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Ms Aileen Chia
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Infocomm Development Authority of Singapore
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By Email:   IDA_Consultation@ida.gov.sg

Dear Ms Chia,

**INVITATION FOR COMMENTS ON INTERCONNECTION OFFER FOR THE PROVISION OF SERVICES ON THE NEXT GENERATION NATIONWIDE BROADBAND NETWORK: REVIEW OF OPENNET PTE LTD'S INTERCONNECTION OFFER**

1.     We refer to IDA's Consultation Paper of 8-November 2011 on the above topic.   We are grateful for the opportunity to comment on this matter.   The views of StarHub Ltd ("StarHub") are set out in the attached documents.   We would welcome the opportunity to discuss this matter with IDA in greater detail.

2.     Please do not hesitate to contact me should anything in this submission require clarification or elaboration.

Yours sincerely,
For and on behalf of
**StarHub Ltd**

Tim Goodchild
Government & Strategic Affairs

**DESCRIPTION OF STARHUB AND ITS INTEREST IN THE PROCEEDINGS:**

1. StarHub Ltd is a Facilities Based Operator ("FBO") in Singapore, having been awarded a licence to provide public basic telecommunication services ("PBTS") by the Telecommunications Authority of Singapore ("TAS", the predecessor to IDA) in May 1998.

2. StarHub Mobile Pte Ltd is a wholly-owned subsidiary of StarHub Ltd. StarHub Mobile Pte Ltd was issued a licence to provide public cellular mobile telephone services ("PCMTS") by the TAS in May 1998. StarHub launched its commercial PBTS and PCMTS services in April 2000.

3. StarHub Ltd acquired CyberWay Pte Ltd (now StarHub Internet Pte Ltd) for the provision of Public Internet Access Services in Singapore in January 1999.

4. In July 2002, Singapore Cable Vision Limited (now StarHub Cable Vision Ltd) ("SCV") merged with StarHub Ltd, and became a wholly-owned subsidiary of StarHub Ltd. SCV holds a FBO licence and offers broadband and cable TV services.

5. Nucleus Connect Pte Ltd, a wholly-owned subsidiary of StarHub Ltd, incorporated in April 2009, is the appointed Operating Company of the Next Generation Nationwide Broadband Network ("Next-Gen NBN").

6. StarHub Online Pte Ltd is a wholly-owned subsidiary of StarHub Ltd. StarHub Online Pte Ltd was issued a licence to provide Public Internet Access Services in Singapore in February 2005.

7. This submission represents the views of the StarHub group of companies, namely, StarHub Ltd, StarHub Mobile Pte Ltd, StarHub Internet Pte Ltd, StarHub Online Pte Ltd and StarHub Cable Vision Ltd.

8. StarHub is a Retail Service Provider ("RSP") in the Next-Gen NBN ecosystem. In order to provide services to our customers we depend heavily on OpenNet Pte Ltd ("OpenNet") and its Interconnection Offer ("ICO") for various issues such as the quality and promptness of fibre installation, accuracy in database for fibre coverage status, and the capacity of OpenNet in provisioning its services etc.

9. If the OpenNet ICO is impractical, inefficient, or incomplete, this will significantly impair StarHub's ability to provide Next-Gen NBN services to its customers; will cause frustration and dissatisfaction for our customers; will generate unnecessary costs for all the parties involved; and will impede the rollout and take-up of the Next-Gen NBN.

**SUMMARY OF STARHUB'S POSITION:**

1.     In the 18 months since the launch of Next-Gen NBN services, StarHub has been closely involved in OpenNet's provisioning of services, and has been closely monitoring the implementation of this national project.

2.     Based on our experience, we believe that the existing OpenNet ICO is flawed and fails to address many of the issues important to Requesting Licensees ("RLs") and RSPs. Unfortunately, the structure of the Next-Gen NBN means that the flaws in the OpenNet ICO are passed down to RLs, RSPs and customers.  Set out below is a non-exhaustive list of the problems we have encountered with the OpenNet ICO, and which we believe IDA's Review should address:

    a.  **Delayed Orders** – For both residential and non-residential orders, StarHub has experienced significant provisioning delays (which can be measured in weeks and even months) due to OpenNet.  In a number of cases, customers have become so frustrated with OpenNet's delays that they have cancelled their orders.  For non-residential connections, OpenNet fails to meet the Service Activation Periods ("SAPs") mandated by IDA in the majority of cases, and a number of customers have had to wait many months to get their connections.  This issue has not been addressed in the Review.  We strongly believe that the SAPs mandated by IDA should be strictly followed by OpenNet, failing which effective penalties should be imposed on OpenNet and adequate compensation should be provided by OpenNet to the affected RLs.

    b.  **Order Quota** – The existing OpenNet quota (of 2,400 orders per week) is acting as a major constraint on the take-up of Next-Gen NBN services.  This point has been noted by a number of external parties, including DBS Vickers which has observed that the Next-Gen NBN: *"will not hurt SingTel"* as the *"porting limit of only 2400 connections per week for NetCo implies that full migration will take at least 8 years".*[1]  The Review does not seek to address this issue, but will actually worsen this problem by moving to a daily quota.  We strongly submit that it is necessary for IDA to mandate: (i) a significant increase in the OpenNet quota; and (ii) the establishment of a separate quota for non-residential orders.

    c.  **Insufficient Feedback from OpenNet** – As an RSP, we are reliant on OpenNet providing accurate, timely and useful feedback on the status of customer orders. However, OpenNet is failing to do this, and the updates that it provides are too general to be of any practical use to RSPs.[2]  Without feedback from OpenNet, we are unable to manage the concerns of our customers.  We submit that OpenNet should be required to provide regular and detailed updates on the orders submitted to it, and to promptly provide RLs with detailed evidence of the status of those orders.[3]

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[1] See "*Singapore Company Focus: SingTel*", DBS Group Research, 17 Nov 2011.

[2] An example of an update from OpenNet is: "*Delay in the granting of permission from or permission is not granted by the building owners/management or house owner or End-User to install the required Network to the Residential Premise within the said building.*"

d. **Poor Quality of Service (QoS)** – We continue to receive a number of "Termination Point No Signal" cases, indicating that OpenNet has not carried out its fibre installation properly. The "one-hour response" arrangement implemented by IDA (in which OpenNet is supposed to respond to installation faults within one-hour) is not effective in all cases and does not address the core issue. We believe that it is necessary for the Review to address the QoS issue, and to put in place real obligations on OpenNet to deliver a reliable service. As noted below, we strongly believe that the penalties regime under the OpenNet ICO is currently inadequate.

e. **Connections to New Buildings** – We understand that OpenNet has no obligation to serve any building built after 2010 (until OpenNet's universal service obligation applies in January 2013). This means that customers in new buildings may be denied Next-Gen NBN services for up to 3-years. We believe that this approach is seriously flawed, as the most suitable (and least disruptive) time to install cabling in a building is during its construction (and before it is occupied). We submit that, as part of the Review, an obligation should be imposed on OpenNet to install its fibre cables in all the new buildings, as they are constructed.

f. **Inefficient Billing Arrangement** – Under the existing OpenNet ICO, RSPs are required to bill customers - on behalf of OpenNet – for any additional cabling work carried out by OpenNet for the customer. This arrangement is costly, frustrating, inefficient, and ineffective; and in many cases RSPs have no choice but to absorb those costs. We strongly believe that OpenNet should bill customers directly for all OpenNet-related charges. If OpenNet still insists that RSPs must bill customers, then OpenNet must: (i) obtain written consent from the customer that the customer is agreeable to the charges; and (ii) submit an invoice (and the customer's consent) to RLs no later than 2 weeks from the installation date.

