

APPENDIX 19

DIRECTED MODIFICATIONS TO SCHEDULE 19

SCHEDULE 19

LICENSING OF BUILDING LEAD-IN DUCT SPACE AND ACCESS TO BUILDING LEAD-IN MANHOLES

SCHEDULE 19

LICENSING OF BUILDING LEAD-IN DUCT SPACE AND ACCESS TO BUILDING LEAD-IN MANHOLES

CONTENTS

1. SCOPE	1
2. SERVICE LEVEL GUARANTEES	2
3. SERVICE DESCRIPTION AND ACCESS POINTS	5
4. ORDERING AND PROVISIONING PROCEDURE	6
5. DESKTOP STUDY	7
6. JOINT SITE VERIFICATION	8
6A. PROJECT STUDY	11
7. CONNECTION DUCT CONSTRUCTION	12
8. INSTALLATION OF UNDERGROUND EQUIPMENT	14
9. REPLACEMENT OF UNDERGROUND EQUIPMENT	18
10. STANDARD TERMS AND CONDITIONS	20
11. UNAUTHORISED ACCESS TO BUILDING LEAD-IN DUCT AND BUILDING LEAD-IN MANHOLE	23
12. PHYSICAL ACCESS PROCEDURE	24
13. MARKING OF UNDERGROUND EQUIPMENT	25
14. REQUESTING LICENSEE RIGHTS	25
15. TERM OF LICENCE	25
16. SUSPENSION	26
17. TERMINATION OF LICENCE	26
18. RESPONSIBILITY OF PARTIES ON TERMINATION OR EXPIRY OF LICENCE	28
19. SUB-LICENSING	30
ANNEX 19-1: SERVICE LEVEL GUARANTEES	
ANNEX 19-2: SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD- IN DUCTS AND BUILDING LEAD-IN MANHOLES	
ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES	

- ANNEX 19-4: SOP FOR WORKING IN BUILDING LEAD-IN MANHOLES AND CABLE PULLING**
- ANNEX 19-5: GUIDELINES FOR ASSESSMENT OF BUILDING LEAD-IN DUCT SPACE**
- ATTACHMENT A: REQUEST FOR BUILDING LEAD-IN DUCT SPACE AND BUILDING LEAD-IN MANHOLES**
- ATTACHMENT B: REQUEST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND/OR BUILDING LEAD-IN MANHOLE**
- ATTACHMENT C: REQUEST FOR EMERGENCY PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND/OR BUILDING LEAD-IN MANHOLE**
- ATTACHMENT D: MASTER LIST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND/OR BUILDING LEAD-IN MANHOLE**
- ATTACHMENT E: WORK METHOD STATEMENT GUIDELINES**

SCHEDULE 19

LICENSING OF BUILDING LEAD-IN DUCT SPACE AND ACCESS TO BUILDING LEAD-IN MANHOLES

1. SCOPE

This Schedule 19 sets out the terms and conditions under which NetLink Trust will provide the Requesting Licensee with a licence for:

- (a) the shared use of the Building Lead-in Ducts and access to their associated Building Lead-in Manholes; or
- (b) access to Building Lead-in Manholes alone in circumstances where Requesting Licensee requires access to its own lead-in ducts or lead-in ducts of a Third Party,

(each a “**Licence**”).

- 1.1 Each Licence is a service provided by NetLink Trust to the Requesting Licensee for the sole purpose of the Requesting Licensee deploying Underground Equipment to provide telecommunication services.
- 1.2 For the avoidance of doubt, the licence necessary for access to lead-in ducts other than NetLink Trust’s Building Lead-In Ducts is not offered by NetLink Trust or covered under this ICO Agreement.
- 1.3 The Requesting Licensee, in its Request for a Licence, must specify whether the Requesting Licensee seeks:
 - (a) a Licence for the shared use of the Building Lead-in Ducts and access to their associated Building Lead-in Manholes; or
 - (b) a Licence for access to Building Lead-in Manholes alone.
- 1.4 The Requesting Licensee may seek a Licence subject to:
 - (a) the shared use by the Requesting Licensee of any Building Lead-in Duct and access to any Building Lead-in Manhole, as applicable, being for the sole purpose of the Requesting Licensee deploying Underground Equipment to provide Telecommunication Services; and
 - (b) the terms and conditions of this Schedule.

- 1.5 NetLink Trust will provide the Requesting Licensee with a Licence for the sole purpose of the Requesting Licensee locating its Underground Equipment in Building Lead-in Ducts and Building Lead-in Manholes, as applicable, in accordance with the directions of the Authority under the Code, where those directions require the provision of a Licence for which the Requesting Licensee has applied.
- 1.6 The timeframes in this Schedule relating to provisioning work to be undertaken by NetLink Trust under clauses 5.1, 5.3, 6.1, 7.1, 9.5 and 10.6 are subject to delays caused by events outside NetLink Trust's reasonable control, in which case such failure to meet the timeframes shall not constitute a breach of this ICO Agreement and clause 2.1 shall not apply, provided that NetLink Trust must notify 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 completion of the relevant provisioning work which is extended for the period of such delays.
- 1.7 This Schedule only applies to Requesting Licensees who are FBOs.
- 1.8 For the purpose of this Schedule, all references to 'Building' are intended to exclude any reference to Central Offices.

2. SERVICE LEVEL GUARANTEES

- 2.1 NetLink Trust will provide the Service Level Guarantees in respect of Licensing for the shared use of the Building Lead-in Ducts and access to their associated Building Lead-in Manholes, or for access to Building Lead-in Manholes as set out in Annex 19-1 of this Schedule. If NetLink Trust fails to meet any Service Level Guarantees applicable to this Schedule and such failure is solely caused by NetLink Trust, its contractors and/or suppliers, NetLink Trust will provide a remedy in the form of a rebate to the Requesting Licensee in accordance with:
- (a) Section 1 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of Request response timeframes;
 - (b) Section 2 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of In-principle Approval response timeframes;
 - (c) Section 3 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of Joint Site Verification timeframes;

- (d) Section 4 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of Connection Duct construction timeframes;
 - (e) Section 5 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of modified Underground Equipment response timeframes; and
 - (f) Section 6 of Annex 19-1 and any terms and conditions contained in this Schedule in respect of timeframes for the maintenance work on Building Lead-in Duct and Building Lead-in Manhole.
- 2.2 A claim by the Requesting Licensee shall be made in writing within thirty (30) 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. NetLink Trust will respond within (30) Calendar Days from date of claim stating whether the claim by Requesting Licensee: (a) is valid for rebates; or (b) is an invalid claim. Where NetLink Trust assessed that the Requesting Licensee's claim is invalid, NetLink Trust will explain its basis or require the Requesting Licensee to provide additional information. For valid claims submitted within the timeframe, NetLink Trust shall provide the rebate in its next Invoice.
- 2.3 If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by NetLink Trust and will be reflected in NetLink Trust's bill to the Requesting Licensee in accordance with NetLink Trust's billing cycle.
- 2.4 The guarantee and rebates provided by NetLink Trust are:
- (a) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
 - (b) subject to this Schedule.
- 2.5 Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim, NetLink Trust 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 or whether NetLink Trust is exempted from Service Level Guarantee payment for a claim, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17, or in the case of a Billing Dispute, in accordance with Schedule 16.

2.6 In addition to clause 1.6 and the specific terms and conditions of the Service Level Guarantees, the Service Level Guarantees shall not apply in any of the following circumstances:

- (a) the Licence(s) are suspended under the terms and conditions of this Schedule or ICO Agreement, except where the suspension is due to NetLink Trust's fault;
- (b) fault due to any equipment, wiring and/or cabling owned or operated by the Requesting Licensee or on behalf of the Requesting Licensee;
- (c) provision or restoration of the Licence(s) where any site-coordination meeting, fault investigation, Joint Investigation Meeting or fault identification coordination meeting is involved, except where (a) the fault was caused by NetLink Trust; and (b) the Requesting Licensee has not contributed to any delay in setting up the meeting. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by NetLink Trust, the time taken from the start of arranging any site-coordination meeting, fault investigation, Joint Investigation Meeting or fault identification coordination meeting up to the end of the meeting, shall always be excluded;
- (d) NetLink Trust is unable to obtain or maintain any licence or permission necessary to the provision or restoration of the Licence(s) despite using its best endeavours to obtain expeditiously or maintain such licence or permission. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by NetLink Trust, the time taken by NetLink Trust to obtain or maintain any licence or permission necessary to the provision or restoration of the Licence(s) shall always be excluded. Provided that in the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain or maintain the licence/permission, NetLink Trust will provide evidence that it has used such best endeavours;
- (e) delay in the provision or restoration of the Licence(s) caused by events beyond the reasonable control of NetLink Trust and its suppliers and contractors;
- (f) NetLink Trust Network outages for which the Requesting Licensee has not reported a fault;
- (g) fault is reported by the Requesting Licensee but no fault is found or confirmed after due and careful investigation, and verification by NetLink Trust;
- (h) NetLink Trust is required to carry out service interruption and the Requesting Licensee has been informed in accordance with clause 9.5 or 9.6;

- (i) NetLink Trust is required to carry out fibre diversion at the request of the Government Agencies, private developers or other relevant parties and the Requesting Licensee has been informed in accordance with clause 9.5 or 9.6; or
 - (j) where any necessary permission is not granted by the relevant authorities, provided always that NetLink Trust has exercised its best endeavours to obtain expeditiously and/or maintain all such necessary permissions. In the event that the Requesting Licensee raises a dispute as to whether NetLink Trust has used its best endeavours to obtain or maintain the permission, NetLink Trust will provide evidence that it has used such best endeavours.
- 2.7 If the Requesting Licensee disputes NetLink Trust's reason for rejection, its records and/or the amount of rebate, the Requesting Licensee shall not be entitled to be credited with any rebate until and unless the dispute has been resolved.
- 2.8 A failure by NetLink Trust to meet any Service Level Guarantee does not constitute a breach of the ICO Agreement or this Schedule.
- 2.9 The Requesting Licensee acknowledges that the relevant remedy provided under clause 2.1 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 Service Level Guarantees for any Licence under this Schedule and shall be NetLink Trust's sole and exclusive liability to the Requesting Licensee for such failure.

3. SERVICE DESCRIPTION AND ACCESS POINTS

- 3.1 NetLink Trust will, subject to availability, provide a Licence to the Requesting Licensee for the shared use of the Building Lead-in Ducts and access Building Lead-in Manholes separately on the basis of:
- (a) per meter use of Building Lead-in Duct for each individual Cable; and
 - (b) access to individual Building Lead-in Manholes.
- 3.2 NetLink Trust may have regard to the following matters, in no particular order, when assessing the availability of the Building Lead-in Duct space, access to the Building Lead-in Duct(s) and access to Building Lead-in Manhole(s):
- (a) immediate demand for the Building Lead-in Ducts and access to the Building Lead-in Manholes which NetLink Trust has already committed to provisioning as at the time of receipt of the Request for the Building Lead-in Ducts and Building Lead-in Manholes;

- (b) future use of, or access to, Building Lead-in Ducts and Building Lead-in Manholes by the Requesting Licensee and other Licensees which has been requested but not yet fulfilled;
- (c) security and confidentiality requirements or restrictions imposed on NetLink Trust by Governmental Agencies;
- (d) whether NetLink Trust has plans or otherwise proposes to decommission a Building Lead-in Duct or a Building Lead-in Manhole within six (6) months of the Requesting Licensee's Request for a Licence to the Building Lead-in Duct or Building Lead-in Manhole;
- (e) whether NetLink Trust has installed relevant Building Lead-in Ducts or Building Lead-in Manholes at the location(s) requested by the Requesting Licensee;
- (f) the utilisation threshold of the Building Lead-in Ducts set out in Annex 19-5;
- (g) the Guidelines for Assessment of Building Lead-in Duct Space set out in Annex 19-5; and
- (h) any additional requirement deemed appropriate by NetLink Trust, subject to the Authority's approval.

