

31 January 2023

NetLink Management Pte Ltd
(as Trustee of NetLink Trust) ("**NetLink Trust**")

By Email

No. of pages: 13
(Including this page)

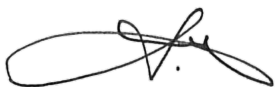
Attention: Mr Lee Khoon Aik
Director (Regulatory & Interconnect)

Dear Mr Lee,

**NOTIFICATION OF PROPOSED DIRECTION UNDER SECTION 31 OF THE
TELECOMMUNICATIONS ACT 1999 IN RESPECT OF THE REVIEW OF NETLINK TRUST'S
INTERCONNECTION OFFER FOR THE PROVISION OF NATIONWIDE BROADBAND NETWORK
SERVICES AND INTERCONNECTION RELATED SERVICES**

1. Pursuant to Section 31(5) of the Telecommunications Act 1999 (the "**Act**"), IMDA hereby notifies NetLink Trust that IMDA intends to issue a Direction under Section 31 of the Act to require NetLink Trust to submit to IMDA for review and approval, NetLink Trust's further proposed modifications ("**NetLink Trust's Further Proposed Modifications**") to its Interconnection Offer ("**ICO**") for the provision of Nationwide Broadband Network services and Interconnection Related Services. A copy of IMDA's proposed direction is enclosed ("**IMDA's Proposed Direction**").
2. Any representations or comments in relation to IMDA's Proposed Direction shall be submitted within **fourteen (14) days** from the date of this letter. IMDA may amend the requirements set out in IMDA's Proposed Direction as it deems appropriate based on any relevant factors including, but not limited to, any representations received.
3. If you should require any clarification, please direct your written queries to the undersigned via email at ILO@imda.gov.sg. Unless otherwise specified by IMDA in writing, any request for clarification shall not affect the timeframe for the submission of any representations or comments, as stipulated in paragraph 2 above.

Yours sincerely,



Ong Tong San
Senior Director (Market Access & Competition Development)
For Director-General (Telecoms & Post),
Deputy Chief Executive (Connectivity Development & Regulation)

[Date] 2023

NetLink Management Pte Ltd
(as Trustee of NetLink Trust) ("**NetLink Trust**")

Attention: Mr Tong Yew Heng
Chief Executive Officer

Dear Mr Tong,

DIRECTION OF THE INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY: REVIEW OF NETLINK TRUST'S INTERCONNECTION OFFER FOR THE PROVISION OF NATIONWIDE BROADBAND NETWORK SERVICES AND INTERCONNECTION RELATED SERVICES

1. The Info-communications Media Development Authority ("**IMDA**"), pursuant to Section 31(1) of the Telecommunications Act 1999 (the "**Act**") and condition 33.1 of the Licence to Provide Facilities-Based Operations issued to NetLink Trust on 22 September 2011, and amended on 1 October 2014, 13 April 2017, 19 July 2017 and 21 January 2019, hereby issues this Direction to NetLink Trust.
2. Reference is made to the following:
 - (a) The Telecom and Media Competition Code;
 - (b) The NetCo Interconnection Code 2020 (the "**NetCo Code**");
 - (c) IMDA's direction to NetLink Trust dated 10 August 2021 titled "Direction of the Info-communications Media Development Authority: Review of NetLink Trust's Interconnection Offer for the Provision of Nationwide Broadband Network Services and Interconnection Related Services";
 - (d) NetLink Trust's letter to IMDA dated 3 September 2021 on the request for extension of deadline for the submission of NetLink Trust's Interconnection Offer for the Provision of Nationwide Broadband Network Services and Interconnection Related Services;
 - (e) IMDA's letter dated 9 September 2021 on the extension of deadline for the submission of NetLink Trust's Interconnection Offer for the Provision of Nationwide Broadband Network Services and Interconnection Related Services;
 - (f) IMDA's direction to NetLink Trust dated 2 December 2021 titled "Direction of the Info-communications Media Development Authority: Submission of NetLink Trust's Proposed Reference Interconnection Offer for Common Service Duct Services";

