

APPENDIX 20

DIRECTED MODIFICATIONS TO SCHEDULE 21

SCHEDULE 21

LICENSING OF COMMON SERVICE DUCTS OR DUCT SPACE AND/OR ACCESS TO ASSOCIATED TELECOM MANHOLES

NOTE: UNLESS OTHERWISE SPECIFIED IN IMDA'S DECISION AND OTHER IMDA DIRECTED MODIFICATIONS IN OTHER PARTS OF THE DIRECTION (INCLUDING SCHEDULE 21 – LICENSING OF COMMON SERVICE DUCTS OR DUCT SPACE AND/OR ACCESS TO ASSOCIATED TELECOM MANHOLES), NETLINK TRUST'S PROPOSED CHANGES TO SCHEDULE 21 – LICENSING OF COMMON SERVICE DUCTS OR DUCT SPACE AND/OR ACCESS TO ASSOCIATED TELECOM MANHOLES ARE APPROVED.

SCHEDULE 21

LICENSING OF COMMON SERVICE DUCTS OR DUCT SPACE AND/OR ACCESS TO ASSOCIATED TELECOM MANHOLES

CONTENTS

1. SCOPE	1
2. SERVICE LEVEL GUARANTEES	4
3. SERVICE DESCRIPTION AND ACCESS POINTS	7
4. ORDERING AND PROVISIONING PROCEDURE	8
5. DESKTOP STUDY	10
6. JOINT SITE VERIFICATION	11
7. PROJECT STUDY	13
8. CONNECTION DUCT CONSTRUCTION	15
9. INSTALLATION OF UNDERGROUND EQUIPMENT	17
10. REPLACEMENT OF UNDERGROUND EQUIPMENT	21
11. STANDARD TERMS AND CONDITIONS	23
12. UNAUTHORISED ACCESS TO COMMON SERVICE DUCT AND/OR TELECOM MANHOLE	26
13. PHYSICAL ACCESS PROCEDURE	28
14. MARKING OF UNDERGROUND EQUIPMENT	29
15. REQUESTING LICENSEE RIGHTS	29
16. PLANT DIVERSION	29
17. TERM OF LICENCE	30
18. SUSPENSION	30

19.	TERMINATION OF LICENCE	31
20.	RESPONSIBILITY OF PARTIES ON TERMINATION OR EXPIRY OF LICENCE	33
21.	SUB-LICENSING	34
ANNEX 21-1:	SERVICE LEVEL GUARANTEES	
ANNEX 21-2:	SOP ON PREVENTION OF DAMAGE TO COMMON SERVICE DUCTS AND/OR TELECOM MANHOLES	
ANNEX 21-3:	PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLES	
ANNEX 21-4:	SOP FOR WORKING IN TELECOM MANHOLES AND CABLE PULLING	
ANNEX 21-5:	GUIDELINES FOR ASSESSMENT OF COMMON SERVICE DUCT SPACE	
ANNEX 21-6:	COMMON SERVICE DUCT NETWORK	
ANNEX 21-7:	PLANT DIVERSION PROCEDURES	
ATTACHMENT A:	REQUEST FOR COMMON SERVICE DUCT SPACE, TELECOM MANHOLE AND/OR CONSTRUCTION OF CONNECTION DUCT	
ATTACHMENT B:	REQUEST FOR PHYSICAL ACCESS TO COMMON SERVICE DUCT AND/OR TELECOM MANHOLES	
ATTACHMENT C:	REQUEST FOR EMERGENCY PHYSICAL ACCESS TO COMMON SERVICE DUCT AND/OR TELECOM MANHOLE	
ATTACHMENT D:	MASTER LIST FOR PHYSICAL ACCESS TO COMMON SERVICE DUCT AND/OR TELECOM MANHOLES	
ATTACHMENT E:	WORK METHOD STATEMENT GUIDELINES	

IMDA Directed Modifications: It is unclear if RLs need to apply for new Licence for each CSD projects listed in the CSD Framework on IMDA’s website. Accordingly, IMDA directs NetLink Trust to make clear in Schedule 21 if RL is required to apply for new Licence for different sets of Common Service Duct and/or Telecom Manholes.

SCHEDULE 21

LICENSING OF COMMON SERVICE DUCTS OR DUCT SPACE AND/OR ACCESS TO ASSOCIATED TELECOM MANHOLES

1. SCOPE

This Schedule 21 sets out the terms and conditions under which NetLink Trust will provide the Requesting Licensee with a licence for:

- (a) the use of NetLink Trust’s Common Service Ducts and access to relevant Telecom Manholes within the Common Service Duct Network on Long-term Basis;
- (b) the shared use of NetLink Trust’s Common Service Duct space and access to relevant Telecom Manholes within the Common Service Duct Network on Short-term Basis; or
- (c) access to Telecom Manholes alone in circumstances where Requesting Licensee requires access to NetLink Trust’s Common Service Ducts or a Third Party CSD

(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 within the Common Service Duct Network, to provide telecommunication services within a Development indicated under Annex 21-6.

1.2 The Requesting Licensee, in its request for a Licence, must specify whether the Requesting Licensee seeks:

- (a) a Licence for the use of Common Service Ducts and access to relevant Telecom Manholes on Long-term Basis (“**Request for Long-term Licence**”);
- (b) a Licence for the shared use of the Common Service Duct space and access to relevant Telecom Manholes on Short-term Basis (“**Request for Short-term Licence**”); or

- (c) a Licence for access to Telecom Manholes only (“**Request for Telecom Manhole Access Licence**”).
- 1.3 Subject to availability of spare Common Service Duct that has been set aside by NetLink Trust specifically for lease to FBOs on Short-term Basis (each a “**Set-aside Duct**”), a Requesting Licensee who intends to acquire a Licence under clause 1(a) is to negotiate a Customised Agreement in accordance with the relevant code of practice of the Authority, if they wish to lease additional Common Service Duct on Long-term Basis from NetLink Trust.
- 1.4 Requesting Licensee who has already been granted a Licence under clause 1(a) (for the purpose of this clause 1.4, an “**Existing Long-term Licence**”) or who owns Third Party CSD may be granted, on an exceptional case-by-case basis, a further Licence under clause 1(b), provided that the following criteria are fulfilled:
 - (a) Requesting Licensee submits documentary evidence to NetLink Trust demonstrating that there is insufficient duct space within the Common Service Ducts under the Existing Long-term Licence, or that there is insufficient duct space within the Third Party CSD owned by the Requesting Licensee, to meet the Requesting Licensee’s needs;
 - (b) NetLink Trust is satisfied with the documentary evidence provided by the Requesting Licensee for the aforesaid purpose; and
 - (c) NetLink Trust determines that there is sufficient space in the Set-aside Ducts based on NetLink Trust’s assessment as described under clause 5.4 and the Guidelines for Assessment of Common Service Duct space set out in Annex 21-5.

For the avoidance of doubt, NetLink Trust may utilise the Set-aside Ducts to serve its future needs, provided that it has obtained the Authority’s prior approval for such use.

- 1.5 The grant of a Licence for the use of Common Service Ducts on Long-term Basis as described in clause 1(a) (“**Long-term Licence**”) will be based on the duct requirements declared by the Requesting Licensee in the CSD Undertaking entered into during the capacity planning phase of a Development. The Requesting Licensee shall be deemed to have submitted a Request for Long-term Licence under this Schedule 21 by way of the CSD Undertaking entered into during the capacity planning phase of a Development, and all references to a Request for Long-term Licence shall be taken to mean the CSD Undertaking. Notwithstanding the above, the Requesting Licensee is required to comply with all the terms and conditions set out under this Schedule 21 (unless otherwise stated) and pay the Charges for the Licence under clause 1(a) as specified in Schedule 15, where applicable.

- 1.6 NetLink Trust shall grant a Requesting Licensee with a Long-term Licence for the specific Common Service Ducts requested by the Requesting Licensee, an indefeasible right of use (“**IRU**”) of the said Common Service Ducts during the term of the Long-term Licence, subject to the payment of IRU Charges as specified in Schedule 15 and the terms and conditions of the ICO Agreement.
- (a) Requesting Licensee shall pay non-refundable IRU Charges comprising fifty percent (50%) of the total projected costs in relation to the installation of the said Common Service Ducts (“**First IRU Charge**”) upon receipt of a written notification by NetLink Trust of the finalised design of the Common Service Duct Network within the relevant Development, and the projected costs. NetLink Trust will issue an invoice to the Requesting Licensee for the collection of the First IRU Charge, and Requesting Licensee shall confirm acceptance of the finalised design of the Common Service Duct Network and the amount of the First IRU Charge, and the Requesting Licensee shall complete the payment request no later than thirty (30) Calendar Days from the date of the relevant invoice.
 - (b) Upon the completion of Common Service Duct Network within the relevant Development, NetLink Trust shall compute the remaining payment to be collected from the Requesting Licensee based on the actual costs incurred in the installation of the said Common Service Ducts, and taking into account the First IRU Charge already paid by the Requesting Licensee (the “**Second IRU Charge**”). NetLink Trust will issue a written notification of the completion of the Common Service Duct Network, and an invoice for the Second IRU Charge. The Requesting Licensee shall confirm acceptance of the amount of the First IRU Charge, and the Requesting Licensee shall complete the payment request no later than thirty (30) Calendar Days from the date of the relevant invoice.
 - (c) For the avoidance of doubt, all IRU Charges – including the First IRU Charge and the Second IRU Charge – are non-refundable. In addition, the Requesting Licensee with Long-term Licence shall remain liable for the payment of all relevant charges associated with the Request for Telecom Manhole Access Licence set out in Schedule 15, including but not limited to the Request Charge and Annual Recurring Charge for the operation and maintenance of Common Service Ducts and Telecom Manholes.

