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Ms Aileen Chia
Deputy Director-General (Telecoms & Post)
Asst CE (Connectivity & Competition Development)
Infocomm Media Development Authority
10 Pasir Panjang Road
#10-01 Mapletree Business City
Singapore 117438

(sent via email to consultation@imda.gov.sg)

Dear Ms Chia

PUBLIC CONSULTATION ON NETLINK TRUST'S INTERCONNECTION OFFER

Nucleus Connect is pleased to provide our comments on NetLink Trust's proposed changes to its Interconnection Offer.

Please feel free to contact the undersigned should IMDA require any clarification on our submission.

Yours sincerely
For and on behalf of
Nucleus Connect Pte Ltd



Ronald Lim
Head (Compliance & Product Development)

**PUBLIC CONSULTATION ON
NETLINK TRUST'S INTERCONNECTION OFFER**

Submission by Nucleus Connect Pte Ltd to the Infocomm Media
Development Authority

9 March 2017

1. Introduction

Nucleus Connect appreciates the opportunity to provide our comments on NetLink Trust's ("NLT") proposed changes to its ICO.

As an open access OpCo which provides services to multiple RSPs, Nucleus Connect is dependent on NLT for the supply of fibre services. Any change to NLT's ICO can therefore affect many downstream providers of services using the Next Gen NBN, consequently also affect services to End-Users.

Our comments can be found in the following sections.

2. General Comments

2.1 *The FIC process must be improved.*

We note that IMDA has allowed NLT to introduce a Fault Identification Charge ("FIC"), in place of its No Fault Found Charge ("NFF"). Further, while the NFF was a flat fee, the FIC is now a time-based charge. We believe that NLT's ICO has not sufficiently clarified how it will implement such a charge, resulting in much uncertainty for RLs.

As drafted, Nucleus Connect believes that a time-based FIC does not incentivise NLT to be efficient since RLs will be expected to pay for all the time it takes for NLT to carry out its fault identification, whether or not such time was spent efficiently and/or competently.

In its ICO, NLT only provides information on when a FIC is applicable, but provides little (if any) indication of how it will impose the FIC. It is therefore unclear when computation of the FIC will begin and end.

Some scenarios that require clarity are as follows:

- a) Nucleus Connect has encountered situations where a Trouble ZTicket ("TT") that was raised to NLT during the weekend is not addressed until the next working day. In such a situation, it will not be fair to commence charging the FIC from the time the TT is raised.
- b) There is no indication how RLs can verify that the amount of time spent by NLT in carrying out fault identification is true and accurate. The inability to verify NLT's claims will result in billing disputes between the parties.
- c) As highlighted above, the FIC charging principles do not give RLs any assurance that NLT will be efficient in its fault identification. Instead NLT can take all the time it wants and/or be as inefficient as it wants since RLs will be required to pay for the entire time NLT takes. This clearly encourages inefficiency.
- d) NLT frequently informs RLs that it is unable to carry out troubleshooting due to access issues. Some of these access issues are actually attributable to NLT's chosen network architecture (eg

springboarding). In such cases, where NLT encounters access issues, it is unclear if NLT will impose FIC for time period it is unable to gain access to the site.

The examples and scenarios provided above are just a sample of the many uncertainties surrounding NLT’s proposed FIC. We have also provided comments on the specific clause in the next section. We believe NLT must provide more information on how it will impose the FIC, failing which Nucleus Connect envisages that there will be an increase in billing disputes related to FIC. Further, it will not be fair for RLs to simply rely on NLT’s records without the ability to verify the accuracy of such records.

To encourage and ensure that NLT carries our FIC expediently and efficiently, IMDA should also impose a cap on the amount of FIC that NLT can charge per incident.

2.2 NLT cannot reject requests for fault identification and rectification

IMDA has made clear in its decision that NLT is required to carry out fault identification and fault rectification for both Pre-COPIF 2013 and COPIF 2013 Buildings. Therefore, we believe that NLT’s ICO must specify that NLT cannot reject any requests for fault identification and fault rectification. Without clearly specifying such obligation, NLT might exploit such uncertainty resulting in delays in fault resolution, and therefore impact services to End-Users.

2.3 Timing to effect NLT’s pricing changes is important to ensure fair competition

Nucleus Connect operates as an open access OpCo in the Next Gen NBN structure. Therefore any changes to NLT’s pricing will have an impact on multiple RSPs. IMDA must therefore ensure that there is sufficient time for Nucleus Connect to revise our own prices (based on NLT’s new input prices), and also for our RSPs to similarly make adjustments to their own End-User prices. The amount of time required must take into consideration the time needed to make operational and workflow changes, make system changes (e.g. to B/OSS), as well as co-ordinating and testing of system changes with NLT (for B2B).

