



**EXPLANATORY MEMORANDUM ISSUED BY
THE INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY OF SINGAPORE
("IDA")**

**DIRECTION OF THE INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY OF
SINGAPORE MADE PURSUANT TO SECTION 27 OF THE
TELECOMMUNICATIONS ACT (CHAPTER 323) IN RESPECT OF THE REVIEW
OF CITYNET INFRASTRUCTURE MANAGEMENT PTE LTD'S (AS TRUSTEE-
MANAGER OF THE NETLINK TRUST) INTERCONNECTION OFFER FOR THE
PROVISION OF SERVICES OVER THE NATIONWIDE BROADBAND NETWORK**

10 December 2014

PART I: INTRODUCTION

**PART II: SUMMARY OF KEY COMMENTS RECEIVED AND IDA'S
DECISIONS**

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EXPLANATORY MEMORANDUM

1. This Explanatory Memorandum sets out the reasons for IDA's Direction dated 10 December 2014 (the "**Direction**"), issued by IDA to CityNet Infrastructure Management Pte Ltd (as Trustee-Manager of the NetLink Trust) (the "**NetLink Trust**"), directing it to incorporate IDA's Required Modifications to its Interconnection Offer (the "**ICO**").
2. For the avoidance of doubt, NetLink Trust shall give effect to IDA's Required Modifications as specified in this Explanatory Memorandum, in addition to IDA's other Required Modifications as specified in other parts of the Direction.
3. Unless the context requires otherwise, all capitalised terms used in this Explanatory Memorandum shall have the same meanings as in the ICO.

PART I: INTRODUCTION

4. As part of the consolidation application by CityNet Infrastructure Management Pte Ltd ("**CityNet**"), Singapore Telecommunications Limited and OpenNet Pte Ltd ("**OpenNet**") in relation to the proposed acquisition by CityNet of 100% of the issued and paid-up share capital in OpenNet ("**Consolidation Application**"), NetLink Trust shall be taking over the systems and services previously undertaken by OpenNet under its Facilities-Based Operations ("**FBO**") licence. Consequently, NetLink Trust has been issued with its revised FBO licence in respect of the foregoing on 1 October 2014. Further, OpenNet's FBO licence has also been terminated on 1 October 2014. Therefore, on and after 1 October 2014, NetLink Trust is responsible for the provision of services previously provided by OpenNet, including the ICO services. Further, all actions and correspondence that were previously undertaken by OpenNet will be attributed to NetLink Trust with effect from 1 October 2014.
5. IDA had engaged NetLink Trust on various measures that NetLink Trust could put in place to improve its Quality of Service ("**QoS**") performance for NetLink Trust's provisioning of Residential and Non-Residential End-User Connection Services. As part of its rectification measures to improve its QoS, NetLink Trust proposed a number of measures to reduce the delays and improve on service provisioning standards.
6. Due to the above rectification measures that NetLink Trust proposed to implement, there is a need to make corresponding changes to NetLink Trust's ICO. Additional changes to its ICO were also proposed by NetLink Trust to address other operational issues. Accordingly, IDA required NetLink Trust to submit its proposed modifications to the ICO ("**Draft Revised ICO**") for IDA's review.
7. For the avoidance of doubt, nothing herein shall be construed as an approval or endorsement by IDA of the adequacy, satisfactoriness and/or correctness of NetLink Trust's improvement measures in any manner. In this regard, NetLink Trust shall continue to remain solely and fully responsible for

implementing all necessary measures to comply with all its regulatory obligations, including, ensuring that it is able to meet its various performance standards under the QoS framework. Further, nothing herein shall constrain or fetter IDA's rights in any manner, nor be construed as granting any expectation on NetLink Trust's part that IDA will take, or not take, any particular course of action in the future.

8. On 13 June 2014, IDA commenced a public consultation ("**Public Consultation**") to seek views and comments from the industry on the Draft Revised ICO.
9. By the close of the Public Consultation on 21 July 2014, IDA received responses from M1 Limited, MyRepublic Limited, NetLink Trust, Nucleus Connect Pte Ltd, Singapore Telecommunications Limited, StarHub Ltd and ViewQwest Pte Ltd. IDA thanks the respondents for their response and has given careful consideration to the views and comments received. The following sections highlight the key issues raised in the Public Consultation. The other issues are addressed in the respective Appendices.

PART II: SUMMARY OF KEY COMMENTS RECEIVED AND IDA'S DECISIONS

Section 1 – Service Level Guarantees

10. In its Draft Revised ICO, in addition to the existing circumstances, NetLink Trust proposed to include a new circumstance where Service Level Guarantees ("**SLGs**") would not apply (the "**New SLG Exemption**"). Under the proposed New SLG Exemption, SLGs would not apply where the End-User or the Management Corporation Strata Title ("**MCST**") (of the development where the end-user resided) required customised arrangements or conditions to be fulfilled (e.g., the MCST had required the End-User to enter into customised arrangements, or the MCST had required non-standard installation within the End-User's premises and had required the End-User to bear the cost accordingly, or the MCST had required the End-User to provide access to or the requisite equipment like boomlift, scaffolding, cherry picker, etc. for installations, or the MCST had required the End-User's endorsement as part of the approval process to grant access to NetLink Trust) before access would be granted to NetLink Trust or before NetLink Trust could provision its services. NetLink Trust had also proposed for this New SLG Exemption to be limited to the time taken for access to be granted to NetLink Trust or the time taken for conditions to be suitable before NetLink Trust could provision its services.
11. In IDA's Public Consultation paper, IDA included its preliminary view on NetLink Trust's proposed New SLG Exemption, noting that the proposed process should be complemented by further tightening of the provisioning processes for Non-Residential End-User Connections ("**Non-Residential EUCs**") under the ICO, to tackle delays attributed to developers/owners/MCSTs of buildings ("**BM**") (such delays will be referred to herein as "**BM Delays**"). IDA indicated that it had considered requiring NetLink Trust to limit the timeframe ("**Timeframe**") for which it could claim

exemption from the applicable SLGs for BM Delays to five (5) Business Days, whereby the additional time taken beyond the Timeframe would be considered as a delay for which NetLink Trust would be liable for SLGs under its ICO (**IDA's Preliminary Proposal**).