CLAUSE 1.7 – REQUIRED MODIFICATIONS

- 1.7 In the event that the Requesting Licensee cancels the Request for Long-term Licence at any time prior to the Completion Date of the Common Service Ducts or Common Service Duct Network, or decides to reduce its duct requirements after the design of the Common Service Duct Network in the Development is finalised, the Requesting Licensee will be required to indemnify NetLink Trust for all reasonable costs incurred by NetLink Trust in respect of all

works related to the construction and installation of the Common Service Ducts that the Requesting Licensee no longer wishes to lease, as of the date on which such decision is communicated to NetLink Trust in writing. The Requesting Licensee shall remain liable for all Charges which apply in relation to the original Licence for the use of Common Service Ducts and access to relevant Telecom Manholes on Long-term Basis, for the entire duration of the said Licence.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2B of IMDA's Decision. Accordingly, IMDA directs NetLink Trust to amend clause 1.7 to give effect to IMDA's Decision.

- 1.8 The Requesting Licensee may seek a Licence under clauses 1.2(b) and 1.2(c) subject to:
- (a) the shared use by the Requesting Licensee of any Common Service Duct space, or access to any Telecom Manhole, as applicable, being for the sole purpose of the Requesting Licensee deploying Underground Equipment within the Common Service Duct Network to provide telecommunication services within the Development; and
 - (b) the terms and conditions of this Schedule 21.
- 1.9 NetLink Trust will provide the Requesting Licensee with a Licence for the sole purpose of the Requesting Licensee locating its Underground Equipment in Common Service Ducts and Telecom Manholes, as applicable, in accordance with the regulatory requirements of the Authority, where those directions and/or requirements require the provision of a Licence for which the Requesting Licensee has applied.
- 1.10 The timeframes in this Schedule 21 relating to provisioning work to be undertaken by NetLink Trust under clauses 5.1, 5.3, 6.1, 8.1, 10.5 and 11.7 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 event and specifying a new date for completion of the relevant provisioning work which is extended for the period of such delay.

2. SERVICE LEVEL GUARANTEES

- 2.1 NetLink Trust will provide the Service Level Guarantees in respect of Licensing for the shared use of the Common Service Ducts and access to Telecom Manholes, or for access to Telecom Manholes as set out in Annex 21-1 of this Schedule 21. If NetLink Trust fails to meet any Service Level Guarantees applicable to this Schedule 21 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 21-1 and any terms and conditions contained in this Schedule 21 in respect of Request for Short-term Licence or Request for Telecom Manhole Access Licence response timeframes;
- (b) Section 0 of Annex 21-1 and any terms and conditions contained in this Schedule 21 in respect of In-principle Approval response timeframes;
- (c) Section 0 of Annex 21-1 and any terms and conditions contained in this Schedule 21 in respect of Joint Site Verification timeframes;
- (d) Section 4 of Annex 21-1 and any terms and conditions contained in this Schedule 21 in respect of Connection Duct construction timeframes;
- (e) Section 0 of Annex 21-1 and any terms and conditions contained in this Schedule 21 in respect of modified Underground Equipment response timeframes; and
- (f) Section 0 of Annex 21-1 and any terms and conditions contained in this Schedule 21 in respect of timeframes for maintenance (including rectification) work on Common Service Duct and Telecom Manholes.

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 clause means that the Requesting Licensee waives any entitlement to the Service Level Guarantee payment in respect of that claim. NetLink Trust will respond within thirty (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 21.

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 1.10 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 21 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 11.18 and 11.19;
 - (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 11.18 or 11.19; 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 21.
- 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 21 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 provide a Licence to the Requesting Licensee for the use of the Common Service Ducts, Common Service Duct space and access to the Telecom Manholes, on the basis of:

- (a) number of Common Service Ducts that are allocated to the Requesting Licensee, where the Requesting Licensee has requested for a Licence on a Long-term Basis as described in clause 1(a);
- (b) per meter use of Common Service Duct space for each individual Cable on a Short-term Basis as described in clause 1(b); and/or
- (c) access to individual Telecom Manholes.

CLAUSE 3.2(f) – REQUIRED MODIFICATIONS

3.2 NetLink Trust may have regard to the following matters, in no particular order, when assessing the availability of Common Service Duct space and access to Telecom Manhole(s) in respect of a Request for Short-term Licence or Request for Telecom Manhole Access Licence:

- (a) future use of, or access to, Common Service Ducts and Telecom Manholes by the Requesting Licensee and other Licensees which has been requested but not yet fulfilled;
- (b) immediate demand for the Common Service Duct and access to the Telecom Manhole which NetLink Trust has already committed to provisioning to a third party at the time of receipt of the Request for Short-term Licence or Request for Telecom Manhole Access Licence;
- (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 Common Service Duct and/or Telecom Manhole within six (6) months of the Requesting Licensee's Request for Short-term Licence or Request for Telecom Manhole Access Licence;
- (e) whether NetLink Trust has installed the relevant Common Service Duct and/or Telecom Manhole at the location(s) requested by the Requesting Licensee;
- (f) whether NetLink Trust has an immediate need to access the Telecom Manholes;

- (g) the Guidelines for Assessment of Common Service Duct Space set out in Annex 21-5; and
- (h) any additional requirement deemed appropriate by NetLink Trust, subject to the Authority's approval.

One respondent disagreed with the inclusion of clause 3.2(f) and was of the view that NetLink Trust should not reject a request to access the Telecom Manhole if there was an immediate need to access the Telecom Manhole. Further, physical access to the Telecom Manhole can be scheduled based on a first come first served basis.

IMDA Directed Modifications: IMDA notes that 3.2(f) is also covered in other clauses and directs NetLink Trust to remove clause 3.2(f).

4. ORDERING AND PROVISIONING PROCEDURE

Shared use of Common Service Duct space

- 4.1 The Requesting Licensee must submit its Request for Short-term Licence in the form prescribed in Attachment A of this Schedule 21, along with a copy of plant map indicating the manhole location(s).
- 4.2 For the purposes of this Schedule 21, the date on which a Request for Short-term Licence is deemed received by NetLink Trust will be determined as follows:
 - (a) if the Request for Short-term Licence 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 for Short-term Licence is received;
 - (b) if the Request for Short-term Licence 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 for Short-term Licence is received; or
 - (c) if the Request for Short-term Licence is received on a day which is not a Business Day, the date on which it is deemed received is the Business Day immediately following the day on which the Request for Short-term Licence is received by NetLink Trust.

- 4.3 NetLink Trust will process all Requests for Short-term Licence 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 for Short-term Licence from all FBOs. Any Request for Short-term Licence 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 for Short-term Licence 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 for Short-term Licence 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 for Short-term Licence.
- 4.7 In this Schedule 21, the date on which a Request for Short-term Licence will be processed under clause 4.3 or 4.4 shall be referred to as the “**Request Date**”.

Access to Telecom Manholes

- 4.8 The Requesting Licensee is required to apply for access to the Telecom Manholes:
- (a) by submitting a Request for Telecom Manhole Access Licence in writing as accordance to the procedures set out under Annex 21-3 of this Schedule 21; or
 - (b) through NetLink Trust Platform, where applicable.

Where the conduit connected to the Telecom Manhole is not owned or controlled by NetLink Trust, Requesting Licensee is also required to provide a copy of all necessary licences, permits and permissions procured by the Requesting Licensee to use and/or access the aforementioned conduit, along with the Request for Telecom Manhole Access Licence.

- 4.9 The grant of access to Telecom Manholes is on a “first come first served” basis, save where an emergency situation necessitates urgent access to Telecom Manholes, in which case the Requesting Licensee shall adhere to the Emergency Physical Access Request as stated under Annex 21-3.

- 4.10 Requesting Licensee is required to pay a one-time user account set-up charge according to the Charges specified in Schedule 15, if it is applying for the access to NetLink Trust Platform for the first time.

5. DESKTOP STUDY

- 5.1 Within one (1) Business Day of the Request Date of the Request for Short-term Licence or Request for Telecom Manhole Access Licence, NetLink Trust will inform the Requesting Licensee whether NetLink Trust will conduct a desktop study under clause 5.2, or whether the said request is rejected pursuant to clause 5.4.
- 5.2 Following receipt of a Request for Short-term Licence or Request for Telecom Manhole Access Licence, unless NetLink Trust rejects the Request for Short-term Licence or Request for Telecom Manhole Access Licence pursuant to clause 5.4 below, NetLink Trust will perform a desktop study in respect of the Common Service Duct space and/or Telecom Manhole to which a Licence is requested in order to ascertain on a preliminary basis whether the Common Service Duct space and/or Telecom Manhole are available (as determined in accordance with clause 3.2).
- 5.3 If NetLink Trust conducts the desktop study described 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 for Short-term Licence or Request for Telecom Manhole Access Licence within five (5) Business Days of the Request Date.
- 5.4 NetLink Trust may reject a Request for Short-term Licence or Request for Telecom Manhole Access Licence if:
- (a) the Request for Short-term Licence or Request for Telecom Manhole Access Licence is not in the prescribed form;
 - (b) the Request for Short-term Licence or Request for Telecom Manhole Access Licence does not contain all required information;
 - (c) the information in the Request for Short-term Licence or Request for Telecom Manhole Access Licence is incorrect or inaccurate; or
 - (d) NetLink Trust determines that shared use of the requested Common Service Duct or access to the requested Telecom 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 the requested Common Service Duct or access to the requested Telecom Manhole is not available, NetLink Trust must provide the reason for rejection, in accordance to the Guidelines for Assessment of Common Service Duct Space set out in Annex 21-5.

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 ("**Request for Joint Site Verification**"), to verify the physical unavailability of Common Service Duct space and/or access to Telecom Manhole that was the basis of the rejection of the Request for Short-term Licence or Request for Telecom Manhole Access Licence.