g. **Errors in OpenNet's Database** – We have experienced a number of cases in which the OpenNet database contains errors (for example, with "home-reached" buildings being listed as "not ready", and "residential buildings" classified as "non-residential buildings"). We understand that some of these errors could arise due to delays in OpenNet staff updating the OpenNet database. Such errors have caused (and are causing) frustration for RSPs and customers. We strongly submit that, as part of the Review, the penalties on OpenNet for database errors must be increased, to ensure that OpenNet is incentivised to provide accurate information.

h. **Classification of Building Types** – In order to provide services to customers, it is critical that all parties in the Next-Gen NBN ecosystem have a clear definition of "residential" and "non-residential" premises. This issue was highlighted to IDA prior to the launch of the Next-Gen NBN. However, this matter is still unresolved, and the OpenNet ICO review will worsen this problem (by essentially granting OpenNet the right to determine building classifications, and by adopting inappropriate definitions

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[3] We submit that OpenNet should provide RLs with copies of the correspondence with Building Management ("BM"), updates on discussions with the BMs, and the contact point for the BM's representative.

from COPIF[4]).  The definition of "Non-Building Address Point" (or "NBAP") is also still subjective and open to interpretation.  We submit that the OpenNet ICO should have its own reasonable and well-defined classifications, with IDA (and not OpenNet) resolving any classification disputes that arise under an established process.

i.  **Ineffective Penalties on OpenNet** – Under the current OpenNet ICO (and the Review), the penalties (if any) faced by OpenNet are inadequate.  For example, when OpenNet fails to meet the mandated SAPs, OpenNet only has to compensate RLs based on the Recurring Charge rate.  OpenNet has almost no incentive to deliver its services on time or to the mandated standards.  We submit that IDA should set more appropriate (and higher) penalties on OpenNet, to give OpenNet the incentive to provision its circuits on-time and to standard.

j.  **No-Fault-Found Cases** – RLs have experienced a number of cases in which the circuit provisioned by OpenNet has no signal, or only a weak signal.  After OpenNet has investigated the failure, OpenNet has reported that the fault has (mysteriously) disappeared, and has sought to impose a "No-Fault-Found" charge.  Some RLs have implemented arrangements to take photographic evidence of the lack of signal on such circuits.  However, the Review ignores these arrangements, and seeks to impose "No-Fault-Found" charges in all circumstances when OpenNet sees fit.

k.  **Minimum Contract Term** – StarHub believes that it is important to give customers a wide choice of contract terms.  For the broadband services offered via StarHub's own network, customers have the ability to sign-up for 3-month contracts.  We are therefore concerned by OpenNet's use of a 12-month minimum contract term (and early termination charges should the customer wish to release the circuit before that date).  While the Review does propose reducing the minimum contract term for non-residential and NBAP circuits to 1-month, we note that: (i) in such cases, the customer must effectively pay 6-months of rental charges; and (ii) the minimum contract period for residential circuits remains at 12-months.  We believe that, as part of the ICO Review, both of these points must be changed.

l.  **Mismatched Obligations** – We are concerned by a serious mismatch in responsibilities under the ICO between OpenNet and the RLs, with OpenNet seeking to impose an unreasonable share of costs and responsibilities onto RLs and RSPs.  This trend has been worsened by the Review, which seeks to impose additional costs on RLs (and RSPs) without any improvement in OpenNet's service quality or reliability.  For example, OpenNet is seeking, through the Review, to impose "Missed Appointment" and undefined "onsite" charges.  We believe that it is necessary to remove such charges or to make them reciprocal (so that OpenNet would have to pay the RL, should OpenNet miss an appointment).  We believe that such an arrangement would be fair and equitable.

m.  **Lack of Timely Notifications** – We are encountering a number of cases where OpenNet cancels appointments only 1 or 2 days before the appointment, leaving RLs with little (or no) time to rearrange matters with the customer.  We have also encountered cases where we received no notice from OpenNet that it has cancelled the

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[4] The Code of Practice for Infocomm Facilities in Building ("COPIF").

appointment. As part of the Review, we strongly believe that IDA must set obligations on OpenNet, through the OpenNet ICO, to ensure that such notifications are given at least 1 week in advance (so that RSPs and customers can plan accordingly). If OpenNet fails to provide such notice, penalties should be imposed on it.

n. **Spring-Boarding**– We have experienced a number of cases in which OpenNet has established a connection to a MDF room in a central location, and has then claimed coverage to all adjacent buildings. However, when we have requested service to an adjacent building, OpenNet has rejected our application, claiming "spring-boarding" problems. Simply put, OpenNet has failed to obtain the approval of the BM in the central location to serve adjacent buildings. Such cases are extremely disruptive to our customers, and we understand that other RSPs have encountered similar problems. We propose that when buildings are shown in OpenNet's database to be "covered", OpenNet cannot reject those orders (or declare them to be "BM issues"), but must ensure that circuits are provisioned within the mandated SAPs. Any failure by OpenNet to provision the circuit within the mandated SAPs must be subject to real and effective penalties.

o. **Use of Services** – OpenNet is required to provide its passive infrastructure services, with cost-based charges, to all RLs. Under this arrangement it should be irrelevant to OpenNet how the RLs use its services. RL's should therefore be free (for example) to serve multiple customers from a single OpenNet circuit, or to extend OpenNet's circuit out of one premise to another location (or to multiple locations), and for RLs to only pay for a single for a single circuit. As part of the OpenNet ICO Review, we believe that it is essential for IDA to clarify that RLs are free to use OpenNet's services without restriction, in the manner outlined above.

3. There is considerable room from improvement in the OpenNet ICO, and we submit that the Review has failed to address many of the critical issues in the current OpenNet ICO (such as the OpenNet quota, the ineffective penalties, "spring-boarding", the delays in serving non-residential premises, etc). We would also highlight many of the changes proposed by OpenNet simply impose additional costs on RLs, RSPs, and customers, without improving the underlying reliability or quality of OpenNet's services. Set out in the attached document is a detailed review of the changes proposed to the OpenNet ICO. However, in carrying out the Review, we strongly submit that IDA should not limit itself to just these proposed changes. Rather, IDA should take this opportunity to address all of the issues raised by RSPs and RLs (including those set out in paragraphs 2(a) to (o) above).

4. We would respectfully highlight that if the issues set out in this response are not addressed, the growth of the Next-Gen NBN will continue to suffer. RLs, RSPs, and customers will continue to suffer delays and frustrations as OpenNet seeks to minimize the obligations placed upon it. We submit that only when these fundamental problems are addressed can the Next-Gen NBN start to achieve the take-up rates forecasted for it.

5. StarHub is not the only RSP to be affected by these issues, and we believe that most (if not all) RLs and RSPs have encountered them. StarHub is not seeking special treatment for its own RSP. Rather we are seeking a more workable and effective OpenNet ICO, to benefit all RLs and RSPs, to help increase the take up of Next-Gen NBN services.