Industry's Submission

12. In relation to IDA's Preliminary Proposal, one respondent submitted that it would be unfair and unreasonable for IDA to impose such a requirement upon NetLink Trust as it amounted to IDA compelling NetLink Trust to assume the commercial risk of having to compensate RLs for BM Delays, which to respondent are "*delays due to the actions or inactions of third parties, which [NetLink Trust] has no control over*". The respondent was thus not supportive of IDA's Preliminary Proposal and suggested that, in place of IDA's Preliminary Proposal, IDA should instead directly regulate the house rules imposed by BMs in order to ensure that the implementation of house rules and related practices by BMs were reasonable. Further, the respondent commented that the QoS Framework already served as a strong regulatory instrument to ensure that NetLink Trust resolved BM Delays promptly in provisioning Non-Residential EUCs, and hence it was not necessary for IDA to impose additional regulatory restrictions on NetLink Trust.
13. The other respondents were broadly supportive of IDA's Preliminary Proposal to further tighten the provisioning processes for Non-Residential EUCs under the ICO to tackle BM Delays. However, the respondents held varying views as to how IDA's Preliminary Proposal should be implemented. One respondent suggested that the proposed Timeframe should apply not only to the New SLG Exemption, but to all circumstances where NetLink Trust could currently claim SLG exemptions. Another respondent was of the view that NetLink Trust should not be penalised for a matter not within its control, but should rather escalate the unresolved issue to IDA for assistance. A third respondent expressed concern that should the New SLG Exemption be limited to the Timeframe of five (5) Business Days as per IDA's Preliminary Proposal, there would be a possibility that NetLink Trust would deliver all Non-Residential EUCs in 15 Business Days, even for orders that experienced no delays. The same respondent suggested that IDA should tighten the QoS Framework, given the proposed extension of time given to NetLink Trust to provision Non-Residential EUCs.

IDA's Assessment

14. IDA has considered the comments from NetLink Trust and its RLs to NetLink Trust's proposed New SLG Exemption for BM delays as well as to IDA's Preliminary Proposal. IDA's specific comments to the key concerns and issues raised are set out as follows.

Responsibility of NetLink Trust for Third Party Issues

15. At the outset, IDA would like to clarify that IDA is not insisting that NetLink Trust be held responsible for delays that are due to reasons beyond NetLink Trust's control, notwithstanding NetLink Trust's exercise of best endeavours. IDA recognises that, in general, there may be instances of delay caused by third parties that are beyond NetLink Trust's reasonable control. However, IDA requires NetLink Trust, in all instances, to undertake best endeavours to resolve all delays in an expeditious manner.
16. Where an order does not fall into the circumstances where SLGs are exempted, IDA continues to require NetLink Trust to complete its service provisioning within the applicable Service Activation Period ("**SAPs**") in the ICO, i.e., 10 Business Days for Non-Residential EUC service orders. For those instances where NetLink Trust is unable to resolve the delays caused by third parties beyond its control despite its best endeavours, the onus shall be on NetLink Trust, in claiming exemption from SLGs, to provide clear explanations to its RLs on the reasons causing the delays, the efforts it made to resolve the said delays, and the expected timeframe for resolution of the said delays. Should the RL disagree with NetLink Trust's claim for exemption from the applicable SLGs, the parties continue to have the option to avail themselves of the existing dispute resolution process provided for in the ICO to resolve the matter.
17. Specifically in relation to BM Delays, given that it has been more than 5 years since NetLink Trust started offering services to RLs via the ICO, IDA expects NetLink Trust to have gained the necessary experience and competency to be able to ensure that it is able to deliver the majority of Non-Residential EUC service orders within the applicable SAPs and to be able to resolve BM Delays in an expeditious manner. Notwithstanding the potential difficulties faced by NetLink Trust in dealing with BM Delays, IDA is of the view that it is unsatisfactory that such orders be indefinitely delayed and in turn NetLink Trust be exempted from compensating RLs for failure to meet its SLGs for an indefinite period.
18. Taking the above into consideration, IDA remains of the view that the Preliminary Proposal is reasonable to ensure that NetLink Trust has a stronger incentive to promptly follow up on cases with BM Delays before they become protracted.

Timeframe for SLG Exemption for Cases with BM Delays

19. In IDA's Preliminary Proposal, IDA had considered requiring NetLink Trust to limit the Timeframe to five (5) Business Days, whereby the additional time taken beyond the Timeframe would be considered as a delay for which NetLink Trust would be liable for SLGs under its ICO. However, taking into account the industry's views and in recognition of the service provisioning timeframes that service providers in the industry typically require for fibre service provisioning for similar non-residential orders, IDA considers it reasonable to revise the Timeframe to ten (10) Business Days in this ICO

review, to allow NetLink Trust to resolve any BM related delay issues using its best endeavours before compensation takes effect (subject to any applicable exemptions), including where necessary, the timely escalation of appropriate cases to IDA for assistance. Depending on the facts, amongst others, IDA may accept a case for intervention, for the purpose of facilitating resolution of any obstruction by the BM, where in IDA's view the BM related delay is beyond NetLink Trust's reasonable control, despite NetLink Trust's best endeavours to resolve it expeditiously. For the avoidance of doubt, nothing herein shall be construed as fettering IDA's exercise of its discretion whether to intervene and/or facilitate the resolution of any obstruction by the BM, depending on the facts and circumstances of each case.

20. In recognition that the BM Delays could be encountered for both Residential and Non-Residential EUC service orders, IDA intends to extend the scope of IDA's Preliminary Proposal (with the modification explained above at paragraph 19) to also apply for Residential End-User Connection orders encountering BM Delays. IDA's Preliminary Proposal with the modification explained above at paragraph 19 as well as paragraph 20 herein shall be known as "**IDA's Decision on Preliminary Proposal**".
21. For the avoidance of doubt, IDA reserves the right to revise the Timeframe and to extend the scope of IDA's Decision on Preliminary Proposal to other ICO services, including but not limited to the NBAP connection service, in subsequent ICO reviews or at any other appropriate time, based on prevailing market conditions and all relevant facts.

Circumstances where IDA's Preliminary Proposal would be Applicable

22. With respect to the suggestion that IDA's Preliminary Proposal apply to all the circumstances within the ICO where SLGs are currently not applicable, IDA notes that, in general, the specific concerns that IDA intends to address through the Preliminary Proposal in relation to BM Delays are not relevant or applicable to the other circumstances stated, e.g., where the delay is caused by an End-User, NetLink Trust's RLs or regulatory authorities. As such, IDA is of the view that, at present, it is not necessary for IDA's Preliminary Proposal to be applied to the other circumstances.

QoS Framework

23. As regards the recommendation for IDA to tighten the QoS Framework, IDA would like to clarify that it is not necessary for the QoS framework to mirror the ICO as they serve different purposes. Specifically, SAPs are a measure of NetLink Trust's service provisioning performance on a "per order" basis, and an obligation owed to RLs under the NetLink Trust ICO. On the other hand, the QoS Framework is a measure of NetLink Trust's service provisioning performance on an aggregate basis. In this regard, IDA does not find it necessary to align the QoS Framework parameters for Non-Residential EUCs with IDA's decision to introduce the Timeframe for the ICO. IDA will review the QoS Framework regularly to ensure its relevance in meeting industry's and consumers' needs as the market develops.

24. For the avoidance of doubt, nothing in the foregoing, including the revision of the Timeframe to ten (10) Business Days in the ICO, shall affect NetLink Trust's regulatory obligations, including the requirement for NetLink Trust to fully comply with the QoS Framework. For the QoS Framework specifically, service orders facing BM Delays that are excluded from the applicable SLGs during the Timeframe shall be included in the computation of NetLink Trust's QoS performance. In other words, in the computation of NetLink Trust's QoS performance for such cases with BM Delays, the start date of the service provisioning shall be the date the RL submits the order to NetLink Trust, regardless of the Timeframe, unless otherwise excluded by IDA.