- 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 Common Service Duct space and/or access to Telecom Manhole(s) or to make them be available at the specific times requested by the Requesting Licensee.
- 5.7 The provisions of this clause 5 shall not apply to a Request for Long-term Licence as described in clause 1(a). For the avoidance of doubt, NetLink Trust is deemed to have granted the Requesting Licensee an in-principle approval for the Licence on a Long-term Basis on the effective date of the CSD Undertaking.

6. JOINT SITE VERIFICATION

- 6.1 Except where:

- (a) the Request for Short-term Licence or Request for Telecom Manhole Access Licence is rejected in accordance with clause 5.4 above;
- (b) the Requesting Licensee fails to submit a Request for Joint Site Verification pursuant to clause 5.5 above within five (5) Business Days of receiving NetLink Trust's rejection notice; and/or
- (c) it is a Request for Long-term Licence,

NetLink Trust will complete a joint site verification ("**Joint Site Verification**"), subject to clause 6.3 of this Schedule 21, within the respective timeframe as set out below:

- (a) five (5) Business Days from the date of the In-Principle Approval; or
- (b) five (5) Business Days from the date the Requesting Licensee submits a Request for 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;
- (c) the grant of access by building managers and/or owners to their developments and/or premises, where applicable; and
- (d) the availability of Requesting Licensee personnel;

For the avoidance of doubt, the Requesting Licensee 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 Telecom Manhole to create a digital record of the existing cable utilisation within the Common Service Duct and determine the size and number of fibre cable within each of the relevant Common Service 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 Standard Cable-Equivalent.

6.5 NetLink Trust will re-confirm the results of the Desktop Study by performing an assessment of the feasibility of shared use of Common Service Duct in accordance with the guidelines provided under Annex 21-5.

- (a) if the result of the duct sharing formula shows that there is Common Service Duct space available for licensing, NetLink Trust will perform pipe testing to determine if new cable(s) can be pulled through the allocated Common Service Duct;
- (b) otherwise, NetLink Trust will reject (or uphold its decision to reject) the Request for Short-term Licence or Request for Telecom Manhole Access Licence and inform the Requesting Licensee of the same in accordance with clause 5.5. 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.

6.6 If the result of the pipe testing under clause 6.5(a) shows that there is no blockage in the designated Common Service Duct, NetLink Trust will provide its final approval by completing the project study pursuant to clause 7 (“**Project Study**”). Otherwise, NetLink Trust will reject (or uphold its decision to reject) the Request for Short-term Licence or Request for Telecom Manhole Access Licence and inform the Requesting Licensee in accordance with clause 5.5.

7. PROJECT STUDY

CLAUSE 7.1 – REQUIRED MODIFICATIONS

7.1 NetLink Trust will communicate to the Requesting Licensee its final approval of:

- (a) a Request for Short-term Licence or Request for Telecom Manhole Access Licence in writing within five (5) Business Days from the pipe testing conducted under clause 6.5(a), provided that the pipe testing result under clause 6.6 shows that there is no blockage in the designated Common Service Duct; or
- (b) a Request for Long-term Licence in writing within five (5) Business Days of the Completion Date of the construction of the relevant Common Service Ducts

(“**Final Approval**”).

The Final Approval will contain any of the following information, as applicable:

- (c) Common Service Duct space and/or access to relevant designated Telecom Manhole (which will be indicated in the associated Telecom Manhole fan-out diagram). For the avoidance of doubt, the allocation of Common Service Duct space shall be determined by NetLink Trust at its sole discretion;

- (d) quotation on the cost that NetLink Trust will incur for the construction and/or provision of Connection Duct(s) as specified in Schedule 15 (if applicable), subject to clause 7.4 below. The quotation shall be valid and binding for ten (10) Business Days from the date of its issuance.

IMDA Directed Modifications: Pipe testing is not required for the approval of the Request for the Telecom Manhole Access Licence. Accordingly, IMDA directs NetLink Trust to amend clause 7.1 accordingly to remove the requirement of pipe testing before it can provide the final approval for the Telecom Manhole Access Licence.

7.2 The Requesting Licensee shall only use the allocated Common Service Duct space that is identified in the Final Approval for its Underground Equipment and shall not be permitted to use any other duct or duct space. Where NetLink Trust's inspection reveals that an installation does not conform to the allocated Common Service Duct space and such non-compliance disadvantages NetLink Trust or jeopardises any telecommunication system in the Common Service Duct or Telecom 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.

7.3 The Requesting Licensee shall, within ten (10) Business Days from the date of the quotation referred to in clause 7.1(d), 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.

7.4 If NetLink Trust incurs costs in providing a Licence over and above the Charges for the construction of Connection Ducts set out in clause 7.1(d) and 8A.4, 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.

8. CONNECTION DUCT CONSTRUCTION

Request for Connection Duct

- 8A.1 Where a Requesting Licensee who owns a Third Party CSD or operates with a Long-term Licence, requires the construction of a Connection Duct, the Requesting Licensee shall seek NetLink Trust's approval by submitting Attachment A of Schedule 21 in accordance with clause 4.1 ("**Request for Connection Duct**").
- 8A.2 NetLink Trust may reject the Request for Connection Duct under clause 8A.1 if:
- (a) the Request for Connection Duct is not in the prescribed form;
 - (b) the Request for Connection Duct did not contain all required information; or
 - (c) the information in the Request for Connection Duct is incorrect or inaccurate.
- 8A.3 Within five (5) Business Days of receiving the Requesting Licensee's Request for Connection Duct under clause 8A.1, NetLink Trust will notify the Requesting Licensee whether the Request for Connection Duct is approved or rejected pursuant to clause 8A.2.

- 8A.4 If the Request for Connection Duct is approved under clause 8A.3, a quotation on the cost of the construction of Connection Duct as specified in Schedule 15 will be provided to the Requesting Licensee in accordance with clause 7.4.
- 8A.5 The quotation issued under clause 8A.4 shall be valid and binding for ten (10) Business Days from the date of its issuance. The Requesting Licensee shall, within ten (10) Business Days from the date of the said quotation, inform NetLink Trust in writing whether it accepts the quotation.
- 8A.6 If the Requesting Licensee does not accept the quotation issued under clause 8A.4, or if the Requesting Licensee fails to inform NetLink Trust in writing of its acceptance of the said quotation within the deadline prescribed under clause 8A.5 for any reason whatsoever, the quotation shall be deemed invalid. The Requesting Licensee shall in any event be liable for and shall pay NetLink Trust:
- (a) an Administrative Charge set out in Schedule 15 for processing cancellation; and
 - (b) any reasonable cost incurred by NetLink Trust up to the point of cancellation.

Construction of Connection Duct

- 8.1 Subject to clauses 1.10 and 2.6 above, 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 7.1(d) and 8A.4, NetLink Trust shall obtain the relevant approvals from the Government Agencies, and shall construct the Connection Duct(s) within twenty (20) Business Days.
- 8.2 If NetLink Trust determines that it is unable, or is likely to be unable, to construct a Connection Duct or to complete construction of a Connection Duct within the timeframe in clause 8.1, NetLink Trust will notify the Requesting Licensee as soon as practicable the reason for not being able to construct a Connection Duct (such as the relevant approvals are rejected by the Government Agencies or in a situation where there is an unfavourable site conditions) or provide a revised timeframe in which construction will be completed. The Requesting Licensee will pay NetLink Trust any reasonable costs that NetLink Trust has incurred up to the point where the permission or approval for construction of a Connection Duct is rejected by the relevant Government Agencies or when the site conditions revealed that it is not feasible to construct a Connection Duct.
- 8.3 Subject to clauses 1.10 and 2.6 above, if NetLink Trust fails to meet the timeframe specified in clause 8.1, 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 8.2.

- 8.4 NetLink Trust will use commercially reasonable endeavours to construct the Connection Duct(s) within the price previously agreed with the Requesting Licensee.
- 8.5 If NetLink Trust needs to revise its costs from time to time due to circumstances beyond its reasonable control, clause 7.4 will apply.
- 8.6 NetLink Trust will notify the Requesting Licensee when construction of the Connection Duct(s) is completed.
- 8.7 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 8.6.
- 8.8 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 ("**Extension Request for Duct Connection**"). A Requesting Licensee's Extension Request for Duct Connection 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 Extension Request for Duct Connection within two (2) Business Days from the date of receipt of such a request.
- 8.9 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:
- (a) terminate its Request for Short-term Licence under clause 4.1, in which case the Requesting Licensee must submit a new Request for Short-term Licence in order to use the Common Telecoms Ducts and/or access the associated Telecom Manholes; or
 - (b) terminate its Request for Connection Duct under clause 8A.1, in which case the Requesting Licensee must submit a new Request for Connection Duct in order to connect its duct to the Connection Duct.

The Requesting Licensee shall in any event be liable for and shall pay NetLink Trust the Charges for the construction of Connection Duct(s) clause 7.1(d) and 8A.4, as well as any additional costs that may arise from the construction of Connection Duct(s) pursuant to clause 7.4.

- 8.10 The Requesting Licensee must inform NetLink Trust when the Requesting Licensee has completed the connection of its duct to the Connection Duct(s).

9. INSTALLATION OF UNDERGROUND EQUIPMENT

CLAUSE 9.1 – REQUIRED MODIFICATIONS

- 9.1 The Requesting Licensee will submit to NetLink Trust its Request for Telecom Manhole Access Licence to physically access NetLink Trust’s Telecom Manhole for the installation of the Underground Equipment through the allocated Common Service Duct and/or Telecom Manhole in accordance with clause 4.8. In any case, the installation of the Underground Equipment must be completed within thirty (30) Business Days from the completion date of connecting its duct to the Connection Duct(s) under clause 8.10.

One respondent commented that RLs do not need to request for Telecom Manhole Access Licence for each physical access of the Telecom Manhole for the installation of underground equipment. Instead, RLs should only need to submit and acquire NetLink Trust’s approval to physically access the manholes for the installation after the approval of the Telecom Manhole Access Licence.