4. ORDERING AND PROVISIONING PROCEDURE

4.1 The Requesting Licensee must submit its Request in the form prescribed in Attachment A of this Schedule 19, along with the following information:

- (a) a copy of plant map indicating the manhole location; and
- (b) where the Building Lead-in Manhole is not connected to a conduit owned or controlled by NetLink Trust, a copy of all necessary licences, permits and permissions procured by the Requesting Licensee to use and/or access the aforementioned conduit.

4.2 For the purposes of this Schedule 19, the date on which a Request is deemed received by NetLink Trust will be determined as follows:

- (a) if the Request is received before 12 noon on a Business Day, the date on which it is deemed received is the Business Day on which the Request is received;

- (b) if the Request is received at or after 12 noon on a Business Day, the date on which it is deemed received is the Business Day immediately following the Business Day on which the Request is received; or
 - (c) if the Request is received on a day which is not a Business Day, date on which it is deemed received is the Business Day immediately following the day on which the Request is received by NetLink Trust.
- 4.3 NetLink Trust will process all Requests on a “first come first served” basis and, subject to clause 4.4, will be processed on the day it is deemed to have been received under clause 4.2.
- 4.4 For each Business Day, NetLink Trust will process a combined total of no more than four (4) Requests from all FBOs. Any Request received on a Business Day on which NetLink Trust is already scheduled to process the maximum number of Requests will be processed on the next Business Day on which NetLink Trust is not already scheduled to process the maximum number of Requests.
- 4.5 If a Request cannot be processed on its Request Date, NetLink Trust will inform the Requesting Licensee of the date on which it is scheduled to be processed within one (1) Business Day of the Request Date.
- 4.6 Each Request will be charged according to the Charges specified in Schedule 15. For the avoidance of doubt, the Request Charge is non-refundable regardless of the outcome of the Request.
- 4.7 In this Schedule 19, the date on which a Request will be processed under clause 4.3 or 4.4 is the “**Request Date**”.

5. DESKTOP STUDY

- 5.1 Within one (1) Business Day of the Request Date, NetLink Trust will inform the Requesting Licensee whether NetLink Trust will conduct a desktop study under clause 5.2 or its Request is rejected under clause 5.4.
- 5.2 Following receipt of a Request, unless NetLink Trust rejects the Request under clause 5.4 below, NetLink Trust will perform a desktop study in respect of the Building Lead-in Duct and/or Building Lead-in Manhole to which a Licence is requested in order to ascertain on a preliminary basis whether the Building Lead-in Duct space and/or Building Lead-in Manhole are available (as determined in accordance with clause 3.2).

5.3 If NetLink Trust conducts a desktop study under clause 5.2, it must complete the study and notify the Requesting Licensee of the in-principle approval (“**In-Principle Approval**”) or rejection of its Request within five (5) Business Days of the Request Date.

5.4 NetLink Trust may reject a Request if:

- (a) the Request is not in the prescribed form;
- (b) the Request does not contain all required information;
- (c) the information in the Request is incorrect or inaccurate; or
- (d) NetLink Trust determines that shared use of the requested Building Lead-in Duct space or access to a Building Lead-in Manhole is unavailable under the criteria set out in clause 3.2.

5.5 In the event NetLink Trust informs the Requesting Licensee that shared use of a requested Building Lead-in Duct space or access to Building Lead-in Manhole is not available, NetLink Trust must:

- (a) provide the reason for rejection, as well as the calculations which show that there is insufficient duct space for leasing, all of which shall adhere to the Guidelines for Assessment of Building Lead-in Duct Space set out in Annex 19-5; and
- (b) where available, offer to the Requesting Licensee the shared use of an alternative Building Lead-in Duct space and/or access to alternative Building Lead-in Manholes.

Within five (5) Business Days from NetLink Trust’s rejection notice, the Requesting Licensee may request for a Joint Site Verification, in accordance with clause 6.1 below, to verify the physical unavailability of Building Lead-in Duct space and/or access to Building Lead-in Manhole that was the basis of the rejection.

5.6 The Requesting Licensee acknowledges that a grant by NetLink Trust of In-Principle Approval does not oblige NetLink Trust to reserve the shared use of the Building Lead-in Duct space and/or access to Building Lead-in Manhole(s) or make them be available at times requested by the Requesting Licensee.

6. JOINT SITE VERIFICATION

6.1 Except where:

- (a) the Request is rejected in accordance with clause 5.4 above;
- (b) the Requesting Licensee rejects an offer for Building Lead-in Duct space alternative provided under clause 5.5(b); or
- (c) the Requesting Licensee fails to submit a request for a Joint Site Verification pursuant to clause 5.5 above within five (5) Business Days of receiving NetLink Trust's rejection notice,

NetLink Trust will complete a joint site verification ("**Joint Site Verification**"), subject to clause 6.3 of this Schedule, within the later of:

- (i) five (5) Business Days from the date of the In-Principle Approval;
- (ii) five (5) Business Days from the date the Requesting Licensee accepts an alternative proposal offered by NetLink Trust under clause 5.5(b), or
- (iii) five (5) Business Days from the date the Requesting Licensee submits a request for a Joint Site Verification pursuant to clause 5.5 above.

6.2 The Requesting Licensee must pay the Joint Site Verification Charge specified in Schedule 15.

CLAUSE 6.3 – REQUIRED MODIFICATIONS

6.3 NetLink Trust will liaise with the Requesting Licensee to schedule the appointment for the Joint Site Verification, subject to the following conditions:

- (a) the grant of all relevant approvals, consents, and permits by the relevant authorities;
- (b) the presence of site conditions which are conducive to the successful performance of the Joint Site Verification; and
- (c) the grant of access by building managers and/or owners to their developments and/or premises.

For the avoidance of doubt, NetLink Trust will obtain building manager's and/or owner's approval if there is a need to enter to their development and/or premises, in order to access the Building Lead-in Manhole. However, if the Building Lead-in Duct space has to be tested from an opening in the MDF Room, and the Requesting Licensee has or is planning to locate its equipment in this MDF Room, the Requesting Licensee, as user of the MDF Room, shall liaise with the building managers and/or owners in procuring the necessary approvals (including

approval to access to their development and/or premises), in order to facilitate any pipe testing work by NetLink Trust during the Joint Site Verification.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2C of IMDA's Decision. Accordingly, IMDA directs NetLink Trust to amend clause 6.3 to reflect the understanding that NetLink Trust will obtain building manager/owner's approval for pipe testing if there is a need to enter the building manager/owner's premises in order to access the Telecom Manholes. However, if a duct segment has to be tested from an opening in the MDF room, and if the RL already has or is planning to locate its equipment in this MDF room, it would be more appropriate for the RL (in its capacity as user of the building manager's MDF room) to seek the building manager/owner's approval for the pipe testing work.

- 6.4 During the Joint Site Verification, NetLink Trust's contractor will access the Building Lead-in Manhole to create a digital record of the existing cable utilisation within the Building Lead-in Duct and determine the size and number of fibre and copper cables (if any) within each of the relevant Building Lead-in Ducts. In the event the label on any cable is no longer legible due to wear and tear or absent, the contractor may take reasonable steps to derive an estimate of the size of the cable.
- 6.5 NetLink Trust will re-confirm the results of the Desktop Study by performing an assessment of the feasibility of shared use of Building Lead-in Duct in accordance with the guidelines provided under Annex 19-5.
- 6.6 Where the Utilisation Rate of NetLink Trust's Building Lead-in Ducts within a single trench (as derived from the assessment referred to in clause 6.5) is less than or equal to 70%:
- (a) NetLink Trust will calculate the Building Lead-in Duct space available for licensing to the Requesting Licensee by referring to the conversion tables and duct sharing formula set out in paragraphs 5 and 6 of Annex 19-5:
 - (i) if the result of the duct sharing formula shows that there is Building Lead-in Duct space available for licensing, NetLink Trust will perform pipe testing to determine if new cable(s) can be pulled through the allocated Building Lead-in Duct;
 - (ii) otherwise, NetLink Trust will reject (or uphold its decision to reject) the Request and inform the Requesting Licensee of the same in accordance with clause 5.5(a). The Requesting Licensee may thereafter raise its concern, if any, in respect of the calculations set out in the rejection to NetLink Trust, or where the case requires exception handling, directly to the Authority.

- (b) If the result of the pipe testing under clause 6.6(a)(i) shows that there is no blockage in the allocated Building Lead-in Duct, NetLink Trust will provide its final approval by completing the project study pursuant to clause 6A (“**Project Study**”). Otherwise, NetLink Trust will reject (or uphold its decision to reject) the Request and inform the Requesting Licensee in accordance with clause 5.5(a).
- 6.7 Where the Utilisation Rate of NetLink Trust’s Building Lead-in Ducts within a single trench (as derived from the assessment referred to in clause 6.5) is more than 70%, NetLink Trust will reject (or uphold its decision to reject) the Request and inform the Requesting Licensee of the same in accordance with clause 5.5(a). The Requesting Licensee may thereafter raise its concern, if any, in respect of the calculation set out in the rejection to NetLink Trust, or where the case requires exception handling, directly to the Authority.
- 6.8 Where the original designated Building Lead-in Manhole is situated within a Building and the Building owner refuses to allow any trenching works to be carried out to the Building Lead-in Manhole, and subject to clause 6.9 below, NetLink Trust will work in good faith with the Requesting Licensee to re-designate, if necessary, the Building Lead-in Manhole leased under this Schedule 19 to the next accessible manhole belonging to NetLink Trust that is “fit for purpose” to be used for the Requesting Licensee’s network deployment, and the said manhole shall thereafter be regarded as the new designated Building Lead-in Manhole leased under this Schedule 19.
- 6.9 The re-designation of the Building Lead-in Manhole shall only be carried out where the Requesting Licensee has provided to NetLink Trust’s reasonable satisfaction the relevant supporting documentation to show that the Requesting Licensee has made an effort to engage the building owner in good faith and to address the building owner’s concerns, and that the Requesting Licensee’s request to access the original designated Building Lead-In Manhole was rejected by the building owner notwithstanding the Requesting Licensee’s efforts. For the avoidance of doubt, the re-designation of the Building Lead-in Manhole shall not be carried out where the obstacle to obtaining access to the original designated Building Lead-in Manhole is not related to the relevant Building, including but not limited to obstructions by external parties and/or elements. NetLink Trust shall recover and the Requesting Licensee shall pay all associated costs incurred by NetLink Trust, including but not limited to additional Desktop Study Charge and/or Joint Site Verification Charge as specified in Schedule 15, in relation to the work performed by NetLink Trust for the re-designation of Building Lead-in Manhole.

