all costs for reinstallation and corrective action. If the Requesting Licensee fails to take appropriate corrective action, SingTel may withdraw physical access or undertake the appropriate corrective action and recover the cost from the Requesting Licensee accordingly.

- 6.8** Before the installation of Tower Equipment, the Requesting Licensee shall be allowed to cancel any request or approval Tower Access Licence upon written notice to SingTel. SingTel may charge an administrative fee as detailed in Schedule 9 (Charges) for processing such cancellation as well as the cost that SingTel incurred up to the point of cancellation.
- 6.9** The Requesting Licensee shall at its own cost and expense, comply with all reasonable requirements of SingTel regarding the installation and/or maintenance of the Requesting Licensee's plant, the licensed area and any works thereto.
- 6.10** If in the course of the their own activities, the Requesting Licensee detects a fault, defect or problem in the Tower it shall notify SingTel as soon as practicable.
- 6.11** The Requesting Licensee must, at its own cost:
- (a) ensure that the Tower is left in a tidy and safe condition following any maintenance or other operation it conducts on or around the Tower;
 - (b) ensure that flammable, toxic material, building material, or rubbish is not left on or around the Tower following any maintenance or other operation it conducts on or around the Tower;
 - (c) correct any fault, defect or problem with its own equipment which jeopardises SingTel's equipment; and
 - (d) immediately notify SingTel of any damage to SingTel's equipment consequent upon its act or omission.
 - (e) maintain and repair its own equipment;
- 6.12** If the Requesting Licensee wishes to replace existing Tower Equipment located on the Tower or to install additional Tower Equipment on the Tower, the Requesting Licensee must submit a request under clause 3.

7. INSTALLATION AND MAINTENANCE OF CO-LOCATION OF EQUIPMENT IN CO-LOCATION SPACE

7.1 The Parties agree to comply with the following procedures in connection with the installation and maintenance of Co-Location Equipment:

- (a) the Co-Location Equipment Installation and Maintenance Procedures at Attachment A and as amended by SingTel from time to time;
- (b) the Standard Operating Procedures at Attachment B and as amended by SingTel from time to time; and
- (c) the Physical Access Procedures at Attachment C and as amended by SingTel from time to time.

7.2 The Requesting Licensee shall pay SingTel the Charges in accordance with Schedule 9 for the installation and termination of tie cables under the Co-Location Equipment Installation and Maintenance Procedures.

8. STANDARD TERMS AND CONDITIONS

8.1 Each Requesting Licensee shall be responsible for the construction and maintenance of its equipment. SingTel will be responsible for maintaining and administering the Tower, Tower Space and the Co-Location Space under this Schedule.

8.2 When SingTel's and the Requesting Licensee's plant is damaged by a Third Party at the same location, SingTel has priority over the Requesting Licensee to work in SingTel's Tower.

8.3 The Requesting Licensee shall engage qualified Architect and Professional Engineer to make the necessary submission to competent authorities and provide Professional Engineer's Certification for the installation of the Tower Equipment at its own costs.

8.4 The Tower Equipment installed shall not exceed the height of five (5) meters per deck.

8.5 The Requesting Licensee shall relocate and reinstall its Tower Equipment at its own expense should the Tower structure be required for repair or upgrading works.

8.6 It shall be the sole responsibility of the Requesting Licensee to ensure that the Tower Equipment installed does not interfere with any of the existing systems. In the event of such interference, the Requesting Licensee shall either relocate or remove the Tower Equipment immediately at its own cost.

8.7 The Requesting Licensee shall provide proper identification markings on each and every piece of Tower Equipment and cable installed.

9. ACCESS AND APPROVALS REQUIRED

9.1 The Requesting Licensee must use its best endeavours to assist SingTel in providing the license to use the Tower Space and the Co-Location Space, including, but not limited to:

(a) at the Requesting Licensee's cost, co-operating with SingTel so that SingTel is able to license the Tower Space and the Co-Location Space efficiently; and

(b) obtaining and maintaining any authorisation, permission, licence, waiver, registration or consent from any person necessary for license the Tower Space and the Co-Location Space.

9.2 The access to the Tower Space and the Co-Location Space is subject to approval from all the relevant authorities with regard to its use and proposed renovation. The Requesting Licensee shall comply with all the terms and conditions imposed by the relevant Authority or government departments and competent authorities at its own cost.

9.3 The Requesting Licensee shall at its own cost and expense, comply with all statutes, by-laws, rules or regulations that may apply to or be imposed on the Requesting Licensee in respect of the licence by any government authority.

10. REQUESTING LICENSEE'S RIGHTS

10.1 The Requesting Licensee has a personal right of occupation on the terms and conditions of the access granted to the Tower Space and Co-Location Space and has no right, title, proprietary interest or interest in the relevant Tower and its Tower Space or Co-Location Space to which the license has been granted. This access shall not create a tenancy and shall not give the Requesting Licensee exclusive right to the occupation of the licensed Tower Space or Co-Location Space. The legal right to

possession and control over the Tower Space and Co-Location Space is vested in SingTel throughout the term of the access.

11. PROTECTION AND SAFETY

11.1 The Requesting Licensee is responsible for the safe operation of its network and shall be responsible for the safe operation of its equipment on the Tower and shall, so far as reasonable practicable, take all necessary steps to ensure that its use of the Tower Space and the Co-Location Space:

- (a) does not endanger the safety of any person, including the employees, contractors, customers or third persons;
- (b) does not damage, interfere with or cause any deterioration in the operation of SingTel's Network;
- (c) does not jeopardise the integrity or confidentiality of Communications within the SingTel's Network; and
- (d) does not threaten the security and accessibility of SingTel's Tower.