IMDA Directed Modifications: The industry practice is to apply for Request for Telecom Manhole Access Licence once and RLs to subsequently apply for physical access for each access of the Telecom Manholes. Given that NetLink Trust would already have provided the final approval for the Request for Telecom Manhole Access Licence in the earlier clauses, there is no need for RL to request for the same licence in clause 9.1 again. Accordingly, IMDA directs NetLink Trust to amend clause 9.1 to require RLs to request for physical access for the access of NetLink Trust’s Telecom Manhole instead of a Telecom Manhole Access Licence.

- 9.2 If the Requesting Licensee does not apply for, or complete, installation of its Underground Equipment in accordance with clause 9.1, NetLink Trust may, by notice, terminate the Requesting Licensee’s Request for Telecom Manhole Access Licence.

CLAUSE 9.3 – REQUIRED MODIFICATIONS

- 9.3 The Requesting Licensee is strictly prohibited from installing any new trenches, new ducts and/or sub-duct in any Common Service Duct or Telecom Manhole.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2D of IMDA’s Decision. Accordingly, IMDA directs NetLink Trust to remove clause 9.3.

- 9.4 Before the installation of Underground Equipment, the Requesting Licensee may withdraw any request upon written notice to NetLink Trust.

CLAUSE 9.5 – REQUIRED MODIFICATIONS

- 9.5 Notwithstanding any withdrawal of a request under clause 9.4, NetLink Trust may impose, and the Requesting Licensee must pay:
- (a) an Administrative Charge set out in Schedule 15 for processing cancellations;
 - (b) any reasonable cost incurred by NetLink Trust up to the point of cancellation; and
 - (c) NetLink Trust’s costs for remediating Common Service Ducts and/or Telecom Manholes to their original state before any work undertaken in relation to the request under clause 9.4.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2D of IMDA’s Decision. Accordingly, IMDA directs NetLink Trust to remove clause 9.5(c) and amend clause 9.5(b) to cover any reasonable cost incurred by NetLink Trust as a result of the cancellation under clause 9.4.

- 9.6 Requesting Licensee must complete installation work within the timeframe approved by NetLink Trust or within thirty (30) Business Days from access becoming available to the Requesting Licensee.
- 9.7 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 (“**Extension Request for Installation Work**”).
- 9.8 NetLink Trust will respond to any Extension Request for Installation Work under clause 9.7 within two (2) Business Days of receipt of the same, and will not unreasonably deny an Extension Request for Installation Work.
- 9.9 If the Requesting Licensee does not complete the 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 for Telecom Manhole Access Licence, in which case:
- (a) the Requesting Licensee must submit a new Request for Telecom Manhole Access Licence in accordance with this Schedule 21 in order to use the Common Service Ducts and/or access to Telecom Manholes; and

- (b) NetLink Trust may remove any Underground Equipment installed or partially installed in Common Service Ducts or Telecom Manholes at the Requesting Licensee's cost.
- 9.10 If the Requesting Licensee cancels 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.
- 9.11 The Requesting Licensee must mark its Underground Equipment so as to clearly identify it as belonging to the Requesting Licensee in accordance with the reasonable directions issued by NetLink Trust from time to time.
- 9.12 The Requesting Licensee must notify NetLink Trust of the completion of installation of Underground Equipment and submit all necessary documentation to NetLink Trust within ten (10) Business Days from completion.
- 9.13 The Requesting Licensee must submit a work completion report together with its notification of completion, which comprises the following details for each Telecom Manhole accessed:
- (a) the identification number for the Telecom 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 Telecom Manhole side wall showing the entry and the exit position of the approved Underground Equipment inside the Telecom Manhole and the Common Service Duct(s) used;
 - (e) photograph(s) of the approved Underground Equipment showing the way the approved Underground Equipment was installed in the Telecom Manhole including the cable identification code for each Cable (which should be clearly labelled on the cable sheath);
 - (f) where a Common Service Duct seal is available for the Telecom Manhole, photograph(s) of the Common Service Duct seal inside the Telecom Manhole showing that the Common Service Duct seal was properly sealed; and
 - (g) photograph(s) of the Telecom Manhole cover showing that the Telecom Manhole cover is properly closed (flush with its frame and the existing ground level, its number clearly visible) after physical access.

- 9.14 If the Requesting Licensee cannot submit a work completion report in the timeframe required by clause 9.12 due to circumstances beyond its reasonable control, it may request (“**Extension Request for Work Completion Report**”), and NetLink Trust will, within two (2) Business Days from the date of receipt of such request, grant a reasonable extension for the submission of work completion report.
- 9.15 Any Extension Request for Work Completion Report under clause 9.14 must be received by NetLink Trust before the last date on which a report is due under clause 9.12.
- 9.16 If the Requesting Licensee fails to submit a work completion report in accordance with clause 9.13 or fails to submit (or comply with) the Extension Request for Work Completion Report under clause 9.14, NetLink Trust may verify the work and take any corrective action necessary.
- 9.17 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 Common Service Ducts and Telecom Manholes are 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.
- 9.18 If the Requesting Licensee does not adequately comply with a request under clause 9.17, NetLink Trust may verify the work and take any corrective action necessary. Requesting Licensee is responsible for performing all works and services that are necessary to maintain the tidiness of the Telecom Manhole at its own costs and expenses, within the reasonable timeframe required by NetLink Trust.
- 9.19 NetLink Trust may, at its own discretion, carry out inspections to confirm that the installations comply with the approved installation plan and this ICO Agreement. Where the inspection reveals that an installation does not conform to the approved installation plan under this ICO Agreement and such non-compliance disadvantages NetLink Trust or jeopardises any telecommunication system in the Common Service Duct or Telecom 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.

- 9.20 All of NetLink Trust's rights to verify and inspect installation work, and all of the Requesting Licensee's obligations in relation to verification, inspection and remediation shall also apply in respect of any reinstalled or remediated works.
- 9.21 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.
- 9.22 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.
- 9.23 The Requesting Licensee will bear its own costs of reinstallation and corrective action under clause 9.19.
- 9.24 The Requesting Licensee will be responsible for performing all works in connection with the installation, operation, maintenance, repair, testing and removal of Requesting Licensee's Cables within the duct space in Common Service Ducts at its own cost.

10. REPLACEMENT OF UNDERGROUND EQUIPMENT

- 10.1 The Requesting Licensee may replace, modify or rearrange existing Underground Equipment in a Common Service Duct or Telecom Manhole by following the procedure in this clause 10 provided that:
- (a) it does not require additional Common Service Duct space or Telecom 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 (of equivalent or smaller) as the Underground Equipment it is replacing.
- 10.2 The Requesting Licensee must submit a request to replace Underground Equipment ("**Request to Replace Underground Equipment**") in the circumstances described in clause 10.1. If a Request to Replace Underground Equipment does not fall within the circumstances set out in clause 10.1, the Requesting Licensee must submit a new request under clause 4.

- 10.3 The Requesting Licensee shall be liable for the costs incurred by NetLink Trust in processing a Request to Replace Underground Equipment as specified in Schedule 15.
- 10.4 A Request to Replace Underground Equipment under clause 10.2 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 Telecom 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.
- 10.5 Within five (5) Business Days of the receipt of the Request to Replace Underground Equipment under clauses 10.2 and 10.4, NetLink Trust will notify the Requesting Licensee whether the request is accepted or rejected. Subject to clauses 1.10 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).
- 10.6 NetLink Trust may reject a Request to Replace Underground Equipment under clause 10.2 if NetLink Trust reasonably believes that:
- (a) the replacement, modification or rearrangement reasonably affects any NetLink Trust plant or equipment; or
 - (b) the Requesting Licensee has, in NetLink Trust's reasonable opinion, not complied in any other way with clause 10.4.
- 10.7 Each obligation in relation to installation of Underground Equipment in clause 9 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.

11. STANDARD TERMS AND CONDITIONS

- 11.1 The Requesting Licensee shall pay all applicable charges, including the relevant Annual Recurring Charge as specified in Schedule 15 for all Licenses obtained under this Schedule 21.
- 11.2 NetLink Trust will provide the Licence for shared use of Common Service Duct space on a Short-term Basis, and access to Telecom Manholes under this Schedule 21 on an “as-is-where-is” basis.
- 11.3 The Requesting Licensee is solely responsible for the construction and maintenance of its Network including its Underground Equipment.
- 11.4 NetLink Trust is only responsible for maintaining and administering the shared use of Common Service Ducts, Common Service Duct space and access to Telecom Manholes under this Schedule 21.
- 11.5 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, Common Service Ducts or Telecom Manholes, the Requesting Licensee must promptly notify NetLink Trust and provide a detailed description of the defect or problem.
- 11.6 In the event that the Requesting Licensee notifies NetLink Trust about a defect or problem pursuant to clause 11.5, the Requesting Licensee may request that NetLink Trust perform maintenance work on the affected Telecom Manhole or Common Service Duct to rectify the relevant defect or problem.
- 11.7 If NetLink Trust, acting reasonably, considers that a defect or problem which is the subject of a request for maintenance work under clause 11.6 affects or is likely to affect the Requesting Licensee’s use of the relevant Common Service Duct or access to the relevant Telecom Manhole, NetLink Trust will within five (5) Business Days of receipt of the request respond to 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 11.8 (“**First Response**”).
- 11.8 NetLink Trust will commence maintenance work on the relevant Common Service Ducts and/or Telecom Manholes within five (5) Business Days of the provision of a First Response under clause 11.7, 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 11.7, 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.
- 11.9 Subject to clauses 1.10 and 2.6 above, NetLink Trust must complete any maintenance work within the timeframe notified to the Requesting Licensee under clause 11.7. 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).
- 11.10 A revised timeframe for the completion of maintenance work under clause 11.9 does not affect the Requesting Licensee's right to a remedy under 2.1(f) (if any such right otherwise exists).
- 11.11 If NetLink Trust fails to complete the maintenance work within the timeframe notified to the Requesting Licensee under clause 11.7 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.
- 11.12 The Requesting Licensee must, in its use of Common Service Ducts and access to Telecom 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 Telecom 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 Telecom Manhole; and

- (d) correct or remove any fault, defect or problem with its Underground Equipment that may jeopardise NetLink Trust's Common Service Duct and/or Telecom Manhole or equipment, plant, or facilities, or the equipment, plant, or facilities of any other FBO.
- 11.13 If a fault, defect or problem with the Requesting Licensee's Underground Equipment causes or may cause damage to NetLink Trust's Common Service Duct and/or Telecom 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.
- 11.14 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.
- 11.15 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 Common Service Ducts and Telecom Manholes.
- 11.16 NetLink Trust is not responsible for the maintenance of the building owner's portion of any Common Service Duct to which a shared use Licence is granted under this Schedule 21. Requesting Licensee is required to engage the building owner (at its own costs and expenses) on any repair or rectification service required on the building owner's portion of any Common Service Duct.
- 11.17 For the avoidance of doubt, NetLink Trust may lease the Common Service Duct space (including the lease of the Common Service Duct space to third parties), and/or install or remove NetLink Trust's or its third-party Underground Equipment, without notifying the Requesting Licensee.