6A. PROJECT STUDY

- 6A.1 NetLink Trust will communicate its final approval of the Request (“**Final Approval**”) to the Requesting Licensee in writing within five (5) Business Days from the pipe testing, if the pipe

testing result under clause 6.6(b) shows that there is no blockage in the allocated Building Lead-in Duct. The Final Approval will contain the following information:

- (a) allocation of Building Lead-in Duct space and/or access to relevant designated Building Lead-in Manhole (which will be indicated in the associated Building Lead-in Manhole fan-out diagram). For the avoidance of doubt, the allocation of Building Lead-in Duct shall be determined by NetLink Trust at its sole discretion;
- (b) whether there are any copper cables within the relevant Building Lead-in Duct (if applicable); and
- (c) quotation on the cost that NetLink Trust will incur for the construction and/or provision of Connection Duct(s) as specified in Schedule 15, subject to clause 6A.4 below. The quotation shall be valid and binding for ten (10) Business Days from the date of its issuance.

6A.2 Requesting Licensee shall only use the allocated Building Lead-in Duct space that is identified in the Final Approval for its cable installation and shall not be permitted to use any other duct or duct space.

6A.3 The Requesting Licensee shall, within ten (10) Business Days from the date of the quotation referred to in clause 6A.1(c), inform NetLink Trust in writing whether it accepts the quotation. If the Requesting Licensee does not accept the quotation, or if the Requesting Licensees does not (for any reason whatsoever) inform NetLink Trust in writing of its acceptance of the quotation within ten (10) Business Days from the date of the quotation, the quotation and the Final Approval shall be deemed invalid. The Requesting Licensee shall in any event be liable for and shall pay NetLink Trust the Joint Site Verification Charge(s) as provided in Schedule 15.

6A.4 If NetLink Trust incurs costs in providing a Licence over and above the Charges for the construction of Connection Ducts set out in clause 6A.1(c), NetLink Trust may recover such costs from the Requesting Licensee provided:

- (a) the costs incurred by NetLink Trust relate to the work that NetLink Trust needs to perform in order to grant a Licence or provide shared use and/or access under that Licence;
- (b) before incurring such costs, NetLink Trust will provide the Requesting Licensee with:
 - (i) prior reasonable notice that the provision of the Licence requires NetLink Trust to incur costs in addition to the Charges;

- (ii) a breakdown of individual cost components and justification for incurring each cost component; and
- (iii) a binding quote for the work, which quote will be valid for five (5) Business Days from the date on which NetLink Trust provides it to the Requesting Licensee.
- (c) NetLink Trust obtains the Requesting Licensee's prior approval of the quote while the quote remains valid; and
- (d) any dispute in respect of determining the reasonable costs set out in the notice is resolved in accordance with Schedule 17.

7. CONNECTION DUCT CONSTRUCTION

- 7.1 Upon obtaining the written notice of acceptance by the Requesting Licensee of the quotation for the Charges for the construction of the Connection Duct(s) under clause 6A.1(c), NetLink Trust shall obtain the relevant approvals from the authorities, and shall construct the Connection Duct within twenty (20) Business Days.
- 7.2 If NetLink Trust determines that it is unable, or is likely to be unable, to complete construction of a Connection Duct within the timeframe in clause 7.1, NetLink Trust will notify the Requesting Licensee as soon as practicable and provide a revised timeframe in which construction will be completed.
- 7.3 Subject to clauses 1.6 and 2.6 above, if NetLink Trust fails to meet the timeframe specified in clause 7.1, NetLink Trust will provide the Requesting Licensee with the remedy due (if any) under clause 2.1(d) regardless of any extension notified under clause 7.2.
- 7.4 NetLink Trust will use commercially reasonable endeavours to construct the Connection Duct(s) within the price previously agreed with the Requesting Licensee.
- 7.5 If NetLink Trust needs to revise its costs from time to time due to circumstances beyond its reasonable control, clause 6A.4 will apply.
- 7.6 NetLink Trust will notify the Requesting Licensee when construction of the Connection Duct(s) is completed.
- 7.7 The Requesting Licensee will connect each of its ducts to the corresponding Connection Duct(s) within twenty-five (25) Business Days from NetLink Trust's notice under clause 7.6.

- 7.8 If the Requesting Licensee fails to complete the duct connection and the failure is attributable to circumstances beyond the Requesting Licensee's reasonable control, NetLink Trust will grant a reasonable extension of time for installation to the Requesting Licensee at the Requesting Licensee's request. 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. NetLink Trust 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.
- 7.9 If the Requesting Licensee does not connect its duct to the Connection Duct(s) within the period notified by NetLink Trust (including any extension of such period), NetLink Trust may, by notice to the Requesting Licensee, terminate its Request, in which case the Requesting Licensee must file a new Request in order to use the Building Lead-in Ducts and/or access the associated Building Lead-in Manholes.
- 7.10 The Requesting Licensee must inform NetLink Trust when the Requesting Licensee has completed the connection of its duct to the Connection Duct(s).

8. INSTALLATION OF UNDERGROUND EQUIPMENT

- 8.1 The Requesting Licensee will submit to NetLink Trust its Request to physically access NetLink Trust's Building Lead-in Manhole for the installation of the Underground Equipment through the allocated Building Lead-in Duct and/or Building Lead-in Manhole at least five (5) Business Days in advance and in any case, the installation of the Underground Equipment must be completed within thirty (30) Business Days from the completion date.
- 8.2 If the Requesting Licensee does not apply for, or complete, installation of its Underground Equipment in accordance with clause 8.1, NetLink Trust may, by notice, terminate the Requesting Licensee's Request.
- 8.3 In any request to install Underground Equipment, the Requesting Licensee must provide a plan which specifies or includes:
- (a) the identity of the senior person who will be present;
 - (b) the name, job title, employment status, contractors and agents who will be physically accessing NetLink Trust's Building Lead-in Manhole for installation works;
 - (c) the installation timetable specifying the duration and dates on which access is requested to perform installation works;

- (d) the location and/or site plan of the Requesting Licensee's duct at and around the location of NetLink Trust's Building Lead-in Manhole at which installation of the Underground Equipment is requested;
- (e) the number of Cables included in the Underground Equipment in each allocated Building Lead-in Duct and/or Building Lead-in Manhole, and in each case the Cable type and size;
- (f) the installation method and the position of each Cable comprising the Underground Equipment described on a Building Lead-in Manhole fan-out diagram for each Building Lead-in Manhole; and
- (g) a detailed work method statement (including how the Requesting Licensee can prevent damage to existing cables, equipment, and facilities found inside allocated Building Lead-in Duct and/or Building Lead-in Manhole).

8.4 Any installation plan submitted under clause 8.3:

- (a) is subject to NetLink Trust's approval; and
- (b) must be consistent with each relevant Annex to this Schedule 19.

8.5 The Requesting Licensee must not install any sub-duct in any Building Lead-in Duct or Building Lead-in Manhole.

8.6 NetLink Trust will review each plan submitted in accordance with clause 8.3 within three (3) Business Days of submission and state whether installation is approved or rejected, and whether it is approved on the requested date and duration or not. NetLink Trust will not unreasonably reject an installation plan.

8.7 NetLink Trust may request amendments to an installation plan submitted under clause 8.3.

8.8 If NetLink Trust rejects or requests amendments to a plan, NetLink Trust will consult with the Requesting Licensee and propose an alternative plan and installation schedule to the Requesting Licensee.

8.9 Before the installation of Underground Equipment, the Requesting Licensee may withdraw any Request upon written notice to NetLink Trust.

CLAUSE 8.10 – REQUIRED MODIFICATIONS

8.10 Notwithstanding any withdrawal of a Request under clause 8.9, NetLink Trust may impose, and the Requesting Licensee must pay:

- (a) an Administrative Charge set out in Schedule 15 for processing cancellations; and
- ~~(b)~~ any reasonable cost incurred by NetLink Trust up to the point of cancellation and as a result of the withdrawal request under clause 8.9; and
- ~~(c)(b) NetLink Trust's costs for remediating Building Lead-in Ducts and Building Lead-in Manholes to their original state before any work undertaken in relation to the Request.~~

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2D of IMDA's Decision. Accordingly, IMDA directs NetLink Trust to remove clause 8.10(c) and amend clause 8.10(b) to cover any reasonable cost incurred by NetLink Trust as a result of the cancellation under clause 8.9.

8.11 Once NetLink Trust has approved an installation plan (provided the Requesting Licensee has not withdrawn its Request) the Requesting Licensee must complete installation works within the timeframe approved by NetLink Trust, provided such timeframe will be at least twenty-five (25) Business Days from access becoming available to the Requesting Licensee.

8.12 If the Requesting Licensee cannot complete installation in the timeframe notified by NetLink Trust for reasons outside the Requesting Licensee's reasonable control, it may notify NetLink Trust prior to the expiry of the required timeframe, provide details, and request a reasonable extension of time.

8.13 NetLink Trust will respond to any extension request under clause 8.12 within two (2) Business Days of receipt and will not unreasonably deny a request for extension.

8.14 If the Requesting Licensee does not complete Underground Equipment installations within the timeframe notified by NetLink Trust (including any extension of such timeframe), NetLink Trust may, by notice to the Requesting Licensee, terminate its Request, in which case:

- (a) the Requesting Licensee must file a new Request in accordance with this Schedule 19 in order to use the Building Lead-in Ducts and/or access to Building Lead-in Manholes; and

- (b) NetLink Trust may remove any Underground Equipment installed or partially installed in Building Lead-in Manholes or Building Lead-in Ducts at the Requesting Licensee's cost.
- 8.15 If the Requesting Licensee cancels or postpones the installation of the approved Underground Equipment, it will pay NetLink Trust any reasonable costs that NetLink Trust has incurred up to the point of cancellation including but not limited to the cancellation Charge specified in Schedule 15.
- 8.16 The Requesting Licensee must mark its Underground Equipment so as to clearly identify it as belonging to the Requesting Licensee in accordance with NetLink Trust's reasonable directions issued from time to time.
- 8.17 The Requesting Licensee must notify NetLink Trust of the completion of installation of Underground Equipment and submit to NetLink Trust within ten (10) Business Days from completion.
- 8.18 The Requesting Licensee must submit a work completion report together with its notification of completion, which comprises of the following details for each Building Lead-in Manhole accessed:
 - (a) the identification number for the Building Lead-in Manhole;
 - (b) the start date and time for each day of physical access;
 - (c) the end date and time for each day of physical access;
 - (d) photographs of the Building Lead-in Manhole side wall showing the entry and the exit position of the approved Underground Equipment inside the Building Lead-in Manhole and the Building Lead-in Duct(s) used;
 - (e) photograph(s) of the approved Underground Equipment showing the way the approved Underground Equipment was installed in the Building Lead-in Manhole including the cable identification code for each Cable (which should be clearly labelled on the cable sheath);
 - (f) where a Building Lead-in Duct seal is available for the Building Lead-in Manhole, photograph(s) of the Building Lead-in Duct seal inside the Building Lead-in Manhole showing that the Building Lead-in Duct seal was properly sealed; and