Section 2 – Rejection of Service Requests

25. In circumstances where SLGs do not apply and the delays are not resolved within two (2) months of the date of submission of the service, NetLink Trust had proposed that it would consult the RLs and subsequently reject such delayed service orders.

Industry's Submission

26. On this proposal, the respondents were of the view that allowing NetLink Trust to reject delayed service orders (arising from circumstances that allowed SLGs exemptions) after two (2) months of delay would not give NetLink Trust the incentive to work towards resolving the delay. Comments were received that NetLink Trust would be allowed to drag the delay and reject the order once the time limit of two (2) months had been met, causing future customers in the same premises to suffer similar issues and delays. It was also commented that RLs' approval should be sought before NetLink Trust rejected such delayed orders.

IDA's Assessment

27. From NetLink Trust's clarification to IDA, IDA notes that under NetLink Trust's proposal, NetLink Trust does not intend for the rejection of the delayed service orders to be subject to RL's prior approval. IDA understands that there had been cases where service orders were not completed but pending RLs' confirmation on whether the orders should be retained in NetLink Trust's systems. IDA also understands that among such cases which were pending RLs' actions, RLs eventually approved the rejection of a fraction of the orders.
28. IDA is of the view that NetLink Trust's proposal to reject cases that are delayed beyond two (2) months is reasonable to avoid having cases of forsaken delayed cases and so that NetLink Trust and the RLs make an effort to promptly complete or appropriately close the order. While NetLink Trust may reject such prolonged delayed orders, it remains open for the RLs to submit a fresh order for the same end-user premise once the issue(s) underlying the service provisioning delay have been resolved. IDA notes that, in such cases, NetLink Trust will not impose rejection charges or re-submission charges on the RL. Therefore, RLs will not be penalised under the ICO for such rejections or re-submission of orders. To address the concerns

expressed over NetLink Trust's lack of incentive to expeditiously address the delays for such cases, IDA will adjust the SAP Rebate mechanism to better motivate NetLink Trust to provision the orders within the ICO SAPs so that RLs can be better compensated for any provisioning delays (as detailed in Section 3 below).

29. Notwithstanding that IDA agrees to NetLink Trust's proposed rejection of orders delayed for more than two (2) months, IDA considers it necessary for NetLink Trust to have exercised best endeavours to resolve the delays before rejecting such orders. IDA also considers it essential for NetLink Trust to provide clear explanation to its RLs on the circumstances surrounding the delays and NetLink Trust's efforts made to resolve the said delays when it consults the RLs before rejecting such orders. IDA is also of the view that it is reasonable to require NetLink Trust to clarify in its ICO that it shall consider valid feedback received from the RL prior to any rejection, and where there is any objection from the RL and the RL is able to substantiate the objection with appropriate documentary evidence, NetLink Trust must provide the RL with the additional time necessary to close the order. Further, the ICO must provide that the parties continue to have the option to avail themselves of the existing dispute resolution process provided for in the ICO to resolve any dispute regarding NetLink Trust's decision to reject cases delayed beyond two (2) months.

Section 3 – Service Activation Period Rebates

30. In its Draft Revised ICO, NetLink Trust had proposed to change the SAP rebate mechanism such that the maximum SAP rebate payable per Residential and Non-Residential EUC¹ (rebate cap) and the period in which the SAP rebate would be applicable² would both increase, while the rebate payable for each day of delay would be reduced ("**Revised Mechanism**").

Industry's Submission

31. The industry respondents generally agreed with NetLink Trust's proposal to increase the length of time for which the SAP compensations would be payable. However, they were of the view that NetLink Trust should minimally retain the current daily rebate amount whilst raising the rebate cap to encourage NetLink Trust to resolve delays expeditiously. One industry respondent suggested that NetLink Trust should offer a tiered rebate mechanism whereby the rebate amount would increase with the length of delay. Another industry respondent was of the view that there should be no limit for SAP rebates and that the SAP rebate amount should be substantially increased (e.g., \$50 per day) to provide a strong incentive to drive NetLink Trust to deliver its committed SAP.

¹ The maximum SAP rebate has been proposed to be increased from seven (7) times of the Monthly Recurring Charge ("**MRC**") to 12 times of the MRC.

² The period in which the SAP rebate is applicable has been proposed to be increased from 30 days to 90 days.

IDA's Assessment

32. While the Revised Mechanism has increased the maximum SAP rebate payable per Residential and Non-Residential EUC from seven (7) times the Monthly Recurring Charge (“MRC”) to 12 times MRC, IDA agrees with the industry that it also has the effect of reducing the per-day SAP rebate payable per connection. Please refer to the following table for illustration using the Non-Residential EUC as an example, where the per-day SAP gets reduced from \$11.66 to \$6.66:

Existing Rebate Mechanism in ICO	Proposed Revised Rebate Mechanism
<u>Per-day Rebate</u> = \$50 X 7/30 = \$11.66	<u>Per-day Rebate</u> = \$50 X 12/90 = \$6.66
<u>Maximum Rebate</u> = \$11.66 X 30days = \$350	<u>Maximum Rebate</u> = \$6.66 X 90days = \$600

33. IDA has no objection to NetLink Trust increasing the maximum SAP rebate payable per Residential and Non-Residential EUC. With regard to the period for which NetLink Trust is liable for SAP rebates, NetLink Trust has spread this rebate across a longer period of 90 days. In practice, an RL would in this way be compensated less rebates on a per-day basis. IDA is of the view that the SAP rebate mechanism should be enhanced to better motivate NetLink Trust to provision the orders within the ICO SAPs and that RLs can be better compensated for any provisioning delays. Accordingly, NetLink Trust will be required to amend its Revised Mechanism by reducing the period in which the SAP rebate is applicable from 90 days to 60 days, while keeping the rebate cap at 12 times MRC.

Existing Rebate Mechanism in ICO	Proposed Revised Rebate Mechanism	IDA's Directed Rebate Mechanism
<u>Per-day Rebate</u> = \$50 X 7/30 = \$11.66	<u>Per-day Rebate</u> = \$50 X 12/90 = \$6.66	<u>Per-day Rebate</u> = \$50 X 12/60 = \$10.00
<u>Maximum Rebate</u> = \$11.66 X 30days = \$350	<u>Maximum Rebate</u> = \$6.66 X 90days = \$600	<u>Maximum Rebate</u> = \$10.00 X 60days = \$600

Section 4 – NetLink Trust’s Quota Management

34. NetLink Trust had proposed the following three key changes to the manner it would manage its quota in the ICO.
- (a) For the existing Quota Adjustment Mechanism (“**QAM**”) in the ICO, NetLink Trust had proposed to:
 - (i) adjust the quota utilisation threshold percentage such that NetLink Trust would increase its Maximum Quota if the utilisation percentage in each review period is greater than or equal to 90% (the “**Trigger Percentage**”); and
 - (ii) increase the quantum of the Maximum Quota, whenever it would be triggered in accordance to (i) above after each review period, to at least 115% of the prevailing orders (including orders received during IT fairs) received during the review period.
 - (b) NetLink Trust had also proposed to replace the existing QAM with the Committed Forecast Approach (“**CFA**”) going forward. In summary, the CFA would comprise the following:
 - (i) RLs would submit regular demand forecasts on a rolling basis and NetLink Trust would plan its manpower resources based on such demand forecasts received from RLs;
 - (ii) RLs would commit to using 90% of the daily demand forecasts, failing which a commitment fee would apply; and
 - (iii) Adjustments (increase/decrease) shall not exceed 5% of previous demand forecast.
 - (c) NetLink Trust had proposed that the temporary increase of installation slots in excess of the Maximum Quota for purpose of IT fairs (“**Seasonal Slots**”) be on a non-mandatory basis.

