

SCHEDULE 5A

LICENSING OF LEAD-IN DUCT AND LEAD-IN MANHOLES

SCHEDULE 5A

LICENSING OF LEAD-IN DUCT AND LEAD-IN MANHOLES

CONTENTS

1.	SCOPE	1
2.	AVAILABILITY OF BUILDING LEAD-IN DUCT/LEAD-IN MANHOLE	3
3.	ORDERING AND PROVISIONING PROCEDURE	8
4.	STUDIES	9
5.	PROJECT STUDY	11
6.	INSTALLATION OF UNDERGROUND EQUIPMENT	15
7.	REPLACEMENT OR ADDITION OF UNDERGROUND EQUIPMENT	19
8.	ACCESS TO BUILDING LEAD-IN DUCT THROUGH SINGTEL'S LEAD-IN MANHOLE	20
9.	STANDARD TERMS AND CONDITIONS	20
10.	ACCESS AND APPROVALS REQUIRED	22
11.	UNAUTHORISED ACCESS TO SINGTEL'S UNDERGROUND PLANT	23
12.	PHYSICAL ACCESS PROCEDURE	24
13.	PROTECTION AND SAFETY	24
14.	MARKING OF UNDERGROUND EQUIPMENT	25
15.	REQUESTING LICENSEE RIGHTS	25
16.	TERM OF LICENCE	26
17.	SUSPENSION OF LICENCE	26
18.	TERMINATION OF LICENCE	27
19.	EXPIRY OF TERM OF LICENCE	29
20.	SUB-LICENSING	31
21.	SINGTEL CEASES TO OWN OR CONTROL A LEAD-IN MANHOLE	31
	ANNEX 5A.1: SERVICE LEVEL GUARANTEES	
	ANNEX 5A.2 - SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD-IN DUCT AND THE LEAD-IN MANHOLE	
	ANNEX 5A.3 - PHYSICAL ACCESS PROCEDURE FOR LEAD-IN MANHOLE	

ANNEX 5A.4 - STANDARD OPERATING PROCEDURES FOR WORKING IN MANHOLE AND CABLE PULLING

ANNEX 5A.5 - ORDER FOR BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

ANNEX 5A.6 - REQUEST FOR PHYSICAL ACCESS TO LEAD-IN DUCT AND LEAD-IN MANHOLE

ANNEX 5A.7 - REQUEST FOR EMERGENCY PHYSICAL ACCESS TO LEAD-IN DUCT AND LEAD-IN MANHOLE

ANNEX 5A.8 - LETTER OF AUTHORISATION FOR PHYSICAL ACCESS TO LEAD-IN DUCT AND LEAD-IN MANHOLE

ANNEX 5A.9 - MASTER LIST FOR PHYSICAL ACCESS TO LEAD-IN DUCT AND LEAD-IN MANHOLE

ANNEX 5A.10 - SINGTEL'S GUIDELINES ON WORK METHOD STATEMENT

SCHEDULE 5A

LICENSING OF LEAD-IN DUCT AND LEAD-IN MANHOLES

1. SCOPE

1.1 This Schedule sets out the terms and conditions under which SingTel will provide the Requesting Licensee with:

- (a) a licence for the shared use of Building Lead-in Duct and Lead-in Manhole in circumstances where SingTel owns or controls the associated Lead-in Manhole; or
- (b) a licence for the shared use of Building Lead-in Duct without Lead-in Manhole in circumstances where SingTel does not own or control the associated Lead-in Manhole and the Requesting Licensee has acquired access to the Lead-in Manhole from a third party,

(each a **Licence**), as requested by the Requesting Licensee for the sole purpose of the Requesting Licensee deploying Underground Equipment to provide telecommunication services. For avoidance of doubt, the use of the word shared in this Schedule 5A refers to the non-exclusive shared use of a Building Lead-in Duct.

1.1A For the purposes of this Schedule, references to Connection Duct are applicable only in circumstances where SingTel owns or controls the Lead-in Manhole(s) and licences access to that Lead-in Manhole(s). In addition, a reference to Building Lead-in Ducts shall include Building Lead-in Ducts for which use is licensed by SingTel where SingTel does not own or control the associated Lead-in Manhole(s).

1.2 The Requesting Licensee may, in its request for a Licence (**Request**), specify whether the Requesting Licensee seeks:

- (a) a Licence for the use of Building Lead-in Duct and access to SingTel's Lead-in Manhole; or
- (b) a Licence for the use of Building Lead-in Duct only without Lead-in Manhole.

1.3 The Requesting Licensee may seek a Licence subject to:

- (a) the use by the Requesting Licensee of any Building Lead-in Duct and access to any SingTel's Lead-in Manhole, as applicable, being for the sole purpose of the

Requesting Licensee deploying Underground Equipment to provide telecommunications services; and

(b) the terms and conditions set out in this Schedule 5A.

1.4 This Schedule only applies to Requesting Licensees who are FBOs.

1.5 SingTel will provide the Service Level Guarantees in respect of Licensing under this Schedule 5A as set out in Annex 5A.1. If SingTel fails to meet any Service Level Guarantees applicable and the failure to meet the Service Level Guarantees is solely caused by SingTel, SingTel shall provide a remedy to the Requesting Licensee in accordance with:

(i) section 1 of Annex 5A.1 and any terms and conditions contained therein in respect of Request response timeframes;

(ii) section 2 of Annex 5A.1 and any terms and conditions contained therein in respect of granting In-principle Approval;

(iii) section 3 of Annex 5A.1 in respect of Project Study timeframes;

(iv) section 4 of Annex 5A.1 and any terms and conditions contained therein in respect of Connection Duct timeframes;

(v) section 5 of Annex 5A.1 and any terms and conditions contained therein in respect of maintenance work on Building Lead-in Duct and SingTel's Lead-in Manhole;

(vi) section 6 of Annex 5A.1 and any terms and conditions contained therein in respect of timeframes for Modified Underground Equipment;

(vii) section 7 of Annex 5A.1 in respect of claims made under Annex 5A.1.

1.6 The Requesting Licensee acknowledges that the relevant remedy provided under clause 1.5 is a genuine pre-estimate of the Requesting Licensee's loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant provisioning timeframes for Licensing of Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and shall be SingTel's sole and exclusive liability to the Requesting Licensee for such failure.

1.7 The Requesting Licensee shall pay all applicable Charges specified in Schedule 9 for the Licence provided to the Requesting Licensee. For avoidance of doubt, in the event SingTel incurs additional costs over and above the Charges specified in Schedule 9, including but not limited to the LTA road opening fee, fees in relation to deployment of a truck mounted attenuator and/or water tanker, SingTel shall recover such costs from the Requesting Licensee.

2. AVAILABILITY OF BUILDING LEAD-IN DUCT/LEAD-IN MANHOLE

2.1 SingTel will provide a Licence to the Requesting Licensee for the use of:

- (a) the Building Lead-in Duct and access to SingTel's Lead-in Manhole (for the avoidance of doubt, the terms and conditions in relation to Lead-in Manhole(s) under this Schedule shall be applicable only where SingTel owns or controls the Lead-in Manhole); or
- (b) the Building Lead-in Duct (in cases where SingTel does not own or control the associated Lead-in Manhole),

on a shared basis provided that the Building Lead-in Duct meets the Total Utilisation (defined below) condition set out in clause 2.2.

2.2 SingTel shall grant the Requesting Licensee a Licence where the total actual utilised cable capacity of all of SingTel's Building Lead-in Ducts within the trench at the point the Request is made is less than or equal to 70% (**Total Utilisation**).

(a) Total Utilisation is calculated on the following basis:-

- (i) Conversion of different fibre core cables to Standard Cable Equivalent.

The table below specifies the conversion of different fibre core cables to Standard Cable Equivalent:-

Fibre Cable Size	Standard Cable Equivalent
up to 480 fibre cores	3
up to 384 fibre cores	2
Less than or equal to 288 fibre cores and external diameter no more than 20 millimetres	1

- (ii) Assumed number of Standard Cable Equivalent per duct for various sizes of Building Lead-in Ducts (**Assumed per Building Lead-in Duct Capacity**).

The table below specifies the number of Standard Cable Equivalent that each duct size is assumed to contain:-

External Diameter of Building Lead-in Duct (in millimetres)	Assumed per Building Lead-in Duct Capacity (in Standard Cable Equivalent)
110	10
100	10
90	8
50	4

- (iii) Conversion of copper cables to Standard Cable Equivalent.

The table below specifies the conversion of copper cables to Standard Cable Equivalent for the cases where there are copper cables within the Building Lead-in Ducts:-

Copper Cable Size	Standard Cable Equivalent
600 pairs and above	10
400 pairs	7
300 pairs	4
200 pairs	3
100 pairs	2
50 pairs and below	1

The formulas to determine the duct space available for lease to a Requesting Licensee under the RIO are set out below. For the avoidance of doubt, the formulas are applicable for Standard Cable Equivalent.

- (b) RIO Duct Space Sharing Formula

[(Number of SingTel's Building Lead-in Ducts under the RIO – Duct Reservation) x Assumed per Building Lead-in Duct Capacity] – Cable Reservation – Existing cables

- (i) SingTel is allowed a duct reservation of 1 Building Lead-in Duct (i.e. either an entire Building Lead-in Duct or the equivalent Assumed per Building Lead-in Duct Capacity) (**Duct Reservation**); and
- (ii) Out of the remaining SingTel's Building Lead-in Ducts, SingTel is allowed a Cable Reservation of 2 Standard Cable Equivalent per Building Lead-in Duct, for its own use.

Should the actual per Building Lead-in Duct Capacity exceed the Assumed per Building Lead-in Duct Capacity, it shall be regarded as an overfilled duct. For the purpose of the RIO Duct Space Sharing Formula, the number of existing cables in the overfilled duct shall be capped at the Assumed per Building Lead-in Duct Capacity.