CLAUSE 11.18 – REQUIRED MODIFICATIONS

- 11.18 If it is necessary to carry out any planned service interruption, including but not limited to planned repair, or replacement or upgrade to any equipment or facility forming part of the Common Service Duct Network, NetLink Trust shall provide the Requesting Licensee with at least four (4) weeks' notice in advance of such interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. In the event that it is necessary for the planned service interruption to be postponed, NetLink Trust shall provide the

Requesting Licensee with no less than one (1) week's notice prior to the original scheduled commencement date of the service interruption. Where, for reasons beyond its control, NetLink Trust is unable to give advance notice to the Requesting Licensee as required by this clause 11.18 e.g. where the service interruption or postponement thereof is necessitated by site works carried out by Third Parties and such Third Parties do not give NetLink Trust sufficient advance notice, NetLink Trust shall notify Requesting Licensee of the service interruption, or postponement thereof (as the case may be), as soon as practicable and shall inform the Requesting Licensee of the period of service interruption in accordance with the requirements for an urgent service interruption as set out in clause 11.19. NetLink Trust shall use its best endeavours to minimise any service disruption to the Requesting Licensee.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2E of IMDA's Decision. Accordingly, IMDA directs NetLink Trust to amend clause 11.18 to include provisions to allow RLs to request for change in the date of the planned service interruptions, and NetLink Trust will give due consideration to the extent feasible.

11.19 If it is necessary to carry out any urgent service interruption, including but not limited to circumstances in which it is necessary for a planned service interruption to be postponed or brought forward, and NetLink Trust is unable to give advance notice to the Requesting Licensee as required by clause 11.18 for reasons beyond NetLink Trust's control, NetLink Trust shall notify the Requesting Licensee as soon as practicable of: (i) the commencement date and time of the urgent service interruption; (ii) the estimated period and end date of the urgent service interruption; and (iii) the reason for such urgent service interruption. NetLink Trust shall also inform the Requesting Licensee as soon as the urgent service interruption has ended. NetLink Trust shall use its best endeavours to minimise any service disruption to the Requesting Licensee.

12. UNAUTHORISED ACCESS TO COMMON SERVICE DUCT AND/OR TELECOM MANHOLE

12.1 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 Common Service Duct and/or Telecom Manhole without having obtained approval in accordance with this Schedule 21, NetLink Trust may do any one or more of the following:

- (a) suspend or terminate this Schedule 21 subject to notifying the Authority that a material breach of this Schedule 21 has occurred and obtaining an order from the Authority under the ICO Agreement for NetLink Trust to suspend or terminate this Schedule 21;

- (b) direct the Requesting Licensee to, within five (5) Business Days of the notice, remove its Underground Equipment from the Common Service Duct and/or Telecom Manhole; and
- (c) direct the Requesting Licensee to, within two (2) Business Days of the notice, submit a Request for Short-term Licence or Request for Telecom Manhole Access Licence in accordance with clause 4 for the use of and access to the relevant Common Service Duct and/or Telecom Manhole.

12.2 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.

12.3 If the Requesting Licensee is directed to submit a Request for Short-term Licence or Request for Telecom Manhole Access Licence under clause 12.1(c), the Requesting Licensee must provide documentary evidence of the date of installation of any unauthorised Underground Equipment at the same time.

12.4 If the Requesting Licensee is unable to provide credible documentary evidence required under clause 12.3, the date of installation will be deemed to have been the Effective Date of this ICO Agreement.

12.5 If NetLink Trust rejects a Request for Short-term Licence or Request for Telecom Manhole Access Licence submitted pursuant to clause 12.1(c) the Requesting Licensee:

- (a) remains liable for all costs and Charges under clause 12.2;
- (b) must pay any Charges or costs associated with the Request for Short-term Licence or Request for Telecom Manhole Access Licence set out in this Schedule 21; and
- (c) must discontinue all unauthorised use and access and remove all unauthorised Underground Equipment from Common Service Ducts and Telecom Manholes within five (5) Business Days from the date NetLink Trust inform Requesting Licensee of the rejection of such request.

- 12.6 If the Requesting Licensee does not remove its Underground Equipment as required under clauses 12.1(b) or 12.5(c), NetLink Trust may remove the Underground Equipment and the Requesting Licensee must pay for all reasonable costs associated with its removal.

13. PHYSICAL ACCESS PROCEDURE

- 13.1 When installing, accessing, operating or working around NetLink Trust's Common Service Duct and/or Telecom Manhole, the Requesting Licensee must comply with:

- (a) the physical access procedures for underground plant in Annex 21-3 as amended from time to time by NetLink Trust;
- (b) the Standard Operating Procedures in Annex 21-2 and Annex 21-4 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.

- 13.2 Subject to clause 11.15, where more than one FBO require access to Common Service Ducts or Telecom Manholes, NetLink Trust will in its sole discretion, determine:

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

- 13.3 After scheduling access to Common Service Ducts or Telecom 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 13.4 – REQUIRED MODIFICATIONS

- 13.4 If NetLink Trust determines that an Alternative Access Request is more urgent 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.

One respondent commented that NetLink Trust should not grant alternative access request where access has already been granted during the same period unless there is an emergency or imminent risk of personnel injury or damage to property.

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 13.4 on what is meant by “more urgent” and that Alternative Access Request will only be approved only if it is a case of emergency.

14. MARKING OF UNDERGROUND EQUIPMENT

- 14.1 The Requesting Licensee must mark its Underground Equipment located in Common Service Ducts and Telecom 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.

15. REQUESTING LICENSEE RIGHTS

- 15.1 The approval and grant of a Licence does not vest in the Requesting Licensee any right, title or proprietary interest in the relevant Common Service Duct and/or Telecom Manhole.

16. PLANT DIVERSION

- 16.1 In the event that NetLink Trust or Requesting Licensee is required to divert plant installed in Common Service Ducts as a result of a request for the same from the relevant Authority, the Requesting Licensee and NetLink Trust shall comply with the plant diversion procedures set

out in Annex 21-7. For the avoidance of doubt, the Party that is required to divert plant installed in the Common Service Ducts shall bear the costs of the diversion.

- 16.2 If a Party (the “**Receiving Party**”) receives a plant diversion request (“**Plant Diversion Request**”) from the relevant Authority, the Receiving Party shall notify the other parties of the details of that Plant Diversion Request within five (5) Business Days after the Receiving Party receives that Plant Diversion Request from the Authority.
- 16.3 The Parties agree that for Duct Diversion Works, NetLink Trust shall be appointed as the Duct Diversion Coordinator for the purposes of the Plant Diversion Procedures to manage each Plant Diversion Request. For Cable Diversion Works, the Requesting Licensee shall work with the Plant Diversion Requestor directly to complete such Cable Diversion Works that affect the Cables belonging to the Requesting Licensee.
- 16.4 Subject to Clause 14 of the Main Body of this ICO Agreement, the Duct Diversion Coordinator will not be liable for any Loss that may be suffered or incurred by the other Party or the other Party’s customers, arising from or in connection with the Plant Diversion, including but not limited to any damage to:
- (a) the other Party’s Common Service Ducts;
 - (b) the other Party’s Cables within the Common Service Ducts; or
 - (c) the Cables belonging to the other Party’s customers.

17. TERM OF LICENCE

CLAUSES 17.1 – REQUIRED MODIFICATIONS

- 17.1 The Requesting Licensee’s Licence on a Long-term Basis as described in clause 1(a) (subject to all restrictions in this ICO Agreement) commences on the date specified by NetLink Trust under clause 7.1. The Licence is valid for 35 years or 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 21.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2B of IDA’s Decision. NetLink Trust is required to amend the drafting the provide clarity that the term for the Telecom Manhole access Licence for RLs under the Long-Term Licence is 35 years.

17.2 The Requesting Licensee's Licence under clauses 1(b) and 1(c) (subject to all restrictions in this ICO Agreement) commences on the date specified by NetLink Trust in the notification issued under clause 8.6. The Licence is valid for two (2) years at the first instance, and shall subsequently be automatically renewed for successive two-year terms 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 21.

17.3 NetLink Trust shall, eight (8) weeks before the expiry of a Licence under clause 1(b) and 1(c), send a reminder to the Requesting Licensee notifying it of the impending expiry of the said Licence. In the event that the Requesting Licensee does not wish to extend the said Licence, the Requesting Licensee shall notify NetLink Trust in writing of the request to discontinue the said Licence and the reason for the request ("**Discontinuation Notice**") at least four (4) weeks before the relevant expiry date. In the absence of any Discontinuation Notice served on NetLink Trust by the Requesting Licensee in accordance with this ICO Agreement, the Licence under clause 1(b) and 1(c) shall be renewed for successive two-year terms on the same terms and conditions in accordance with clause 17.2. NetLink Trust shall provide a confirmation notice to the Requesting Licensee upon the renewal of each term.