- (g) NetLink Trust's Interconnection Offer ("**ICO**") incorporating various changes, as submitted by NetLink Trust from 30 September 2021 to 26 April 2022 ("**Draft Revised ICO**");
 - (h) The Public Consultation titled "Public Consultation on NetLink Trust's Interconnection Offer", issued by IMDA on 17 May 2022 ("**Public Consultation**");
 - (i) IMDA's clarifications with NetLink Trust dated 27 July 2022 to 11 October 2022;
 - (j) IMDA's decision on the review of NetLink Trust's ICO for the provision of Nationwide Broadband Network Services and Interconnection Related Services (the "**Decision**"); and
 - (k) Notification of IMDA's Proposed Direction dated 31 January 2023 ("**Notification**"), with the accompanying directed modifications.
3. Following the close of the Public Consultation on 14 July 2022, IMDA has reviewed the Draft Revised ICO, as well as the views and comments submitted in response to the Public Consultation. IMDA has issued the Decision on the review of NetLink Trust's ICO for the provision of Nationwide Broadband Network Services and Interconnection Related Services. IMDA has assessed that certain parts of the Draft Revised ICO require further modifications to ensure that they are appropriate as well as relevant and responsive to the needs of the industry.
4. This direction will exclude ICO Schedules 22 and 23 as the prices for the said schedules will be separately reviewed and finalised. IMDA will issue the decision on ICO Schedules 22 and 23 when the review of these schedules is completed.
5. Accordingly, IMDA hereby directs NetLink Trust as follows:
- (a) NetLink Trust shall submit to IMDA for review and approval, NetLink Trust's further proposed modifications ("**NetLink Trust's Further Proposed Modifications**") to the following components of its ICO to give effect to IMDA's required modifications as specified in the (1) **Decision** and (2) the following **Appendices** to the direction (see attached) by [date]:
 - (i) Appendix 1: Directed modifications to the Main Body;
 - (ii) Appendix 2: Directed modifications to Schedule 1 Residential End-User Connection;
 - (iii) Appendix 3: Directed modifications to Schedule 2 Non-Residential End-User Connection;

- (iv) Appendix 4: Directed modifications to Schedule 3 NBAP Connection;
- (v) Appendix 5: Directed modifications to Schedule 4 CO to CO Connection;
- (vi) Appendix 6: Directed modifications to Schedule 5 CO to Building MDF Room Connection;
- (vii) Appendix 7: Directed modifications to Schedule 6 Building MDF Room to FTTB Node Connection;
- (viii) Appendix 8: Directed modifications to Schedule 7 FTTB Node to DP Connection;
- (ix) Appendix 9: Directed modifications to Schedule 8 Building MDF Room to Residential Premise Connection;
- (x) Appendix 10: Directed modifications to Schedule 9 Building MDF Room to Non-Residential Premise Connection;
- (xi) Appendix 11: Directed modifications to Schedule 10 CO to NBAP DP Connection;
- (xii) Appendix 12: Directed modifications to Schedule 11 NBAP DP to NBAP TP Connection;
- (xiii) Appendix 13: Directed modifications to Schedule 12 Co-Location Service;
- (xiv) Appendix 14: Directed modifications to Schedule 12B Co-Location Supplementary Cooling Service;
- (xv) Appendix 15: Directed modifications to Schedule 12C Co-Location Space & Service in New Co-Location Room;
- (xvi) Appendix 16: Directed modifications to Schedule 15 Charges;
- (xvii) Appendix 17: Directed modifications to Schedule 16 Billing;
- (xviii) Appendix 18: Directed modifications to Schedule 18 Dictionary;
- (xix) Appendix 19: Directed modifications to Schedule 19 Licensing of Building Lead-In Duct Space and Access to Building Lead-In Manholes; and
- (xx) Appendix 20: Directed modifications to Schedule 21 Licensing of Common

Service Ducts or Duct Space and/or Access to Associated Telecom Manholes.

(together, the “**Directed Modifications**”).

The list of Directed Modifications to NetLink Trust is summarised in Annex A.

- (b) In NetLink Trust’s Further Proposed Modifications, NetLink Trust shall also propose, for IMDA’s review and approval, such editorial changes to NetLink Trust’s ICO that are necessary, including ensuring that all references used in the ICO and Schedules to the ICO are applicable, correct and relevant.
- (c) To the extent that any ancillary or consequential modification to any provision in NetLink Trust’s ICO is necessary in order to give effect to the Directed Modifications and requirements under this direction, NetLink Trust shall propose such modification for IMDA’s review and approval.