Illustration 1

Assume a trench containing three 110mm diameter Building Lead-in Ducts with a total of 9 existing cables:

Calculation

Assumed per Building Lead-in Duct Capacity (in Standard Cable Equivalent) = 10

Number of Building Lead-in Ducts in the trench = 3

Duct Reservation = 1

Cable Reservation (in Standard Cable Equivalent) = 4 (i.e. 2 per remaining duct)

Total Assumed Capacity (in Standard Cable Equivalent) = $(3 - 1) \times 10 = 20$

Existing cables (in Standard Cable Equivalent) = 9

Total Utilisation = $9 / 20 \times 100 = 45\% \leq 70\%$

As the Total Utilisation is less than 70%, then in accordance to the RIO Duct Space Sharing Formula, the duct space available for lease to Requesting Licensees (in Standard Cable Equivalent) = $[(3 - 1) \times 10] - 4 - 9 = 7$

Illustration 2

Assume a trench containing three (where one of the three Building Lead-in Ducts is faulty) 110mm diameter Building Lead-in Ducts with a total of 9 existing cables:

Calculation

Assumed per Building Lead-in Duct Capacity (in Standard Cable Equivalent) = 10

Number of Building Lead-in Ducts in the trench = 3

Number of faulty Building Lead-in Ducts in the trench = 1

Number of Building Lead-in Ducts available = $3 - 1 = 2$

Duct Reservation = 1

Cable Reservation (in Standard Cable Equivalent) = 2 (i.e. 2 per remaining duct)

Total Assumed Capacity (in Standard Cable Equivalent) = $(2 - 1) \times 10 = 10$

Existing cables (in Standard Cable Equivalent) = 9

Total Utilisation = $9 / 10 \times 100 = 90\% > 70\%$

As the Total Utilisation is more than 70%, there would be no further lease of the duct space to Requesting Licensees.

Illustration 3

Assuming a trench containing three 110 mm diameter Building Lead-in Ducts with a total of 15 existing cables:

Calculation

Assumed per Building Lead-in Duct Capacity (in Standard Cable Equivalent) = 10

Number of Building Lead-in Ducts in the trench = 3

Duct Reservation = 1

Cable Reservation (in Standard Cable Equivalent) = 4 (i.e. 2 per remaining duct)

Total Assumed Capacity (in Standard Cable Equivalent) = $(3 - 1) \times 10 = 20$

Existing cables (in Standard Cable Equivalent) = 15

Total Utilisation = $15/20 \times 100 = 75\% > 70\%$

As the Total Utilisation is more than 70%, there would be no further lease of the duct space to Requesting Licensees.

Illustration 4

Assuming a trench containing three (where one of the three Building Lead-in Ducts contains 12 cables) 110 mm diameter Building Lead-in Ducts with a total of 12 existing cables:

Calculation

Assumed per Building Lead-in Duct Capacity (in Standard Cable Equivalent) = 10

Number of Building Lead-in Ducts in the trench = 3

Duct Reservation = 1

Cable Reservation (in Standard Cable Equivalent) = 4 (i.e. 2 per remaining duct)

Total Assumed Capacity (in Standard Cable Equivalent) = $(3 - 1) \times 10 = 20$

Existing cables (in Standard Cable Equivalent) = 12

Total Utilisation = $12/20 \times 100 = 60\% \leq 70\%$

As the Total Utilisation is less than 70%, then in accordance to the RIO Duct Space Sharing Formula, the duct space available for lease to Requesting Licensees (in Standard Cable Equivalent) = $[(3 - 1) \times 10] - 4 - 10 = 6$ (where only for the purpose of applying the RIO Duct Space Sharing Formula, the duct with 12 existing cables is capped at the Assumed per Building Lead-in Duct Capacity of 10 cables)

- (c) (i) SingTel may lease the Building Lead-in Duct space (including the lease of the Building Lead-in Duct space to third parties); or install and remove its or third party Underground Equipment, without notifying the Requesting Licensee.

(ii) The allocation of the Building Lead-in Duct under a Requesting Licensee's Licence shall be solely determined by SingTel.

2.3 For the purposes of this Schedule 5A, in addition to Total Utilisation, SingTel may have regard to the following additional factors when assessing the availability of Building Lead-in Duct and where applicable, access to SingTel's Lead-in Manholes:

- (a) immediate demand for the Building Lead-in Duct and access to the SingTel's Lead-in Manhole which it has already committed to provisioning as at the time of receipt of the Request for the Building Lead-in Duct and SingTel's Lead-in Manhole;
- (b) Not Used
- (c) Not Used
- (d) the Requesting Licensee and other Licensee's requirements (including for operations and maintenance purposes) which have been ordered but not yet delivered or which have been provided;
- (e) security and confidentiality requirements or restrictions imposed on SingTel by Governmental Agencies;
- (f) whether SingTel has plans or otherwise proposes to Decommission the Building Lead-in Duct or SingTel's Lead-in Manhole within six (6) months of the date on which SingTel receives the Request for Building Lead-in Duct and Lead-in Manhole;
- (g) whether SingTel has installed any Building Lead-in Ducts or SingTel's Lead-in Manholes at the location requested by the Requesting Licensee; or
- (h) SingTel seeking the Authority's assessment that SingTel's reservation entitlement set out under clause 2.2(b) would be insufficient for SingTel's maintenance and expansion requirements and/or fulfilment of SingTel's regulatory obligations, including any ground situation and operational considerations, thus allowing an increase in the aforementioned reservation entitlement set out under clause 2.2(b).

Where the Building Lead-in Duct and access to SingTel's Lead-in Manholes are not available due to clause 2.2(e), the Requesting Licensee shall at its own cost acquire the necessary licence, access right and/or permit from the Governmental

Agencies to satisfy all requirements and/or lift all restrictions under clause 2.2(e). The Requesting Licensee shall provide written documentation certifying the relevant licence, access right and/or permit to SingTel should it wish to submit a new request for the Building Lead-in Duct and access to SingTel's Lead-in Manholes. The Requesting Licensee shall indemnify and hold SingTel harmless from and against all security, confidentiality, restriction, undertaking and/or charges imposed by the Governmental Agencies.

2.4 Where a SingTel Lead-in Manhole is situated within the building premises and the building owner had rejected the Requesting Licensee's request for reasonable trenching works for the SingTel Lead-in Manhole, the Requesting Licensee may, by providing the necessary evidence set out in clause 2.5, request SingTel to, in good faith, re-designate the closest available SingTel manhole to be the SingTel Lead-in Manhole. The re-designated SingTel manhole shall be "fit for purpose" for the Requesting Licensee's network deployment. For the avoidance of doubt, such re-designation shall not apply to SingTel Lead-in Manholes obstructed by non-building-related obstructions, such as SingTel Lead-in Manholes which are obstructed by external parties and/or elements (including but not limited to construction works of an external party).

2.5 The Requesting Licensee should, at minimum, submit the following as evidence:

- (i) Valid documentary evidence provided by the building owner stating the building owner's rejection of the Requesting Licensee's request for reasonable trenching works; and
- (ii) Demonstrate to SingTel that the Requesting Licensee has engaged the building owner in good faith and has put in reasonable effort to address the building owner's concerns with regard to the Requesting Licensee's request for reasonable trenching works.

3. ORDERING AND PROVISIONING PROCEDURE

3.1 The Requesting Licensee shall use the form in Annex 5A.5 to submit its Request for the use of Building Lead-in Ducts and access to SingTel's Lead-in Manholes (where applicable). The form shall be submitted on a Business Day (**Request Date**). For the purposes of this Schedule 5A, the Request Date shall be determined as follows:

- (a) if the Request is received before 12:00 pm on a Business Day, the Request Date is the Business Day on which the Request is received; or

(b) if the Request is received at or after 12:00 pm on a Business Day, the Request Date is the Business Day immediately following the Business Day on which the Request is received.

3.2 Not Used

3.3 SingTel shall process all Requests on a “first come first served” basis up to the maximum number specified in clause 3.4.

3.4 For each Business Day, SingTel shall process a combined total of no more than four (4) Requests from all Licensees and any subsequent Requests received on that Business Day shall overflow to the next Business Day. Subject to clause 3.1, subsequent Requests shall overflow to the next Business Day and SingTel shall inform the Requesting Licensee of that overflow within one (1) Business Day of the Request Date.

3.5 The Requesting Licensee shall pay the application fee specified in Schedule 9 regardless of whether its Request is successful or not.

4. STUDIES

4.1 Following receipt of a Request under clause 3, SingTel will review the Request to confirm that the form in Annex 5A.5 had been duly completed and there is no grounds for rejection. Where SingTel accepts the form in Annex 5A.5 and subsequently the Request, SingTel shall perform a desk study in respect of the Request to ascertain whether the Building Lead-in Duct and SingTel’s Lead-in Manhole are available (as determined in accordance with clause 2.2 and 2.3) on a preliminary basis.

4.2 Subject to clause 3.4, Requesting Licensee shall be notified within one (1) Business Day of the Request Date (calculated in accordance with clause 3.4), if the Requesting Licensee’s Request has been accepted, or rejected. If the Request is rejected, SingTel shall provide the reason(s) for such rejection to the Requesting Licensee.

4.3 SingTel may reject a Request made under clause 3 if:

(a) the Requesting Licensee is not an FBO;

(b) the Request is not in the prescribed form;

- (c) the Request does not contain all the required information; or
 - (d) the information in the Request is incorrect or inaccurate.
- 4.4 If SingTel notifies the Requesting Licensee that SingTel has accepted the Request, SingTel must complete its desk study and inform the Requesting Licensee of the in-principle approval of the Request (**In-Principle Approval**) or rejection within five (5) Business Days of the Request Date, taking into account the following:
- (a) whether the Building Lead-in Duct and SingTel's Lead-in Manhole is available as determined under clause 2.2 and 2.3; and
 - (b) SingTel's manhole records for the purpose of assessing the availability of the Building Lead-in Ducts or Building Lead-in Duct and SingTel's Lead-in Manhole.

SingTel shall inform the Requesting Licensee if copper cables are present either at the point of granting In-Principle Approval or Final Approval (or both), in order for the Requesting Licensee to make its own assessment on any potential short term and long term risks (including but not limited to co-existence risks due to the higher pulling tension and weight of copper cables over fibre cables, potential damage during deployment and SingTel's increasing activities on recovering copper cables).

The parties agree that the exclusions and limitation of liability as set out under clause 15 of the main body of this RIO Agreement shall apply to any and all Losses, including all Losses under, in connection or in relation to the copper cables or removal of the same, and all Losses in relation to a claim by the Requesting Licensee that may arise due to the act or omission of another party who had been granted a Licence as under clause 1.1 of this Schedule.

- 4.5 In the event SingTel informs the Requesting Licensee that the use of a requested Building Lead-in Duct or access to SingTel's Lead-in Manhole is not available, SingTel must provide reasons explaining the basis for its decision. Where such rejection is due to the Total Utilisation exceeding 70% or drawn from the RIO Duct Space Sharing Formula, SingTel shall provide Requesting Licensee with its calculation in support of this. Where available, SingTel must offer alternative Building Lead-in Duct or SingTel's Lead-in Manholes to the Requesting Licensee.
- 4.6 Where a Request is rejected pursuant to clause 4.5 above, the Requesting Licensee may choose to request for a Project Study no later than five (5) Business Days from the date of rejection of the Request. Late requests for the Project Study will not be accepted, and rejected Requests shall be deemed closed at the end of the five (5)

Business Day period. The Requesting Licensee shall submit its request for a Project Study to SingTel together with the aforementioned Request containing the reasons for the rejection.