**Annex A**

**Detailed Comments on Main Body:**

| Clause | Comments |
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| **18.8(b)** | This Clause sets out a subjective, arbitrary and unnecessary review process in which OpenNet (at its sole discretion and by mere notification to RLs) can change the Security Requirements on RLs. We submit that this measure is unwarranted and unreasonable. Given the $750mill in Government funding available to OpenNet (which will offset much of the commercial risk OpenNet faces), there is no justification for this Clause, and it should be deleted in its entirety. If OpenNet believes that its Security Requirements must be increased, this should be the subject of the triennial ICO review carried out by IDA. |
| **18.8(b)(ii)** | This Clause proposes setting the Security Requirement to the higher of $30,000 or three times the RL's highest invoice. This requirement is provided without any support justification and is unreasonable. We strongly submit that this obligation should be deleted in its entirety. |
| **18.8(c)** | We strongly believe that any review of the Security Requirement should be the subject of the triennial ICO review carried out by IDA. OpenNet should not have the ability to make unilateral changes to the RL's Security Requirements. |
| **18.9** | OpenNet is seeking to double the time required to return the Security Requirements to RLs. There is no justification for this change, and we believe that the original 7 day timeframe is appropriate. |
| **Attachment A Page 4** | The reference to "*at its own discretion*" should be deleted from this Clause, as OpenNet should not be given the right to make unilateral changes to the RL's Security Requirements. Please refer to our comments on Clauses 18.8(b) and 18.8(c) above. |
| **Attachment B Page 3** | The reference to "*at its own discretion*" should be deleted from this Clause, as OpenNet should not be given the right to make unilateral changes to the RL's Security Requirements. Please refer to our comments on Clauses 18.8(b) and 18.8(c) above. |

**Annex B**
**Detailed Comments on Schedule 1:**

| Clause | Comments |
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| **2.6(c)** | Under this Clause, OpenNet's Service Level Guarantees ("SLGs") do not apply when a site coordination meeting, a Joint Investigation Meeting, or a fault identification coordination meeting, is involved. However, given that OpenNet is the party responsible for provisioning and restoring its circuits, we submit that this Clause is overly broad.<br><br>IDA has already determined that OpenNet is responsible for a significant percentage of the delay cases. The wording of Clause 2.6(c) gives OpenNet too much room to avoid its SLGs. In its bidding for the NetCo RFP, OpenNet should have taken into account the need to coordinate with third-parties when provisioning and restoring its circuits. We therefore believe that Clause 2.6(c) should be deleted in its entirety, and that OpenNet should be required to meet the mandated SAPs. OpenNet's provisioning obligations should not just fall away just because OpenNet determines the need to set up a meeting. |
| **2.6(d)** | Under this Clause, OpenNet's SLGs do not apply when OpenNet needs to "*obtain or maintain any licence or permission*". Again this gives OpenNet very wide latitude to ignore the SLGs and to provision its circuits late. Again, in its bidding for the NetCo RFP, OpenNet should have taken into account the need to obtain or maintain the relevant licenses and permissions. We therefore strongly submit that the scope of this Clause must be limited, given the impact on customers of prolonged OpenNet delays. |
| **2.6(e)** | StarHub is aware of literally dozens of cases where customers have faced prolonged delays in service provisioning, which OpenNet has simply attributed to "BM issues". Please see Footnote 2 for the standard OpenNet response in such cases.<br><br>As Clause 2.6(e) ensures that OpenNet is not subject to any SLG when "BM issues" arise, OpenNet has no incentive to ensure that those issues are addressed in an effectively and timely manner. Given the absence of SLGs in such cases, OpenNet has a strong incentive to prolong the delay until either: (i) the BM gives way; or (ii) the customer cancels their order. We submit that this Clause is responsible for much of the delay faced by customers in getting their orders provisioned on time.<br><br>We therefore submit that this Clause must be revised so that OpenNet must demonstrate that it has exhausted all its measures and efforts in accessing the building. If it fails to adequately demonstrate this, the SLGs would apply. We believe that modifying the Clause in this manner would set a stronger incentive on OpenNet to resolve "BM issues" and provision its circuits on time. |

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| **2.6(h)** | As noted above, we believe that it is entirely unreasonable for OpenNet to be the sole party to determine whether a particular incident is a genuine "No-Fault-Found" case.<br><br>Maintaining this Clause in its current form gives OpenNet every incentive to refuse to accept responsibility for its own network failures, and to blame other parties. At very least, this Clause should be amended, to allow RLs and RSPs to demonstrate to IDA (via photographic evidence) that the circuit was not working at the time the fault was reported. This would redress the balance between the parties and would help to ensure that OpenNet takes responsibility for its own network faults. |
| **2.6(i)** | Under this Clause, OpenNet's SLGs do not apply when OpenNet is carrying out "*a scheduled service interruption*". IDA will be aware of RSP feedback on the frequency of such interruptions, and their impact on service delivery. We therefore submit that:<br><br>(i)    This Clause would only be reasonable if the time taken for the scheduled service interruption is within an acceptable level (which IDA should determine); and<br><br>(ii)    OpenNet should set out the maximum number of scheduled service interruptions within a certain period, so that it will not apply this Clause unnecessarily (thus causing unnecessary inconvenience to RLs and the customers). |
| **2.7** | We respectfully submit that this Clause is unbalanced and unreasonable. Simply put, OpenNet could technically reject any rebate request, and therefore never resolve the dispute, resulting in RL never getting the due rebate. We therefore believe that this Clause should be removed from the OpenNet ICO. |
| **2.8** | We submit that this Clause is unreasonable. The objective of the OpenNet ICO is to ensure that OpenNet delivers the mandated services on time, at the mandated price, and to the mandated level. Therefore, if OpenNet fails to provision the circuits to the mandated standard, OpenNet should be penalized at an appropriate level so that it sees the incentive to comply with the SLGs. Failing to meet the SLGs is unarguably a breach of the OpenNet ICO. We therefore submit that this Clause should be deleted in its entirety. |
| **2.9** | It is a common feedback from RSPs that the remedies in the OpenNet ICO are entirely inadequate, and that RSPs have to pay out a much higher level of compensation to their own customers than they ever receive from OpenNet under the SLGs.<br><br>For example, for cases where OpenNet has delayed its provisioning by several months, customers will typically request compensation from RSPs from 1 to 3 months of retail charges (or the equivalent amount in vouchers, etc). However, the remedy from OpenNet under the OpenNet ICO is insufficient to even cover these waivers, not counting the additional costs faced by the RSPs in having to extract the remedies from OpenNet.<br><br>We strongly submit that, as part of the Review, it is necessary for IDA to substantially increase the compensation paid to RLs when OpenNet fails to meet its SLGs. |

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| **3.1(A)(c)** | It appears that under this Clause, two charges of the same nature will be imposed, that is: one for Clause 3.1(c) and one for Clause 3.1(d). We believe that it is unreasonable and unnecessary to charge twice for patching services.<br><br>We submit that IDA must review carefully any new charges proposed by OpenNet. Any new charges will have to be passed onto customers and will discourage the take-up of Next-Gen NBN services. As noted above, we are concerned that OpenNet is seeking to impose additional costs on RLs, RSPs and customers, without improving the quality or reliability of OpenNet's services. |
| **3.1(A)** | Under this Clause, it is stated that "*Unless reasonably considered necessary by OpenNet, OpenNet shall utilize at least 90% of the connections in each splitter before an additional splitter is provisioned*". However, the OpenNet ICO fails to set out the process for determining whether "*at least 90% of the connections in each splitter*" have been utilized. StarHub would propose that an audit process should be established to ensure that OpenNet will not provision new splitters unnecessarily. |
| **4.2** | Under this Clause, OpenNet absolves itself from almost all responsibilities associated with the relocation of Termination Points. StarHub respectfully submits that this Clause must be amended to ensure that:<br><br>• OpenNet uses its "best efforts" to perform the relocation works in a timely manner;<br><br>• OpenNet is responsible for any damage it causes during the relocation;<br><br>• The commitment to provide the Relocation Service within 3 Business Days should serve as the SLG (and that OpenNet should be subject to the appropriate penalties if it fails to meet that SLG);<br><br>• As it is OpenNet's responsibility to relocate the TP, OpenNet should bear all relevant charges pertaining to the relocation of the TP; and deal directly with the customer during the relocation of the TP;<br><br>• OpenNet should be flexible and should support concealed cabling at the home owner's request (and cost); and<br><br>• The cancellation charge should not apply if the cancellation is due to OpenNet's failure to meet QoS or RFS dates. |

| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers.  If maintained, this quota will restrict further the growth of the Next-Gen NBN.[5]  However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota. |
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| | Currently, the OpenNet weekly quota stands at 2,400 orders.  If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders.  However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5% reduction in the number of orders provisioned). |
| | Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers.  StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet.  However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the OpenNet ICO. |
| | Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly submit that the existing weekly quota should be significantly increased.  The weekly quota, as it currently stands, is not sufficient to meet industry demand.  We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period.  If the SAPs are exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level. |
| | In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted.  This is an untenable situation for the Next-Gen NBN and must be addressed.  We submit that there should be a quota set aside for the provisioning of non-residential order each week.  If this quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa). |
| | We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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[5] As has been noted by DBS, the *"porting limit of 2400 connections/week for NetCo limits* [the] *competitive threat [for SingTel]. This limit includes both corporate and consumer segments and RSPs get their quota on first come first serve basis. SingTel itself would use a majority of this limit due to its dominant market share. At this speed, full migration to NBN would take 8 years at the least. Currently, there is a waiting period of 6 weeks to get fiber connection, once a consumer signs for the connection."*  See *"Singapore Company Focus: SingTel"*, DBS Group Research, 17 Nov 2011.

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| **5.3(e)** | We would respectfully note that, as it is currently drafted, this Clause creates an ambiguity, as it is not clear whether OpenNet has any obligation to fulfil the Request under such circumstance. It is therefore necessary to amend this Clause to clarify whether, under such circumstance, OpenNet will provision a second TP automatically, and whether the RL will be informed of this beforehand. |
| **5.4(b)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / BM / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and should therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **5.5** | This Clause states that OpenNet shall advise the RL *"within either 10 or 40 Business Days … whether the Residential End-User Connection has been successfully set up"*. We submit that this Clause is ambiguous, as it is unclear when OpenNet will inform the RL about the set-up. This Clause should clarify when the 10 Business Days or the 40 Business Days applies. |
| **5.9** | Under this Clause, where OpenNet provides incorrect Mandated Services Information ("MSI") and accepts a Residential End-User Connection Request for a Non-Residential premise, after 12-months OpenNet can charge for this connection at Non-Residential rates. This measure is insufficient.<br><br>When RSPs contract with a customer it will typically be for a period of longer than 12-months (particularly for non-residential customers). Practically it is extremely difficult to convince customers to accept drastically increased rates after 12-months. We therefore submit that, for this type of case, the Residential charges should continue beyond 12-months (if the customer wishes to renew the contract, or if the customer's contract is longer than 12-months).<br><br>It is important to remember that the cases covered by this Clause only arise where OpenNet is <u>solely</u> responsible for providing incorrect MSI. |

| 5.10 | Under this Clause, where the RL submits a valid order for a Residential circuit, and OpenNet then determines that its MSI is incorrect (solely due to OpenNet, its contractors or suppliers), OpenNet can simply reject the order.  The only penalty on OpenNet is just a 1-month rebate of the monthly recurring charge, which is entirely inadequate.  The RSP will have gone to considerable lengths to win the customer, the RSP will lose out on an ongoing revenue stream from that customer (due to the error of OpenNet, its contractors or suppliers), and the RSP will suffer considerable damage to its reputation arising out of the order rejection.  We submit that the OpenNet ICO should be amended so that, in such cases: |
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| | (i)      OpenNet is still required to provision a circuit to the customer within the mandated SAPs; or |
| | (ii)      OpenNet must provide a 24-month rebate of the monthly recurring charge. |
| **5.11(b)** | Where errors are found in OpenNet's database, we welcome the objective of correcting those errors within 3 Business Days.  However, we have had cases where it has taken 2-4 weeks for this correction to be done. |
| | We believe that it is important to establish a penalty regime if OpenNet fails to correct errors in its database within 3 Business Days.  If an error is not corrected in a timely manner, there is a risk that other RSPs will also be affected by that error, leading to further customer dissatisfaction. |
| | We would also note that the process for highlighting database errors is not set out in the OpenNet ICO.  We believe that it is necessary to set out a detailed process in the revised OpenNet ICO for this. |
| **5.12-5.14** | We strongly submit that it is inappropriate and costly for RLs to be involved in any work concerning the TP installation.  It would be far more efficient (from the perspective of the Next-Gen NBN eco-system) if OpenNet interacted directly with the customer in regard to TP matters.  Requiring RLs and RSPs to act as the "post-box" for TP-related communications between OpenNet and the customer will simply result in increased delays, frustrations and costs.  We therefore submit that Clauses 5.12 to 5.14 should be deleted from the OpenNet ICO, and that OpenNet should deal directly with the customer for TP-related matters. |
| | We would also note that: |
| | •   Operationally, it would be difficult to put in place restrictions on the RL for changes to appointment dates (as Clause 5.12 and 5.13 propose), as such changes are outside the control of RSPs; and |
| | •   We believe that the Missed Appointment charge in Clause 5.14 should be removed or made reciprocal.  If it is made reciprocal, no charges should be imposed if the Missed Appointment is caused by the building owner, the BM, house owner and/or tenant. |

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| **6.3** | As noted earlier, we believe that it is fair and reasonable for OpenNet to bill and collect payment when the customer requests additional installation work (such as additional cabling). Imposing such costs on RL and RSPs will lead to delays, inefficiency and frustration. |
| **6.9** | The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this outcome overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under Clause 6.9 for failure to meet the SAP be removed. |
| **6.10** | This Clause sets out the (very broad) circumstances in which OpenNet can refuse to compensate the RLs. We submit that that this Clause is too broad, and needs to be reduced in scope. In particular, the Clause should be amended to require OpenNet to demonstrate that it has exhausted all measures and efforts to accessing the building in question before Clause 6.10(a) applies.<br><br>In addition we would highlight the cross-referencing error in this Clause, which refers to "*this clause 6.11*". |