(the “**Direction**”)

- 6. The reasons for this Direction are set out in the **Decision** and the **Appendices** to this Direction.
- 7. IMDA reminds NetLink Trust that:
 - (a) To the extent that any of NetLink Trust’s Further Proposed Modifications fails to give effect to IMDA’s Directed Modifications or, in IMDA’s view, is not acceptable, IMDA will direct NetLink Trust to adopt specific drafting language; and
 - (b) IMDA may reject any of NetLink Trust’s Further Proposed Modifications that are not for the purpose of giving effect to IMDA’s Directed Modifications as set out in this Direction.
- 8. NetLink Trust shall submit to IMDA one (1) marked-up softcopy of its ICO, incorporating NetLink Trust’s Further Proposed Modifications to give effect to IMDA’s Directed Modifications. The softcopy submission shall be in Microsoft Word format and emailed to ILO@imda.gov.sg.
- 9. NetLink Trust is reminded of its obligation to comply with this Direction under Section 31(6) of the Act.
- 10. In addition, with the incorporation of new ICO Schedule 21, there should be corresponding information provided for the service take-up relating to ICO Schedule 21, in addition to those NLT is already submitting to IMDA. In this regard, moving forward, IMDA will require NetLink Trust to include the following information for ICO

Schedule 21 in NetLink Trust's regular submission of information regarding service take-up under NetLink Trust's ICO:

ICO schedule	Information To be Submitted
21	<p>For each CSD project:</p> <p>1) For Long Term duct lease – Total number of ducts by each Requesting Licensee</p> <p>2) For Short Term duct space lease - Total number of Standard Cable Equivalent obtained by each Requesting Licensee and Total length of Standard Cable Equivalent installed by each Requesting Licensee (in cable metres)</p>

11. Any clarification on this Direction shall be made in writing, addressed to the Director-General (Telecoms & Post), Deputy Chief Executive (Connectivity Development & Regulation), attention to Mr Ong Tong San, and emailed to ILO@imda.gov.sg. Please note that any query or clarification from NetLink Trust shall not affect NetLink Trust's obligation to comply fully with this Direction, including the timelines specified in this Direction.

Yours sincerely,

Aileen Chia (Ms)
Director-General (Telecoms & Post),
Deputy Chief Executive (Connectivity Development & Regulation)

Annex A – Summary of Directed Modifications

NO.	IMDA's REQUIRED MODIFICATIONS	REFERENCE
1.	Section 2.1: New Provisions and ICO Schedules NetLink Trust is required to adopt the amended drafting on Personal Data Provisions in paragraph 9 for clause 19A.2 of the Main Body.	<ul style="list-style-type: none"> IMDA's Decision, paragraph 9 Directed Modification to Main Body, clause 19A.2
2.	Section 2.1: New Provisions and ICO Schedules NetLink Trust is required to amend the definition of "Personal Data" such that it is consistent with the definition used in the PDPA.	<ul style="list-style-type: none"> IMDA's Decision, paragraph 10 Directed Modification to Schedule 18, definition of "Personal Data"
3.	Section 2.1: New Provisions and ICO Schedules NetLink Trust is required to remove the mention of ICO Schedules 22 and 23 from the Main Body, and the charges and definitions for ICO Schedules 22 and 23 from ICO Schedules 15 and 18 respectively.	<ul style="list-style-type: none"> IMDA's Decision, paragraph 16 Directed Modification to Main Body, Part 2 clause 1.2, 2.1, Attachment A and Attachment B Directed Modification to Schedule 15, clauses 18 and 19 Directed Modification to Schedule 18, definition of "COD", "COD Connection", "Connection", "Direct End-User", "End Serving Address", "Enterprise Service", "Point-to-Point Connection", "Primary Connection"
4.	Section 2.2: OTCs and Billing Processes NetLink Trust is required to remove the imposition of a charge for	<ul style="list-style-type: none"> IMDA's Decision, paragraph 19 Directed Modification to clause 9.18 in Schedules 1,2,3