- 4.7 SingTel shall proceed with the Project Study where In-Principle Approval is granted or a request for a Project Study is accepted in accordance with clause 4.6.
- 4.8 The Requesting Licensee acknowledges that the grant by SingTel of the In-Principle Approval does not require SingTel to reserve the Building Lead-in Duct and SingTel's Lead-in Manhole or make them be available at the time requested by the Requesting Licensee.
- 4.9 The Requesting Licensee agrees to pay the Project Study Charge specified in Schedule 9, regardless of whether the Request is successful or not.

5. PROJECT STUDY

- 5.1 Subject to clauses 1.5 and 5.2, the Project Study shall be completed within five (5) Business Days:-
 - (i) from the date of the In-Principle Approval;
 - (ii) from the date the Requesting Licensee accepts an alternative proposal under clause 4.5; or
 - (iii) from the date of Requesting Licence's request for Project Study, where Requesting Licensee has requested a Project Study pursuant to clause 4.6.
- 5.2 The Requesting Licensee must pay the Project Study fee specified in Schedule 9.

SingTel will liaise with the Requesting Licensee to schedule the Project Study, subject to the following conditions:

- (i) the grant of relevant approvals, consents and permits by the relevant authorities;
- (ii) the presence of site conditions which are conducive to the successful performance of the joint site survey; and
- (iii) the grant of access by building managers and/or owners to their developments and/or premises.

- 5.3 The Project Study shall include a joint site survey to be conducted by SingTel and the Requesting Licensee to enable SingTel and the Requesting Licensee to jointly assess the physical availability of the requested Building Lead-in Duct and access to SingTel's Lead-in Manhole (where applicable). For the purpose of the joint site survey, SingTel shall arrange for the SingTel contractor (without limiting the following): to go on-site to open and access the requested Building Lead-in Manhole, take photographs of the existing cables within the requested Building Lead-in Ducts, and identify the size and number of fibre and copper cables within each Building Lead-in Duct.
- 5.4 Within five (5) Business Days of the completion of the Project Study within the timeframe under clause 5.1, SingTel shall:
- (a) where the use of a Building Lead-in Duct and access to a SingTel's Lead-in Manhole (where applicable) are unavailable, notify the Requesting Licensee of the unavailability and provide reasons explaining the basis for its decision. Where such rejection is due to the Total Utilisation exceeding 70% or drawn from the RIO Duct Space Sharing Formula, SingTel shall provide Requesting Licensee with its calculation in support of this. Should the Requesting Licensee dispute the computation (based on actual ground data collected during the joint site survey), the Requesting Licensee may raise its concern to SingTel, or the Authority for cases which may require exceptional handling; or
 - (b) if the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) is available, SingTel shall notify the Requesting Licensee of its final approval (**Final Approval**) together with the following information:
 - (i) the Building Lead-in Ducts and SingTel's Lead-in Manhole (where applicable) which will be Licensed to the Requesting Licensee, identified by the number and location;
 - (ii) the date of provision;
 - (iii) where applicable, subject to clause 5.5 below, the Charges that SingTel would incur in the provision of the Connection Duct as specified in Schedule 9;
 - (iv) where applicable, the number of Connection Ducts approved;
 - (v) the Building Lead-in Ducts allocated (on a Lead-in Manhole fan-out diagram) to the Requesting Licensee; and

- (vi) where applicable, the direction and location of the Connection Duct;
- (vii) in accordance with clause 4.4(b), SingTel shall also inform the Requesting Licensee if copper cables are present.

5.5 In the event that the provision of the Connection Duct will result in SingTel incurring additional costs over and above the Charges specified in clause 5.4(b)(iii) above, SingTel may recover such costs from the Requesting Licensee provided:

- (i) the costs incurred by SingTel will relate to the work that SingTel needs to perform in order to provision the Connection Duct;
- (ii) before incurring the costs, SingTel will provide the Requesting Licensee with prior reasonable notice that the provision of the Connection Duct requires SingTel to undertake such work and such notice shall clearly and with sufficient detail set out a breakdown of the individual cost components and justification for incurring each cost component;
- (iii) based on the information set out in clause 5.5(ii), a binding quote to the Requesting Licensee in respect of the work to be undertaken by SingTel which shall be valid for a period of five (5) Business Days from the date they are notified to the Requesting Licensee by SingTel;
- (iv) SingTel shall obtain the prior approval of the Requesting Licensee to the costs noted in the notice within the time period under paragraph 5.5(iii) and if the Requesting Licensee does not provide its approval within that time period, clause 5.6 will apply; and
- (v) any dispute in respect of determining the reasonable costs set out in the notice shall be resolved in accordance with Schedule 11 of the RIO Agreement.

5.6 The Requesting Licensee shall provide its agreement to proceed with the construction of the Connection Duct within five (5) Business Days from the Final Approval and its agreement to pay the Charges, and any additional costs under clause 5.5, to be incurred in the construction of the Connection Duct. If the Requesting Licensee does not respond within this period, or informs SingTel that it is unwilling to incur such Charges or additional costs, or informs the SingTel of its intention to withdraw the request, SingTel shall not be obliged to proceed with the construction of the Connection Duct and shall not incur any of such Charges or additional costs and the Requesting Licensee's Request for the Building Lead-in

Duct and SingTel's Lead-in Manhole (where applicable) will be deemed to be withdrawn. For the avoidance of doubt, the Requesting Licensee shall remain liable for reasonable costs that SingTel has incurred until the date of withdrawal of the request.

- 5.7 Upon receipt of the Requesting Licensee's agreement, SingTel shall construct the Connection Duct within twenty (20) Business Days. If SingTel fails to meet the specified timeframe, SingTel must provide a remedy to the Requesting Licensee for the duration of the delay under clause 1.5.
- 5.8 If SingTel reasonably believes that it is unable to or it is likely to be unable to complete construction of the Connection Duct within the specified timeframe in clause 5.7, SingTel must notify the Requesting Licensee as soon as practicable (but in any event, before the expiry of the timeframe specified in clause 5.7) and provide a revised timeframe in which construction will be completed. Any extension of time under this clause 5.8 shall not prejudice the Requesting Licensee's right to receive a remedy in accordance with clause 5.7 for the duration of the delay under clause 1.5.
- 5.9 SingTel shall use its best endeavours to construct the Connection Duct within its price specified in clauses 5.4(b)(iii) and 5.5. Where SingTel requires a revision of costs from time to time due to circumstances beyond its reasonable control, SingTel must comply with clause 5.5.
- 5.10 SingTel will advise the Requesting Licensee when the construction of Connection Duct is completed (**Completion Date**). The Requesting Licensee shall connect its duct to the Connection Duct within twenty-five (25) Business Days from the Completion Date. If the Requesting Licensee does not connect its duct to the Connection Duct within this period, the Requesting Licensee's Request will lapse. If the Requesting Licensee's failure to complete connection is attributable to circumstances beyond the Requesting Licensee's reasonable control, SingTel will grant a reasonable extension of time for installation to the Requesting Licensee at the Requesting Licensee's request (**Extension Period**). A Requesting Licensee's request under this clause must describe the circumstances beyond the Requesting Licensee's control and such request must be received prior to the expiry of the aforementioned twenty-five (25) Business Day period. SingTel must respond to a Requesting Licensee's request under this clause within two (2) Business Days from the date of receipt of such a request. If the Requesting Licensee does not connect its duct to the Connection Duct within the Extension Period, the Requesting Licensee's Request will lapse.

- 5.11 The Requesting Licensee shall inform SingTel when the connection of its duct to the Connection Duct is completed.

6. INSTALLATION OF UNDERGROUND EQUIPMENT

- 6.1 The Requesting Licensee shall submit to SingTel its request to install Underground Equipment through the allocated Building Lead-in Duct and to physically access SingTel's Lead-in Manhole (where applicable) at least five (5) Business Days in advance and in any case, within thirty (30) Business Days from the Completion Date. Where SingTel does not own or control the associated Lead-in Manhole and the Requesting Licensee has acquired access to the Lead-in Manhole from a third party, the Requesting Licensee shall submit to SingTel its request to install Underground Equipment through the allocated Building Lead-in Duct at least five (5) Business Days in advance and in any case, within one hundred and twenty (120) Calendar Days from the date of the Final Approval.
- 6.2 If the Requesting Licensee does not apply for, or complete, installation of its Underground Equipment in accordance with clause 6.1, SingTel may, by notice, terminate the Requesting Licensee's Request.
- 6.3 In its request under clause 6.1, the Requesting Licensee shall specify a plan which sets out:
- (a) the identity of the senior person who will be present;
 - (b) where applicable, the list of staff, contractors or agent that would be physically accessing SingTel's Lead-in Manhole for installation works;
 - (c) the installation time table specifying the date(s) and an estimate of the duration for which cable pulling work is requested;
 - (d) the location and/or site plan of the Requesting Licensee's duct at and around the location of the Lead-in Manhole at which installation of the Underground Equipment is requested;
 - (e) the number of cables to be installed in each allocated Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), and the cable type and size of each cable;

- (f) the installation method and the position of each cable comprising the Underground Equipment described in the Lead-in Manhole fan-out diagram for each Lead-in Manhole; and
 - (g) a detailed work method statement (including how the Requesting Licensee can prevent damage to SingTel's existing cables, equipment and facilities found inside the Lead-in Manhole) for cable and sub-duct pulling consistent with SingTel's guidelines set out in Annex 5A.10 for SingTel's approval.
- 6.4 Any installation plan submitted under clause 6.3 is:
- (a) subject to SingTel's approval; and
 - (b) must be consistent with each relevant Annex to this Schedule 5A.
- 6.5 The Requesting Licensee must not commence the cable installation until it has received SingTel's approval for the installation of the Underground Equipment.
- 6.6 Within three (3) Business Days of the receipt of request submitted under clause 6.1, SingTel shall review the submitted request and state whether installation is approved on the requested date and duration or not. SingTel shall not unreasonably reject such request.
- 6.7 If SingTel notifies the Requesting Licensee of its approval for the cable installation request under clause 6.6, the Requesting Licensee shall complete the installation of the Underground Equipment in the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) within twenty-five (25) Business Days of SingTel's approval. If the Requesting Licensee's failure to complete installation is attributable to circumstances beyond the Requesting Licensee's reasonable control, SingTel will grant a reasonable extension of time for installation to the Requesting Licensee at the Requesting Licensee's request (**Extension Period**). A Requesting Licensee's request under this clause must describe the circumstances beyond the Requesting Licensee's control and such request must be received prior to the expiry of the aforementioned twenty-five (25) Business Day period. SingTel must respond to a Requesting Licensee's request under this clause 6.7 within two (2) Business Days from the date of receipt of such a request. If the Requesting Licensee does not complete the installation of Underground Equipment within the Extension Period, the Requesting Licensee's Request will lapse.
- 6.8 Where approval is withheld, or amendments are required by SingTel, SingTel shall consult the Requesting Licensee and propose an alternative installation schedule to

the Requesting Licensee. The Requesting Licensee shall pay SingTel the Charges for the processing of the application for cable installation under clause 6.1 regardless of whether the application is successful or not.