We therefore believe that IMDA should provide no less than six (6) months to allow the above activities to be completed.

3. Specific Comments

Without prejudice to the generality of our comments above, Nucleus Connect’s comments on the specific proposed changes to NetLink Trust’s ICO are as follows:

Relevant Provision of NetLink Trust ICO	NC’s Comments
SCHEDULE 1 (RESIDENTIAL END-USER CONNECTION)	
Clause 4.1 Coverage Info	NC notes that this clause has been revised to specify that NLT will indicate in its MSI that a Residential Premises in a Pre-

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	<p>COPIF 2013 Building has been "covered" if a TP has been successfully installed.</p> <p>NC is of the view that this clause should be revised to similarly specify that NLT will indicate in its MSI that a Residential Premises of a COPIF 2013 Building has been "covered" if the Residential Premises has attained its TOP status, and therefore that orders can be submitted for services to Residential Premises within the building.</p> <p>NLT should also commit to specifying the relevant Installation Charges that would be applicable to each type of premises for both Pre-COPIF 2013 and COPIF 2013 Buildings.</p> <p>Finally, NC has encountered situations where a COPIF 2013 Building has obtained TOP, but NLT was not prompt in updating its MSI. This resulted in confusion and unhappiness for End-Users, RLs, and RSPs. NLT should therefore commit to update its MSI in a timely manner.</p>
<p>Clause 4.2 Order Submission</p>	<p>Section 1 Paragraph 2 (Page 5) of the Consultation Document specifies that <i>"NLT is required to propose changes to clarify that it shall service end-users' requests for FTP installation/relocation to their homes in relation to active service/request for New NBN service after the buildings have attained TOP status for both Pre-COPIF 2013 and COPIF 2013 Buildings"</i>.</p> <p>NC believes that in addition to servicing End-User requests, NLT must also be obligated to service similar requests from RLs.</p> <p>Also, NC notes that NLT's ICO has not completely addressed this requirement as NLT has not specified how an End-User and/or RL can submit a request for FTP installation. NLT should be required to specify this process in its ICO.</p> <p>Finally, we note that Section 1 Paragraph 4 (Page 5) of the Consultation Document explicitly states that <i>"NLT shall specify that the Service Activation Charge will not be applicable when an RL submits a request for Residential EUC to be relocated from one point in a premises to another point in the same"</i></p>

Relevant Provision of NetLink Trust ICO	NC's Comments
	<p><i>premises.</i>" However, clause 4.2(c) appears to contradict this obligation. NC therefore submits that to avoid confusion, NLT must state explicitly that the Service Activate Charge would not apply in such a scenario.</p>
<p>Clause 11.6</p>	<p>For clarity, NC believes that this clause should track the language used in Schedule 15 especially to state that "NLT shall not impose any FIC in the event that NLT determines that the fault identified resulted from a cause that cannot be attributed to the End-User, RSP and/or the RL.</p> <p>Further, it is not clear how NLT will determine whether a fault is evidently attributable to the End-User, RSP and/or the RL. NLT cannot be allowed to make the assumption that just because it determines that a fault has not occurred in its network, it must therefore be the fault of the End-User, RSP and/or RL. Without the provision of evidence, NLT must not impose the FIC, but must be required to assume that the fault is not attributable to any party, and therefore the FIC will not apply.</p>
<p>Clause 11.8(d) NLT-initiated change</p>	<p>NC notes that the revised clause 11.8(d) contradicts Section 1, Paragraph 8 (Page 7) and Diagram 1 (Page 8) of the Consultation Document.</p> <p>The Consultation Document clearly states that "<i>for faults on NLT's Network in Pre-COPIF 2013 Buildings and NLT's Network in COPIF 2013 Buildings that are not evidently caused by end-users, the RSP and/or the RL, the ICO shall specify that NLT shall <u>not</u> impose the FIC...</i>". Diagram 1 further clarifies that "<i>for faults not caused by RL/RSP/End-User: It will be NLT's responsibility to maintain its network..... Accordingly, NLT shall <u>not</u> charge FIC or repair charges.</i>"</p> <p>We believe that clause 11.8(d) must specify that NLT is only allowed to impose FIC and/or repair charges when a fault is evidently caused by RL/RSP/End-User as specified in Diagram 1 (Page 8) of the Consultation Document.</p> <p>As currently drafted, NLT has the right to impose FIC/repair charges as long as it determines that the fault is not evidently caused by NLT or its contractors. This is not consistent with</p>