| 6.11 | As a general principle, we support the concept of an "*express activation service*". However, we would note the following points: |
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| | • The service will be of no assistance in serving "homes passed" customers, as the service only applies to those customers who already have installed TPs; |
| | • OpenNet has stated that it will process only 40 applications per day. Unfortunately, the RSPs lack any visibility as to the number of express orders submitted by other RSPs. If the daily quota is exceeded, then (presumably) OpenNet will only process the order in the next Working Day, rendering moot the idea of one-day delivery; |
| | • The proposed charge (an additional $55) is unreasonable and unjustified, particularly when the standard charge for the service is $15 per month; |
| | • Operationally it would be extremely difficult to implement the proposed arrangements for express activations. For example, Clause 6.11(c) requires 10am daily cut-off. However, nearly all of the RSPs open their shops at 11am, meaning that they will not be able to submit orders by the cut-off. At best, RSPs will only be able to submit orders for the following day (rendering moot the idea of one-day delivery); and |
| | • For the express service to be meaningful, it is necessary for OpenNet to finish all the testing and measurement. If this is not done, there is no assurance that the service will actually work. |
| | If IDA wishes to see the "*express activation service*" adopted by RSPs, it will be necessary to amend Clause 6.11 to: (i) establish an express activation process for "homes passed" customers; (ii) increase the quota to at least 100 orders per day; (iii) reduce the proposed charges (to a maximum of $30); (iv) set the daily cut-off time to 12 noon; and (v) require OpenNet to carry out testing and measurement for these services. If these changes are not made, we do not believe that the express activation service will be widely adopted by RSPs. |
| 6A.1 | This Clause mandates that joint investigation of faults will only take place where the RL installs its equipment within 7 calendar days from OpenNet's handover. We believe that this requirement is impractical, and is based a misunderstanding of how RLs and RSPs interact with customers. |
| | Customers will typically want the installation to take place on a date that is convenient for them. For this reason we have experienced many cases where customers want the installation to take place after 7 calendar days of the handover. RLs and RSPs are not in a position to dictate to customers when the installation will take place. We therefore believe that Clause 6A.1 should be amended to refer to 30 calendar days, rather than to 7 calendar days. |
| | In addition, we believe that it is necessary for this Clause to clarify what penalties will be imposed on OpenNet if it fails to turn up for joint investigation (as we have experienced this outcome). |

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| **6.A.2** | This Clause states that "*The RL may only request for a joint investigation between 9am and 7pm from Mon-Sat (exclude Sun/PH)*".  We would highlight that StarHub (like many RSPs) carries out installation work from 9am to 9pm everyday (including Sundays and Public Holidays).  We do this to meet the needs of our customers, and to support the growth of the Next-Gen NBN.  It is unclear why OpenNet should be exempt from carrying out joint investigations on Sundays and Public Holidays.  We believe that Clause 6.A.2 should be amended to extend OpenNet's joint investigation hours to reflect customer needs. |
| **6A.3** | We are concerned by the requirement in this Clause for RLs to jointly sign off the investigation report during the Joint Investigation.  We believe that it is not necessary for RLs to jointly sign off the investigation report during the Joint Investigation, since RL has to *"first perform all necessary checks"* before the joint investigation.  RLs should not be responsible for the readings/actions taken by OpenNet. |
| **6A.4** | This Clause requires that, where a circuit fault is not due to the RL, OpenNet must delay the start date for the billing of that circuit.  While we support this requirement, we also submit that if the fault persists after OpenNet's confirmation that the fault is rectified, penalties must be imposed on OpenNet. |
| **6A.5** | This Clause covers cases where OpenNet fails to repair an installation-related fault within 72 hours of the joint investigation.  We submit that in such cases, it is insufficient for OpenNet to only waive the cancellation charge.  Rather, all relevant charges related to the installation of the TP should be waived.  In addition, if so required by the customer, OpenNet should also remove the TP and make good the condition of the customer's premise (at no charge). |
| **8.1** | This Clause has been amended to set a minimum contract term on RLs where the Fibre Handover has taken place.  We submit that the RL should not be held liable for the deactivation in those circumstances that are beyond RLs' control (such as building demolishment, houses undergoing renovation or rebuilding, owner/tenant moving overseas, etc). |
| **9.1** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations.  We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation and power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question are related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.7** | This Clause states that OpenNet will seek to carry out scheduled service interruptions between 1am and 6am. We would note that there are still important levels of broadband usage at 1am. We would therefore submit that this Clause should be amended to require OpenNet to carry out its scheduled service interruptions between: (i) 2am to 6am; and (ii) on Business Days, excluding Public Holidays. |
| **9.13** | OpenNet is proposing to amend this Clause to absolve itself from any responsibility for the damage it causes to the customer's home. We believe that this proposal is inappropriate, and would remove from OpenNet any incentive to act in a careful and considerate manner. We therefore submit that OpenNet should be responsible for any damage it causes in removing its equipment from the customer's home.<br><br>It is also important to note that, as far as the RSPs and RLs are concerned, they order circuits and terminate circuits. Removals are not a service for a RL or RSP to order, and it is up to the owner of the premise to request this service (if they so wish). OpenNet should therefore liaise directly with the premise owner, in the same way that OpenNet is currently installing the first TP. It is not practical for RLs to request this service, as RLs will have no visibility as to whether there are other services connected to the TP. |
| **9.15** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |

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| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |
| **11.5** | As "Patch Cable at the MDF Room" is provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |
| **11.7** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• The reference in Clause 11.7(a) to "*Clause 6.8*" is incorrect;<br><br>• Pursuant to Clause 11.7(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one;<br><br>• Clause 11.7(b) also contains an incorrect reference to "*Clause 6.8*";<br><br>• Under Clause 11.7(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.7(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |

| 11.8(a) | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However: |
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| | • In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and |
| | • It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| 11.8(b) | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.8(a), 11.8(c) and 11.8(d) are accepted. If these changes are not accepted, Clause 11.8(b) would impose an inequitable and unfair burden on RLs. |
| 11.8(c) | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |
| 11.8(d) | We would highlight that any damage to OpenNet's Network in the residential premise is beyond RL's/RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| 11.10 | We believe that it is inappropriate for OpenNet to impose "joint investigation" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |

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| **11.15** | Based on the large number of incidents where OpenNet has failed to meet the mandated SAPs in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under Clause 11.15 for failure to meet the MTTR for a particular month in respect of services affected be removed. |
| **12.3** | This Clauses refers to "*the time each fault is reported*" by the RL, and suggests that each fault for each individual connection must have its own individual report. Such an approach would be bureaucratic and inefficient. We submit that for a fault that affects several connections, one incident report should be sufficient to cover all the affected customers. |
| **18** | In general we welcome the idea of a Relocation Service being made available to RLs, RSPs and customers. However, we can see a number of flaws in the Relocation Service that has been proposed. In particular:<br><br>• The charging for the service is excessive, and would appear to involve double counting (as the RL must pay for a TP installation charge and the relocation charge, which cover the same activity);<br><br>• There do not appear to be any SLGs for Relocation Services, which calls into question the timeframe in which the service will be provided; and<br><br>• The service absorbs the OpenNet quota at twice the rate of standard orders. There is no justification for this, given that the additional work to be performed by OpenNet is negligible.<br><br>In addition, it is unclear from the text whether:<br><br>• This service is available in cases where the new address is "home passed";<br><br>• It is necessary, as part of this service, for the TP at the old address to be removed; and<br><br>• All applications for Relocation Services must be submitted via the manual form.<br><br>Again, if IDA wishes to see RLs use the Relocation Service, we strongly believe that the issues outlined above must be addressed upfront. |