- (g) photograph(s) of the Building Lead-in Manhole cover showing that the Building Lead-in Manhole cover is properly closed (flush with its frame and the existing ground level, its number clearly visible) after physical access.
- 8.19 If the Requesting Licensee cannot submit a work completion report in the timeframe required by clause 8.18 due to circumstances beyond its reasonable control, it may request, and NetLink Trust will, within two (2) Business Days from the date of receipt of such request, grant a reasonable extension.
- 8.20 Any request for extension under clause 8.19 must be received by NetLink Trust before the last date on which a report is due under clause 8.18.
- 8.21 If the Requesting Licensee fails to submit a work completion report in accordance with clause 8.18 or fails to request (or comply with) an extension under clause 8.19, NetLink Trust may verify the work and take any corrective action necessary.
- 8.22 If any photograph provided in the work completion report is not clear or, in NetLink Trust's reasonable view, does not adequately demonstrate that Underground Equipment is installed and that the Building Lead-in Ducts and Building Lead-in Manholes is left in a state required by this ICO Agreement, NetLink Trust may within ten (10) Business Days of receipt of the report require the Requesting Licensee to do one or more of the following:
 - (a) reinstall or take other corrective action within a reasonable period notified by NetLink Trust; and
 - (b) re-submit the work completion report within ten (10) Business Days of NetLink Trust's notification.
- 8.23 If the Requesting Licensee does not adequately comply with a request under clause 8.22, NetLink Trust may verify the work and take any corrective action necessary.
- 8.24 NetLink Trust may at its own discretion, carry out inspections to confirm that the installations comply with the approved installation plan and this Agreement. Where the inspection reveals that an installation does not conform to the approved installation plan or this ICO Agreement and such non-compliance disadvantages NetLink Trust or jeopardises any telecommunication system in the Building Lead-in Duct or Building Lead-in Manhole, NetLink Trust may require the Requesting Licensee to:
 - (a) reinstall the Underground Equipment; or
 - (b) take such other corrective action as required by NetLink Trust,

within the reasonable timeframe required by NetLink Trust.

- 8.25 All of NetLink Trust's rights to verify and inspect installation works, and all of the Requesting Licensee's obligations in relation to verification, inspection and remediation apply in respect of any reinstalled or remediated works.
- 8.26 If the Requesting Licensee fails to take any corrective action required by NetLink Trust, NetLink Trust may:
- (a) suspend physical access; or
 - (b) undertake any appropriate corrective action.
- 8.27 If NetLink Trust needs to verify, inspect or correct the Requesting Licensee's work, the Requesting Licensee must pay all costs reasonably incurred by NetLink Trust.
- 8.28 The Requesting Licensee will bear its own costs of reinstallation and corrective action under clause 8.24.

9. REPLACEMENT OF UNDERGROUND EQUIPMENT

- 9.1 The Requesting Licensee may replace, modify or rearrange existing Underground Equipment in a Building Lead-in Duct or Building Lead-in Manhole by following the procedure in this clause 9 provided that:
- (a) it does not require additional Building Lead-in Duct space or Building Lead-in Manhole access;
 - (b) it does not require the construction of any additional Connection Duct; and
 - (c) the new Underground Equipment is the same type and size as the Underground Equipment it is replacing.
- 9.2 If a Request to replace Underground Equipment does not fall within the circumstances set out in clause 9, the Requesting Licensee must submit a new Request under clause 4.
- 9.3 The Requesting Licensee must submit a Request to replace Underground Equipment in the circumstances described in clause 9. The Requesting Licensee shall be liable for the costs incurred by NetLink Trust in processing a Request under this clause as specified in Schedule 15.

- 9.4 A Request under clause 9.3 must contain the following information:
- (a) purpose of replacement, modification or rearrangement;
 - (b) date, time and duration of replacement, modification or rearrangement work;
 - (c) detailed description of works and process to be carried out at each Building Lead-in Manhole;
 - (d) Underground Equipment to be installed, replaced, modified or rearranged;
 - (e) any assistance required from NetLink Trust (subject to agreement and charges);
 - (f) a description of the precautions on how the Requesting Licensee would ensure that the replacement would not affect any existing plant or equipment; and
 - (g) any other information which the Requesting Licensee believes would be useful to NetLink Trust in assessing the request.
- 9.5 Within five (5) Business Days of the receipt of the request under clauses 9.3 and 9.4, NetLink Trust will notify the Requesting Licensee whether the request is accepted or rejected. Subject to clauses 1.6 and 2.6 above, if NetLink Trust does not meet the timeframe under this clause, NetLink Trust will provide the Requesting Licensee with the remedy due (if any) under clause 2.1(e).
- 9.6 NetLink Trust may reject a Request under clause 9.3 if NetLink Trust reasonably believes that:
- (a) the replacement, modification or rearrangement reasonably affects any existing plant or equipment; or
 - (b) the Requesting Licensee has, in NetLink Trust's reasonable opinion, not complied in any other way with clause 9.4.
- 9.7 Each obligation in relation to installation of Underground Equipment in clause 8 which is relevant to the replacement, modification or rearrangement of Underground Equipment (such as labelling of Underground Equipment and submission of a work completion report) will apply, to the extent applicable, to such replacement, modification or rearrangement.

10. STANDARD TERMS AND CONDITIONS

- 10.1 NetLink Trust will provide the shared use of Building Lead-in Ducts and access to Building Lead-in Manholes under this Schedule 19 on an “as-is-where-is” basis.
- 10.2 The Requesting Licensee is responsible for the construction and maintenance of its Network including its Underground Equipment.
- 10.3 NetLink Trust is responsible for maintaining and administering the shared use of Building Lead-in Ducts and access to Building Lead-in Manholes under this Schedule 19.
- 10.4 If in the course of installation, operation, maintenance, replacement or repair of its Underground Equipment, the Requesting Licensee detects a defect or problem in NetLink Trust’s equipment, plant, facilities, Building Lead-in Ducts or Building Lead-in Manholes, the Requesting Licensee must promptly notify NetLink Trust and provide a detailed description of the defect or problem.
- 10.5 In case of an issue under clause 10.4, the Requesting Licensee may request that NetLink Trust perform maintenance work on any affected Building Lead-in Manhole or Building Lead-in Duct to rectify any defect or problem.
- 10.6 If NetLink Trust, acting reasonably, considers that a defect or problem which is the subject of a request for maintenance work affects or is likely to affect the Requesting Licensee’s use of the relevant Building Lead-in Duct or access to Building Lead-in Manhole, NetLink Trust will within five (5) Business Days of receipt of the request provide the Requesting Licensee with an estimate of the time that NetLink Trust will take to complete the maintenance work including the estimated time needed to obtain any necessary approval from a Third Party under clause 10.7 (“**First Response**”).
- 10.7 NetLink Trust will commence maintenance work on Building Lead-in Ducts and Building Lead-in Manholes (as relevant) within five (5) Business Days of the provision of a First Response under clause 10.6, except where NetLink Trust must obtain the consent, approval or permission of a Third Party to conduct such maintenance work, in which case NetLink Trust will:
- (a) within three (3) Business Days of the provision of the First Response under clause 10.6, apply to the Third Party for the relevant consent, approval or permission; and
 - (b) within five (5) Business Days of the receipt of such consent, approval or permission, commence the maintenance work.

- 10.8 Subject to clauses 1.6 and 2.6 above, NetLink Trust must complete any maintenance work within the timeframe notified to the Requesting Licensee under clause 10.6. If NetLink Trust fails to do so, NetLink Trust will:
- (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 the Requesting Licensee with the remedy due (if any) under clause 2.1(f).
- 10.9 A revised timeframe for the completion of maintenance work under clause 10.8 does not affect the Requesting Licensee's right to a remedy under 2.1(f) (if any such right otherwise exists).
- 10.10 If NetLink Trust fails to complete the maintenance work within the timeframe notified to the Requesting Licensee under clause 10.6 due to events outside NetLink Trust's reasonable control, such failure does not constitute a breach of this ICO Agreement, provided that NetLink Trust:
- (a) notifies the Requesting Licensee as soon as practicable upon the occurrence of a delay;
 - (b) states the cause of the delay; and
 - (c) specifies a new date for the completion of maintenance work which is no longer than the period of delay caused by the event(s) outside NetLink Trust's reasonable control.
- 10.11 The Requesting Licensee must, in its use of Building Lead-in Ducts and access to Building Lead-in Manholes:
- (a) take such action as a reasonably prudent licensee would take, and avoid any act or omission which a reasonably prudent licensee would avoid;
 - (b) keep the Building 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 Building Lead-in Manhole; and
 - (d) correct or remove any fault, defect or problem with its Underground Equipment that may jeopardise NetLink Trust's Building Lead-in Duct, Building Lead-in Manhole or equipment, plant, or facilities, or the equipment, plant, or facilities of any other FBO.

- 10.12 If a fault, defect or problem with the Requesting Licensee's Underground Equipment causes or may cause damage to NetLink Trust's Building Lead-in Duct, Building Lead-in Manhole or equipment, plant, or facilities or equipment, plant or facilities of any other FBO, the Requesting Licensee must:
- (a) notify NetLink Trust as soon as practicable; and
 - (b) repair the fault, defect or problem or take other corrective action immediately.
- 10.13 If NetLink Trust, acting 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.
- 10.14 When both NetLink Trust's and the Requesting Licensee's equipment, plant, facilities or other properties are damaged at the same location, NetLink Trust has priority over the Requesting Licensee to work in Building Lead-in Ducts and Building Lead-in Manholes.
- 10.15 NetLink Trust is not responsible for the maintenance of the building owner's portion of any Building Lead-in Duct to which a shared use Licence is granted under this Schedule 19.
- 10.16 For the avoidance of doubt, NetLink Trust may lease the Building Lead-in Duct space (including the lease of the Building Lead-in Duct space to third parties), and/or install or remove NetLink Trust's or its third party Underground Equipment, without notifying the Requesting Licensee.

11. UNAUTHORISED ACCESS TO BUILDING LEAD-IN DUCT AND BUILDING LEAD-IN MANHOLE

- 11.1 Without prejudice to any other rights NetLink Trust may have (whether under contract, at law, or in equity), where NetLink Trust identifies that the Requesting Licensee has accessed a Building Lead-in Duct or Building Lead-in Manhole without having obtained approval in accordance with this Schedule 19, NetLink Trust may do any one or more of the following:
- (a) suspend or terminate this Schedule 19 subject to notifying the Authority that a material breach of this Schedule 19 has occurred and obtaining an order from the Authority under the ICO Agreement for NetLink Trust to suspend or terminate this Schedule 19;
 - (b) direct the Requesting Licensee to, within five (5) Business Days of the notice, remove its Underground Equipment from the Building Lead-in Duct or Building Lead-in Manhole; and

- (c) direct the Requesting Licensee to, within two (2) Business Days of the notice, submit a Request in accordance with clause 4 for the relevant use and access.

11.2 The Requesting Licensee must pay:

- (a) the reasonable costs incurred by NetLink Trust in investigating any unauthorised access; and
- (b) Charges in arrears for all unauthorised access or use, calculated by NetLink Trust in accordance with Schedule 15, which will be due within ten (10) Business Days from the date of Invoice.

11.3 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 of any unauthorised Underground Equipment at the same time.

11.4 If the Requesting Licensee is unable to provide credible documentary evidence required under clause 11.3, the date of installation will be deemed to have been the Effective Date of this ICO Agreement.