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	<p>IMDA's requirements.</p> <p>Further, we note that NLT has removed its obligation to charge End-Users directly for rectification works. This is a regression in process. The requirement and obligation for NLT to impose charges on End-Users directly has been debated at length in earlier consultations on NLT's ICO. NLT should not be allowed to take this opportunity to revert to a less efficient process.</p> <p>NC therefore submits that where NLT is requested to carry out works by End-Users, NLT must charge End-Users directly for such works. Charging RLs under such a scenario only increases the chances of disputes and bad debts.</p> <p>From an operations standpoint, it is also more efficient for NLT to deal directly with the End-User because NLT's field engineer would have already been with the End-User on-site, and will hence be able to seek the End-User's agreement instead of requiring service providers to seek agreement on charges downstream, thereby prolonging the service restoration process. This is as opposed to NLT's justification in the Consultation Document, Point 5 "...NLT had justified that this process will reduce service downtime experienced by the End-User..."</p> <p>In terms of billing, the End-User will also very likely be receiving a delayed bill through the multiple layers of downstream service providers. In fact, it could well be several months before a fault repair charge will eventually reach the End-User.</p> <p>If a fault repair charge is eventually disputed by the End-User, the charge will very likely end up as a bad debt to the RSP or RL.</p> <p>NC is of the view that this clause should be revised to specify that for a fault occurring in the NLT Network that is caused evidently by the End-User, NLT will bill the fault repair charges to the End-User directly.</p>
Clause 11.8(e)	NC would like to confirm that where a fault is found in the

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Faults occurring in BD/BO network (COPIF 2013 Buildings).	<p>BO's/BD's network in COPIF 2013 Buildings, NLT will not automatically carry out fault repairs, but will wait for further instructions from the RL.</p> <p>If NLT carries out any repairs without first obtaining the requisite approvals from RLs, then NLT must not be allowed to impose charges on RLs.</p> <p>Also, NLT should specify where End-Users are able to obtain the list of contractors authorised by NLT to carry out fault rectification, and clarify whether the charges imposed by such authorised contractors will follow the ICO.</p>
SCHEDULE 2 (NON-RESIDENTIAL END-USER CONNECTION)	
Clause 11.6	<p>We believe that the same conditions under which the FIC can be imposed under Schedule 1 should apply to Schedule 2.</p> <p>Please also see comments to clause 11.6 in Schedule 1.</p>
Clause 11.8(d) NLT-initiated change	Please refer to similar comments for Schedule 1 (Residential End-User Connection).
SCHEDULE 15 (CHARGES)	
Joint Investigation Charge/Onsite Charges	<p>There is no reason for the large discrepancy between the Joint Investigation Charge and Onsite Charge and the FIC. We note that the FIC is \$64 for the 1st 2 hours, but \$130 for a similar duration for Joint Investigation/Onsite Charge.</p> <p>NC submits that there is no justification for the higher \$130 charge. NLT should therefore be required to align its Joint Investigation/Onsite Charges with the FIC which is \$64 for the 1st 2 hours.</p>
Clause 1.7.2 Cancellation Charge	<p>NC notes that this clause has been revised to specify that NLT's Cancellation Charge "...shall be at the same rate as the corresponding Installation Charge for the requested service..."</p> <p>NC is of the view that the use of the word "corresponding" is unclear, and that NLT should specify the exact charge applicable.</p>
Clause 1.9.2, Clause 2.8.3,	The clauses referred to specify NLT's Fault Identification Charge. NC notes that the FIC has a minimum charge of \$64

Relevant Provision of NetLink Trust ICO	NC's Comments
<p>Clause 3.8.3, Clause 4.7.3, Clause 5.7.3, Clause 6.7.3, Clause 7.8.3, Clause 8.8.3, Clause 9.8.3, Clause 10.7.3, Clause 11.7.3 FIC</p>	<p>(per visit up to the first 2 hours), with the subsequent hours charged based on an hourly rate.</p> <p>NC believes that the FIC's hourly charging principle will be detrimental to the industry's fault rectification process in the long run. It is NC's view that the FIC should be a fixed charge. Bearing in mind that NLT provides passive fibre services, NLT should be able to quickly indentify the cause and location of a fibre fault. NLT should therefore be restricted to only imposing a fixed FIC charge based on industry standards for similar scope of work.</p> <p>However, if IMDA proceeds with the hourly charging principle, NC's comments and concerns are as follows.</p> <p>With an hourly charging principle, there will no longer be an incentive for NLT to identify and rectify the fault expeditiously. The longer a fault goes unresolved, the more FIC charge amount that will be incurred by the downstream providers, to the financial benefit of NLT.</p> <p>NC is of the view that NLT's fault identification cannot be in-progress indefinitely. To incentivise NLT to be efficient, unless NLT can resolve a fault within 8 hours (as confirmed by RLs), NLT should not be allowed to impose any FIC. We would note that the 8-hour timeframe is in line with NLT's own target for MTTR.</p> <p>Separately, as the FIC will be charged based on hourly rates, NC would like NLT to clarify on how it will provide <u>evidence that its personnel are indeed on-site during its stated date and time</u> for fault identification, especially given that RL and other downstream service providers are not present during the fault identification activity. For instance, will NLT provide documentation signed-off by the End-User to acknowledge that its personnel were indeed on-site for fault identification during NLT's stated start-time and end-time? Will NLT also provide the RL with such supporting documents as evidence when it invoices the RL?</p> <p>NC would also like NLT to provide clarification on the following:</p> <p>(a) For its FIC computation, will NLT capture the FIC start-time</p>