| 18.1(iii) | Under this Clause, OpenNet is requiring that RLs provide the NRIC/FIN/Passport Number of the customer. Given the importance of maintaining customer privacy, we believe that this information is unnecessary and should not be provided. If IDA mandates that this information must be provided to OpenNet, we respectfully submit that IDA must be held responsible for any disclosure of this information to third parties. |
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| 18.4 | As noted above, we are concerned by the charges OpenNet is seeking to impose for the Relocation Service. We do not believe that there should be a separate charge for Relocation Service, when the Service already requires an installation charge, an activation charge for the new premise, and a deactivation charge for the old premise. In addition, we do not believe that cancellation charges are appropriate for the changing of an address when no work has started.<br><br>We would also highlight that the wording of this Clause is ambiguous and is open to interpretation. The Clause states that, for this service, RLs must *"make payment of the applicable charges … which includes …"*. This statement leaves open what charges will be incurred as part of the Relocation Service. We strongly submit that this Clause must be amended to set out, in a comprehensive manner, all the charges that are payable as part of the Relocation Service. |
| 18.6 | This Clause mandates that Relocation Services will not be available as an Express Activation. We respectfully believe that there is likely to be a market demand for Express Activations to be available for Relocation Services. We therefore submit that this Clause should be deleted in its entirety.<br><br>In addition, we would note that this Clause contradicts Schedule 15, Clause 1.15, which sets out the *"Cancellation Charge under Express Activation under Relocation Service"*. If there is no Express Service Activation for a Request for Relocation Service, how can there be a *"Cancellation Charge under Express Service Activation under Relocation Service"*? |
| 19 | It is unclear from this Clause what process RL's would follow to verify that it is requesting for a second TP. We believe that this Clause should be amended to set out this process. |
| 19.2 | This Clause allows OpenNet to reject a request for a second TP if all the fibres in the first TP are not utilized. However, we submit that it is necessary for this Clause to set out the process in which RSPs receive a notification from OpenNet in the event both fibres of the first TP are used up. This is because RSPs will do not have any visibility of other RSPs' services on the TP. |
| 19.4 | This Clause refers to RL being charged *"the applicable"* charges, creating ambiguity as to what the applicable charge is. This Clause should be amended to specify exactly what charges are payable under this Clause. |

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| **20** | This Clause proposes a regime in which "*New Requesting Licensees*" can take over a connection from the "*Existing Requesting Licensee*".  We believe that this proposed process is deeply flawed, and would note that the "*Existing Requesting Licensee*" has entered into a contract with OpenNet for the circuit in question.  It is therefore up to the RL to decide whether to deactivate the existing TP, so long as it continues to pay for the connection. It is not for OpenNet to unilaterally overturn that contract.  If the customer requests additional services from another RL, it is up to OpenNet to establish whatever additional network equipment is needed to provide this.<br><br>If the "*Existing Requesting Licensee*" is unable to provide services to the customer because OpenNet has taken over the connection, it is unclear who would provide it with compensation.  In addition, it possible that a customer could signs up with different RSPs at the same time, and requires the use of two different TP ports at the same time. It is unclear how this Clause would work in this scenario.<br><br>We see that this Clause will lead to confusion, disputes and service disruptions.  We strongly submit that Clause 20 should therefore be deleted in its entirety. |

**Annex C**
**Detailed Comments on Schedule 2:**

We would note that many of the issues in Schedule 1 are replicated in the other Schedules of the OpenNet ICO. For reasons of completeness, we have replicated our earlier comments in our comments on these later Schedules. However, in the event of any oversight, our comments on Schedule 1 also apply to the other Schedules, *mutatis mutandis*.

| Clause | Comments |
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| 2.6(c) | Under this Clause, OpenNet's SLGs do not apply when a site coordination meeting, a Joint Investigation Meeting, or a fault identification coordination meeting is involved. However, given that OpenNet is the party responsible for provisioning and restoring its circuits, we submit that this Clause is overly broad.<br><br>IDA has already determined that OpenNet is responsible for a significant percentage of the delay cases. The wording of Clause 2.6(c) gives OpenNet too much room to avoid its SLGs. In its bidding for the NetCo RFP, OpenNet should have taken into account the need to coordinate with third parties when provisioning and restoring its circuits. We therefore believe that Clause 2.6(c) should be deleted in its entirety, and that OpenNet should be required to meet the mandated SAPs. OpenNet's provisioning obligations should not just fall away whenever OpenNet determines the need to set up a meeting. |
| 2.6(d) | Under this Clause, OpenNet's SLGs do not apply when OpenNet needs to "*obtain or maintain any licence or permission*". Again this gives OpenNet very wide latitude to ignore the SLGs and to provision its circuits late. We therefore strongly submit that the scope of this Clause must be limited, given the impact on customers of prolonged OpenNet delays. |
| 2.6(e) | StarHub is aware of literally dozens of cases where customers have faced prolonged delays in service provisioning, which OpenNet has simply attributed to "BM issues". Please see Footnote 1 for the standard OpenNet response in such cases.<br><br>As Clause 2.6(e) ensures that OpenNet is not subject to any SLG when "BM issues" arise, OpenNet has no incentive to ensure that those issues are addressed in an effectively and timely manner. Given the absence of SLG in such cases, OpenNet has a strong incentive to prolong the delay until either: (i) the BM gives way; or (ii) the customer cancels their order. We submit that this Clause is responsible for much of the delay faced by customers in getting their orders provisioned on time.<br><br>We therefore submit that this Clause must be revised so that OpenNet must demonstrate that it has exhausted all its measures and efforts in accessing the building. If it fails to adequately demonstrate this, the SLGs would apply. We believe that modifying the Clause in this manner would set a stronger incentive on OpenNet to resolve "BM issues" and provision its circuits on time. |

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| **2.6(h)** | As noted above, we believe that it is entirely unreasonable for OpenNet to be the sole party to determine whether a particular incident is a genuine "No-Fault-Found" case.<br><br>Maintaining this Clause in its current form gives OpenNet every incentive to refuse to accept responsibility for its own network failures, and to blame other parties. At very least, this Clause should be amended, to allow RLs and RSPs to demonstrate to IDA (via photographic evidence) that the circuit was not working at the time the fault was reported. This would redress the balance between the parties and would help to ensure that OpenNet took responsibility for its network faults. |
| **2.6(i)** | Under this Clause, OpenNet's SLGs do not apply when OpenNet is carrying out "*a scheduled service interruption*". IDA will be aware of RSP feedback on the frequency of such interruptions, and their impact on service delivery. We therefore submit that:<br><br>(i)      This Clause would only reasonable if the time taken for schedule service interruption is within an acceptable level (which IDA should determine); and<br><br>(ii)     OpenNet should set out the maximum number of scheduled service interruptions within a certain period, so that it will not apply this Clause inadvertently and thus cause unnecessary inconvenience to RLs and the customers. |
| **2.6(k)** | There is no valid reason to exclude from the SLGs those connections with a one-month contract term. The SLGs are intended to cover such matters as fault restoration. The inclusion of Clause 2.6(k) effectively means that there is no obligation on OpenNet to restore faults on connections that have one-month contract term. This Clause will significantly undermine any benefit in taking a connection with a one-month contract term, as there is no certainty as to the reliability of the service. We strongly submit that Clause 2.6(k) should be deleted in its entirety. |
| **2.7** | We respectfully submit that this Clause is unbalanced and unreasonable. Simply put, OpenNet could technically reject any rebate request, and therefore never resolve the dispute, resulting in RL never getting the due rebate. We therefore believe that this Clause should be removed from the OpenNet ICO. |
| **2.8** | We believe that this Clause is unreasonable. The objective of the OpenNet ICO is to ensure that OpenNet delivers the mandated services on time, at the mandated price, and to the mandated level. Therefore, if OpenNet fails to provision the circuits to the mandated standard, OpenNet should be penalized at an appropriate level so that it sees the incentive to comply with the SLGs. Failing to meet the SLGs is unarguably a breach of the OpenNet ICO. We therefore submit that this Clause should be deleted in its entirety. |