- 6.9 If the Requesting Licensee cancels or postpones the installation date, it shall pay SingTel the reasonable costs that SingTel has incurred up to the point of cancellation including but not limited to the cancellation charge specified in Schedule 9.
- 6.10 The Requesting Licensee shall notify SingTel on completion of the installation under this clause and submit to SingTel within ten (10) Business Days from its completion of cable installation, the work completion report which comprises of the following:
- (a) the identification number for the Lead-in Manhole;
 - (b) the start date and time at which physical access is carried out;
 - (c) the end date and time at which physical access is carried out;
 - (d) photographs of the Lead-in Manhole side wall showing the entry and the exit position of the cables inside the Lead-in Manhole and the Building Lead-in Duct(s) used;
 - (e) photograph(s) of the approved Underground Equipment showing the Underground Equipment including the cable identification code for each cable (which should be clearly labelled visible on the cable sheath);
 - (f) where a Building Lead-in Duct seal is available for the Lead-in Manhole, photograph(s) of the Building Lead-in Duct seal inside the Lead-in Manhole showing that the Building Lead-in Duct seal was properly sealed; and
 - (g) where applicable, photograph(s) of the Lead-in Manhole cover showing that the Lead-in Manhole cover is properly closed after the physical access. The Lead-in Manhole cover is properly closed if it is flush with its frame and the existing ground level when closed. The Lead-in Manhole number should also be clearly printed.
- 6.11 If the Requesting Licensee fails to submit its work completion report in accordance with clause 6.10, SingTel shall proceed with the verification of work completion after the expiry of the timeframe in clause 6.7 or on completion of the installation of the Underground Equipment whichever is the earlier. The reasonable cost

incurred will be recovered from the Requesting Licensee. If the Requesting Licensee's failure to submit its work completion report is due to circumstances beyond the Requesting Licensee's reasonable control, SingTel will grant a reasonable extension of time for submitting the work completion report at the Requesting Licensee's request (**Extension Period**). A Requesting Licensee's request under this clause must describe the circumstances beyond the Requesting Licensee's reasonable control and such request must be received prior to the expiry of the time period under clause 6.10. SingTel must respond to a Requesting Licensee's request under this clause 6.11 within two (2) Business Days from the date of receipt of such request.

- 6.12 If any photograph provided in the work completion report is not clear or, in SingTel's reasonable view, not adequate to demonstrate that the installation of the Underground Equipment is installed in accordance with the installation plan and the Standard Operating Procedures contained in Annexes 5A.2 and 5A.4, SingTel shall, within ten (10) Business Days from the receipt of the report, reject the submission and require the Requesting Licensee to re-submit the work completion report within ten (10) Business Days from the date SingTel informs the Requesting Licensee of its rejection, failing which SingTel shall proceed with the verification of work completion and take such corrective action necessary. SingTel shall recover the reasonable cost incurred from the Requesting Licensee.
- 6.13 SingTel may at its own discretion, carry out an inspection to confirm that the installations conform to the approved installation plans and the Standard Operating Procedures. Where the inspection reveals that the installation does not conform to the approved installation plan in a significant manner which disadvantages SingTel or jeopardises SingTel's plant, SingTel shall inform the Requesting Licensee to reinstall or take other corrective action within a reasonable time as required by SingTel, but in any event within ten (10) Business Days. The Requesting Licensee shall bear all reasonable costs for reinstallation and corrective action, and the reasonable costs incurred by SingTel for inspection of the corrective action and installation. If the Requesting Licensee fails to take appropriate corrective action, SingTel may withdraw physical access or undertake the appropriate corrective action and recover the reasonable cost from the Requesting Licensee accordingly.
- 6.14 Before the installation of Underground Equipment, the Requesting Licensee may cancel any request or approval for the use of the Building Lead-in Duct and/SingTel's Lead-in Manhole (where applicable) upon written notice to SingTel. SingTel may charge an administrative fee as detailed in Schedule 9 for processing such cancellation as well as the reasonable cost that SingTel incurred up to the point of cancellation.

7. REPLACEMENT OF UNDERGROUND EQUIPMENT

7.1 If the Requesting Licensee wishes to replace or modify existing Underground Equipment located in the Building Lead-in Duct or SingTel's Lead-in Manhole (**Modified Underground Equipment**), the Requesting Licensee must submit a request in respect of that Modified Underground Equipment. The Requesting Licensee shall be liable for the costs incurred by SingTel in processing a request for Modified Underground Equipment under this clause 7.1 as specified in Schedule 9. The request for Modified Underground Equipment must contain the following information:

- (a) Purpose of replacement or modification;
- (b) Date, time and duration of replacement or modification;
- (c) Detailed description of works and process to be carried out at the Lead-in Manhole;
- (d) Underground Equipment to be installed, replaced or modified;
- (e) Any assistance required from SingTel (subject to approval and charges);
- (f) A description of the precautions on how the Requesting Licensee would ensure that the replacement or modification would not affect any existing plant or equipment; and
- (g) Any other information which the Requesting Licensee believes would be useful to SingTel in assessing the Requesting Licensee's request.

7.2 Within five (5) Business Days of the receipt of the request for Modified Underground Equipment, SingTel must notify the Requesting Licensee whether its request for Modified Underground Equipment is accepted or rejected. If SingTel does not meet the timeframe under this clause 7.2, it shall provide the Requesting Licensee with a remedy for the duration of the delay under clause 1.5. SingTel may reject the request for Modified Underground Equipment if SingTel reasonably believes that:

- (a) the replacement or modification reasonably affects any existing plant or equipment; and
- (b) the Requesting Licensee has, in SingTel's reasonable opinion, not complied with clause 7.1.

8. ACCESS TO BUILDING LEAD-IN DUCT THROUGH SINGTEL'S LEAD-IN MANHOLE

- 8.1 Where necessary the Requesting Licensee will arrange access to one riser via a Lead-in Manhole. The Requesting Licensee will distribute its Underground Equipment from that riser to other risers within the building via horizontal trunking subject to approval from building owners, Housing Development Board (HDB) and the Town Council as appropriate.
- 8.2 Where clause 8.1 is not feasible, the Requesting Licensee may apply for access to the risers via another Lead-in Manhole and SingTel will not unreasonably reject such an application by a Requesting Licensee.

9. STANDARD TERMS AND CONDITIONS

- 9.1 SingTel will provide the use of the Building Lead-in Duct and access to SingTel's Lead-in Manhole (where applicable) on an "as-is-where-is" basis.
- 9.2 The Requesting Licensee is responsible for the construction and maintenance of its Network including its Underground Equipment. SingTel will be responsible for maintaining and administering the use of Building Lead-in Ducts and access to SingTel's Lead-in Manholes under this Schedule.
- 9.3 If in the course of installation, operation, maintenance, replacement or repair of its Underground Equipment, the Requesting Licensee detects a defect or problem in SingTel's Underground Equipment, plant, Facilities, Building Lead-in Duct or SingTel's Lead-in Manhole, the Requesting Licensee shall, as soon as practicable, notify SingTel of the relevant manhole number and provide a description of the defect or problem.
- 9.4 The Requesting Licensee may request that SingTel perform maintenance work on any affected Building Lead-in Duct or SingTel's Lead-in Manhole to rectify any defect or problem. If SingTel, acting reasonably, considers that the defect or problem affects or is likely to affect the Requesting Licensee's use of the relevant Building Lead-in Duct or SingTel's Lead-in Manhole, SingTel shall within five (5) Business Days of receipt of a request for maintenance work provide the Requesting Licensee with an estimate of the time that SingTel will take to complete the maintenance work including the estimated time needed to obtain any necessary approval from a third party under clause 9.5 (**First Response**).
- 9.5 SingTel shall commence maintenance work on the Building Lead-in Duct and SingTel's Lead-in Manhole within five (5) Business Days of the provision of the

First Response under clause 9.4, except where SingTel must obtain the consent, approval or permission of a third party to conduct such maintenance work, in which case:

- (a) within three (3) Business Days of the provision of the First Response under clause 9.4, SingTel shall apply to the third party for the relevant consent, approval or permission; and
- (b) upon receipt of the relevant consent, approval or permission from the third party, commence the maintenance work within five (5) Business Days of the receipt of such consent, approval or permission.

9.6 SingTel must complete the maintenance work within the timeframe notified to the Requesting Licensee under clause 9.4. If SingTel fails to complete the maintenance work within the timeframe notified under clause 9.4, SingTel shall:

- (a) as soon as reasonably practicable (but in any event, no later than five (5) Business Days before the expiry of the notified timeframe), notify the Requesting Licensee of a revised date for completion of the maintenance work; and
- (b) provide a rebate to the Requesting Licensee for a period equal to period of delay in accordance with clause 1.5.

9.7 For the avoidance of doubt:

- (a) a revised timeframe for the completion of maintenance work under clause 9.6(a) shall not prejudice the Requesting Licensee's ability to obtain a rebate under clause 9.6(b) in accordance with clause 1.5; and
- (b) if SingTel fails to complete the maintenance work within the timeframe notified to the Requesting Licensee under clause 9.4 due to events outside SingTel's reasonable control, such failure to meet the timeframes shall not constitute a breach of this Schedule or this RIO Agreement, provided that SingTel notifies the Requesting Licensee as soon as practicable upon the occurrence of such event, stating the cause of the events and specifying a new date for the completion of maintenance work by extending the relevant timeframes for a period equal to the period of such delay.

9.8 The Requesting Licensee must:

- (a) take such action as a reasonably prudent Licensee would;

- (b) keep the Lead-in Manhole and its surrounding area free of debris and in a tidy and safe condition;
- (c) ensure that no flammable or toxic material is left in or around the Lead-in Manhole; and
- (d) correct or remove any fault, defect or problem with its Underground Equipment that may jeopardise the SingTel's Building Lead-in Duct, Lead-in Manhole or Underground Equipment, plant, or Facilities.