Industry’s Submission

35. The industry respondents welcomed NetLink Trust's proposed enhancements to its QAM. Two respondents were however of the view that the proposed Trigger Percentage of 90% could be further lowered to 80%. Instead of performing the review of the Maximum Quota using the QAM once every 12 weeks, three respondents proposed that NetLink Trust's review should be on a rolling basis. There was also a suggestion for the review of the Maximum Quota to be done once every eight (8) weeks, rather than on a 12-weekly basis.
36. On the other hand, the industry respondents indicated that they were not prepared to accept the CFA. They were of the view that it was challenging for RLs to forecast with reasonable accuracy the quota needed for each day. The

CFA would result in RLs providing very conservative forecasts to reduce the risk of being penalised by NetLink Trust through the commitment fee. At the same time, if RLs did not cater sufficient quota through the demand forecast, they could be liable to their Retail Service Providers (“RSPs”) or end-users for not being able to fulfil their orders. The CFA would thus have the effect of creating longer waiting time for customers, especially at times of unexpected overwhelming demand. Should forecasts be necessary for NetLink Trust to fine-tune its management of the Maximum Quota, one industry respondent commented that the forecasts should be on a best effort and non-committal basis. Further, RLs should not be penalised for variations between their forecasts and actual quota take-up. Two industry respondents also highlighted their concerns in providing commercially sensitive forecast numbers to NetLink Trust.

37. With regard to NetLink Trust’s proposal to provide Seasonal Slots on a non-mandatory basis, two respondents were of the view that NetLink Trust should instead revert to the current practice of committing to provide Seasonal Slots ahead of major industry events.

IDA’s Assessment

38. IDA notes that the existing QAM, coupled with NetLink Trust’s existing practice of providing additional Seasonal Slots to meet seasonal demand, has generally enabled NetLink Trust to offer sufficient installation slots to meet the demand for its services and the needs of the industry, and that NetLink Trust’s RLs generally have no adverse concerns over the QAM. NetLink Trust’s proposed enhancements to the QAM will improve the capability of this mechanism to better ensure that NetLink Trust avails sufficient quota to the industry. Considering the past utilisation rates of NetLink Trust’s quota, and that the QAM will allow the quota level to be dynamically adjusted according to demand over time, IDA is of the view that NetLink Trust’s proposed enhancements to the QAM are sufficient at present. Accordingly, it may not be necessary for NetLink Trust to lower the Trigger Percentage or to conduct the review of the Maximum Quota on a rolling basis at this juncture. Further, for the above reasons, the review frequency of the Maximum Quota using the enhanced QAM of once every 12 weeks appears adequate and reasonable.
39. IDA notes the industry respondents’ view that NetLink Trust should continue to commit to offer Seasonal Slots to RLs for major industry events (e.g., IT fairs) to prepare both NetLink Trust and the RLs for the expected increase in demand for fibre services. IDA notes from NetLink Trust that there had been under-utilisation of Seasonal Slots at the most recent IT fairs. While this may be the factor behind NetLink Trust’s proposal to remove Seasonal Slots as a mandatory offer, IDA notes that NetLink Trust is allowed to propose the volume of Seasonal Slots it wishes to offer for each IT fair. Should under-utilisation of resources be of concern to NetLink Trust, NetLink Trust should take into account all relevant factors, including historical utilisation rates, in sizing its volume of Seasonal Slots. Nevertheless, NetLink Trust is reminded that IDA fully expects NetLink Trust to put in place adequate arrangements to handle seasonal fluctuations and comply with all its regulatory obligations.

40. With regard to the CFA, IDA notes that there may be practical difficulties for RLs to provide realistic rolling forecasts. IDA is therefore not convinced that the CFA will more effectively manage NetLink Trust's quota system at this juncture. NetLink Trust has also not demonstrated to IDA how forecast demand from the CFA can be effectively managed as part of NetLink Trust's quota to better meet the industry's needs and on a non-discriminatory basis. To illustrate, there are inadequate details in NetLink Trust's proposed CFA on how it will operate in practice to assure IDA that, consistent with the ICO, all requests for services will be processed by NetLink Trust on a non-discriminatory basis, such as by "first come, first served". In the circumstances, IDA is of the view that, at present, the QAM, together with NetLink Trust's proposed enhancements in this ICO review, would be able to effectively assist NetLink Trust in sizing its service provisioning capacity and on a non-discriminatory basis. Accordingly, unless or until the time when NetLink Trust is able to address the concerns which the industry respondents have raised as regards the CFA, IDA will not require the QAM to be complemented or replaced by the CFA.
41. IDA will continue to monitor market developments with a view to ensuring that NetLink Trust maintains sufficient service provisioning capacity to meet demand for its services. Where appropriate, IDA may further review any part of NetLink Trust's quota under its ICO in the future, including the level of NetLink Trust's quota, the adjustment mechanism and any forecast system that is capable of demonstrating its effectiveness in meeting the needs of the industry.

Section 5 – NetLink Trust's Notification for Scheduled Interruptions

42. In NetLink Trust's Draft Revised ICO, NetLink Trust had proposed to include the notification process for urgent and unscheduled service interruptions ("**Unplanned Interruptions**") and to amend the notification period for planned service interruptions ("**Planned Interruptions**") to at least two (2) weeks. NetLink Trust had also proposed that it would provide the RLs with no less than 24 hours' notice should there be a change to the Planned Interruption.
43. For Unplanned Interruptions, RLs would be informed of the interruption as soon as practicable together with the estimated period of service interruption. For Planned Interruptions, according to NetLink Trust, there were cases of interruption necessitated by site works that were performed by third parties which could only notify NetLink Trust with a notice period of less than one (1) month. NetLink Trust had proposed to reduce the notice period for Planned Interruptions from one (1) month to two (2) weeks as the current notification period of at least one (1) month was not operationally feasible.