11.5 If NetLink Trust rejects a Request submitted pursuant to clause 11.1(c) the Requesting Licensee:

- (a) remains liable for all costs and Charges under clause 11.2;
- (b) must pay any Charges or costs associated with the Request set out in this Schedule 19; and
- (c) must discontinue all unauthorised use and access and remove all unauthorised Underground Equipment from Building Lead-in Ducts and Building Lead-in Manholes within five (5) Business Days.

11.6 If the Requesting Licensee does not remove its Underground Equipment as required under clauses 11.1(b) or 11.5(c), NetLink Trust may remove the Underground Equipment and the Requesting Licensee must pay for all reasonable costs associated with its removal.

12. PHYSICAL ACCESS PROCEDURE

12.1 When installing, accessing, operating or working around NetLink Trust's Building Lead-in Duct or Building Lead-in Manhole, the Requesting Licensee must comply with:

- (a) the physical access procedures for underground plant in Annex 19-3 as amended from time to time by NetLink Trust;
- (b) the Standard Operating Procedures in Annex 19-2 and Annex 19-4 as amended by NetLink Trust from time to time;
- (c) all relevant restrictions, conditions or security requirements imposed by any Governmental Agency;
- (d) all relevant codes and standards issued by the Authority or any other relevant Governmental Agency from time to time; and
- (e) any reasonable written instructions provided to the Requesting Licensee by NetLink Trust relating to particular circumstances not covered by the Annexes.

12.2 Where more than one FBO requires access to Building Lead-in Ducts or Building Lead-in Manholes, NetLink Trust or its nominee will, in its sole discretion, determine:

- (a) the number and identity of parties allowed concurrent access; and
- (b) the sequence in which the FBOs, including the Requesting Licensee, will access the Building Lead-in Ducts and Building Lead-in Manholes.

12.3 After scheduling access to Building Lead-in Ducts or Building Lead-in Manholes, for the Requesting Licensee, if:

- (a) NetLink Trust subsequently requires access; or
- (b) NetLink Trust receives a request from another FBO for access,

(each an “**alternative access request**”) during any time at which the Requesting Licensee has been granted access (each a “**cross-over period**”), NetLink Trust will notify the Requesting Licensee and request details about the Requesting Licensee’s reasons for access.

CLAUSE 12.4 – REQUIRED MODIFICATIONS

12.4 After assessing the reasons given by the Requesting Licensee, if NetLink Trust determines that an alternative access request is more urgent (such as in an emergency situation where access is required for the restoration of service) than the access scheduled to the Requesting Licensee, NetLink Trust will notify the Requesting Licensee, and:

- (a) the Requesting Licensee's access will be suspended for the cross-over period; and
- (b) NetLink Trust will, following consultation with the Requesting Licensee, reschedule the Requesting Licensee's access at an alternative time acceptable to the Requesting Licensee.

IMDA Directed Modifications: IMDA notes that NetLink Trust will determine if the Alternative Access Request is for an urgent situation or emergency (e.g., need to restore services due to cable damage) before determining if there is a need to reschedule the access that was scheduled to the RL. However, the drafting can be clearer to provide clarity. Accordingly, IMDA directs NetLink Trust to provide clarity in clause 12.4 on what is meant by "more urgent" and that Alternative Access Request will only be approved only if it is a case of emergency.

13. MARKING OF UNDERGROUND EQUIPMENT

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

14. REQUESTING LICENSEE RIGHTS

- 14.1 The approval and provision of a Licence does not vest in the Requesting Licensee any right, title or proprietary interest in the relevant Building Lead-in Duct or Building Lead-in Manhole.

15. TERM OF LICENCE

- 15.1 The Requesting Licensee's Licence (subject to all restrictions in this ICO Agreement) commences on the date specified by NetLink Trust under clause 7.6 and continues until the earlier of:
 - (a) the termination or expiry of this ICO Agreement; or
 - (b) a Party terminating usage or access in accordance with any right under this Schedule 19.

16. SUSPENSION

- 16.1 Subject to clause 11.2 of the main body of this ICO Agreement, NetLink Trust may suspend the Requesting Licensee's Licence at any time until further notice to the Requesting Licensee if NetLink Trust determines that such use or access causes or is likely to cause physical or

technical harm to any telecommunications network, system or services (whether of NetLink Trust or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the NetLink Trust's facilities, equipment or plant.

- 16.2 NetLink Trust may carry out repairs or upgrades to any one or more Building Lead-in Duct and Building Lead-in Manhole by giving fourteen (14) Calendar Days' notice to the Requesting Licensee.
- 16.3 Without prejudice to or limiting the exclusions or limitations of liability in this ICO Agreement, NetLink Trust shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of access to Building Lead-in Duct or Building Lead-in Manhole under this clause 16.
- 16.4 Where a suspension under this clause 16 is due to the fault of the Requesting Licensee, the Requesting Licensee must compensate NetLink Trust for all the reasonable costs it incurs in lifting the suspension after the Requesting Licensee has rectified its fault.

17. TERMINATION OF LICENCE

- 17.1 Subject to clause 12.3 of the main body of the ICO Agreement, NetLink Trust may immediately terminate the Requesting Licensee's Licence under this Schedule if:
- (a) the Requesting Licensee fails to complete any installation, relocation, repair in the time required under this Agreement (including any extension granted);
 - (b) in NetLink Trust's reasonable opinion, the Requesting Licensee is using a Building Lead-in Duct or accessing a Building Lead-in Manhole in contravention of an applicable law, licence, code, regulation or direction and NetLink Trust 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 approved Underground Equipment is used for a purpose other than for the purpose of the Requesting Licensee providing Telecommunication Services;
 - (d) the Requesting Licensee locates equipment other than approved Underground Equipment in the Building Lead-in Duct or Building Lead-in Manhole;
 - (e) a Building Lead-in Duct or Building Lead-in Manhole has become unsafe for its purpose;

- (f) NetLink Trust's right to own, maintain or operate a Building Lead-in Duct or Building Lead-in Manhole is revoked, terminates or expires;
 - (g) the shared use of a Building Lead-in Duct or access to a Building Lead-in Manhole causes or is likely to cause physical or technical harm to, or cause deterioration in the operation of any telecommunications network, system or services (whether of NetLink Trust or any other person);
 - (h) the Requesting Licensee is no longer an FBO;
 - (i) the NetLink Trust ICO is revoked by the Authority under clause 12.8 of the main body of this ICO Agreement; or
 - (j) the Authority removes the requirement for NetLink Trust to supply the Licences in this Schedule under the NetLink Trust ICO or exempts NetLink Trust from supplying the Licences in this Schedule under the ICO Agreement, provided that the date of termination shall not be earlier than the effective date of the Authority's decision.
- 17.2 Subject to clause 12.3 of the main body of the ICO Agreement, NetLink Trust may terminate the Requesting Licensee's Licence by giving ten (10) Business Days' prior written notice to the Requesting Licensee if the Requesting Licensee removes or abandons its Underground Equipment and the Requesting Licensee does not dispute such written notice by NetLink Trust.
- 17.3 Subject to clause 12.3 of the main body of the ICO Agreement, if NetLink Trust proposes to decommission any Building Lead-in Duct and/or Building Lead-in Manhole, NetLink Trust must provide the Requesting Licensee with at least six (6) months' prior written notice of its intention to terminate the Requesting Licensee's use of, and access to, the Building Lead-in Duct and/or Building Lead-in Manhole.
- 17.4 Subject to clause 12.3 of the main body of the ICO Agreement, at any time during the term of Licence to the shared use of the Building Lead-in Duct and/or access to a Building Lead-in Manhole, if access to that Building Lead-in Duct and/or the Building Lead-in Manhole is to be terminated because of the closure of a Building MDF room, NetLink Trust must give the Requesting Licensee at least six (6) months' prior notice before such event and if NetLink Trust is unable to give such notice for circumstances beyond NetLink Trust's reasonable control, NetLink Trust must notify the Requesting Licensee as soon as reasonably practicable upon being aware of any pending closure of the Building MDF room.
- 17.5 Subject to clause 12.3 of the main body of the ICO Agreement, the Requesting Licensee may terminate its Licence under this Schedule by giving NetLink Trust one (1) month's written notice of termination. If a Requesting Licensee purports to terminate a Licence on less than one

(1) month's notice, the Requesting Licensee will remain liable for all Charges which apply in relation to the Licence and use and access under that Licence for the period between the purported termination and the first date on which such a termination is allowed under this clause 17.5.

17.6 Subject to clause 12.3 of the main body of the ICO Agreement, either Party ("**Terminating Party**") may terminate the Requesting Licensee's Licence under this Schedule:

- (a) if the other Party is in breach of this Schedule or this ICO Agreement and the breach is a service-affecting breach, and such breach remains un-remedied for a period of seven (7) Calendar Days after receiving notice from the Terminating Party; or
- (b) if the other Party is in breach of this Schedule or this ICO Agreement and 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), and such breach remains un-remedied for a period of fourteen (14) Calendar Days after receiving notice from the Terminating Party.

17.7 Subject to clause 12.3 of the main body of the ICO Agreement, if this Schedule 19 or this ICO Agreement is terminated or expires for any reason, any Licence granted under this Schedule 19 and any use of, or access to, Building Lead-in Duct and Building Lead-in Manhole is also terminated.

18. RESPONSIBILITIES OF PARTIES ON TERMINATION OR EXPIRY OF LICENCE

18.1 NetLink Trust will take reasonable measures to minimise disruptions to the Requesting Licensee's operations that may result from the termination of a Licence.

18.2 The Requesting Licensee will bear its own costs associated with the closure of the Building MDF room and the termination of a Licence.

18.3 The Requesting Licensee will be solely responsible for making alternative arrangements to continue to provide its customers with services following any termination of a Licence.

18.4 If the Requesting Licensee requests NetLink Trust's assistance to implement alternatives to terminated use of, and access to, the Building Lead-in Duct and/or Building Lead-in Manhole within thirty (30) Business Days of such termination, NetLink Trust will provide all reasonable assistance to implement such alternatives at the Requesting Licensee's cost.

18.5 Nothing in this clause 18 restricts:

- (a) NetLink Trust's termination rights;
 - (b) the Requesting Licensee's ultimate responsibility to find and implement alternatives;
or
 - (c) the Requesting Licensee's obligation to comply with the processes and procedures for the use of, and access to, Building Lead-in Ducts and Building Lead-in Manholes.
- 18.6 Upon expiry or termination of a Licence the Requesting Licensee must discontinue the use and access under that Licence and immediately remove its Underground Equipment.
- 18.7 If the Requesting Licensee fails to discontinue the use and access of the Building Lead-in Duct and Building Lead-in Manhole, or fails to remove its Underground Equipment as required under clause 18.6, NetLink Trust may remove the Underground Equipment and the Requesting Licensee must pay NetLink Trust all reasonable costs associated with such removal.
- 18.8 Notwithstanding termination or expiry, the Requesting Licensee will continue to be responsible for all Charges (including recurring Charges for the use of, and access to, the Building Lead-in Duct and Building Lead-in Manhole) until the date immediately after the complete removal of its Underground Equipment from all Building Lead-in Ducts and Building Lead-in Manholes.
- 18.9 Upon removal of the Requesting Licensee's Underground Equipment under clauses 18.6 or 18.7, NetLink Trust will verify and restore the Building Lead-in Duct and Building Lead-in Manhole to their condition before installation of the Underground Equipment.
- 18.10 The Requesting Licensee will pay all reasonable costs incurred by NetLink Trust in verifying and restoring the Building Lead-in Duct and Building Lead-in Manhole under clause 18.9, including the costs of updating NetLink Trust's records, other than in circumstances where the Requesting Licensee's discontinuation of use and access is a direct result of NetLink Trust's decommissioning of the Building Lead-in Duct and associated Building Lead-in Manholes.
- 18.11 Upon termination or expiry of the Requesting Licensee's Licence the Requesting Licensee must pay the Termination Charge specified in Schedule 15 unless the termination or expiry is a direct result of NetLink Trust's decommissioning of the Building Lead-in Duct and Building Lead-in Manholes.