9.9 If a fault, defect or problem with the Underground Equipment of the Requesting Licensee causes or may cause damage to SingTel's Building Lead-in Duct, Lead-in Manhole or Underground Equipment, the Requesting Licensee must:

- (a) notify SingTel as soon as practicable; and
- (b) repair the fault, defect or problem or take other corrective action immediately.

9.10 Where SingTel reasonably determines that the Requesting Licensee's Underground Equipment poses an immediate risk of personal injury or significant property damage, it may, at the Requesting Licensee's cost, take any interim measure necessary to prevent such injury or damage, pending attendance by the Requesting Licensee to perform corrective work.

9.11 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 Building Lead-in Duct and/or SingTel's Lead-in Manhole.

9.12 SingTel is not responsible for the maintenance of the owner's portion of the Building Lead-in Duct.

10. ACCESS AND APPROVALS REQUIRED

10.1 The Parties shall comply with clause 16.5 of the main body of this RIO Agreement in relation to the obtaining of all licences, permits, consents, waivers, authorisations and intellectual property or other rights required for the provision of the Licensed Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable).

11. UNAUTHORISED ACCESS TO SINGTEL'S UNDERGROUND PLANT

11.1 Without prejudice to any other rights SingTel may have (whether under contract, at law, or in equity), where SingTel identifies that the Requesting Licensee has accessed its Building Lead-in Duct and / or SingTel's Lead-in Manhole without having obtained approval in accordance with this Schedule, SingTel may do any one or more of the following:

- (a) subject to notifying the Authority that a material breach of this Schedule 5A has occurred and obtaining an order from the Authority under clause 12.2 or 13.2 of the RIO Agreement (as the case may be) for SingTel to suspend or terminate this Schedule 5A, SingTel may suspend or terminate this Schedule 5A;
- (b) direct the Requesting Licensee to, within five (5) Business Days of the notice, remove its equipment from the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable); and/or
- (c) direct the Requesting Licensee to, within two (2) Business Days of the notice, submit a Request in accordance with clause 3 of this schedule 5A.

11.2 The Requesting Licensee must pay the reasonable costs incurred by SingTel in investigating the unauthorised access.

11.3 SingTel will assess the Request under clause 11.1(c) in accordance with clauses 4 and 5.

11.4 If the Requesting Licensee does not remove its equipment within five (5) Business Days of the notice under clause 11.1(b), SingTel may remove the equipment and the Requesting Licensee shall be liable for any reasonable costs associated with its removal.

11.5 If the Requesting Licensee is directed to submit a Request under clause 11.1(c), the Requesting Licensee must provide documentary evidence of the date of installation as part of the Request for Building Lead-in Duct and Lead-in Manhole. If the Requesting Licensee is unable to provide credible documentary evidence substantiating the date of installation, the date of access shall be deemed to be the Effective Date of this RIO Agreement.

11.6 Where SingTel approves the Request under clause 11.1(c) of the Schedule, the Requesting Licensee must pay, within ten (10) Business Days from the date of approval, SingTel's reasonable costs incurred in investigating the unauthorised

access, and the Charges in arrears calculated from the date of access (including the date of deemed access under clause 11.5 in accordance with Schedule 9.

- 11.7 If SingTel rejects the Request under clause 11.1(c) of the Schedule, the Requesting Licensee must pay, within ten (10) Business Days from the date of rejection, SingTel's reasonable costs incurred in investigating the unauthorised access, and the Charges in arrears calculated from the date of access (including the date of deemed access under clause 11.5 in accordance with Schedule 9 and the Requesting Licensee must discontinue the use of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and remove its Underground Equipment within five (5) Business Days.

12. PHYSICAL ACCESS PROCEDURE

- 12.1 When installing, accessing, operating or working around SingTel's Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), the Requesting Licensee must comply with:

- (a) physical access procedures for Underground Plant in Annex 5A.3 as amended from time to time by SingTel;
- (b) the Standard Operating Procedures in Annex 5A.2 and 5A.4 as amended by SingTel from time to time;
- (c) all relevant codes and standards issued by the Authority or any other relevant Governmental Agency from time to time; and
- (d) any reasonable written instructions provided to the Requesting Licensee by SingTel relating to particular circumstances not covered by the Standard Operating Procedures.

13. PROTECTION AND SAFETY

- 13.1 The Requesting Licensee is responsible for the safe operation of its Network and shall be responsible for the safe operation of its Underground Equipment and shall, so far as reasonably practicable, take all necessary steps to ensure that its Underground Equipment and its use of the Building Lead-in Duct and / or the Lead-in Manhole:

- (a) does not endanger the safety of any person, including the employees, contractors, customers or third persons;

- (b) does not cause or is not likely to cause physical or technical harm to any telecommunications network, system or services including but not limited to causing damage, interfering with or causing deterioration in the operation of SingTel's Network or Facilities or creates a security risk; and
- (c) does not threaten the security and accessibility of SingTel's Building Lead-in Duct or the Lead-in Manhole.

13.2 The Requesting Licensee shall report immediately any incident, injury or harm, fatal or otherwise, that occurs at the site to SingTel and the relevant authority. For any fatal or serious accident, the accident site shall be left undisturbed to facilitate the relevant authority to investigate the circumstances leading to the accident. The Requesting Licensee shall report immediately to the Ministry of Manpower, the police and the insurance company of any fatal accident having occurred at 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 Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof.

13.3 The Requesting Licensee certifies that all work to be performed by the Requesting Licensee where access has been approved is performed by appropriately qualified, skilled and trained personnel.

14. MARKING OF UNDERGROUND EQUIPMENT

14.1 The Requesting Licensee must mark its Underground Equipment located in Building Lead-in Ducts and SingTel's Lead-in Manholes (where applicable), so as to clearly identify it as belonging to the Requesting Licensee and otherwise in accordance with SingTel's reasonable directions issued from time to time.

15. REQUESTING LICENSEE RIGHTS

15.1 The approval and provision of sharing does not vest in the Requesting Licensee any right, title or proprietary interest in the relevant Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable).

16. TERM OF LICENCE

16.1 The term of the Licensee's Licence shall commence on the Completion Date of the relevant Connection Duct in respect of that Building Lead-in Duct and SingTel's Lead-in Manhole or the date of the Final Approval (in the case where SingTel does not own or control the associated Lead-in Manhole and the Requesting Licensee has acquired access to the Lead-in Manhole from a third party), and shall continue for the term of the RIO Agreement until the earlier of any of the following events:

- (a) either party terminates the Licence in accordance with clause 18 of this Schedule;
- (b) the SingTel RIO is revoked by the Authority under clause 13.7 of the RIO Agreement;
- (c) the Authority removes the requirement for SingTel to supply the right to use Building Lead-in Ducts and access to SingTel's Lead-in Manholes (where applicable) under the SingTel RIO or exempts SingTel from supplying the right to use Building Lead-in Ducts and access to SingTel's Lead-in Manholes (where applicable) under clause 13.8 of the RIO Agreement; or
- (d) subject to clause 15.2, the Requesting Licensee terminates the Licensee's Licence by giving SingTel not less than one (1) month's prior written notice.

16.2 The Requesting Licensee may terminate the Licence on less than one (1) month's prior written notice provided that the Requesting Licensee shall be liable to SingTel for the recurring fees for that Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) for the period between the date of termination and the date that is one month after the notice of termination.

17. SUSPENSION OF LICENCE

17.1 Subject to clause 12.2 of the main body of this RIO Agreement, SingTel may suspend the Requesting Licensee's licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) until further notice if the Licence in respect of the Building Lead-in Duct and/or the Lead-in Manhole causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of SingTel or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the SingTel Network.

- 17.2 SingTel may carry out repairs or upgrades to any Building Lead-in Duct and SingTel's Lead-in Manhole by giving fourteen (14) Calendar Days' notice to the Requesting Licensee (such repair or upgrades to be assessed and performed on the same criteria as SingTel provides to itself, its affiliates and Customers).
- 17.3 Without limiting the exclusions or limitations of liability in this RIO Agreement, SingTel shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of access to the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) under this clause.
- 17.4 Where the suspension is due to the fault of the Requesting Licensee, the Requesting Licensee must compensate SingTel for the reasonable cost it incurs in lifting the suspension after the Requesting Licensee has rectified its fault.

18. TERMINATION OF LICENCE

- 18.1 SingTel may terminate the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) at any time with immediate effect by giving notice to the Requesting Licensee if the Requesting Licensee fails to complete the installation of its Underground Equipment within twenty-five (25) Business Days under this Schedule. If the Requesting Licensee's failure to complete installation is attributable to circumstances beyond the Requesting Licensee's reasonable control, SingTel will grant a reasonable extension of time for installation to the Requesting Licensee at the Requesting Licensee's request (**Extension Period**). A Requesting Licensee's request under this clause must describe SingTel's actions or the circumstances beyond the Requesting Licensee's control and such request must be received prior to the expiry of the aforementioned twenty-five (25) Business Day period. SingTel must respond to the Requesting Licensee's request under this clause within two (2) Business Days from the date of receipt of such request. If the Requesting Licensee does not complete the installation of the Underground Equipment within the Extension Period, the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) will be terminated.
- 18.2 Subject to clause 13.2 of the main body of this RIO Agreement, SingTel may immediately terminate the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) if:
- (a) the Requesting Licensee is no longer an FBO;

- (b) in SingTel's reasonable opinion, the Requesting Licensee is using the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) in contravention of an applicable law, licence, code, regulation or direction and SingTel has the necessary confirmation from the relevant Governmental Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
- (c) the Requesting Licensee's Underground Equipment is used for a purpose other than for the purpose of the Requesting Licensee providing telecommunication services to the Requesting Licensee's Customers;
- (d) the Requesting Licensee locates equipment other than Underground Equipment in the Building Lead-in Duct and/ SingTel's Lead-in Manhole (where applicable);
- (e) the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) have become unsafe for its purpose;
- (f) SingTel's right to own, control, maintain or operate the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) is revoked or terminates or expires;
or
- (g) the use of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of SingTel or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of SingTel's Network.

18.3 Subject to clause 13.2 of the main body of this RIO Agreement, SingTel may terminate the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) after giving the Requesting Licensee ten (10) Business Days' prior written notice if the Requesting Licensee removes or abandons its Underground Equipment and the Requesting Licensee did not dispute such written notice by SingTel.