Industry's Submission

44. Respondents commented that the notification period for Planned Interruptions should be maintained at one (1) month to allow RLs and RSPs sufficient time to update their systems and service records, inform end-users of interruptions

and to implement service continuity plans where necessary. It was also noted that Government agencies would require at least one (1) month's notice for Planned Interruptions in Government contracts. Adverse comments were received on NetLink Trust's proposal to inform RLs of any postponement to Planned Interruptions only 24 hours before the original Planned Interruption. The respondents were of the view that the proposed 24-hour notification period was practically too short as RLs/RSPs had an obligation to provide at least 48 hours notice to RSPs/end-users for such postponements. Another respondent suggested that a two-week notification period for such postponements would be appropriate. Further, it was also commented that Unplanned Interruptions should only be for a strictly limited set of circumstances and should not include postponement of normal Planned Interruptions. There was one respondent which commented that it had no concerns with NetLink Trust's proposed changes.

IDA's Assessment

45. IDA understands NetLink Trust's concerns that there may be instances when third parties involved in the Planned Interruption may not be able to inform NetLink Trust in time such that NetLink Trust can only inform the RLs of such Planned Interruptions with less than one (1) month's notice period. However, IDA is of the view that such incidents of short notice from third parties could be handled as part of the process for Unplanned Interruptions, where NetLink Trust shall inform RLs of such interruption as soon as practicable together with the estimated period of service interruption. Considering that it is imperative for NetLink Trust to provide ample notice for RLs to work out the arrangements in anticipation for Planned Interruptions, IDA agrees with industry's comments to retain the one-month notification period for all Planned Interruptions.
46. With regard to NetLink Trust's proposal to inform RLs 24 hours prior to postponement of Planned Interruptions, IDA is of the view that a 24-hour notification period may not be sufficient for RLs, RSPs and End-Users to react. In this regard, IDA considers it reasonable that NetLink Trust shall provide at least one (1) week's notice to RLs for any postponement of Planned Interruptions. Should NetLink Trust be restricted to a shorter notification period due to corresponding short notices provided by third parties, NetLink Trust shall use the same principle in the process for Unplanned Interruptions to inform the RLs as soon as practicable of such unforeseen postponement of Planned Interruptions.

Section 6 – Reclassification of Premises

47. NetLink Trust had proposed that the reclassification of a premise, having an active end-user connection at the time of submission, to another premise type should not be allowed. However, NetLink Trust would allow the reclassification of a defined area within a premise (regardless of whether the premise was with or without an active end-user connection) to another premise type. NetLink Trust had also proposed to remove the requirement for NetLink Trust to inform the RL within one (1) Business Day from the date of

submission of the request for reclassification, whether the reclassification was successful.

48. With regard to the administrative requirements for reclassification requests, NetLink Trust had proposed that RLs obtain and keep a record of at least two, instead of at least one, pieces of documentary evidence as proof of change of premise type from the End-User. Further, NetLink Trust had clarified in its ICO proposal that only telecommunication bills for fixed network services would be accepted for consideration as documentary evidence for change of premise type.

Industry's Submission

49. One respondent commented that NetLink Trust should allow reclassification of premises regardless of whether there was an active end-user connection if the End-User was able to provide substantive evidence warranting a premise reclassification. With NetLink Trust's proposal, the industry respondent was of the view that the RLs and RSPs would need to activate temporary services for customers while waiting for NetLink Trust to complete its reclassification process. There were also views that it was not clear what constituted a "defined area" in NetLink Trust's proposal, and that NetLink Trust would need to specify the scenarios and aptly define the term "defined area". A respondent was agreeable with NetLink Trust's proposed revisions, but indicated its view that NetLink Trust should work with the relevant parties to ensure the accuracy of classification of premises to reduce the need to rely on third party documentation.
50. On the definition of the various classifications of premises, one respondent was of the view that the basis on which NetLink Trust would decide on the classification should be defined in the ICO. It was also proposed that a premise should only be classified as a residential premise if it was "designed, adapted or used for human habitation of a residential nature" and otherwise, it should be classified as a non-residential premise. Where there was a dispute, the respondent suggested adopting the classification used by IRAS. Comments were also received that it may be challenging to fulfil NetLink Trust's requirement for least two sets of documentary evidence per reclassification request as End-Users who did not own the property may face difficulties in providing the multiple pieces of evidence. The industry respondents were also of the view that the current requirement for NetLink Trust to provide a one (1) Business Day notice on the acceptance of the reclassification should be retained. Another respondent queried the need for the documentary evidence in the form of telecommunication/Internet bills to be of 'fixed line subscription only'.
51. Further, it was suggested that NetLink Trust should provision Non-Residential EUCs in accordance with the standard split ratio of 1:16 instead of 1:24 for cases of reclassification from residential to non-residential premise type. If NetLink Trust was unable to change the split ratio to 1:16, the respondent recommended that NetLink Trust consider having a differentiated charging

mechanism based on the ratio type, including 1:24, subject to IDA's audit and approval.

IDA's Assessment

52. IDA understands that NetLink Trust's proposed inclusion of the ICO condition which disallows the reclassification of a premise, having an active end-user connection at the time of submission, is consistent with and reflects NetLink Trust's existing practice for reclassification of premises. In other words, NetLink Trust's proposal is to formalise this process by including it in the ICO. IDA understands that it is necessary for NetLink Trust to perform physical works at the backend when reclassifying a premise and active end-user connections may be disrupted as a result of reclassification works. IDA thus considers it reasonable for reclassification to be done only on premises without active end-user connections so as to avoid service disruption to end-users. To address the concern that the reclassification process may be lengthy and considering that End-Users may be deprived of connectivity services in the interim, IDA requires NetLink Trust to propose in its ICO a definitive timeframe by which the reclassification process would be complete. Further, NetLink Trust shall clarify that it will adhere to the reclassification timeframe, unless there are delays due to reasons beyond NetLink Trust's reasonable control despite NetLink Trust using its best endeavours to attempt to complete the reclassification within the prescribed timeframe.
53. With regard to a respondent's comment that the term "defined area" should be clearly defined, IDA understands from NetLink Trust that it is challenging to prescribe exactly or exhaustively how End-Users further sub-divide their premises as NetLink Trust would not be aware of the various configurations that End-Users could have for their premises. However, IDA considers it necessary for NetLink Trust to minimally clarify in its ICO that the "defined area" could be subject to configurations according to the End-User's choice and to give some examples of what it considers acceptable "defined areas".
54. On the definition of what constitutes a residential or non-residential premise, IDA would consider it reasonable for NetLink Trust to clarify in its ICO that the basis on which NetLink Trust decides on the classification should be consistent with the definitions of Residential Premise and Non-Residential Premise in Schedule 18 – Dictionary to the ICO.
55. IDA understands from NetLink Trust that the requirement of one (1) Business Day to inform the RL of the status of reclassification is redundant since NetLink Trust will, by default, accept the reclassification request without any verification of supporting documents. However, if NetLink Trust intends to remove the requirement to inform the RL of the reclassification status, IDA's view is that it is then not clear in the ICO how an RL is informed of whether the premise selected is eligible for reclassification or if the RL should instead proceed to place an order for that premise using the newly classified premise type. IDA therefore requires NetLink Trust to propose modifications to the ICO to clarify the above.