11.2 The Requesting Licensee shall report immediately any incident, injury or harm, fatal or otherwise that occurs at the site to SingTel and the Authority. For fatal or serious accident, the accident site shall be left undisturbed to facilitate the relevant authority to investigate on the circumstances leading to the accident. The Requesting Licensee shall report immediately to the Ministry of Manpower, police and insurance company of any fatal accident having occurred in the site. The Requesting Licensee shall be liable for and shall indemnify and keep indemnified SingTel against all losses, claims, proceedings, damages, liabilities, costs and expenses for injuries or death to any person whomsoever or any loss or damage to any property whatsoever which arise out of or in consequence of any act or omission of the Requesting Licensee's employees and contractors in relation to SingTel's Tower Site and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof.

11.3 The Requesting Licensee certifies that all work performed by the Requesting Licensee which license has been approved is performed by appropriately qualified, skilled and trained personnel.

12. TERM OF LICENCE

- 12.1** The Tower Access Licence shall commence on the date the Requesting Licensee provides notice of its Final Acceptance under clause 4.9 and continues for two (2) years unless terminated earlier in accordance with this Schedule.
- 12.2** SingTel may terminate the Tower Access Licence at any time with immediate effect by giving notice to the Requesting Licensee if the Requesting Licensee fails to complete the installation of its Tower and Co-Location Equipment within thirty (30) Business Days under Attachment A or as otherwise agreed by SingTel.
- 12.3** SingTel may immediately terminate the Tower Access Licence if:
- (a) the Requesting Licensee is no longer an FBO providing wireline and broadband services;
 - (b) the Requesting Licensee is in breach of this Schedule and such breach remains unremedied for a period of five (5) Business Days after receiving notice from SingTel to do so;
 - (c) in SingTel's reasonable opinion, the Requesting Licensee is using the Tower Space or Co-Location Space in contravention of an applicable law, licence, code, regulation or direction;
 - (d) the Requesting Licensees use of the Tower Space or Co-Location Space is having or is likely to have an adverse network impact on SingTel;
 - (e) the Tower Equipment or Co-Location Equipment is used for a purpose other than for the purpose contemplated under clause 1.1;
 - (f) the Requesting Licensee removes or abandons its Tower Equipment or Co-Location Equipment;
 - (g) the Requesting Licensee locates equipment other than Tower Equipment or Co-Location Equipment in the Tower Space or Co-Location Space respectively;
 - (h) the Tower Space or Co-Location Space have become unsafe or unsuitable for their purpose;

- (i) SingTel's right to own, maintain or operate the Tower Site is revoked or terminates or expires; or
- (j) the Requesting Licensee does or allows anything to be done which in SingTel's reasonable opinion may jeopardise the Tower Site or the SingTel Network.

12.4 SingTel may give the Requesting Licensee no less than six (6) months' notice at any time during the term that the Tower Access Licence is to be terminated because of the closure of that Tower Site. The Requesting Licensee shall bear its own cost associated with the closure of a Tower Site and the Requesting Licensee shall solely be responsible for making such alternative arrangements as are necessary to continue to provide its customers with services.

12.5 Upon expiry or termination of the Tower Access Licence:

- (a) the Requesting Licensee must discontinue the use of its Tower Equipment and Co-Location Equipment and remove its Tower Equipment and Co-Location Equipment from the Tower Site within ten (10) Business Days after the expiry of the Tower Access Licence or from the date of termination of the Tower Access Licence, whichever is the earlier; and
- (b) SingTel shall reinstate the Tower Space and Co-Location Space and recover/reinstate all cables/supports/opening and recover the cost of such reinstatement from the Requesting Licensee.

12.6 If the Requesting Licensee fails to discontinue the use of its Tower Equipment and Co-Location Equipment and remove its Tower Equipment and Co-Location Equipment under clause 12.5, SingTel shall remove the Requesting Licensee's Co-Location Equipment and reinstate the Tower Space and Co-Location Space to their original condition. The Requesting Licensee shall pay to SingTel all costs associated with the work undertaken by SingTel including the disposal of the Tower Equipment and Co-Location Equipment. In such event, the Requesting Licensee shall have no claim whatsoever, against SingTel.

12.7 Upon termination of the Tower Access Licence, any physical access granted to the Tower Site shall also be terminated.

12.8 Upon termination of Tower Access Licence, the following Charges shall be recovered from the Requesting Licensee:

- (a) Licence Charges for the remainder of the licence term;
- (b) outstanding pro-rata site preparation charges.

13. SUB-LICENSING

- 13.1** The Requesting Licensee must not assign the Tower Access Licence in respect of or sub-let the Tower Space or Co-Location Space at the Tower Site.

14. ADDITIONAL SPACE AND EQUIPMENT

- 14.1** If the Requesting Licensee wishes to replace, modify or rearrange existing Tower Equipment or Co-Location Equipment in the Tower Space or Co-Location Space or to install additional Tower Equipment or Co-Location Equipment in the Tower Space or Co-Location Space, the Requesting Licensee must submit a request in respect of the replacement, modification, rearrangement or additional Tower Equipment or Co-Location Equipment.
- 14.2** Requests for additional Tower Space or Co-Location Space at Tower Sites shall be treated as a separate Tower Access Licence Request and the process of ordering and provisioning in clause 3 shall apply.