18.4 Subject to clause 13.2 of the main body of this RIO Agreement, either Party (**Terminating Party**) may terminate the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) if the other Party is in breach of this Schedule and such breach remains un-remedied for a period of:

- (a) seven (7) Calendar Days after receiving notice from the Terminating Party to do so, if the breach is a service affecting breach; and

(b) fourteen (14) Calendar Days after receiving notice from the Terminating Party to do so, if the breach is a non-service affecting breach (including but not limited to failure to pay any sum for which the Requesting Licensee has been Invoiced).

18.5 Subject to clause 13.2 of the main body of this RIO Agreement, if SingTel has plans or otherwise proposes to decommission a Building Lead-in Duct and/or a SingTel's Lead-in Manhole, SingTel must provide the Requesting Licensee with at least six (6) months' prior notice of its intention to terminate the sharing of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable).

18.6 Subject to clause 13.2 of the main body of this RIO Agreement, at any time during the term of access to the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), if access to that Building Lead-in Duct or SingTel's Lead-in Manhole is to be terminated because of the closure of a POA or Building MDF room, SingTel must give the Requesting Licensee at least six (6) months' prior notice before such event and if SingTel is unable to give such notice for circumstances beyond SingTel's reasonable control, SingTel must notify the Requesting Licensee as soon as reasonably practicable upon being aware of any pending closure of the POA or the Building MDF room. SingTel shall take reasonable measures to minimise the disruptions to the Requesting Licensee's operations that may result from the termination of access to the Building Lead-in Duct or SingTel's Lead-in Manhole. The Requesting Licensee shall bear its own costs associated with the closure of the POA or Building MDF room and the termination of the Licence to Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), and the Requesting Licensee shall solely be responsible for making such alternative arrangements as are necessary to continue to provide its customers with services. In the event that the Requesting Licensee requests assistance from SingTel within thirty (30) Business Days after receiving a notice under this clause to provide an alternative solution to the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) which is being terminated, SingTel shall use its reasonable endeavours to assist the Requesting Licensee in finding suitable alternatives to the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) that is the subject of termination provided that nothing in this clause shall restrict SingTel's right to terminate under this clause 18 and that the ultimate responsibility to find an alternative lies with the Requesting Licensee.

19. EXPIRY OF TERM OF LICENCE

19.1 Upon expiry or termination of the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), the Requesting Licensee must

discontinue the use of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and remove its Underground Equipment immediately.

- 19.2 Where the Requesting Licensee fails to discontinue the use of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and to remove its Underground Equipment, SingTel shall remove the Underground Equipment and the Requesting Licensee shall pay all reasonable costs associated with its removal.
- 19.3 Upon expiry or termination of the Licence in respect of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) and the removal of the Requesting Licensee's Underground Equipment, SingTel shall verify and restore the state of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable). The Requesting Licensee shall pay all reasonable costs incurred by SingTel in verifying and restoring the state of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable), including the costs of updating SingTel's records, other than in circumstances where the Requesting Licensee's discontinuation of the use of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) is a direct result of SingTel's decommissioning of the Building Lead-in Duct and/or SingTel's Lead-in Manhole under this Schedule 5A.
- 19.4 If this Schedule or this RIO Agreement is terminated for any reason, any Licence of Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) is also terminated.
- 19.5 The Requesting Licensee shall pay the termination fee specified in Schedule 9 for the termination of the Licence of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) other than in circumstances where the Requesting Licensee's termination of the Licence of the Building Lead-in Duct and SingTel's Lead-in Manhole (where applicable) is a direct result of SingTel's decommissioning of the Building Lead-in Duct and/or SingTel's Lead-in Manhole under this Schedule 5A.
- 19.6 For the avoidance of doubt, the Requesting Licensee's right to physical access to the Building Lead-in Duct and/or SingTel's Lead-in Manhole shall terminate upon the termination of the Licence of Building Lead in Duct and SingTel's Lead-in Manhole (where applicable).

20. SUB-LICENSING

20.1 The Requesting Licensee must not assign the Licence in respect of or sub-let the Building Lead-in Duct and/ SingTel's Lead-in Manhole (where applicable) Licensed under this Schedule.

21. SINGTEL CEASES TO OWN OR CONTROL A LEAD-IN MANHOLE

21.1 If SingTel ceases to own or control a Lead-in Manhole licensed under this Schedule 5A, SingTel:

- (a) will notify the Requesting Licensee of that event; and
- (b) may terminate by written notice the Licence to the affected Building Lead-in Duct(s) and Lead-in Manhole(s) under this Schedule 5A in which case clause 21.2 will apply,

and the Requesting Licensee:

- (c) hereby consents to; and
- (d) will execute such documents, and take such other steps, as are reasonably necessary to give effect to,

the Licence termination in clause 21.1(b).

21.2 In the event of a Licence termination under clause 21.1(b):

- (a) SingTel shall deliver to the Requesting Licensee, concurrently with the written notice of termination, a further written notice stating that SingTel will, at the Requesting Licensee's election within a reasonable stipulated timeframe, provide to the Requesting Licensee a new Licence for the use of the affected Building Lead-in Duct(s); and
- (b) unless the Requesting Licensee elects not to receive a new Licence as provided for in paragraph 21.2(a) or fails to make an election within the stipulated timeframe, the Requesting Licensee shall not by reason of the Licence termination be required to remove, whether temporarily or otherwise, its Underground Equipment from the affected Building Lead-in Duct(s).

ANNEX 5A.1

SERVICE LEVEL GUARANTEES

1. REBATES FOR BUILDING LEAD-IN DUCT AND ACCESS TO SINGTEL' SLEAD-IN MANHOLE (WHERE APPLICABLE) REQUEST TIMEFRAMES

Missed notification timeframe as to whether Request is accepted or rejected (clause 4.2) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

2. REBATES FOR IN-PRINCIPLE APPROVAL

Missed notification timeframe as to whether In-Principle Approval is granted or rejected (clause 4.4) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

3. REBATES FOR PROJECT STUDY TIMEFRAMES

Missed timeframe for completion of Project Study (clause 5.1) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

4. REBATES FOR CONNECTION DUCT TIMEFRAMES

Missed timeframe for completion for Connection Duct (clause 5.7) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

5. REBATES FOR MAINTENANCE WORK TIMEFRAMES

Missed timeframe for completion of Maintenance Work (clause 9.4) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

6. REBATES FOR MODIFIED UNDERGROUND EQUIPMENT TIMEFRAMES

Missed timeframe for processing of request for Modified Underground Equipment (clause 7.2) by:	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

7. CLAIM PROCEDURES

- (a) A claim by the Requesting Licensee shall be made in writing within fourteen (14) Calendar Days of the completion of the relevant Calendar Month on which the Service Level Guarantees are measured. The amount in respect of any claim shall be paid to the Requesting Licensee in the form of a rebate. The Requesting Licensee acknowledges that a failure to make a claim within the specified timeframes under this paragraph means that the Requesting Licensee waives any entitlement to the Service Level Guarantee payment in respect of that claim.
- (b) If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, then the amount of the rebate will be credited into the Requesting Licensee’s account after it has been processed by SingTel and will be reflected in SingTel’s bill to the Requesting Licensee in accordance with SingTel’s billing cycle.
- (c) The guarantee and rebates provided by SingTel under this Annex 5A.1 are:
 - (i) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
 - (ii) subject to this Schedule.

- (d) Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim under this Annex 5A.1, SingTel shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies for a claim or as to the quantum of the claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 11 of the RIO, or in the case of a Billing Dispute, in accordance with Schedule 10 of the RIO.

ANNEX 5A.2

SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD-IN DUCT AND THE LEAD-IN MANHOLE

- (a) The Requesting Licensee will purchase service layout plans from SingTel in respect of each Lead-in Manhole to which access is provided under this Schedule.
- (b) The Requesting Licensee will submit an earthwork notification form to SingTel within seven (7) days before the commencement of earthwork in accordance with section 29(1) of the Act.
- (c) When working in or around the vicinity of SingTel's Underground Plant, the Requesting Licensee will engage licensed telecommunications cable detection workers to detect SingTel's Underground Plant and carry out trial holes by manual digging to expose SingTel's Underground Plant in order to determine the depth and alignment of SingTel's Underground Plant.
- (d) If necessary, a site meeting may be arranged at the Requesting Licensee's cost to co-ordinate the routing of the Requesting Licensee's ducts.
- (e) The Requesting Licensee will carry out trial holes by manual digging when working in or near the vicinity of SingTel's Underground Plant to determine the depth and the alignment of SingTel's Underground Plant.
- (f) At the Requesting Licensee's cost, the Requesting Licensee may seek SingTel's assistance to ascertain the location of SingTel's Underground Plant. The Requesting Licensee may also provide visible markings (such as poles, tapes, painting, etc.) to indicate the estimated position of SingTel's Underground Plant for SingTel's confirmation.
- (g) The Requesting Licensee will submit to SingTel the method of support and protection to the exposed SingTel's Underground Plant for SingTel's concurrence.
- (h) If necessary, the Requesting Licensee will sever tree roots before grubbing the tree stump, subject to approval from relevant authorities.
- (i) The Requesting Licensee will inform SingTel regarding the dismantling of supports.

- (j) The Requesting Licensee will inform SingTel regarding the back-filling procedure over SingTel's Underground Plant.
- (k) The Requesting Licensee will disseminate information regarding SingTel's service layout to the Requesting Licensee's contractors, sub-contractors and machine operators carrying out the work.
- (l) The Requesting Licensee will submit a work schedule and installation plan to SingTel where works are to be carried out in the vicinity of SingTel's Underground Plant.
- (m) The Requesting Licensee will report immediately on any damage to SingTel Underground Plant at a designated telephone number.
- (n) The Requesting Licensee shall not dig trial holes using JCB or excavator.
- (o) The Requesting Licensee will not carry out any excavation, soil investigation, piling or earthworks in the vicinity of SingTel's Underground Plant without confirming the actual positions of SingTel's Underground Plant.
- (p) The Requesting Licensee will not cover up any of SingTel's Lead-in Manholes with earth or building materials.
- (q) The Requesting Licensee will not take for granted that SingTel's cables are in a straight run.
- (r) The Requesting Licensee will not cover up or attempt to repair any damages to SingTel's Underground Plant but is to report such damages to SingTel immediately.
- (s) The Requesting Licensee will not dismantle any support for SingTel's Underground Plant without informing SingTel and obtaining SingTel's consent.
- (t) The Requesting Licensee must not assume that the depth of SingTel's Underground Plant is not deeper than 1.5 metres.
- (u) The Requesting Licensee will not remove any concrete encasement around SingTel's pipeline after exposing it unless approval from SingTel is given.