56. IDA also understands from NetLink Trust that some of the documentary evidence submitted by RLs in the past was either unable to demonstrate the change of premise usage or contradicted the actual premise use verified on-site. NetLink Trust has thus proposed that the RLs submit at least two, instead of one, pieces of documentary evidence for better clarity. From the industry respondents' comments, IDA understands that there may be circumstances where RLs face challenges in obtaining two pieces of documentary evidence from the End-Users. IDA is of the view that it is reasonable for the ICO to require at least two pieces of documentary evidence for reclassification requests by default in order to provide greater certainty on the correct classification of the premise. Nevertheless, should RLs face difficulty in submitting two pieces of documentary evidence to NetLink Trust due to factors arising from the End-Users (e.g., the End-User is only able to provide one document), the RLs should explain the reason for omitting a full set of documentary evidence and NetLink Trust shall then not unreasonably reject the reclassification request if the submitted documentary evidence is sufficient to demonstrate the change of premise usage. IDA therefore requires NetLink Trust to propose modifications to the ICO to clarify the above.
57. On the respondent's query as to why it is necessary for the documentary evidence to be in the form of fixed-line telecommunication/Internet bills, NetLink Trust has explained that for consistency of classification, it would make sense for the telecommunication/Internet bill to be of a fixed-line subscription, as the Residential EUC/Non-Residential EUC service is analogous to a fixed-line subscription, and that bills for mobile connections are not appropriate as documentary evidence as property classification as the terms and conditions for mobile services are typically not based on the premise or location of use. In this regard, IDA is of the view NetLink Trust's proposed terms are reasonable. Hence, it would not be appropriate if NetLink Trust relies on, for instance, the telecommunication bill for a mobile service for the purpose of property reclassification for a fixed-line fibre connection.
58. With regard to the suggestion that NetLink Trust should provision to a premise reclassified as non-residential with the standard split ratio of 1:16 for Non-Residential EUCs instead of continuing with the existing 1:24 split ratio for Residential EUCs, IDA understands that NetLink Trust would have to carry out physical network reconfiguration to implement changes in split ratios arising from reclassification of premises. In this regard, IDA is of the view that it may not be reasonable nor technically efficient for NetLink Trust to reconfigure its network by redeploying a 1:16 fibre connection to the newly classified non-residential premise, which had originally been deployed with a 1:24 fibre connection. IDA notes that such reconfiguration may also result in end-users who are connected to the same splitter (but are not requesting the reclassification) encountering disruptions in service. Additionally, taking into consideration the reverse situation for a premise reclassified as residential where NetLink Trust is maintaining a 1:16 split ratio instead of converting to a 1:24 split ratio, and in view of the low incidences of premise type reclassification, IDA is presently of the view that, on balance, NetLink Trust need not be required to provision in accordance with the standard split ratio applicable for such reclassified premises. However, all other terms and

conditions applicable for the relevant EUC Service pertinent to the reclassified premise shall continue to apply (e.g., all other terms and conditions for Non-Residential EUCs shall apply to the premise reclassified as non-residential).

59. With respect to a respondent's submission for NetLink Trust to apply a differentiated charging mechanism for a 1:24 split fibre connection compared to a 1:16 split fibre connection for non-residential premises, IDA's position is that it is reasonable for the charges for the EUC service for reclassified premises to be based on the End-User's usage for the connection (e.g., for a residential end-user to pay charges based on the Residential EUC). Further, while the respondent has proposed to apply a 1:24 split fibre connection charging to a 1:16 split fibre connection for non-residential premises, IDA notes that there is no reciprocal charging principle for residential premises, whereby a 1:16 split fibre connection charging should apply to a 1:24 split fibre connection. On balance, IDA is of the view that the existing charging mechanism is reasonable and IDA will not presently require NetLink Trust to offer the suggested differentiated pricing. Notwithstanding the above, IDA is open to considering if there is industry demand for the 1:24 Non-Residential EUC service or the 1:16 Residential EUC service, and NetLink Trust may wish to file a separate tariff or ICO service for such services.

Section 7 – Insufficient Capacity

60. The ICO provides NetLink Trust with extended service delivery timeframes should there be a need to install additional fibre capacity for service provisioning. In particular, NetLink Trust is allowed a service delivery timeframe of
- (a) 10 Business Days from the receipt of the service request from the RL should additional capacity be needed between the FTTB Node of the residential or non-residential premise and the Termination Point in the premise (“**TP**”); or
 - (b) 40 Business Days from the receipt of the service request from the RL should additional capacity be needed between the Central Office (“**CO**”) and the TP.

Industry's Submission

61. Several respondents expressed concern over the manner in which NetLink Trust currently handled cases that experienced extended service delivery timeframes arising from “insufficient capacity”. One respondent highlighted that under the current process, NetLink Trust was not providing RLs/RSPs with details as to where the actual capacity was insufficient in NetLink Trust's network and that arising from NetLink Trust providing ambiguous resolution timeframes to the RLs and RSPs, e.g., “up to 2 months”, the industry was unable to provide clarity to End-Users as to when the service would be provisioned. The respondents proposed that NetLink Trust should provide greater visibility on the exact nature of the “insufficient capacity” issue being

faced, and that NetLink Trust should provide specific timeframes to resolve the delays arising from “insufficient capacity”.

62. Several respondents also highlighted their concerns that NetLink Trust might be inaccurately attributing delays as “insufficient capacity” related, including orders where NetLink Trust had sufficient fibre and/or splitter capacity in place. One respondent viewed that NetLink Trust should not be allowed to use the “insufficient capacity” argument when it had failed to utilise the second fibre in the customer’s premise.

IDA’s Assessment

63. IDA notes with concern the feedback about NetLink Trust’s handling of cases classified as encountering insufficient capacity issues. In particular, IDA is deeply concerned that the lack of clarity from NetLink Trust with respect to the nature of the issue and the resolution timeframes are causing ambiguity and frustration to RLs, RSPs and End-Users. IDA agrees that for all cases for which NetLink Trust claims insufficient capacity, NetLink Trust shall minimally inform the RL the exact resource and network location which requires top up and provide a definitive timeframe for resolution, in line with the existing provisions of the ICO.
64. IDA further clarifies that it is not appropriate for NetLink Trust to broadly categorise all cases of insufficient capacity to adopt a service delivery timeframe of 40 Business Days. Under the ICO, insufficient capacity refers only to the insufficiency of fibre. Therefore, the extended SAP of 10 or 40 Business Days for NetLink Trust to provide the EUC arising from insufficient capacity is due to the difference in the distance required for NetLink Trust to install the wireline between the connecting points. In this regard, IDA had taken the foregoing into account when IDA approved the relevant provisions in NetLink Trust’s ICO. Accordingly, the 10 Business Days service delivery timeframe is applicable if there is insufficient fibre capacity from the FTTB Node to the TP of a premise and it is necessary for NetLink Trust to top up fibre capacity from the FTTB Node to the TP of the premise for that service order. Further, the extended service delivery timeframe of 40 Business Days is applicable only if there is insufficient fibre capacity from the CO to the TP of a premise and it is necessary for NetLink Trust to top up fibre capacity from the CO to the TP of the premise for that service order. Considering that the time taken to install a splitter in the FTTB Node would be similar to the time taken to install a splitter in the designated CO, IDA is of the view that the time needed to install splitters should be the same regardless of where the splitter top up is performed. Further, IDA is of the view that the effort in installing an additional splitter due to insufficient splitter capacity should be subsumed within the service provisioning efforts for a standard Residential or Non-Residential EUC.
65. Accordingly, IDA requires NetLink Trust to modify its service provisioning process in the ICO to reflect that all cases with insufficient fibre capacity would, by default, be given ten (10) business days for the necessary installation of the additional fibre capacity and service delivery. Where there is