	removing Unnecessary Personal Data from NetLink Trust's records (i.e., the Unnecessary Personal Data Removal Charge).	<ul style="list-style-type: none"> Directed Modification to clause 9.16 in Schedules 4, 5, 6, 7, 8, 9, 10, 11 Directed Modification to Schedule 15, clauses 1.19, 2.20, 3.13, 4.12, 5.12, 6.12, 7.13, 8.15, 9.15, 10.12, 11.12
5.	<p>Section 2.2: OTCs and Billing Processes</p> <p>NetLink Trust is required to remove the imposition of Fault Investigation Charge.</p>	<ul style="list-style-type: none"> IMDA's Decision, paragraph 22 Directed Modification to Schedule 12, clause 2.6 in Annex 12D Directed Modification to Schedule 12C, clause 2.6 in Annex 12D-1 Directed Modification to Schedule 15, clauses 12.15 and 12C.16 Directed Modification to Schedule 18, definition of "Fault Investigation Charge"
6.	<p>Section 2.2: OTCs and Billing Processes</p> <p>With regard to the billing for the repair and replacement work done within the EU's premises, NetLink Trust is required to revert the relevant clauses under the ICO to the language used in the existing approved ICO, i.e., NetLink Trust shall impose the relevant repair and replacement charges in accordance with Schedule 15 (Charges) to the end user and charge the end-user directly unless the damage is caused by the Requesting Licensee ("RL").</p>	<ul style="list-style-type: none"> IMDA's Decision, paragraph 28 Directed Modification to Schedule 1, clause 11.8(d) Directed Modification to Schedule 2, clause 11.8(d) Directed Modification to Schedule 8, clause 11.7(d) Directed Modification to Schedule 9, clause 11.7(d)
7.	<p>Section 2.3 – Other Operational Issues</p> <p>With regard to the planned service interruption for Residential End-User Connections, NetLink Trust is required to amend the ICO to include</p>	<ul style="list-style-type: none"> IMDA's Decision, paragraph 33 Directed Modification to Schedule 1, clause 9.8

	the practice that NetLink Trust will indicate in its notification of planned service interruption which exception it is exercising for the said maintenance to be carried outside the default maintenance window.	
8.	Section 2.3 – Other Operational Issues With regard to the planned service interruption for non-residential connections, NetLink Trust shall revert the relevant clauses in Schedules 2 to 11 to its original drafting.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 34 • Directed Modification to Schedules 2 to 11, clause 9.8
9.	Section 2.3 – Other Operational Issues With regard to the planned service interruption for Residential End-User Connections, Non-Residential End-User Connections and NBAP Connections, NetLink Trust is required to amend the timeline to allow RLs to request for a change in the planned service interruption dates within five (5) business days.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 37 • Directed Modification to Schedule 1, clause 9.5 • Directed Modification to Schedule 2, clause 9.5 • Directed Modification to Schedule 3, clause 9.5
10.	Section 2.3 – Other Operational Issues With regard to the integration of NetLink Trust’s provision of 5 th installation slots and Saturday Installations for Residential End-User Connections into the ICO, NetLink Trust is required to rename “Seasonal Slots” to “Additional Slots”.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 41 • Directed Modification to Schedule 1, clause 5.2(ii) • Directed Modification to Schedule 18, definition of “Seasonal Slot”
Section 3.2 - New ICO Schedule 21 for Common Service Ducts or Duct Space and/or Access to Associated Telecom Manholes		
11.	3.2A – General With regard to the definition of “Common Service Duct”, NetLink Trust	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 52 • Directed Modification to Schedule 18, definition of “Common Service Duct”

	is required to amend the definition to remove the word “solely” from the definition and to replace “NGNBN” with “NBN.	
12.	3.2A – General With regard to the security requirement for Schedule 21, NetLink Trust is required to amend the additional security requirement of \$75,000 for all RLs taking up Schedule 21 in the Main Body to \$20,000 and applicable only to RLs taking up the long-term duct lease (including Telecom Manhole access) and short-term duct space lease (including Telecom Manhole access).	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 56 • Directed Modification to Main Body, Part 1 clauses 1.6(c), 1.8(d), Part 2 clause 18.3(c) and Attachment A
13.	3.2B – Scope of Services Regarding the cancellation of Long-term Licence or reduction of long-term duct requirement before completion of construction of the CSD, NetLink Trust is required to amend clause 1.7 in Schedule 21 to reflect the decision in paragraphs 65 and 66 of IMDA’s Decision.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraphs 65 and 66 • Directed Modification to Schedule 21, clause 1.7
14.	3.2B – Scope of Services With regard to the term of the Telecom Manhole Access Licence, NetLink Trust is required to (a) 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; and (b) amend Schedules 21 and 15 to allow NetLink Trust to recover the remaining upfront construction and installation cost of the Telecom Manholes from the RL in the event of early termination of the Long-term Licence.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 73 • Directed Modification to Schedule 15, clause 17.12 • Directed Modification to Schedule 21, clauses 17.1 and 20.11
15.	3.2B – Scope of Services NetLink Trust is required to include standalone operation and	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 76 • Directed Modification to Schedule 15, clause 17