- (v) SingTel may, when required, issue reasonable “Do’s and Don’ts” to the Requesting Licensee so as to safeguard SingTel’s Underground Plant and the Requesting Licensee shall comply with such “Do’s and Don’ts”.

ANNEX 5A.3 - PHYSICAL ACCESS PROCEDURE FOR LEAD-IN MANHOLE

1 GENERAL

- 1.1 The physical access procedures are applicable to all SingTel Lead-in Manholes for which sharing has been approved for the installation, operation and maintenance of Requesting Licensee's Underground Equipment installed within, attached to or sited upon that Lead-in Manhole, subject to and in accordance with this Annex.
- 1.2 The Requesting Licensee shall provide to SingTel a master list of persons nominated by it to have physical access to Lead-in Manhole for which sharing has been approved by the SingTel in accordance with the prescribed form in Annex 5A.9. The master list shall contain, without limitation, for each person, the following details:
 - (a) full name; and
 - (b) company name and license no.; and
 - (c) last four characters of IC/Passport no.; and
 - (d) a copy of Safety Instruction Course (**SIC**)/Safety Orientation Course (**SOC**) Certificate and its expiry date.
 - (e) Not Used
 - (f) Not Used
- 1.3 The master list provided under clause 1.2 shall be maintained and updated by the Requesting Licensee with a new master list provided to SingTel whenever any amendments are made to the master list.
- 1.4 The Requesting Licensee shall ensure that its workmen listed in the master list are either Singaporeans, or Singapore Permanent Residents, or holders of valid work permits.
- 1.5 The Requesting Licensee shall pay the Charge specified in Schedule 9 for SingTel to process the Requesting Licensee's Master List.

- 1.6 No person will be permitted physical access to SingTel's Lead-in Manhole without being nominated on the master list under clause 1.2 and without a current valid Letter of Authorisation as in Annex 5A.8.

2. PHYSICAL ACCESS REQUEST

- 2.1 Subject to clause 3, where the Requesting Licensee wishes to obtain physical access to the Lead-in Manhole of SingTel, for which sharing has been approved, it must submit a request in writing in accordance with the prescribed form in Annex 5A.6 not less than five (5) Business Days before the requested physical access date. The request must contain, without limitation:

- (a) the purpose for which physical access is requested; and
- (b) the identity of the senior person who will be present and who will be responsible for the persons who will be physically accessing the Lead-in Manhole; and
- (c) a complete list of the persons (limited to a maximum of eight (8)) who may be physically accessing the Lead-in Manhole on the relevant date of access, from which list a maximum of four (4) persons will be confirmed as being the persons who will be undertaking the physical access in accordance with clause 2.2; and
- (d) a copy of a valid foreign worker's work permit if such person is neither a Singaporean nor a Singapore Permanent Resident; and
- (e) an estimate of the time during which physical access is requested; and
- (f) the specific Lead-in Manhole to which physical access is requested.

- 2.2 No later than the day on which physical access to the Lead-in Manhole has been granted but prior to physical access actually being granted, the Requesting Licensee must notify SingTel the names of up to four (4) person(s) from the list in the request made under clause 2.1(c) who will actually be physically accessing the Lead-in Manhole.

- 2.3 SingTel shall within two (2) Business Days of receipt of a request under clause 2.1, advise the Requesting Licensee of whether the request for physical access has been approved in accordance with the prescribed form in Annex 5A.6. The approval shall be the Letter of Authorisation as in Annex 5A.8 sent by SingTel by email.

2.4 Where SingTel approves a request for physical access each Party will comply with the terms and conditions set out in clause 5.

2.5 The Requesting Licensee shall pay the Charges specified in Schedule 9 for SingTel to process a request for physical access.

3. EMERGENCY PHYSICAL ACCESS REQUEST

3.1 The Requesting Licensee shall submit to SingTel a list of designated senior personnel contained listed on the master list who are authorised to request emergency physical access.

3.2 In the event of an emergency where physical access is required by the Requesting Licensee to address the emergency situation, the Requesting Licensee must first obtain SingTel's consent for access by telephone using the designated telephone number of SingTel's Fault Control Centre. SingTel shall notify the Requesting Licensee within one (1) hour, of whether the request for physical access has been approved. Where SingTel grants the Requesting Licensee with emergency access post telephone call, the Requesting Licensee must subsequently provide SingTel, via email, a confirmation of emergency access in writing in accordance with the prescribed form in Annex 5A.7 by the Business Day that follows granting of access.

3.3 The written and verbal emergency physical access request and confirmatory email under clause 3.2 must specify, without limitation, for each person, the following details:

- (a) full name; and
- (b) the full name of the requesting party; and
- (c) last four characters of NRIC number for Singaporean or Singapore Permanent Resident, or Passport number and valid foreign worker's work permit number if such person is neither a Singaporean nor a Singapore Permanent Resident; and
- (d) a copy of a valid foreign worker's work permit if such person is neither a Singaporean nor a Singapore Permanent Resident; and
- (e) contact number; and
- (f) email; and

- (g) details of the emergency situation (including whether it is service affecting or non-service affecting); and
- (h) the identity of the senior person who will be present and who will be responsible for the persons who will be accessing the Lead-in Manhole; and
- (i) a complete list of the persons (limited to a maximum of four (4)) who will be accessing the Lead-in Manhole on the relevant occasion of emergency access; and
- (j) an estimate of the time during which physical access is requested; and
- (k) the specific Lead-in Manhole to which physical access is requested.

3.4 Not Used

3.5 Upon obtaining approval under clause 3.4, physical access will be permitted on an interim basis only. Physical access shall be for a maximum period of eight (8) hours unless otherwise agreed. SingTel shall not withhold its agreement unreasonably.

3.6 Where SingTel approves a request for physical access each Party will comply with the terms and conditions set out in clause 5.

3.7 Where, in an emergency situation, both SingTel and the Requesting Licensee require physical access to undertake corrective action, SingTel has priority with the Requesting Licensee's knowledge.

3.8 The Requesting Licensee shall pay the Charge as specified in Schedule 9 for SingTel to process a request for emergency physical access.

4. REJECTION OF PHYSICAL ACCESS REQUEST

4.1 SingTel may reject a request for physical access other than a bona fide emergency physical access request under clause 3, or revoke an approval for physical access where:

- (a) the request is not in the prescribed form and does not contain all the required information; or
- (b) the request is for physical access to Lead-in Manhole for which sharing has not been approved; or

- (c) the persons listed on the request do not appear on the master list or SingTel has advised that the person(s) listed have been barred either by SingTel or the relevant authorities; or
- (d) any person listed on the request is not Singaporean, Singapore Permanent Resident or a holder of a valid foreign worker's work permit; or
- (e) the SIC/SOC Certificate of any person listed on the request has expired; or
- (f) SingTel has scheduled work for the time specified by the Requesting Licensee in the request; or
- (g) SingTel determines that the physical access or work to be performed by the Requesting Licensee as specified in the request may breach clause 5.2; or
- (h) SingTel determines that the area is unsafe or
- (i) the Requesting Licensee is in breach of this Schedule and such breach continues and remains unremedied at the time of the request for physical access.

4.2 If SingTel rejects a request for physical access under clause 4.1 SingTel shall provide the Requesting Licensee with its reasons for rejection.

5. CONDITIONS OF PHYSICAL ACCESS

- 5.1 SingTel may refuse any person physical access to, or require that person to be removed, from the site where:
- (a) that person cannot, upon request, produce a current valid Letter of Authorisation; and any identification card which is issued by SingTel or
 - (b) SingTel has previously notified the Requesting Licensee of problems with that person (eg. the person has breached safety requirements or Standard Operating Procedures); or
 - (c) the person has been barred under clause 5.8 or
 - (d) where in the opinion of SingTel, the person's action may cause damage to SingTel's properties or may compromise or threaten safety.

5.2 The Requesting Licensee must not do or omit to do anything in connection with gaining physical access which may:

- (a) threaten the safety of SingTel's employees, customers or third persons; or
- (b) interfere physically or electrically with the delivery of telecommunications services supplied or to be supplied by SingTel; or
- (c) jeopardise the integrity or confidentiality of communications within SingTel's Network; or
- (d) threaten the security of SingTel's Lead-in Manhole; or
- (e) cause damage to SingTel's Lead-in Manhole.

5.3 The Requesting Licensee must ensure the following:

- (a) only persons with a current and valid Letter of Authorisation can gain physical access; and
- (b) physical access is gained only to the Lead-in Manhole or part thereof for which approval has been granted; and
- (c) each person gaining physical access signs a log book maintained by the Requesting Licensee in which is recorded the full name of the person, last four characters of IC/Passport no., date and time of entry and departure from the Lead-in Manhole; and
- (d) the applicable Standard Operating Procedures are followed and any written instructions (relating to particular circumstances not covered by the Standard Operating Procedures); and
- (e) the Lead-in Manhole is left in a safe and tidy condition and
- (f) the Requesting Licensee's senior person informs SingTel when work has been completed and all Requesting Licensee personnel have left the facility.

5.4 No still, motion or digital cameras, film, negatives, tape or digital recorders, explosives, inflammables, cigarettes, lighters and equipment with electromagnetic emissions or radiation are allowed in Lead-in Manhole.

- 5.5 SingTel may inspect the logbook referred to in clause 5.3 5.3at any time.
- 5.6 Where, for whatever reason, the Requesting Licensee decides that a person nominated by it should no longer be permitted physical access it must immediately notify SingTel and provide an updated master list.
- 5.7 SingTel may terminate physical access to a specific Lead-in Manhole where:
- (a) the physical access causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of SingTel or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of SingTel’s Network; or
 - (b) that the area is unsafe; or
 - (c) that the Requesting Licensee is in breach of clause 5.2 or 5.3.
- 5.8 Without prejudice to any other rights SingTel may have (whether under contract, at law, or in equity), where the Requesting Licensee or its agents or contractors:
- (a) gains unauthorised entry to any Lead-in Manhole or part thereof; or
 - (b) uses, or attempts to use, the Letter of Authorisation for any purpose other than the purpose for which approval was granted,
- physical access may be immediately terminated and the person(s) will henceforth be barred from entering any facilities of SingTel.
- 5.9 The Requesting Licensee must not grant a third person physical access to Lead-in Manhole to which the Requesting Licensee has been granted physical access under this Annex. For the avoidance of doubt in the context of this clause the term “third person” does not include the Requesting Licensee’s contractor.