insufficient fibre capacity from the CO to the TP and hence a 40-day service delivery timeframe is applicable for NetLink Trust to top up fibre capacity from the CO to the TP for that premise, NetLink Trust shall inform the RL accordingly and provide the necessary justification and/or evidence in support. Except for cases which relate to the insufficiency of fibre, NetLink Trust shall not invoke the “insufficient capacity” provisions in the ICO. Instead, for the reasons explained above, it is the responsibility of NetLink Trust to put in place all necessary splitters, and/or other network elements and resources, to meet its regulatory obligations. For the avoidance of doubt, where there is insufficient splitters and/or other network elements, NetLink Trust shall provision the EUC within the prescribed SAP periods in the ICO i.e., three (3) Business Days for Residential EUCs and 10 Business Days for Non-Residential EUCs.

Section 8 – Address Not Found Cases

66. In NetLink Trust's Draft Revised ICO, NetLink Trust had proposed to include the following manual process for service provisioning designed for “Address Not Found” cases, where
- (a) the RL would be notified by NetLink Trust of the acceptance or rejection of the service request within three (3) Business Days of the date of request; and
 - (b) the Residential or Non-Residential EUC would be provisioned within 40 Business Days upon NetLink Trust's acceptance of the service request.
67. In the Public Consultation paper, IDA stated its preliminary view that the actual provisioning process for "Address Not Found" cases should be no different from the approach adopted in the ICO, where NetLink Trust should provide services to such Residential or Non-Residential Premises based on the SAPs under the ICO (i.e., three (3) or 10 Business Days from the date of request). If there is insufficient capacity (e.g., requiring NetLink Trust to install additional fibre), NetLink Trust could then take additional time to provision such services, as provided for in its ICO.

Industry's Submission

68. Respondents were generally in agreement with IDA's preliminary view, with several respondents highlighting that NetLink Trust's proposed SAP of 40 business days would discourage affected End-Users from taking up fibre services. Several respondents also expressed concerns that relying upon a manual process would increase the likelihood of delays and miscommunication between NetLink Trust, RLs, RSPs and End-Users, and were of the view that NetLink Trust should instead allow RLs to submit “Address Not Found” cases electronically through NetLink Trust's B2B and Service Portal instead.

IDA's Assessment

69. Having considered the responses received, IDA maintains the view that it is reasonable for NetLink Trust to align the terms and conditions of the process for "Address Not Found" cases with all the relevant processes for Residential and Non-Residential EUCs in the ICO (including the process for service delivery with insufficient capacity).
70. In line with IDA's view that the actual provisioning process for "Address Not Found" cases should be no different from the approach adopted in the ICO, IDA agrees that NetLink Trust's systems should allow such cases to be submitted electronically and processed with as little manual intervention as possible. Accordingly, NetLink Trust is required to ensure that its OSS/BSS system allows electronic submission and automated provisioning process for "Address Not Found" cases. Further, IDA requires NetLink Trust to propose modifications to its ICO to streamline its proposed manual process for "Address Not Found" cases.

Section 9 – NetLink Trust's Charges

71. IDA received comments from the industry respondents with regard to the various charges in NetLink Trust's ICO. The following paragraphs provide a summary of a few of the key concerns raised by the industry.

Industry's Submission

Cancellation Charges

72. One industry respondent provided comments with regard to cancellation charges in the ICO. In particular, the respondent was of the view that the cancellation charge should not vary across different residential property types and that there was no reason for the quantum to be equivalent to the installation charges. Rather, cancellation charges should be priced in accordance with typical administrative charges.

Prices of Segment Services

73. Comments were received that NetLink Trust's charges for the CO to CO connection (at \$6,000 per month) and the CO to MDF connection (at \$2,300 per month) were high. The respondent compared the above NetLink Trust segment service charges with the price that another Facilities-Based Operator is charging for a data centre to data centre connection (at \$2,500 per month).

Onsite Visit Charges and Professional Service Charges

74. An industry respondent commented that charges for onsite visits should not be determined by the number of NetLink Trust staff attending the site visit. The respondent was concerned that NetLink Trust may deploy excessive manpower for the onsite visits to increase the onsite visit charges payable, especially when RLs had no control over the number of NetLink Trust staff

attending the site visit. It was also commented that professional services were over-priced at \$2,000 per man-day and RLs were obliged to purchase minimally a full man-day even though the professional services only required 15 minutes.

Charges for Deactivating Patching Service

75. IDA received comments that the deactivation of patch cables and/or the removal of the patch cable from the CO or MDF room should not be chargeable as the effort should be considered as part of the basic service to be provided by NetLink Trust under “deactivation” for which there is no charge.

IDA’s Assessment

76. In relation to the feedback provided by respondents on NetLink Trust’s ICO charges, IDA notes that arising from the Consolidation Application, there might be changes to NetLink Trust’s cost structure that may have consequential impact on the relevant costs attributable to NetLink Trust’s services. In this regard, in order to provide for a holistic review where both additional costs and/or cost savings arising from the consolidation can be assessed, IDA is considering conducting a review of NetLink Trust’s ICO prices after operations have stabilised post consolidation.

Section 10 – Unused Fibre Handback

77. To prevent RLs from holding on to fibre resources on the Nationwide Broadband Network (“**NBN**”) despite end-users having terminated their fibre subscriptions, NetLink Trust had proposed to amend the ICO to require RLs to promptly terminate their use of fibre connections (including end-user connections) provisioned by NetLink Trust, once End-Users or RSPs terminate their services with RLs, and to submit a fortnightly report on the RL’s utilisation of each Residential EUC that was (a) activated for the End-User within 14 days prior to the submission of the report; and (b) terminated by the End-User within 14 days prior to submission of the report (the “**Fortnightly Report**”).

Industry’s Submission

78. An industry respondent commented that the existing six-month timeframe for activation/termination of an EUC should be retained and that the requirement for RLs to submit a fortnightly report to NetLink Trust should be rejected. Respondents suggested that there was no reason for RLs to hoard fibre resources since there was a cost to hold on to each “unused” connection. Further, it was mentioned that open-access Operating Companies (“**OpCos**”) with multiple RSPs might not have visibility over whether an End-User had terminated the service as they did not have a direct contractual relationship with the End-User. Another industry respondent was of the view that NetLink Trust’s proposal would add additional administrative costs and would not serve any purpose considering the proposed enhancements to the Fibre

Takeover ("**FTO**") Process, since the Losing RSP would no longer be able to block a transfer of fibre to the Gaining RSP. An industry respondent further commented that the existing six-month timeframe for activation/termination of an EUC should be retained and that the requirement for RLs to submit the Fortnightly Report to NetLink Trust should be rejected.