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| **2.9** | It is a common feedback from RSPs that the remedies in the OpenNet ICO are entirely inadequate, and that RSPs have to pay out a much higher level of compensation to their own customers than they ever receive from OpenNet under the SLGs.<br><br>For example, for cases where OpenNet has delayed its provisioning by several months, customers will typically request compensation from RSPs from 1 to 3 months of retail charges (or the equivalent amount in vouchers, etc). However, the remedy from OpenNet under the OpenNet ICO is insufficient to cover the waivers RSPs needed to give, not counting the additional costs faced by the RSPs in having to extract the remedies from OpenNet.<br><br>We strongly submit that, as part of the Review, it is necessary for IDA to substantially increase the compensation paid to RLs when OpenNet fails to meet its SLGs. |
| **3.1(A)(c)** | We wish to clarify why there should be 2 charges with the same nature, i.e. one for 3.1 (c) and one for 3.1(d). We believe that it is unreasonable and unnecessary to charge twice for patching service.<br><br>We propose that IDA should carefully consider the (new) charges proposed by OpenNet, so that RSPs would not have to pass those unreasonable and unnecessary charges to the end users and eventually discouraging them from taking up Next-Gen NBN services. |
| **3.1(A)** | Under this Clause it is stated that "*Unless reasonably considered necessary by OpenNet, OpenNet shall utilize at least 90% of the connections in each splitter before an additional splitter is provisioned*". However, the OpenNet ICO fails to set out the process for determining whether "*at least 90% of the connections in each splitter*" have been utilized. StarHub would propose that an audit process should be established to ensure that OpenNet will not provision new splitters unnecessarily. |

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| **4.1, 4.2** | Under these Clauses, OpenNet effectively establishes itself as the defining party for property classifications.  Experience has shown that OpenNet: (a) takes an extremely long time in its consideration of such cases; and (b) almost always defines properties with the classification that results in the highest charges.  StarHub faced prolonged delays in serving residential customers living in SLA "black and white" properties, as OpenNet insisted that these properties were non-residential.<br><br>Given that OpenNet has a direct financial incentive to define properties with the classification that results in the highest charges, it is entirely inappropriate for OpenNet to act as the arbiter of property classifications.  It is more appropriate for IDA to act in that role.  We therefore submit that it is necessary for this Clause to be amended so that:<br><br>• If OpenNet disagrees with the classification that a RL is using for a particular property, OpenNet can raise this matter to IDA for resolution; and<br><br>• Until the matter is resolved by IDA, the RL will continue to pay OpenNet based on the RL's classification of the property, with any adjustment and reimbursement taking place after IDA's resolution.<br><br>In regard to the detail of Clause 4.2, we would note that OpenNet's obligation is limited to responding to the RL within 2 Business Days.  As this "*response*" could simply be an acknowledgement of the RL's request, there are no assurances whatsoever that OpenNet will address such cases in a timely and responsive manner. |
| **4.3** | This Clause sets out the information that RLs must submit in regard to requests for non-residential circuits.<br><br>We respectfully submit that OpenNet should be able to adapt to situations where the address given in the application form (generally the main address of the customer premise), could differ from the address of the actual location for installation.  Such cases could arise where:<br>• The customer occupies space classified as several addresses in the same building; and<br><br>• Where the format and punctuation of the address is slightly different.<br><br>We respectfully submit that OpenNet should not treat such orders as invalid, and should not reject the installation due to a "wrong" address.  Rather, OpenNet should seek clarification from the RL, and should allow the order to be amended (if necessary). |

| 4.3(d) | StarHub welcomes the introduction of a 1-month contract term for non-residential connections. However, we would note that: |
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| | • Pursuant to Schedule 15, Clause 2.2, OpenNet is seeking to impose a charge of $300 for a 1-month contract. This is equivalent to 6 months of the charges for the same service with a 12-month contract; and |
| | • Pursuant to Schedule 2, Clause 2.6(k), there are no SLGs for a circuit taken with a 1-month contract. |
| | These conditions are unwarranted and unreasonable, and will undermine any demand for the service. We strongly believe that: (a) the charges for a 1-month contract must be reduced to match those for a 12-month contract, and (ii) standard SLGs must apply to circuits under a 1-month contract. |
| | We also submit that, if OpenNet is willing to offer non-residential circuits on a 1-month basis, it should also be willing to offer residential circuits and NBAPs on an equivalent basis. |
| 4.4 | Under this Clause, OpenNet absolves itself from almost all responsibilities associated with the relocation of Termination Points. StarHub respectfully submits that this Clause must be amended to ensure that: |
| | • OpenNet uses its "best efforts" to perform the relocation works in a timely manner; |
| | • OpenNet is responsible for any damage it causes during the relocation; |
| | • The commitment to provide the Relocation Service within 3 Business Days should serve as the SLG (and that OpenNet should be subject to the appropriate penalties if it fails to meet that SLG); |
| | • As it is OpenNet's responsibility to relocate the TP, OpenNet should bear all relevant charges pertaining to the relocation of the TP; and deal directly with the customer during the relocation of the TP; |
| | • OpenNet should be flexible and support concealed cabling at the home owner's request and cost; and |
| | • The cancellation charge should not apply if the cancellation is originated from OpenNet's failure to meet QoS or RFS dates. |

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| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.<br><br>Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5% reduction).<br><br>Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to \$750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.<br><br>Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.<br><br>In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).<br><br>We submit that these measures would help to address some of the issues associated with the OpenNet quota. |
| 5.3(e) | We would respectfully note that, as it is currently drafted, this Clause creates an ambiguity, as it is not clear whether OpenNet has any obligation to fulfil the Request under such circumstance. It is therefore necessary to amend this Clause to clarify whether, under such circumstance, OpenNet will provision a second TP automatically, and whether the RL will be informed of this beforehand. |
| 5.4 | We would like to propose to reduce the notification lead time from 10 to 5 Business Days on whether Request is accepted or rejected, since we believe that 5 Business Days should be sufficient to determine the acceptance status. |

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| **5.4(b)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **5.5** | This Clause states that OpenNet shall advise the RL *"within either 10 or 40 Business Days … whether the Non-Residential End-User Connection has been successfully set up"*. We submit that this Clause is ambiguous, as it is unclear when OpenNet will inform the RL about the set-up. We submit that this Clause should clarify when the 10 Business Days or the 40 Business Days applies. |
| **5.9** | Under this Clause, where the RL submits a valid order for a Non-Residential circuit, and OpenNet then determines that its MSI is incorrect (solely due to OpenNet, its contractors or suppliers), OpenNet can simply reject the order. The only penalty on OpenNet is just a 1-month rebate of the monthly recurring charge, which is entirely inadequate. The RSP will have gone to considerable lengths to win the customer, the RSP will lose out on an ongoing revenue stream from that customer (due to the error of OpenNet, its contractors or suppliers), and the RSP will suffer considerable damage to its reputation. We submit that the OpenNet ICO should be amended so that, in such cases:<br><br>(i) OpenNet is still required to provision a circuit to the customer within the mandated SAPs; or<br><br>(ii) OpenNet must provide a 24-month rebate of the monthly recurring charge. |
| **5.10** | Where errors are found in OpenNet's database, we welcome the objective of correcting those errors within 3 Business Days. However, we have had cases where it has taken 2-4 weeks for this to be done.<br><br>We believe that it is important to establish a penalty regime if OpenNet fails to correct errors in its database within 3 Business Days. If an error is not corrected in a timely manner, there is a risk that other RSPs will be impacted by that error.<br><br>We would also note that the process for highlighting database errors is not set out in the OpenNet ICO. We believe that it is necessary to set out a detailed process in the revised OpenNet ICO for this. |