6. COMPLIANCE WITH THE WORKPLACE SAFETY AND HEALTH ACT (CHAPTER 354A)

- 6.1 SingTel and the Requesting Licensee acknowledge and agree that:
- (a) for the purpose of the Workplace Safety and Health Act (Chapter 354A), the Lead-in Manholes are a “factory” and therefore, a “workplace” (as those terms are defined in the Workplace Safety and Health Act (Chapter 354A)); and

(b) SingTel and the Requesting Licensee each have various responsibilities and obligations under the Workplace Safety and Health Act (Chapter 354A) in relation to the Lead-in Manholes.

6.2 The Requesting Licensee will procure that itself and its contractors, when accessing the Lead-in Manholes, will comply with the following:

(a) the various responsibilities and obligations under the Workplace Safety and Health Act (Chapter 354A), on the basis that the Lead-in Manholes are a “factory” and, therefore, a “workplace” (as those terms are defined in the Workplace Safety and Health Act (Chapter 354A)), and any subsequent amendment thereof; and

(b) all relevant instructions or requirements issued by the Authority or any other relevant Government Agency from time to time with regards to safety at workplace.

ANNEX 5A.4 – STANDARD OPERATING PROCEDURES FOR WORKING IN MANHOLE AND CABLE PULLING

INTRODUCTION

This Annex provides the Standard Operating Procedures for a) Working inside SingTel's Lead-in Manholes and b) Cable pulling inside SingTel's Lead-in Manhole.

1 WORKING INSIDE SINGTEL LEAD-IN MANHOLE

- 1.1 The Requesting Licensee shall place all approved temporary road signing equipment such as signboards, barricades, traffic cones, blinker lamps, revolving lamps bearing the logo and names of the Requesting Licensee and its contractor at the site in advance of, and/or for the duration of its works, in accordance with the LTA Temporary Signing Manual (1988 edition) or as superseded by the Code of Practice For Temporary Traffic Control issued by LTA which shall be the duty of the Requesting Licensee to ascertain in respect thereof and any subsequent amendment thereof as a minimum requirement and if the site condition is extra hazardous due to high speed traffic, road bend, road incline, obstruction by shrubs or trees, and the like, additional temporary road signing equipment shall be provided and placed by the Requesting Licensee to mitigate the effect of such hazards.
- 1.2 The Requesting Licensee shall remove all debris from inside of the Lead-in Manhole.
- 1.3 The Requesting Licensee shall ensure that the Lead-in Manhole and its surrounding area are cleaned and flammable or toxic material is not left in or around the Lead-in Manhole. The Requesting Licensee shall also ensure that the Lead-in Manhole covers are flushed with the surface when closed. All debris and leftover materials resulting from its works shall be removed from the inside of the Lead-in Manhole.

2 CABLE PULLING INSIDE SINGTEL'S LEAD-IN MANHOLE

- 2.1 The Requesting Licensee must also provide detailed information on the work method statement for cable and sub-duct pulling for SingTel's approval. The information shall include the work method statement on how the Requesting Licensee can prevent damage to existing cables found inside the Lead-in Manholes that is consistent with SingTel's guidelines in Annex 5A.10.

- 2.2 The Requesting Licensee shall ensure that its cable is laid against one side of the wall and supported on its own cable bearers in the Lead-in Manhole provided space is available for installation of the cable bearers. The Requesting Licensee shall ensure that its cable is properly secured to the cable bearers at all times.
- 2.3 The Requesting Licensee shall ensure that its cable and sub-Duct do not cause obstruction in the Lead-in Manhole. The Requesting Licensee shall remove such obstruction immediately when instructed by SingTel to do so.
- 2.4 The Requesting Licensee is not required to install its sub-Ducts but it may install its own sub-Ducts for which it shall be fully responsible.
- 2.5 The Requesting Licensee shall submit to SingTel for approval, the manufacturer's detailed information, type, size and sample of the sub-Duct to be used. Approval shall not be unreasonably withheld.
- 2.6 On the cable sheath, the Requesting Licensee shall clearly identify the Requesting Licensee at 1m intervals. The Requesting Licensee shall use a different colour from SingTel for the strip along the entire length of the cable for cables to be installed.
- 2.7 The Requesting Licensee must not construct or place any cable joint inside SingTel's Lead-in Manhole.
- 2.8 The Requesting Licensee shall use SingTel approved gas and watertight duct seal to reinstate affected duct seal(s) in SingTel's Lead-in Manhole after cable pulling work. Where, during the course of installation, the Requesting Licensee causes any damage to SingTel's Underground Plant, the Requesting Licensee must report the damage immediately to SingTel. The Requesting Licensee shall not attempt to repair SingTel's damaged Underground Plant. SingTel shall rectify any damage in any way it deems fit, the reasonable cost and expense for the repair thereof shall be recovered from the Requesting Licensee.

ANNEX 5A.5 – ORDER FOR BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

ORDER FOR BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE	
The Requesting Licensee	
Date of Application : _____ Application Reference Number : _____	
Estate/Street Name & Block No : _____	
Manhole No. to connect : _____	
MDF, Ter or Riser No. : _____	
No. of Cable / Type / Size & Pair : _____	
(* Plan map indicating the location of the manhole to be attached)	
On Behalf of the Requesting Licensee	
Sign : _____ Requesting Licensee Name: _____	
Name : _____ Requesting Licensee BRN: _____	
Designation : _____	
Department : _____	
Contact Number : _____ Company Stamp : _____	
Email : _____	
SingTel's Reply to the Requesting Licensee	
<input type="checkbox"/> Application returned – incomplete/illegible	
<input type="checkbox"/> Not Approved Reason for Rejection : _____	
<input type="checkbox"/> Approved subject to details and conditions given in the attached Letter of Authorisation	
<input type="checkbox"/> Alternative Date and Time SingTel Approval Code : _____	
On Behalf of SingTel	
Sign : _____ Contact Number : _____	
Name : _____ Email : _____	
Date : _____	
Processing Status	
Received Date : _____ Queue Status : _____	
Processed Date : _____	

ANNEX 5A.6 – REQUEST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

REQUEST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

The Requesting Licensee	
Date of Application :	_____ Application Reference Number : _____
Physical Access is sought for the purpose of :	
[Reason]	_____
Manhole Number :	_____
Requested Date / Time of Access :	_____
Estimated Duration of Access :	_____ [Hours]
Name of Person(s) for which Physical Access is requested. (please attach separate sheet if space is insufficient)	
1.	[Name of Senior Person & last four characters of NRIC No, or Passport No & Work Permit No]
2.	[Name & last four characters of NRIC No, or Passport No & Work Permit No]
3.	[Name & last four characters of NRIC No, or Passport No & Work Permit No]
4.	[Name & last four characters of NRIC No, or Passport No & Work Permit No]
On Behalf of the Requesting Licensee	
Sign :	_____ Requesting Licensee Name: _____
Name :	_____
Designation :	_____
Department :	_____
Contact Number :	_____ Company Stamp : _____
Email :	_____
SingTel's Reply to the Requesting Licensee	
<input type="checkbox"/>	Application returned – incomplete/illegible
<input type="checkbox"/>	Not Approved Reason for Rejection : _____
<input type="checkbox"/>	Approved subject to details and conditions given in the attached Letter of Authorisation

On Behalf of SingTel

Sign : _____ Contact Number : _____
Name : _____ Email : _____
Date : _____

ANNEX 5A.7 – REQUEST FOR EMERGENCY PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

REQUEST FOR EMERGENCY PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

The Requesting Licensee

Date of Application : _____ Application Reference Number : _____

Emergency Physical Access is sought for the purpose of :

[Reason] _____

Manhole Number : _____

Requested Date / Time of Access : _____

Estimated Duration of Access : _____ [Hours]

Name of Person(s) for which Physical Access is requested.

1. [Name of Senior Person & last four characters of NRIC No, or Passport No & Work Permit No, & SIC/SOC No]
2. [Name & last four characters of NRIC No, or Passport No & Work Permit No, & SIC/SOC No]
3. [Name & last four characters of NRIC No, or Passport No & Work Permit No, & SIC/SOC No]
4. [Name & last four characters of NRIC No, or Passport No & Work Permit No, & SIC/SOC No]

On Behalf of the Requesting Licensee

Sign : _____ Requesting Licensee Name: _____

Name : _____

Designation : _____

Department : _____

Contact Number : _____ Company Stamp : _____

Email : _____

SingTel's Reply to the Requesting Licensee

- Application returned – incomplete/illegible
- Not Approved Reason for Rejection : _____
- Approved subject to details and conditions given in the attached Letter of Authorisation

On Behalf of SingTel

Sign : _____ Contact Number : _____
Name : _____ Email : _____
Date : _____

ANNEX 5A.8 – LETTER OF AUTHORISATION FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

**LETTER OF AUTHORISATION
FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE**

This Letter of Authorisation is issued in conjunction with the approval given to the request application via reference _____ date _____ .

It must be carried in the possession of the senior person at all time during the duration of access granted to the Underground Plant as indicated below.

Location of Manhole and Manhole Number granted for access :

Name of Person(s) for which Physical Access is requested.

1. [Name of Senior Person & last four characters of NRIC No / Passport No]
2. [Name & last four characters of NRIC No / Passport No]
3. [Name & last four characters of NRIC No / Passport No]
4. [Name & last four characters of NRIC No / Passport No]

Approved Date of Access : _____

Approved Time of Access : _____

Approved Duration of Access : _____ [Hours]

On Behalf of SingTel

Sign : _____ Contact Number : _____

Name : _____ Email : _____

Date : _____

ANNEX 5A.9 – MASTER LIST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

MASTER LIST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND LEAD-IN MANHOLE

S/n	Name	Company Name / Requesting Licensee A's Contactor Name	Last four characters of NRIC / Passport No.	SIC / SOC No.	SIC/SOC's Expiry Date		
1	Richard Tan	Requesting Licensee A	xxx4567C	8888999	30/12/2009		
2	Yeh Sing Ping	Pipe Construction Pte Ltd	xxx444A	7777788	12/11/2009		
	Two examples for reference.						

ANNEX 5A.10 - SINGTEL'S GUIDELINES ON WORK METHOD STATEMENT

1. GENERAL

The Requesting Licensee shall provide its work method statement to SingTel based on the following guidelines. The work method statement shall:

- (a)** describe in sufficient detail, either in pictorial or photographic form, where the Requesting Licensee intends to install its equipment (including cables). The Requesting Licensee must indicate the position of its installation or work area relative to existing plant (including cables and fixtures) at the site;
- (b)** identify the equipment, plant, fixtures and cables that will be directly affected during its installation; and
- (c)** describe in sufficient detail, either in pictorial or photographic form, how the Requesting Licensee proposes to prevent damage to the equipment, plant, fixtures and cables.