	<p>maintenance charges in the ICO, including the work scope covered under the operation and maintenance charges.</p>	
16.	<p>3.2C – Ordering and Provisioning Procedure</p> <p>With regard to Joint Site Verification for pipe testing, 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. NetLink Trust is required to amend the ICO to reflect the above understanding. NetLink Trust is also required to replicate the same amendment to Schedule 19.</p>	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 82 • Directed Modification to Schedule 21, clause 6.3 • Directed Modification to Schedule 19, clause 6.3
17.	<p>3.2D – Installation of Underground Equipment and Physical Access Procedure</p> <p>NetLink Trust is required to remove the requirement that prohibits RLs from installing any new trenches, new ducts and/or sub-duct in any Common Service Duct or Telecom Manhole; or in any areas served by a Common Service Duct(s).</p>	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 85 • Directed Modification to Schedule 21, clause 9.3
18.	<p>3.2D – Installation of Underground Equipment and Physical Access Procedure</p> <p>With regard to the charge that NetLink Trust impose on RL in the event that an RL withdraws a request under clause 9.4, NetLink Trust is required to remove clause 9.5(c) <u>and amend clause 9.5(b) to cover any</u></p>	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 88 • Directed Modification to Schedule 21, clause 9.5 • Directed Modification to Schedule 19, clause 8.10

	<u>reasonable cost incurred by NetLink Trust as a result of the cancellation under clause 9.4..</u> NetLink Trust is required to adopt the same drafting in Schedule 19 as well.	
19.	3.2E – Others With regard to planned service interruptions, NetLink Trust is required 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.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 91 • Directed Modification to Schedule 21, clause 11.18
20.	3.2E – Others With regard to sub-licensing, NetLink Trust is required to remove the requirement to enter into a customised agreement with NetLink Trust for sub-leasing. Instead, NetLink Trust is required to state that RL can only sub-lease unused duct capacity after it has obtained IMDA’s approval to do so.	<ul style="list-style-type: none"> • IMDA’s Decision, paragraph 94 • Directed Modification to Schedule 21, clause 21.2
21.	NetLink Trust is required 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.	Directed Modification to Schedule 21
22.	NetLink Trust is required to make clear in Schedule 21 that it does not include lead-in ducts and lead-in manholes.	Directed Modification to Schedule 21
23.	NetLink Trust is required to remove clause 3.2 (f).	Directed Modification to Schedule 21, clause 3.2(f)
24.	NetLink Trust is required to amend clause 7.1 to remove the requirement of pipe testing before it can provide the final approval for the Telecom Manhole Access Licence. Pipe testing is not required for	Directed Modification to Schedule 21, clause 7.1

	the approval of the Request for the Telecom Manhole Access Licence.	
25.	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. NetLink Trust is required 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.	Directed Modification to Schedule 21, clause 9.1
26.	NetLink Trust is required 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.	<ul style="list-style-type: none"> • Appendix 20 – Directed Modification to Schedule 21, clause 13.4 • Appendix 19 – Directed Modification to Schedule 19, clause 12.4
27.	NetLink Trust is required to include the phrase "Subject to clause 12.3 of the main body of the ICO Agreement".	Appendix 20 – Directed Modification to Schedule 21, clauses 19.2, 19.4, 19.5, 19.6
28.	NetLink Trust is required to remove "breach of ICO agreement" as a condition where NetLink Trust may reject an Emergency Access request, or revoke and approval for Emergency Access.	<ul style="list-style-type: none"> • Appendix 20 – Directed Modification to Schedule 21, Annex 21-3, clause 23 • Appendix 19 – Directed Modification to Schedule 19, Annex 19-3, clause 24
29.	NetLink Trust is required to amend the timeline in clause 2(b) from 20 Business Days to 30 Business Days.	Appendix 20 – Directed Modification to Schedule 21, Annex 21-7, clause 2(b)