19. SUB-LICENSING

- 19.1 The Requesting Licensee must not assign a Licence, or sub-let the shared use of the Building Lead-in Duct or access to a Building Lead-in Manhole, under this Schedule 19.

ANNEX 19-1: SERVICE LEVEL GUARANTEES

Service Level Guarantees

1 Rebates for the shared use of Building Lead-In Duct and access to Building Lead-In Manhole Request timeframes

Missed notification timeframe as to whether Request is accepted or rejected by (clause 5.1):	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 response timeframes

Missed notification timeframe as to whether In-Principle Approval is granted or rejected by (clause 5.3):	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 Joint Site Verification timeframes

Missed timeframe for the completion of a Joint Site Verification by (clause 6.1):	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

ANNEX 19-1: SERVICE LEVEL GUARANTEES

4 Rebates for Connection Duct construction timeframes

Missed timeframe for construction of a Connection Duct by (clause 7.1):	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 modified Underground Equipment

Missed notification timeframe for approval or rejection of Underground Equipment modification by (clause 9.5):	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 maintenance work on a Building Lead-In Duct or Building Lead-in Manhole

Missed timeframe for maintenance of a Building Lead-In Duct or Building Lead-in Manhole by (clause 10.6):	Rebate
1-30 Calendar Days	Number of days of delay x weekly recurring Charge
More than 30 Calendar Days	30 x weekly recurring Charge

ANNEX 19-2: SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD-IN DUCTS AND BUILDING LEAD-IN MANHOLES

SOP on Prevention of Damage to Building Lead-in Ducts and Building Lead-in Manholes

1. The Requesting Licensee must purchase service layout plans from NetLink Trust in respect of each Building Lead-in Manhole to which access is provided under this Schedule.
2. The Requesting Licensee will, in accordance with section 29(1) of the Act, submit an earthwork notification form to NetLink Trust at least seven (7) Calendar Days before the commencement of any earthwork to connect to NetLink Trust's Connection Duct(s). When working in or around the vicinity of Building Lead-in Ducts, Building Lead-in Manholes or any other NetLink Trust or Third Party FBO underground equipment, underground plant or underground facilities, the Requesting Licensee will engage licensed telecommunications cable detection workers and carry out trial holes by manual digging in order to determine the location, depth and alignment of such underground equipment, underground plant and underground facilities and prevent any damage.
3. The Requesting Licensee must use visible markings (such as poles, tapes, painting, etc.) to indicate the position of NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and any other NetLink Trust or Third Party FBO underground equipment, underground plant or underground facilities.
4. If necessary, the Requesting Licensee will arrange a site meeting with NetLink Trust at the Requesting Licensee's cost to co-ordinate the routing of the Requesting Licensee's ducts when working in or near the vicinity the NetLink Trust's Building Lead-in Ducts and Building Lead-in Manholes.
5. If the Requesting Licensee is unable to correctly and accurately determine the location, depth and alignment of NetLink Trust's Building Lead-in Ducts and Building Lead-in Manholes, the Requesting Licensee must seek NetLink Trust's assistance to ascertain those locations and must pay NetLink Trust's reasonable costs in providing such assistance.
6. The Requesting Licensee must not expose Building Lead-in Ducts, Building Lead-in Manholes or any other NetLink Trust or Third Party FBO underground equipment, underground plant or underground facilities without NetLink Trust's prior written approval.
7. If the Requesting Licensee seeks an approval under paragraph 6 of this Annex, the Requesting Licensee will submit to NetLink Trust the reasons why exposing the Building Lead-in Ducts, Building Lead-in Manholes or other NetLink Trust or Third Party FBO underground equipment, underground plant or underground facilities is necessary and unavoidable and all measures that will be taken to support and protect the exposed Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities.

**ANNEX 19-2: SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD-IN DUCTS AND
BUILDING LEAD-IN MANHOLES**

8. The Requesting Licensee will keep NetLink Trust informed regarding the dismantling of supports.
9. The Requesting Licensee will inform NetLink Trust regarding the back-filling procedure after exposure of any Building Lead-in Duct, Building Lead-in Manhole and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities.
10. The Requesting Licensee will disseminate information regarding NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities layout to the Requesting Licensee's contractors, sub-contractors and machine operators carrying out the work.
11. The Requesting Licensee will submit a work schedule and installation plan to NetLink Trust where works are to be carried out in or around the vicinity of NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities.
12. The Requesting Licensee will report immediately on any damage caused in connection with the installation works or otherwise caused to NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities at a telephone number to be designated by NetLink Trust.
13. The Requesting Licensee must not dig trial holes using machinery such as JCB or excavator.
14. The Requesting Licensee must not carry out any excavation, soil investigation, piling or earthworks in the vicinity of NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities without confirming their actual positions.
15. The Requesting Licensee will not cover up any of Building Lead-in Manholes with earth or building materials.
16. The Requesting Licensee must not assume that Building Lead-in Ducts are constructed in a straight run.
17. The Requesting Licensee must not cover up or attempt to repair any damage to NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities, but rather report such damages to NetLink Trust immediately.

**ANNEX 19-2: SOP ON PREVENTION OF DAMAGE TO BUILDING LEAD-IN DUCTS AND
BUILDING LEAD-IN MANHOLES**

18. The Requesting Licensee will not dismantle any support for NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities without informing NetLink Trust and obtaining NetLink Trust's consent.
19. The Requesting Licensee must not assume that the depth of NetLink Trust's underground plant is only 1.5 metres.
20. The Requesting Licensee must not remove any concrete encasement around NetLink Trust's pipeline after exposing it unless NetLink Trust gives prior written approval.
21. NetLink Trust may issue reasonable "Do's and Don'ts" to the Requesting Licensee so as to safeguard to NetLink Trust's Building Lead-in Ducts, Building Lead-in Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities, and the Requesting Licensee must comply with such "Do's and Don'ts".

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

Physical Access Procedure for Building Lead-in Manholes

1. The physical access procedures in this Annex 19-3 apply to all Building Lead-in Manholes to which the Requesting Licensee is granted access.
2. No procedure set out in this Annex 19-3 is intended by either Party to apply in relation to any Building Lead-in Manhole to which access has not been provided under a Schedule to this ICO Agreement, and neither Party may attempt to use these procedures in relation to such Building Lead-in Manholes.

Workers to be approved

3. The Requesting Licensee must provide to NetLink Trust a master list of persons nominated by the Requesting Licensee to have physical access to Building Lead-in Manhole (the “**Master List**”).
4. NetLink Trust may issue a prescribed form in which the Master List must be provided. At the Effective Date, the prescribed form of the Master List is set out in Attachment D to this Schedule 19. The Master List must contain at least the following details for each person listed:
 - (a) full name;
 - (b) company name and license no.;
 - (c) last 4 alphanumeric characters of the NRIC, FIN, Passport no. (whichever applies);
 - (d) a copy of Safety Instruction Course (SIC)/Safety Orientation Course (SOC) Certificate and its expiry date; and
 - (e) contact number; and
 - (f) email address.
5. The Master List must be maintained and updated by the Requesting Licensee with a new Master List provided to NetLink Trust whenever any amendments are made to the then-current Master List.
6. The Requesting Licensee must ensure that workers listed in the Master List are Singaporeans, Singapore Permanent Residents or holders of valid work permits.

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

7. The Requesting Licensee must pay Charges specified in Schedule 15 for NetLink Trust to process the Requesting Licensee's Master List.
8. Only persons whose names are listed on the Master List will be permitted physical access to any Building Lead-in Manhole.

Physical access request

9. Except for emergency access provided under paragraphs 20 to 31 of this Annex 19-3, access to a Building Lead-in Manhole will only be provided on a Business Day.
10. If the Requesting Licensee wishes to obtain physical access to a Building Lead-in Manhole, it must submit a request in writing at least five (5) Business Days before the requested physical access date (an "**Access Request**").
11. NetLink Trust may issue a prescribed form in which an Access Request must be submitted. At the Effective Date, the prescribed form of the Access Request is set out in Attachment B to this Schedule 19. An Access Request must at least contain:
 - (a) the purpose for which physical access is requested;
 - (b) the identity of the senior person who will be present and who will be responsible for the persons who will physically access the Building Lead-in Manhole;
 - (c) a complete list of the persons who may physically access the Building Lead-in Manhole on the relevant date of access;
 - (d) a copy of a valid foreign worker's work permit for each person who is neither a Singaporean nor a Singapore Permanent Resident;
 - (e) an estimate of the time during which physical access is requested; and
 - (f) the specific Building Lead-in Manhole to which physical access is requested.
12. The Access Request may only nominate up to a maximum of eight (8) people for whom physical access is requested.
13. Prior to physical access actually being granted, the Requesting Licensee must notify NetLink Trust the names of up to four (4) person(s) from the Access Request who will actually physically access the Building Lead-in Manhole.

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

14. Within two (2) Business Days of receipt of an Access Request, NetLink Trust will advise the Requesting Licensee whether the access has been approved.
15. The Requesting Licensee may apply for expedited approval for urgent physical access other than emergency access and in those circumstances must pay any additional Charge notified by NetLink Trust from time to time for expedited processing.
16. Written confirmation of the approval granted under paragraph 14 of this Annex 19-3 will be provided by NetLink Trust.
17. If NetLink Trust approves an Access Request, each Party will comply with the terms and conditions set out in paragraphs 34 to 43 of this Annex 19-3 in relation to physical access pursuant to that Access Request.
18. If, after granting an Access Request from the Requesting Licensee, NetLink Trust is informed of urgent physical access required by another FBO, NetLink Trust may notify the Requesting Licensee that its grant of physical access has been rescheduled in accordance with Schedule 19.
19. The Requesting Licensee must pay the Charges specified in Schedule 15 in relation to Access Request processing.