79. On the other hand, one industry respondent supported NetLink Trust's proposal of mandating RLs to promptly return unused fibre connections.

IDA's Assessment

80. IDA holds the view that the holding on of unused fibre strands contributes to the inefficient use of limited resources over the NBN. Further, there does not appear to be any good reason or rationale for telecommunication licensees providing services over fibre on the NBN ("**NBN Service Providers**") to hold on to such unused fibre strands once End-Users cease to subscribe to services provided over these fibre strands and where there are no charges imposed by NetLink Trust or where such charges are waived by NetLink Trust for releasing the same.
81. In line with the above, on 29 October 2014, IDA issued a direction to NBN Service Providers, in respect of the release of unused fibre resources on the NBN ("**29 October 2014 Direction**"). Under the 29 October 2014 Direction, NBN Service Providers shall release any unused fibre strands, previously used for the provisioning of Residential or Non-Residential EUC services, back to NetLink Trust or to an OpCo (as applicable), within one (1) Business Day from the date that End-Users cease to subscribe to such services provided over these fibre strands. NetLink Trust shall then make available the released and unused fibre strands to its other RLs within another one (1) Business Day from the date an OpCo or RSP releases an unused fibre strand.
82. Accordingly, NetLink Trust is required to amend Schedule 1 – Residential End-User Connection and Schedule 2 – Non-Residential End-User Connection of its ICO to reflect the processes it will put in place to comply with IDA's 29 October 2014 Direction. With respect to NetLink Trust's proposed changes to the ICO to also require RLs to promptly terminate NBAP Connection and segment connection services where end-users cease to subscribe to these services, IDA notes that the take-up for these services is low and that it would be sufficient, at present, for the 29 October 2014 Direction to apply to services with significant take-up, i.e., Residential and Non-Residential EUC services. Accordingly, NetLink Trust is required to remove the relevant proposed changes in relation to NBAP Connection and segment connection services. For the avoidance of doubt, IDA reserves the right to extend the scope of IDA's 29 October 2014 Direction and/or amend the ICO to include other ICO services, including but not limited to the NBAP Connection and other segment connection services as may be appropriate, in subsequent ICO reviews or at any other appropriate time, based on prevailing market conditions and all relevant facts. Given that all NBN Service Providers, including NetLink Trust's RLs, are required to comply with IDA's 29 October

2014 Direction, unless NetLink Trust is able to provide adequate reasons to IDA's satisfaction, IDA is of the view that, at present, NetLink Trust's proposal for its RLs to submit Fortnightly Reports to NetLink Trust on the RLs' utilisation of each service connection is unnecessary.

83. Separately, IDA clarifies that the six-month timeframe for the activation of an EUC is separate from the 29 October 2014 Direction. The former relates to the activation of an EUC within six (6) months, failing which NetLink Trust may terminate the EUC and reclaim the corresponding fibre strand; whereas the latter relates to the release of unused fibre strands upon the cessation of services triggered by an End-User's request to his/her RSP. Accordingly, IDA will not amend the six-month timeframe for the activation of an EUC at this juncture.

Section 11 – Fibre Takeover Process

84. In the Draft Revised ICO, NetLink Trust had proposed enhancements to the FTO Process, a process only applicable where the Gaining RL, Losing RL and the Gaining RSP (as defined in NetLink Trust's ICO) intending to provide NBN services to End-Users are parties to an industry implemented agreement on the FTO Process ("**FTO Agreement**").

Industry's Submission

85. Comments were received that the enhanced FTO Process should be rejected as it was not likely to succeed due to the challenges of having multiple parties involved in the process. Industry respondents were also of the view that it was unclear whether the FTO Agreement would be voluntary and that only RLs and RSPs who wished to voluntarily adopt the FTO Process should be subject to the FTO Agreement. Further, it was commented that any party to the FTO Agreement should be entitled to withdraw its participation in the FTO Process by giving at least 30 days' prior written notification and without liability or fee to other parties still in the FTO Process.
86. Industry respondents highlighted that clause 20.2(f) of the Draft Revised ICO, which outlined only two acceptable conditions based on which a Losing RL might reject an FTO request, was limiting. It was also highlighted that clause 20.2(f) was anti-competitive as it increased the switching barrier for service providers offering unbundled NBN services.
87. Respondents also provided recommendations to further enhance the operational aspects of the FTO Process. Amongst these, it was requested that the FTO Process should provide clarity on the compensation that NetLink Trust would provide, and the party responsible for handling the customer, should the FTO Process for a service order fail. In addition, there were suggestions that the FTO Process was insufficient and that it should be complemented with the availability of the second fibre to every premise.

IDA's Assessment

88. IDA highlights that both the existing FTO Process and the proposed enhanced FTO Process are currently not mandatory processes under the ICO, but are options available to RLs if the process is suitable for the circumstances on the ground. To further clarify, the existing FTO Process and the proposed enhanced FTO Process are avenues for OpCos and RSPs to meet service requests from residential End-Users who are able to tolerate a minimal amount of disruption in activating a new service to replace an existing one.
89. IDA is of the view that in straightforward “churn” cases (e.g., End-Users switching only a broadband service between RSPs), the FTO Process or NetLink Trust’s proposed enhanced FTO Process will likely be suitable. In any event, regardless of whether the FTO Process or enhanced FTO process applies, IDA reiterates that NetLink Trust shall ensure that it is, at all times, able to meet all its regulatory obligations and shall take all necessary measures to comply with the same, including the provision of services via an alternative fibre strand (e.g., the second fibre strand) to meet any End-User service demand for services.
90. Notwithstanding that NetLink Trust has been working with various members of industry to trial the proposed enhanced FTO process and has made further refinements to the process to mitigate the concerns raised, IDA notes that there remain practical concerns that need to be addressed for the enhanced FTO Process to work more effectively, including the implementation of system processing for orders under the current FTO process. As such, IDA will not require the ICO to be amended to mandate the participation of all RLs in the proposed enhanced FTO Process at this juncture.
91. IDA notes that notwithstanding the above, there may be OpCos, RSPs and End-Users who may wish to leverage on NetLink Trust’s proposed enhanced FTO Process and/or the existing FTO Process based on the facts and circumstances of each case. IDA will thus require NetLink Trust to offer the proposed enhanced FTO Process as an additional option to the existing processes in the ICO, i.e., in addition to provisioning service via an alternative fibre strand as well as to the existing FTO Process. In this manner, RLs will be able to exercise the most suitable option(s) provided by NetLink Trust that best meets the needs and requirements of End-Users based on the facts and circumstances of the case at hand.

PART III: CONCLUSION

92. In conclusion, IDA assures the industry that it will continue to review the ICO prices, timelines, processes, terms and conditions from time to time, to ensure that it continues to be relevant and appropriate to the prevailing market conditions in Singapore.