18. SUSPENSION

18.1 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.

18.2 NetLink Trust may carry out repairs or upgrades to any one or more Common Service Duct and/or Telecom Manhole by giving fourteen (14) calendar days' notice to the Requesting Licensee.

18.3 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 Common Service Duct and/or Telecom Manhole under this clause 18.

- 18.4 Where a suspension under this clause 18 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.

19. TERMINATION OF LICENCE

- 19.1 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 21 if:

- (a) the Requesting Licensee fails to complete any installation, relocation, repair in the time required under this ICO Agreement (including any extension granted);
- (b) in NetLink Trust's reasonable opinion, the Requesting Licensee is using a Common Service Duct or accessing a Telecom Manhole in contravention of an applicable law, licence, code, regulation or direction and NetLink Trust has the necessary confirmation from the relevant Government 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 Common Service Duct and/or Telecom Manhole;
- (e) a Common Service Duct and/or Telecom Manhole has become unsafe for its purpose;
- (f) NetLink Trust's right to own, maintain or operate a Common Service Duct and/or Telecom Manhole is revoked, terminates or expires;
- (g) the shared use of a Common Service Duct or access to a Telecom 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 21 under the NetLink Trust ICO or exempts NetLink Trust from supplying the Licences in this Schedule 21 under the ICO Agreement, provided that the date of termination shall not be earlier than the effective date of the Authority's decision.

CLAUSE 19.2 – REQUIRED MODIFICATIONS

- 19.2 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.

IMDA Directed Modifications: In accordance with TMCC and ICO main body, all termination and suspension cases require IMDA's prior written approval so as to ensure no unilateral termination or suspension on Dominant Licensee's or RL's end which may result in end-user impact. In this regard, IMDA directs NetLink Trust to include the phrase "Subject to clause 12.3 of the main body of the ICO Agreement" in clause 19.2.

- 19.3 Subject to clause 12.3 of the main body of the ICO Agreement, if NetLink Trust proposes to decommission any Common Service Duct or Telecom Manhole, NetLink Trust may terminate the Requesting Licensee's use of, and access to, the Common Service Duct and/or Telecom Manhole by providing the Requesting Licensee with at least six (6) months' prior written notice.

CLAUSE 19.4, 19.5, 19.6 – REQUIRED MODIFICATIONS

- 19.4 At any time during the term of a Licence for the shared use of the Common Service Duct space and/or access to a Telecom Manhole, if access to that Common Service Duct and/or Telecom 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.
- 19.5 The Requesting Licensee may terminate its Licence under this Schedule 21 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 19.5.
- 19.6 Either Party ("**Terminating Party**") may terminate the Requesting Licensee's Licence under this Schedule 21:

- (a) if the other Party is in breach of this Schedule 21 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 21 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.

IMDA Directed Modifications: In accordance with TMCC and ICO main body, all termination and suspension cases require IMDA's prior written approval so as to ensure no unilateral termination or suspension on Dominant Licensee's or RL's end which may result in end-user impact. In this regard, IMDA directs NetLink Trust to include the phrase "Subject to clause 12.3 of the main body of the ICO Agreement" in clauses 19.4, 19.5 and 19.6.

19.7 Subject to clause 12.3 of the main body of the ICO Agreement, if this Schedule 21 or this ICO Agreement is terminated or expires for any reason, any Licence granted under this Schedule 21 and any use of, or access to, Common Service Duct and/or Telecom Manhole is also terminated.

20. RESPONSIBILITIES OF PARTIES ON TERMINATION OR EXPIRY OF LICENCE

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

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

20.3 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.

20.4 If the Requesting Licensee requests NetLink Trust's assistance to implement alternatives to the terminated use of, and access to, the Common Service Duct and/or Telecom 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.

20.5 Nothing in this clause 20 restricts:

- (d) NetLink Trust's termination rights;

- (e) the Requesting Licensee's ultimate responsibility to find and implement alternatives;
or
 - (f) the Requesting Licensee's obligation to comply with the processes and procedures for the use of, and access to, Common Service Ducts and Telecom Manholes.
- 20.6 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.
- 20.7 If the Requesting Licensee fails to discontinue the use and access of the Common Service Duct and/or Telecom Manhole, or fails to remove its Underground Equipment as required under clause 20.6, NetLink Trust may remove the Underground Equipment and the Requesting Licensee must pay NetLink Trust all reasonable costs associated with such removal.
- 20.8 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 Common Service Duct and/or Telecom Manhole) until the date immediately after the complete removal of its Underground Equipment from all Common Service Ducts and Telecom Manholes.
- 20.9 Upon removal of the Requesting Licensee's Underground Equipment under clauses 20.6 or 20.7, NetLink Trust will verify and restore the Common Service Duct and/or Telecom Manhole to their condition before installation of the Underground Equipment.
- 20.10 The Requesting Licensee will pay all reasonable costs incurred by NetLink Trust in verifying and restoring the Common Service Duct and/or Telecom Manhole under clause 20.9, 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 Common Service Duct and associated Telecom Manhole.

CLAUSE 20.11 – REQUIRED MODIFICATIONS

- 20.11 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 Common Service Duct and/or Telecom Manhole.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2B of IDA's Decision. For mid-term termination of the Telecom Manhole Access Licence by RLs on a Long-term Licence, it is reasonable for NetLink Trust to recover the RL's remaining share of the upfront manhole construction and installation cost, if it had not already been paid by the RL. However, the RL should not be charged for works related to the maintenance of the

manhole which NetLink Trust may carry out in future since the RL will no longer be accessing the manhole. Accordingly, IMDA directs NetLink Trust to amend clause 17.12 to reflect this decision.

21. SUB-LICENSING

21.1 The Requesting Licensee must not assign a Licence, or sub-let the shared use of a Common Service Duct or access to a Telecom Manhole, under this Schedule 21.

CLAUSE 21.2 – REQUIRED MODIFICATIONS

21.2 In the event that any FBO is unable to obtain a Licence due to a lack of duct space from Third Party CSD and NetLink Trust's Common Service Ducts, and the Requesting Licensee wishes to sub-licence the unused duct space that the Requesting Licensee leased from NetLink Trust (on Short-term and/or Long-term Basis) to the aforementioned FBO, the Requesting Licensee may commence good faith negotiations for a Customised Agreement with NetLink Trust in accordance with the relevant code of practice of the Authority for the said purpose.

IMDA Directed Modifications: IMDA refers NetLink Trust to Section 3.2E of IMDA's Decision. Accordingly, IMDA directs NetLink Trust to amend clause 21.2 to reflect that RL can only sub-lease unused duct capacity after it has obtained IMDA's approval to do so.

ANNEX 21-1: SERVICE LEVEL GUARANTEES

Service Level Guarantees

1 Rebates for the shared use of Common Service Duct and access to Telecom Manhole request timeframes (under clause 1(b) and clause 1(c))

Missed notification timeframe as to whether Request for Short-term Licence or Request for Telecom Manhole Access Licence 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

4 Rebates for Connection Duct construction timeframes

ANNEX 21-1: SERVICE LEVEL GUARANTEES

Missed timeframe for construction of a Connection Duct by (clause 8.1):	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 10.5):	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 and rectification works on a Common Service Duct and/or Telecom Manhole

Missed timeframe for maintenance and rectification of a Common Service Duct and/or Telecom Manhole by (clause 11.7):	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 21-2: SOP ON PREVENTION OF DAMAGE TO COMMON SERVICE DUCTS AND/OR TELECOM MANHOLES

SOP on prevention of damage to Common Service Ducts and/or Telecom Manholes

1. The Requesting Licensee must purchase service layout plans from NetLink Trust in respect of each Telecom Manholes to which access is provided under this Schedule 21.
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 Common Service Ducts and/or Telecom 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 Common Service Ducts and/or Telecom 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 Common Service Ducts and Telecom Manholes.
5. The indicative locations of NetLink Trust's Common Service Ducts and Telecom Manholes are identified in the service layout plan acquired under paragraph 1 of Annex 21-2. In situations where the Requesting Licensee is unable to correctly and accurately determine the location, depth and alignment of NetLink Trust's Common Service Ducts and Telecom 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 Common Service Ducts and/or Telecom 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 Common Service Ducts and/or Telecom 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 Common Service Ducts and/or Telecom

**ANNEX 21-2: SOP ON PREVENTION OF DAMAGE TO COMMON SERVICE DUCTS
AND/OR TELECOM MANHOLES**

Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities.

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 Common Service Duct and/or Telecom Manholes 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 Common Service Ducts and/or Telecom 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 Common Service Ducts and/or Telecom Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities.
12. The Requesting Licensee will immediately report on any damage caused in connection with the installation works or otherwise caused to the Common Service Ducts and/or Telecom Manholes and other NetLink Trust or Third Party FBO underground equipment, underground plant and underground facilities to 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 Common Service Ducts and/or Telecom 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 Telecom Manholes with earth or building materials.
16. The Requesting Licensee must not assume that Common Service 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 Common Service Ducts and/or Telecom Manholes and other NetLink Trust or Third Party FBO

**ANNEX 21-2: SOP ON PREVENTION OF DAMAGE TO COMMON SERVICE DUCTS
AND/OR TELECOM MANHOLES**

underground equipment, underground plant and underground facilities, but rather report such damages to NetLink Trust immediately.