Emergency physical access request

20. The Requesting Licensee must submit to NetLink Trust a list of designated senior personnel on the Master List who are authorised to request emergency physical access (“**Emergency Access**”).
21. If Emergency Access is required, the Requesting Licensee must first obtain NetLink Trust’s consent for access by telephone using the designated telephone number of NetLink Trust’s Fault Control Centre. NetLink Trust will notify the Requesting Licensee within one (1) hour of receiving a request for Emergency Access of whether the request has been approved.
22. If NetLink Trust grants the Requesting Licensee Emergency Access to a Building Lead-in Manhole, the Requesting Licensee must provide NetLink Trust, via email, a written confirmation of Emergency Access in accordance with the prescribed form in Attachment C to this Schedule 19 by the first Business Day following the granting of access.
23. Each request for Emergency Access under paragraph 21 and each confirmation under paragraph 22 must specify:

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

- (a) full name each person to be granted (or granted) Emergency Access;
- (b) the full name of the requesting person;
- (c) last 4 alphanumeric characters of the NRIC, FIN, or Passport no. (whichever applies) for each person to be granted (or granted) Emergency Access;
- (d) a copy of a valid foreign worker's work permit for each person to be granted (or granted) Emergency Access who is neither a Singaporean nor a Singapore Permanent Resident;
- (e) contact number each person to be granted (or granted) Emergency Access;
- (f) details of the Emergency (including whether it is service affecting or non-service affecting) or reason for requesting access outside a Business Day;
- (g) the identity of the senior person who will be present and who will be responsible for the persons who will be accessing the Building Lead-in Manhole;
- (h) a complete list of the persons (limited to a maximum of 4) who will be accessing the Building Lead-in Manhole;
- (i) an estimate of the time during which physical access is requested; and
- (j) the specific Building Lead-in Manhole to which physical access is requested.

CLAUSE 24 – REQUIRED MODIFICATIONS

24. NetLink Trust may reject an Emergency Access request, or revoke an approval for Emergency Access where:
- (a) the request is for physical access to Building Lead-in Manhole to which access has not been approved under a Schedule to this Agreement;
 - (b) the persons listed on the request do not appear on the Master List or NetLink Trust or a relevant authority has barred one or more such person from physical access;
 - (c) any person listed on the request is not Singaporean, Singapore Permanent Resident or a holder of a valid foreign worker's work permit;

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

- (d) the SIC/SOC Certificate of any person listed on the request has expired;
- (e) NetLink Trust determines that the physical access or work to be performed by the Requesting Licensee may breach paragraph 35 of this Annex 19-3;
- ~~(f) NetLink Trust determines that the area is unsafe;~~
- ~~(g)(f) the Requesting Licensee is in breach of this ICO Agreement and such breach continues and remains unremedied at the time of the request; or~~
- ~~(h)(g) The Requesting Licensee is in breach of the Workplace Safety and Health Act.~~

IMDA Directed Modifications: IMDA directs NetLink Trust to remove clause 24(g) in Annex 19-3 as a breach of ICO (e.g., admin breach) should not be used as a reason to reject an Emergency Access request.

- 25. Upon approval under paragraph 24, physical access will be permitted on an interim basis only.
- 26. Physical access under paragraph 24 will be for a maximum period of eight (8) hours unless otherwise agreed. NetLink Trust will not withhold its agreement unreasonably.
- 27. Where NetLink Trust approves a request for Emergency Access, each Party will comply with the terms and conditions set out in paragraphs 34 to 43 of this Annex 19-3. In addition:
 - (a) NetLink Trust may appoint a co-ordinator to physically oversee any Emergency works (“**Emergency Works Co-ordinator**”);
 - (b) NetLink Trust may make the grant of Emergency Access conditional upon the Emergency Works Co-ordinator’s presence on site; and
 - (c) the Requesting Licensee shall not be liable for the costs in relation to the appointment of the Emergency Works Co-ordinator;
 - (d) the Requesting Licensee must comply with all directions from the Emergency Works Co-ordinator.
- 28. Where, in an Emergency, both NetLink Trust and the Requesting Licensee require Emergency Access to undertake corrective action, the Requesting Licensee acknowledges that NetLink Trust has priority.

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

29. Where, in an Emergency, two or more FBOs including the Requesting Licensee require Emergency Access to undertake corrective action, NetLink Trust may, in its absolute discretion, determine the order of priority for access and may reallocate priorities as the Emergency and Emergency works develop or are better assessed.
30. The Requesting Licensee must pay NetLink Trust the Charge specified in Schedule 15 in relation to processing of a request for Emergency Access.

Rejection of physical access request

31. NetLink Trust may reject an Access Request other than a bona fide Emergency Access request, or revoke an approval for physical access where:
 - (a) the request is not in the prescribed form or does not contain all the required information;
 - (b) the request is for physical access to Building Lead-in Manhole to which access has not been approved under a Schedule to this ICO Agreement;
 - (c) the persons listed on the request do not appear on the Master List or NetLink Trust or a relevant authority has barred one or more such person from physical access;
 - (d) any person listed on the request is not Singaporean, Singapore Permanent Resident or a holder of a valid foreign worker's work permit;
 - (e) the SIC/SOC Certificate of any person listed on the request has expired;
 - (f) NetLink Trust has scheduled work for the time access has been requested by the Requesting Licensee;
 - (g) NetLink Trust determines that the physical access or work to be performed by the Requesting Licensee may breach paragraphs 34 to 42 of this Annex 19-3;
 - (h) NetLink Trust determines that the area is unsafe;
 - (i) the Requesting Licensee is in breach of this Agreement and such breach continues and remains unremedied at the time of the request; or
 - (j) The Requesting Licensee is in breach of the Workplace Safety and Health Act.

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

32. If NetLink Trust rejects a request for physical access under paragraph 32, NetLink Trust will provide the Requesting Licensee with its reasons for rejection.

Conditions of physical access

33. NetLink Trust may refuse any person physical access to, or require that person to be removed from, a site where:
- (a) that person cannot, upon request, produce an identification card which is issued by NetLink Trust;
 - (b) NetLink Trust has previously notified the Requesting Licensee of problems with that person (e.g. the person has breached safety requirements or Standard Operating Procedures);
 - (c) the person has been barred by NetLink Trust under this ICO Agreement; or
 - (d) in the sole opinion of NetLink Trust, the person's action or non-action may cause damage to NetLink Trust's properties or may compromise or threaten safety.
34. The Requesting Licensee must not do or omit to do anything in connection with physical access which may:
- (a) threaten the safety of any person;
 - (b) interfere physically or electrically with the delivery of telecommunications services supplied or to be supplied by NetLink Trust or any other FBO;
 - (c) jeopardise the integrity or confidentiality of communications within NetLink Trust's Network;
 - (d) threaten the security of NetLink Trust's Building Lead-in Manhole; or
 - (e) cause damage to NetLink Trust's Building Lead-in Manhole.
35. The Requesting Licensee must ensure the following in relation to Building Lead-in Manholes to which it has been granted access:
- (a) physical access is gained only to the Building Lead-in Manhole or part thereof for which approval has been granted;

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

- (b) each person gaining physical access signs a log book maintained by the Requesting Licensee in which is recorded the full name of the person, IC/passport number, date and time of entry and departure;
 - (c) the applicable Standard Operating Procedures and any written instructions (relating to particular circumstances not covered by the Standard Operating Procedures) are followed;
 - (d) the Building Lead-in Manhole is left in a safe and tidy condition; and
 - (e) the Requesting Licensee's senior person informs NetLink Trust when work has been completed and all Requesting Licensee personnel have left the Building Lead-in Manhole.
- 36. No still, motion or digital cameras, film, negatives, tape or digital recorders, explosives, inflammables, cigarettes, lighters or equipment with electromagnetic emissions or radiation are allowed in any Building Lead-in Manhole.
- 37. NetLink Trust may inspect the logbook referred to in paragraph 36(c) at any time.
- 38. 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 NetLink Trust and provide an updated Master List.
- 39. NetLink Trust may terminate physical access to a specific Building 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 NetLink Trust or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of NetLink Trust's Network;
 - (b) that the area is unsafe; or
 - (c) that the Requesting Licensee is in breach of any provision of this Agreement.
- 40. Without prejudice to any other rights NetLink Trust 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 Building Lead-in Manhole or part thereof;

ANNEX 19-3: PHYSICAL ACCESS PROCEDURE FOR BUILDING LEAD-IN MANHOLES

- (b) breaches safety requirements or Standard Operating Procedures; or
- (c) has threatened safety, integrity or a confidentiality obligation,

Physical access may be immediately terminated and the person(s) involved will be barred from any further access or entry to any NetLink Trust facility.

41. The Requesting Licensee must not grant a Third Party (other than approved contractors) physical access to Building Lead-in Manhole to which the Requesting Licensee has been granted physical access under Schedule 19 and this Annex 19-3.

Compliance with the Workplace Safety and Health Act (Chapter 354A)

42. NetLink Trust and the Requesting Licensee acknowledge and agree that:
 - (a) for the purpose of the Workplace Safety and Health Act (Chapter 354A), the Building 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) NetLink Trust and the Requesting Licensee each have various responsibilities and obligations under the Workplace Safety and Health Act (Chapter 354A) in relation to the Building Lead-in Manholes.
43. The Requesting Licensee will procure that itself and its contractors, when accessing the Building Lead-in Manholes, will comply with the following:
 - (a) the various responsibilities and obligations under the Workplace Safety and Health Act (Chapter 354A); and
 - (b) all relevant instructions or requirements issued by the Authority or any other relevant Governmental Agency from time to time with regards to safety at the workplace.

ANNEX 19-4: SOP FOR WORKING IN BUILDING LEAD-IN MANHOLES AND CABLE PULLING

SOP for Working in Building Lead-in Manholes and Cable Pulling

1. This Annex 19-4 provides the Standard Operating Procedures for working inside Building Lead-in Manholes and cable pulling inside Building Lead-in Manholes.

Working inside Building Lead-in Manholes

2. The Requesting Licensee must place all approved temporary road signing equipment (such as signboards, barricades, traffic cones, blinker lamps and revolving lamps) bearing the logo and names of the Requesting Licensee and its contractor at each site in advance of, and for the duration of, its work.
3. Road signing equipment must as a minimum requirement accord with the LTA Temporary Signing Manual (1988 edition) or, where relevant, the Code of Practice for Temporary Traffic Control issued by LTA (as applicable) and any subsequent amendment of either.
4. If a site condition is extra hazardous (for example, due to high speed traffic, road bend, road incline or obstruction by shrubs or trees) the Requesting Licensee must erect additional temporary road signing equipment to mitigate the effect of such hazards.
5. It is the Requesting Licensee's obligation to determine each safety standard, manual, code or other regulation or guideline which applies to site works.
6. To the extent any safety standard, manual, code or other regulation or guideline contradicts a requirement under this ICO Agreement, the Requesting Licensee will notify NetLink Trust and seek its prior written waiver of any non-compliance with this ICO Agreement.
7. The Requesting Licensee must remove all debris and left-over material from inside and around the vicinity of the Building Lead-in Manhole.
8. The Requesting Licensee must ensure that the Building Lead-in Manhole and its surrounding area are cleaned and no flammable or toxic material is left in or around the Building Lead-in Manhole.
9. The Requesting Licensee must ensure that Building Lead-in Manhole covers are flush with the surface when closed.
10. The Requesting Licensee must seal all key-holes on the Building Lead-in Manhole cover with a polypropylene insert or other appropriate material reasonably agreed by the parties, to prevent water from collecting inside the key-holes.