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	<p>based on the time that it receives the RL's Fault Report, or will it capture the FIC start-time based on the actual time that NLT personnel physically arrives on site? Similarly for the FIC end-time, will NLT record the end-time based on the actual time that NLT's personnel physically departs the site, or will it be based on closure of the Fault Report?</p> <p>(b) For Fault cases that need to be KIV-ed due to BM access issues, will the time during which the fault investigation is suspended pending resolution of access issues, and therefore be excluded from NLT's computation of the FIC?</p> <p>(c) For Fault cases that stretch over a weekend, NC understands that based on current experience, NLT personnel will only resume Fault rectification activity on Monday morning. Under such a scenario, will the RL be billed FIC over the weekend when no action is being taken by NLT personnel?</p> <p>(d) For Fault cases that require two separate on-site visits by NLT personnel, for example after the first on-site visit to a serving cabinet where NLT eventually determines there is no fault found but is required to subsequently arrange a second on-site visit with the End-User at the End-User's premises, will NLT be imposing one FIC or two different FICs?</p> <p>In summary, NC submits that NLT's principles for imposing FIC leaves much uncertainty for RLs, and actually encourages NLT to be more inefficient.</p>
<p>Clause 1.12., Clause 2.13 TP Relocation, Repair and Replacement, and Removal.</p>	<p>Section 1, Paragraph 4 of the Consultation Document states that <i>"Further, NLT shall specify that the Service Activation Charge will not be applicable when an RL submits a request for the Residential EUC to be relocated from one point in a premises to another point in the same premises."</i></p> <p>NC submits that the clauses referred to should be revised to clearly specify that the Service Activation Charge will NOT be payable if the RL submits a request for the Residential EUC to be relocated from one point in the premises to another point in the same premises.</p>
<p>Clause 2.3 Installation Charge</p>	<p>We note that IMDA has allowed NLT a significant increase in Installation Charges. However, NC submits that Clause 2.3.4</p>

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	<p>does not give sufficient certainty and clarity to RLs in regards to the charges imposed by NLT.</p> <p>NLT should instead specify the circumstances under which it will impose additional charges, as well as specify the amount of such charges.</p> <p>In the circumstance, NC submits that aside from the scenarios specified in clause 2.3.5, NLT should not be allowed to impose any additional charges. Clause 2.3.4 should therefore be amended to reflect this.</p>
<p>Clause 1.12.2, Clause 2.13.2 TP Relocation, Repair and Replacement, and Removal.</p>	<p>NC notes that the words "End-User" have been removed in the revised clauses referred to.</p> <p>NC is of the view that new sub-clauses should be inserted after each of these revised clauses to specify that for a fault occurring within the NLT Network that is caused evidently by the End-User, NLT will bill the fault repair charges directly to the End-User.</p> <p>NLT must not be allowed to take this opportunity to revert to a less efficient way of operating, which can give rise to disputes and bad debt.</p>
<p>Clause 12.15, Clause 12B.11, Clause 12C.15 Co-location FIC</p>	<p>Section 1, Paragraph 8 (Page7) of the Consultation Document states that <i>"....NLT shall replace <u>ALL</u> instances of No Fault Found Charge regime in the ICO with this new Fault Investigation Charge regime."</i></p> <p>However, we note that the Co-location service schedules have not been amended to reflect this requirement. NLT should be required to amend the relevant clauses in these service schedules accordingly.</p>

4. Conclusion

Nucleus Connect appreciates the opportunity to provide our feedback on NLT's proposed changes to its ICO. We believe that further improvements to the ICO are required to provide assurance and certainty to RLs. One key area which requires clarity is the principle and mechanism for imposing the FIC.