18. The Requesting Licensee will not dismantle any support for NetLink Trust's Common Service Ducts and/or Telecom 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 Common Service Ducts and/or Telecom 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 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

Physical access procedure for Telecom Manholes

1. The physical access procedures in this Annex 21-3 apply to all Telecom Manholes to which the Requesting Licensee is granted access.
2. No procedure set out in this Annex 21-3 is intended by either Party to apply in relation to any Telecom 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 Telecoms 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 Telecom Manhole (the “**Master List**”).
4. NetLink Trust may issue a prescribed form as set out in Attachment D of this Schedule 21 in which the Master List must be provided. The Master List must contain 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 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

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 Telecom Manhole.

Physical access request

9. Except for emergency access provided under paragraphs 18 to 29 of this Annex 21-3, access to a Telecom Manhole will only be provided on a Business Day.
10. If the Requesting Licensee wishes to obtain physical access to a Telecom Manhole, it must:
 - (a) submit its Request for Telecom Manhole Access Licence in the form prescribed in Attachment A of this Schedule 21 at least five (5) Business Days before the requested physical access date; or
 - (b) submit a Request for Telecom Manhole Access Licence through NetLink Trust Platform, if applicable.

Where the conduit connected to the Telecom Manhole is not owned or controlled by NetLink Trust, Requesting Licensee must also provide a copy of all necessary licences, permits and permissions procured by the Requesting Licensee to use and/or access the aforementioned conduit, along with the Request for Telecom Manhole Access Licence.

11. Following the Request for Telecom Manhole Access Licence under clause 10(a) of Annex 21-3, NetLink Trust may issue a prescribed form as set out in Attachment B of this Schedule 21 in which an access Request must be submitted ("**Access Request**"). An Access Request must 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 Telecom Manhole;
 - (c) a complete list of the persons who may physically access the Telecom 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;

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

- (e) an estimate of the time during which physical access is requested;
 - (f) the specific Telecom Manhole to which physical access is requested; and
 - (g) where Access Request is relevant to the grant of a Licence on a Long-term Basis as described in clause 1(a) of Schedule 21, Requesting Licensee is required to provide the following information to NetLink Trust:
 - (i) cable route plan with indication of Telecom Manhole;
 - (ii) identification number of the relevant Common Service Ducts;
 - (iii) number of cable(s) to pull through the relevant Common Service Ducts; and
 - (iv) each of the cable size(s).
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 Telecom Manhole.
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. Written confirmation of the approval granted under paragraph 14 of this Annex 21-3 will be provided by NetLink Trust.
16. If NetLink Trust approves an Access Request, each Party will comply with the terms and conditions set out in paragraphs 33 to 42 of this Annex 21-3 in relation to physical access pursuant to that Access Request.
17. The Requesting Licensee must pay the Charges specified in Schedule 15 in relation to Access Request processing.

Emergency physical access request

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

18. 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**”).
19. 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.
20. If NetLink Trust grants the Requesting Licensee Emergency Access to a Telecom Manholes, 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 21 by the first Business Day following the granting of access.
21. Each request for Emergency Access under paragraph 19 and each confirmation under paragraph 20 must specify:
 - (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 Telecom Manholes;
 - (h) a complete list of the persons (limited to a maximum of 4) who will be accessing the Telecom Manholes;
 - (i) an estimate of the time during which physical access is requested; and

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

- (j) the specific Telecom Manholes to which physical access is requested.
22. 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.

CLAUSE 23 – REQUIRED MODIFICATIONS

23. NetLink Trust may reject an Emergency Access request, or revoke an approval for Emergency Access where:
- (a) the request is for physical access to Telecom Manholes to which access has not been approved under a Schedule to this ICO 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;
 - (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 34 of this Annex 21-3;
 - (f) NetLink Trust determines that the area is unsafe;
 - (g) 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) The Requesting Licensee is in breach of the Workplace Safety and Health Act.

One respondent disagreed to clause 23 (a), (b) and (g). The respondent was of the view that NetLink Trust must not reject an Emergency Access request unless there is an emergency or imminent risk of personnel injury or damage to property.

IMDA Directed Modifications: IMDA does not see a problem to clause 23 (a) and (b) but agree that clause 23(g) can be removed as a breach of ICO (e.g., admin breach) should not be used as a reason to reject an Emergency Access request. Accordingly, IMDA directs NetLink Trust to remove clause 23(g) in Annex 21-3. For consistency, IMDA directs NetLink Trust to replicate the same amendment in ICO Schedule 19.

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

24. Upon approval under paragraph 23, physical access will be permitted on an interim basis only.
25. Physical access under paragraph 23 will be for a maximum period of eight (8) hours unless otherwise agreed. NetLink Trust will not withhold its agreement unreasonably.
26. Where NetLink Trust approves a request for Emergency Access, each Party will comply with the terms and conditions set out in paragraphs 33 to 42 of this Annex 21-3. In addition:
 - (a) NetLink Trust may at its sole discretion 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.
27. 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.
28. 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.
29. The Requesting Licensee must pay NetLink Trust the Charge specified in Schedule 15 in relation to processing of a request for Emergency Access.

Subsequent to the Emergency Access to the Telecom Manholes, Requesting Licensee must retrospectively apply for Emergency Access by writing to NetLink Trust or through NetLink Trust Platform within three (3) Business Days.

Rejection of physical access request

30. NetLink Trust may reject an Access Request other than a bona fide Emergency Access request, or revoke an approval for physical access where:

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

- (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 Telecom 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 33 to 41 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.
31. If NetLink Trust rejects a request for physical access under paragraph 30, NetLink Trust will provide the Requesting Licensee with its reasons for rejection.

Conditions of physical access

32. 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);

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

- (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.
- 33. 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 Telecom Manholes; or
 - (e) cause damage to NetLink Trust's Telecom Manholes.
- 34. The Requesting Licensee must ensure the following in relation to Telecom Manholes to which it has been granted access:
 - (a) physical access is gained only to the Telecom Manholes or part thereof for which approval has been granted;
 - (b) each person gaining physical access signs a logbook 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 Telecom Manholes 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 Telecom Manholes.

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

35. 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 Telecom Manholes.
36. NetLink Trust may inspect the logbook referred to in paragraph 34(b) at any time.
37. 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.
38. NetLink Trust may terminate physical access to a specific Telecom Manholes 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 ICO Agreement.
39. 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 Telecom Manholes or part thereof;
 - (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.
40. The Requesting Licensee must not grant a Third Party (other than approved contractors) physical access to Telecom Manholes to which the Requesting Licensee has been granted physical access under Schedule 21 and this Annex 21-3.

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

41. NetLink Trust and the Requesting Licensee acknowledge and agree that:

ANNEX 21-3: PHYSICAL ACCESS PROCEDURE FOR TELECOM MANHOLE

- (a) for the purpose of the Workplace Safety and Health Act (Chapter 354A), the Telecom 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 Telecom Manholes.
- 42. The Requesting Licensee will procure that itself and its contractors, when accessing the Telecom 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 21-4: SOP FOR WORKING IN TELECOM MANHOLES AND CABLE PULLING

SOP for working inside Telecom Manholes and Cable pulling

1. This Annex 21-4 provides the Standard Operating Procedures for working inside Telecom Manholes and Cable-pulling inside Telecom Manholes.

Working inside Telecom 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 Telecom Manholes. Requesting Licensee should hire their own water tanker provider to remove debris (such as water, sludge, oil and mud) inside the Telecom Manholes, where necessary.
8. The Requesting Licensee must ensure that the Telecom Manholes and its surrounding area are cleaned and no flammable or toxic material is left in or around the Telecom Manholes.
9. The Requesting Licensee must ensure that Telecom Manholes covers are flush with the surface when closed. Requesting Licensee must use white paint with stencil to indicate the contractor code, date of access and the company's code at the Telecom Manholes covers upon work completion.

ANNEX 21-4: SOP FOR WORKING IN TELECOM MANHOLES AND CABLE PULLING

10. The Requesting Licensee must seal all key-holes on the Telecom Manholes cover with a polypropylene insert or other appropriate material reasonably agreed by the parties, to prevent water from collecting inside the key-holes.

Cable pulling inside Telecom 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 Telecom Manholes.
13. Work method statement 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 neatly against one side of the wall and supported on cable bearers in the Telecom Manholes, 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 without any Cable slack;
 - (c) ensure Cable does not criss-cross with other existing cables installed in the Telecom Manholes;
 - (d) obtain from NetLink Trust the necessary cable bearer(s) prior to installing its Cable;
 - (e) ensure that its Cable does not cause obstruction in the Telecom Manholes;
 - (f) ensure Cable slack is provided in the Telecom Manholes where cable joint is located. The Cable slack shall be placed neatly on cable bearers and shall not exceed the maximum length of two (2) times the length and width of the manhole wall; and
 - (g) ensure Cable is installed in the duct that is allocated by NetLink Trust to the Requesting Licensee.
15. If the Requesting Licensee's Cable obstructs a Telecom Manholes, NetLink Trust may require, and the Requesting Licensee will immediately remove such obstruction.

ANNEX 21-4: SOP FOR WORKING IN TELECOM MANHOLES AND CABLE PULLING

16. On each cable sheath, the Requesting Licensee must clearly identify, label and/or tag the Cable with an identification at one (1) metre intervals to differentiate the Cable ownership.
17. The Requesting Licensee must use a different colour Cable from existing cable installed in the Telecom Manholes for the entire strip of Cable installed.
18. The Requesting Licensee must use NetLink Trust approved gas and watertight duct seal to reinstate affected duct seal(s) in Telecom Manholes after cable pulling work.

ANNEX 21-5: GUIDELINES FOR ASSESSMENT OF COMMON SERVICE DUCT SPACE

Guidelines for Assessment of Common Service Duct Space

1. Subject to clauses 3.2 and 5.2 of Schedule 21, NetLink Trust will assess the availability of Common Service Duct space for licensing to the Requesting Licensee by referring to the conversion tables and duct sharing formula set out below:

2. 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 Common Service Ducts as measured in Standard Cable-Equivalent (“**Assumed per Duct Capacity**”):

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

3. Duct sharing formula for Licence granted under clause 1(b) of Schedule 21:

$$\frac{\text{(Number of NetLink Trust's Set-aside Duct} \times \text{Assumed per-Duct Capacity)}}{\text{Existing Cables}}$$

Where:

- (a) Assumed per-Duct Capacity will be capped at the number of Standard Cable-Equivalent tabulated under paragraph 2(b) of Annex 21-5.