ANNEX 19-4: SOP FOR WORKING IN BUILDING LEAD-IN MANHOLES AND CABLE PULLING

Cable pulling inside Building Lead-in Manholes

11. The Requesting Licensee must provide detailed information on the work method statement for cable pulling to NetLink Trust for its approval.
12. Information provided under paragraph 11 must include a work method statement on how the Requesting Licensee will prevent damage to existing cables found inside the Building Lead-in Manholes.
13. Work methods must be consistent with any guidelines issued by NetLink Trust from time to time.
14. The Requesting Licensee must:
 - (a) ensure that its Cable is laid against one side of the wall and supported on cable bearers in the Building Lead-in Manhole, provided space is available for installation of the cable bearers;
 - (b) ensure that its Cable is at all times properly secured to any cable bearers installed;
 - (c) obtain from NetLink Trust the necessary cable bearer(s) prior to installing its Cable; and
 - (d) ensure that its Cable does not cause obstruction in the Building Lead-in Manhole.
15. If the Requesting Licensee's Cable obstructs a Building Lead-in Manhole, NetLink Trust may require, and the Requesting Licensee will immediately remove such obstruction.
16. On each cable sheath, the Requesting Licensee must clearly identify that it is the owner of the Cables at one (1) metre intervals.
17. The Requesting Licensee must use a different colour Cable from existing cable installed in the Building Lead-in Manhole for the entire strip of Cable installed.
18. The Requesting Licensee must not construct or place any cable joint inside NetLink Trust's Building Lead-in Manhole.
19. The Requesting Licensee must use NetLink Trust approved gas and watertight duct seal to reinstate affected duct seal(s) in Building Lead-in Manholes after cable pulling work.

ANNEX 19-5: GUIDELINES FOR ASSESSMENT OF BUILDING LEAD-IN DUCT SPACE

Guidelines for Assessment of Building Lead-in Duct Space

1. NetLink Trust will assess the availability of Building Lead-in Duct space based on the guidelines listed in Annex 19-5, and subject to clauses 3.2 and 5.2 of Schedule 19.
2. NetLink Trust will assess the total actual utilised cable capacity of all NetLink Trust's Building Lead-in Ducts within a single trench ("**Utilisation Rate**") taking into account the actual number of cables in the Building Lead-in Ducts.
3. Where the Utilisation Rate is more than 70%, NetLink Trust will reject the Requesting Licensee's Request for the shared use of Building Lead-in Ducts.
4. However, where the Utilisation Rate is less than or equal to 70%, NetLink Trust will determine the Building Lead-in Duct space available for licensing to the Requesting Licensee by referring to the conversion tables and duct sharing formula set out in paragraphs 5 to 7 below.
5. Conversion tables:
 - (a) Conversion of the size of various fibre core cables to Standard Cable-Equivalent:

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

- (b) Maximum capacity for the various sizes of Building Lead-in Ducts as measured in Standard Cable-Equivalent ("**Assumed per Duct Capacity**"):

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

- (c) Conversion of the size of copper cables to Standard Cable-Equivalent:

ANNEX 19-5: GUIDELINES FOR ASSESSMENT OF BUILDING LEAD-IN DUCT SPACE

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

6. Duct sharing formula:

$$(\text{Number of NetLink Trust's Building Lead-in Ducts in a trench} \times \text{Assumed per-Duct Capacity}) - \text{Cable Reservation} - \text{Existing Cables}$$

Where:

- (a) 'Cable Reservation' refers to the reservation of two (2) Standard Cable-Equivalent space per duct (by default), unless otherwise provided for in this Annex 19-5; and
- (b) Assumed per-Duct Capacity will be capped at the number of Standard Cable-Equivalent tabulated under paragraph 5(b) of Annex 19-5. For the avoidance of doubt, such cap will not apply in the calculation of the Utilisation Rate.
- (c) Should the actual utilisation of the relevant Building Lead-in Duct exceed the Assumed per-Duct Capacity, it shall be regarded as an overfilled duct. For the purpose of the duct sharing formula set out in paragraph 6 of this Annex 19-5, the number of existing cables in the overfilled duct shall be capped at the Assumed per-Duct Capacity.

For the avoidance of doubt, methods of calculation are illustrated below:

Illustration 1

Assuming a trench containing three 110mm diameter lead-in ducts with a total of 12 existing cables:

Assumed per-Duct capacity = 10

Number of NetLink Trust's Building Lead-in Ducts in the trench = 3

Cable Reservation = 6 (i.e. 2 per duct)

Total Assumed per-Duct Capacity = $3 \times 10 = 30$

Existing cables = 12

Total Utilisation = $12 / 30 \times 100 = 40\% \leq 70\%$

ANNEX 19-5: GUIDELINES FOR ASSESSMENT OF BUILDING LEAD-IN DUCT SPACE

As the Total Utilisation is less than 70%, then in accordance with the duct sharing formula set out in paragraph 6 of this Annex 19-5, the duct space available for leasing is:

Number of Building Lead-in Ducts x Assumed per-Duct Capacity – Cable Reservation – Existing Cables

$$\text{i.e. } (3 \times 10) - 6 - 12 = 12$$

Illustration 2

Assuming a trench containing three 110mm diameter lead-in ducts with a total of 24 existing cables:

Assumed per-Duct Capacity = 10

Number of NetLink Trust's Building Lead-in Ducts in the trench = 3

Cable Reservation = 6 (i.e. 2 per duct)

Total Assumed per-Duct Capacity = $3 \times 10 = 30$

Existing cables = 24

Total Utilisation = $24 / 30 \times 100 = 80\% > 70\%$

As the Total Utilisation exceeds 70%, then in accordance with paragraph 3 of this Annex 19-5, there is no duct space available for leasing.

Illustration 3

Assuming a trench containing three 110mm diameter lead-in ducts with 14, 4, 2 existing cables respectively (i.e. a total of 20 existing cables)

Assumed per-Duct capacity = 10

Number of NetLink Trust's Building Lead-in Ducts in the trench = 3

Cable Reservation = 6 (i.e. 2 per duct)

Total Assumed per-Duct Capacity = $3 \times 10 = 30$

Existing cables = 20

Total Utilisation = $20 / 30 \times 100 = 67\% \leq 70\%$

As the Total Utilisation is less than 70%, then in accordance with the duct sharing formula set out in paragraph 6 of this Annex 19-5, the duct space available for leasing is:

Number of Building Lead-in Ducts x Assumed per-Duct Capacity – Cable Reservation – Existing Cables

ANNEX 19-5: GUIDELINES FOR ASSESSMENT OF BUILDING LEAD-IN DUCT SPACE

i.e. $(3 \times 10) - 6 - 16 = 8$,

where Existing Cables (for purpose of calculating available space for lease) = $10 + 4 + 2 = 16$ (i.e. the Assumed per-Duct Capacity for the first duct remains at 10 notwithstanding the fact that there are actually 14 existing cables in that duct)

7. In the event that the Cable Reservation set out under paragraph 6 of Annex 19-5 is found to be insufficient for NetLink Trust's maintenance and expansion requirements and/or fulfilment of NetLink Trust's regulatory obligations (taking into account all relevant factors, including any ground situation and operational considerations), NetLink Trust shall be entitled to seek the Authority's permission to increase the Cable Reservation set out under paragraph 6 of Annex 19-5.

Where more Standard Cable-Equivalent duct space is required to be reserved (subject to the Authority's approval), NetLink Trust shall inform the Requesting Licensee of the applicable higher Cable Reservation for the duct sharing formula set out in paragraph 6 above.

ATTACHMENT A: REQUEST FOR BUILDING LEAD-IN DUCT SPACE AND BUILDING LEAD-IN MANHOLES

Request for Building Lead-in Duct Space and Building Lead-in Manholes

The Requesting Licensee	
Date of Request: _____	Application Reference Number : _____
Estate/street name and block number	: _____
Building Lead-In Manhole number	: _____
No. of Connection Ducts required	: _____
No. of Cables (incl. type, sizes and pairs):	_____
No. of Building Lead-In Ducts required :	_____
For access to MDF, TER or riser number:	_____
Requesting Licensee must attach:	
(a) A copy of plant map indicating the manhole location	
(b) Where the Building Lead-in Manhole is not connected to a conduit owned or controlled by NetLink Trust, a copy of all necessary licences, permits and permissions procured by the Requesting Licensee to use and/or access the aforementioned conduit	
On Behalf of the Requesting Licensee	
Sign: _____	Name of Requesting Licensee: _____
Name: _____	(Company name)
Designation: _____	Requesting Licensee BRN: _____
Department: _____	
Contact No: _____	
Email _____	Company Stamp: _____
Address: _____	
Processing Status	
Received Date: _____	Queue Status: _____ Processed Date: _____

ATTACHMENT B: REQUEST FOR PHYSICAL ACCESS TO BUILDING LEAD-IN DUCT AND/OR BUILDING LEAD-IN MANHOLE

Request for Physical Access to Building Lead-in Duct and/or Building Lead-in Manhole

The Requesting Licensee

Date of Request: _____ Request Reference Number: _____

Approval for Physical Access is sought for the purpose of: _____

[Reason]

Manhole number: _____

Requested Date / Time of Access: _____

Estimated Duration of Access: _____

Name of Person(s) for which Physical Access is requested. (Please attach separate sheet if space is insufficient).

1. _____
[Name of Senior Person & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

2. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

3. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

4. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

¹ Note: only last 4 alphanumeric characters required

On Behalf of the Requesting Licensee

Sign: _____ Name of Requesting Licensee: _____
Name: _____ (Company name)
Designation: _____ Requesting Licensee BRN: _____
Department: _____
Contact No: _____
Email _____ Company Stamp: _____
Address: _____

NetLink Trust's Reply to the Requesting Licensee

☐ Request returned – illegible/incomplete
☐ Not approved Reason for rejection: _____

On Behalf of NetLink Trust

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

Processing Status

Received Date: _____ Queue Status: _____ Processed Date: _____

**ATTACHMENT C: REQUEST FOR EMERGENCY PHYSICAL ACCESS TO BUILDING
LEAD-IN DUCT AND/OR BUILDING LEAD-IN MANHOLE**

Request for Emergency Physical Access to Building Lead-in Duct and/or Building Lead-in Manhole

The Requesting Licensee

Date of Request: _____ Request Reference Number: _____

Approval for Emergency Physical Access is sought for the purpose of : _____

[Reason] _____

Manhole number: _____

Requested Date / Time of Access: _____

Estimated Duration of Access: _____

Name of Person(s) for which Emergency Physical Access is requested. (Please attach separate sheet if space is insufficient).

1. _____
[Name of Senior Person & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

2. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

3. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

4. _____
[Name & NRIC/FIN/Passport No.¹ & Work Permit No (where applicable)]

¹ Note: only last 4 alphanumeric characters required

On Behalf of the Requesting Licensee

Sign: _____	Name of Requesting Licensee: _____
Name: _____	(Company name)
Designation: _____	Requesting Licensee BRN: _____
Department: _____	
Contact No: _____	
Email _____	Company Stamp: _____
Address: _____	

NetLink Trust's Reply to the Requesting Licensee

☐ Request returned – illegible/incomplete

☐ Not approved Reason for rejection: _____

On Behalf of NetLink Trust

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

Processing Status

Received Date: _____ Queue Status: _____ Processed Date: _____

Master List for Physical Access to Building Lead-in Duct and/or Building Lead-in Manhole

¹ Note: only last 4 alphanumeric characters required

ATTACHMENT E: WORK METHOD STATEMENT GUIDELINES

Work Method Statement Guidelines

The Requesting Licensee's work method statement must:

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