ANNEX 21-6: COMMON SERVICE DUCT NETWORK

(a) Tengah Town

ANNEX 21-7: PLANT DIVERSION PROCEDURES

Plant Diversion Procedures

1. General
 - (a) These plant diversion procedures are applicable when NetLink Trust or Requesting Licensee receives a request to divert plant installed in the Common Service Ducts (a “**Plant Diversion Request**”) from a requestor (a “**Plant Diversion Requestor**”).
 - (b) “**Plant Diversion**” under this Schedule 21 relates to the diversion of Common Service Ducts owned by NetLink Trust and the diversion of individual Requesting Licensees’ cables within the Common Service Ducts.
 - (c) The plant diversion procedures in section 2 of this Annex 21-7 shall apply in respect of the works required to divert the relevant Common Service Ducts (“**Duct Diversion Works**”) and the works required to divert the affected Cables to the new duct route (including recovery of Cables from the Common Service Ducts that have been diverted) (“**Cable Diversion Works**”).
2. Plant Diversion Procedure:
 - (a) Following receipt of a Plant Diversion Request from a Plant Diversion Requestor, the Receiving Party shall notify the other parties of the details of that Plant Diversion Request within five (5) Business Days.

Clause 2(b) – REQUIRED MODIFICATIONS

- (b) For Duct Diversion Works, the Duct Diversion Coordinator shall liaise and consult with the other Party and all affected Duct Customers of the Parties (“**Cable Owners**”) to develop a draft duct diversion plan (“**Draft Duct Diversion Plan**”) within twenty (20) Business Days from the receipt of the Plant Diversion Request, and circulate the Draft Duct Diversion Plan to the other Party and Cable Owners for their review. The Duct Diversion Coordinator must develop the Draft Duct Diversion Plan based on the following principles:
 - (i) the new Common Service Duct route shall follow the route that is assigned by the Plant Diversion Requestor; and
 - (ii) in the event that the Plant Diversion Requestor does not assign any route for the Plant Diversion, the shortest Common Service Duct route practicable shall be used.
- (c) The Duct Diversion Coordinator shall allow five (5) Business Days from the distribution of the Draft Duct Diversion Plan for the other Party and all Cable Owners to provide proposed amendments, if any, to the Duct Diversion Coordinator.
- (d) Within five (5) Business Days from the receipt of the proposed amendments under section 2(c) of Annex 21-7, the Duct Diversion Coordinator shall update the Draft Duct Diversion Plan to incorporate the proposed amendments as far as practicable and reasonable, and circulate an updated plan (the “**Final Duct Diversion Plan**”) to the other Party and all Cable Owners for their endorsement.

ANNEX 21-7: PLANT DIVERSION PROCEDURES

One respondent requested to increase the timeline in clause 2b, 2c and 2d to 30 Business Days, 10 Business Days and 10 Business Days respectively.

IMDA Directed Modifications: IMDA notes that telecom licensees are advised to complete the planning of plant diversions within three (3) months once the full details of the plant diversion have been provided. Based on past projects, 20 Business Days may not be sufficient for the various parties to develop the Draft Duct Diversion Plan. Accordingly, IMDA directs NetLink Trust to amend the timeline in clause 2b to 30 Business Days. The timelines in clause 2c and 2d can be retained.

- (e) In the event of a dispute between the Duct Diversion Coordinator and the other Party and/or any Cable Owner with regards to the Final Duct Diversion Plan, the Duct Diversion Coordinator shall attempt, as far as reasonable and practicable, to address the dispute within five (5) Business Days from the circulation of the Final Duct Diversion Plan under section 2(d) of this Schedule 21, failing which the Duct Diversion Coordinator shall have the Authority make a final decision on the dispute.
- (f) The Duct Diversion Coordinator shall submit the Final Duct Diversion Plan, including the budgeted charges for the duct diversion and coordination, to the Plant Diversion Requestor. The other Party and each Cable Owner of the affected Common Service Ducts will develop and submit its respective cable diversion plan, including its schedule for diversion ("**Cable Diversion Plan**") and budgeted charges to the Plant Diversion Requestor separately.
- (g) Following receipt of the Final Duct Diversion Plan from the Duct Diversion Coordinator, the Plant Diversion Requestor shall inform the Duct Diversion Coordinator whether it agrees with the Final Duct Diversion Plan. Where the Plant Diversion Requestor is a party to this ICO Agreement, such agreement shall not be unreasonably withheld.
- (h) Following receipt of the agreement from the Plant Diversion Requestor, the Duct Diversion Coordinator shall notify the other Party and all Cable Owners of the affected Ducts of such agreement and proceed to carry out the Duct Diversion Works in accordance with the Final Duct Diversion Plan which has been agreed by the Plant Diversion Requestor ("**Agreed Duct Diversion Plan**").
- (i) NetLink Trust shall update the status of the affected Common Service Ducts and Telecom Manholes owned by NetLink Trust as "Plant Diversion" in NetLink Trust's Geographical Information System ("**GIS**") to prevent new requests for access to those affected Common Service Ducts and Telecom Manholes.
- (j) NetLink Trust shall reserve physical access to the Common Service Ducts and Telecom Manholes that are affected by the Duct Diversion Works for the period during which physical access is required for the purpose of carrying out the said Duct Diversion Works ("**Duct Diversion Duration**") in NetLink Trust Platform, in order to prevent third parties from accessing the said Common Service Ducts and Telecom Manholes during the Duct Diversion Duration.

ANNEX 21-7: PLANT DIVERSION PROCEDURES

- (k) The Duct Diversion Coordinator must provide monthly updates in the form of a Progress Update Report to the other Party, the Cable Owners and the Plant Diversion Requestor.
- (l) The Duct Diversion Coordinator must complete the diversion in accordance to the standards and timelines set out in the Agreed Duct Diversion Plan and keep the parties updated on its status.
- (m) Upon completion of the Duct Diversion Works under section 2(l) of Annex 21-7, the Duct Diversion Coordinator shall notify the other Party, the Cable Owners and the Plant Diversion Requestor. The Duct Diversion Coordinator shall also submit the relevant invoices and supporting documentation (if any) to the Plant Diversion Requestor for the charges incurred by the Duct Diversion Coordinator in carrying out the Duct Diversion Works in accordance with the Agreed Duct Diversion Plan. Following the receipt of the notification from the Duct Diversion Coordinator under section 2(m) of Annex 21-7, the Duct Diversion Coordinator shall liaise with the other Party and other Cable Owners to develop a schedule for physical access (a “**Cable Diversion Schedule**”) to co-ordinate the Cable Diversion Works of the other Party with each other Cable Owner and to ensure that there is no conflict in the schedule with each other Cable Owner for the purpose of carrying out their Cable Diversion Works pursuant to their Cable Diversion Plan (including recovery of cables from the affected Common Service Ducts).
- (n) If physical access to a Telecom Manhole(s) is required for the Cable Diversion Works under section 2(m) of Annex 21-7, the other Party and each Cable Owner shall submit their respective Requests for Telecom Manhole Access Licence to NetLink Trust as stated under clause 4.8 of this Schedule 21.
- (o) Upon completion of its Cable Diversion Works, the other Party and each other Cable Owner shall submit a Works Completion Report to NetLink Trust within three (3) Business Days. The other Party and each other Cable Owner shall each submit their invoices to the Plant Diversion Requestor for the charges incurred in carrying out the Cable Diversion Works in accordance with the Agreed Duct Diversion Plan and to be borne by the Plant Diversion Requestor. The respective parties (including the other Cable owner) will collect payment of the amounts payable under such invoices from the Plant Diversion Requestor.
- (p) Following the receipt of Works Completion Report from the affected Cable Owner under section 2(o) of Annex 21-7, NetLink Trust shall update its Common Service Duct and Telecom Manhole records in GIS.

**ATTACHMENT A: REQUEST FOR COMMON SERVICE DUCT SPACE, TELECOM
MANHOLE AND/ OR CONSTRUCTION OF CONNECTION DUCT**

**Request for Common Service Duct Space, Telecom Manholes and/or Construction of
Connection Duct**

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

**ATTACHMENT B: REQUEST FOR PHYSICAL ACCESS TO COMMON SERVICE DUCT
AND/OR TELECOM MANHOLE**

Request for Physical Access to Common Service Duct and/or Telecom 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: _____	

**ATTACHMENT B: REQUEST FOR PHYSICAL ACCESS TO COMMON SERVICE DUCT
AND/OR TELECOM MANHOLE**

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

**ATTACHMENT C: REQUEST FOR EMERGENCY ACCESS TO COMMON SERVICE
DUCT AND/OR TELECOM MANHOLE**

Request for Emergency Physical Access to Common Service Duct and/or Telecom 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 : _____

**ATTACHMENT D: MASTER LIST FOR PHYSICAL ACCESS TO COMMON SERVICE
DUCT AND/OR TELECOM MANHOLE**

Master List for physical access to Common Service Duct and/or Telecom Manhole

S/N	Name	Company Name / Requesting Licensee's Contactor Name	NRIC / FIN / Passport No. ¹	SIC/ SOC No.	SIC/ SOC expiry date	Contact Tel No.	Email Address
1	Richard Tan	Requesting Licensee's Name	567C	8888999	30/12/2020	68888999	Richard.tan@yahoo.com.sg
2	Yeh Sing Ping <i>Two examples for reference.</i>	Pipe Construction s Pte Ltd	444A	77777788	12/11/2020	67777788	Sp.yeh@pipeconstruction.com

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 NetLink Trust's 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.