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| **6.12** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 5.12, to create a realistic incentive for OpenNet to improve its service delivery.  OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time.  It is no longer possible to assume that OpenNet's delays are simply "teething troubles". <br><br> The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low.  Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs or improve its service delivery.  Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations.  However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform. <br><br> We propose that the maximum limit on the compensation amount under Clause 6.12 for failure to meet the SAP be removed. |
| **6.13** | This Clause sets out the (very broad) circumstances in which OpenNet can refuse to compensate its RLs.  We submit that that this Clause is too broad, and needs to be reduced in scope.  In particular, the Clause should be amended to require OpenNet to demonstrate that it has exhausted all measures and efforts to accessing the building in question before Clause 6.13(a) applies. |

| 6.14, 6.15 | As a general principle, we support the concept of an "*express activation service*". However, we would note the following points: |
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| | • The service will be of no assistance in serving buildings that do not already have TPs installed; |
| | • OpenNet has stated that it will only process 40 applications per day. However, RSPs lack any visibility as to the number of express orders submitted by other RSPs. If the daily quota is exceeded, then (presumably) OpenNet will only process the order in the next Working Day, rendering moot the idea of one-day delivery; |
| | • The proposed charge (an additional $55) is unreasonable and unjustified, particularly when the standard charge for the service is $15 per month; and |
| | • Operationally it would be extremely difficult to implement the proposed arrangements for express activations. For example, Clause 6.11(c) requires 10am daily cut-off. However, nearly all of the RSPs open their shops at 11am, meaning that they will not be able to submit orders by the cut-off. At best, RSPs will only be able to submit orders for the following day. |
| | • For the express service to be meaningful, it is necessary for OpenNet to finish all the testing and measurement. If this is not done, there is no assurance that the service will actually work. |
| | If IDA wishes to see the "*express activation service*" adopted by RSPs, it will be necessary to amend Clause 6.14 to: (i) establish a process for buildings that do not have TPs installed; (ii) increase the quota to at least 100 orders per day; (iii) reduce the proposed charges (to a maximum of $30); (iv) set the daily cut-off time to 12 noon; and (v) require OpenNet to carry out testing and measurement for these services. If these changes are not made, we do not believe that the express activation service will be widely adopted by RSPs. |
| 6.14(e), 6.15(e), 6.16 | To make the this express service meaningful, we submit that OpenNet should demonstrate that it has exhausted its efforts in negotiating with the building owner / management / End User before rejecting or delaying the provision of such service. |
| 9 | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in a: |
| | • Serviceable condition; and |
| | • A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.7** | This Clause states that OpenNet will seek to carry out scheduled service interruptions between 1am and 6am. We would note that there are still important levels of broadband usage at 1am. We would therefore submit that this Clause should be amended to require OpenNet to carry out its scheduled service interruptions between: (i) 2am to 6am; and (ii) on Business Days, excluding Public Holidays. |
| **9.13** | OpenNet is proposing to amend this Clause to absolve itself of any responsibility for the damage it causes to the customer's premises. We believe that this proposal is inappropriate, and would remove from OpenNet any incentive to act in a careful and considerate manner. We therefore submit that OpenNet should be responsible for any damage it causes in removing its equipment<br><br>It is also important to note that, as far as the RSPs and RLs are concerned, they order circuits and terminate circuits. Removals are not a service for a RL or RSP to order, and it is up to the owner of the premise to request this service (if they so wish). OpenNet should therefore liaise directly with the premise owner, in the same way that OpenNet is currently installing the first TP. It is not practical for RLs to request this service, as RLs will have no visibility as to whether there are other services connected to the TP. |
| **9.16** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11** | We submit that Clause 11 should be amended to reflect the 1-hour service restoration, set out in Schedule 1, 6A.2. |

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| **11.2** | Under this Clause, OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |
| **11.5** | As "Patch Cable at the MDF Room" is provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.7** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.7(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one;<br><br>• Under Clause 11.7(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.7(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.8(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.8(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.8(a), 11.8(c) and 11.8(d) are accepted. If these changes are not accepted, Clause 11.8(b) would impose an inequitable and unfair burden on RLs. |
| **11.8(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.8(d)** | We would highlight that any damage to OpenNet's Network in the non-residential premise is beyond RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| **11.10** | We believe that it is inappropriate for OpenNet to impose "joint investigation" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer. <br><br> In addition, we submit that: <br><br> • If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and <br><br> • To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.16** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform. <br><br> We propose that the maximum limit on the compensation amount under this Clause 11.16 for failure to meet the MTTR for a particular month in respect of services affected be removed. |
| **12.3** | This Clauses refers to "*the time each fault is reported*" by the RL, and suggests that each fault for each individual connection must have its own individual report. Such an approach would be bureaucratic and inefficient. We submit that for a fault that affects several connections, one incident report should be sufficient to cover all the affected customers. |

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| **18** | In general we welcome the idea of a Relocation Service being made available to RLs, RSPs and customers. However, we can see a number of flaws in the Relocation Service that has been proposed. In particular:<br><br>• The charging for the service is excessive, and would appear to involve double counting (as the RL must pay for a TP installation charge and the relocation charge, which cover the same activity);<br><br>• There do not appear to be any SLGs for Relocation Services, which calls into question the timeframe in which the service will be provided; and<br><br>• The service absorbs the OpenNet quota at twice the rate of standard orders. There is no justification for this, given that the additional work to be performed by OpenNet is negligible.<br><br>In addition, it is unclear from the text whether:<br><br>• This service is available in cases where the new address is does not have an installed TP;<br><br>• It is necessary, as part of this service, for the TP at the old address to be removed; and<br><br>• All applications for Relocation Services must be submitted via the manual form.<br><br>Again, if IDA wishes to see RLs use the Relocation Service, we strongly believe that the issues outlined above must be addressed upfront.<br><br>We would also highlight that Schedule 1, Clause 18.6 states that for residential customers "*there shall be no Express Service Activation for a Request for Relocation Service*". This condition is absent from Schedule 2. For the avoidance of doubt we submit that Clause 18 should be amended to state that for non-residential customers "*the Express Service Activation is available for Request for Relocation Service*". |
| **18.1(iii)** | Under this Clause, OpenNet is requiring that RLs provide the NRIC/FIN/Passport Number of the customer. Given the importance of maintaining customer privacy, we believe that this information is unnecessary and should not be provided. If IDA mandates that this information must be provided to OpenNet, we respectfully submit that IDA must be held responsible for any disclosure of this information to third parties. |

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| **18.4** | As noted above, we are concerned by the charges OpenNet is seeking to impose for the Relocation Service. We do not believe that there should be a separate charge for Relocation Service, when the Service already requires an installation charge, an activation charge for the new premise, and a deactivation charge for the old premise. In addition, we do not believe that cancellation charges are appropriate for the changing of an address when no work has started.<br><br>We would also highlight that the wording of this Clause is ambiguous and is open to interpretation. The Clause states that, for this service, RLs must *"make payment of the applicable charges … which includes …"*. This statement leaves open what charges will be incurred as part of the Relocation Service. We strongly submit that this Clause must be amended to set out, in a comprehensive manner, all the charges that are payable as part of the Relocation Service. |
| **19** | It is unclear from this Clause what process RL's would follow to verify that it is requesting for a second TP. We believe that this Clause should be amended to set out this process. |
| **19.2** | This Clause allows OpenNet to reject a request for a second TP if all the fibres in the first TP are not utilized. However, we submit that it is necessary for this Clause to set out the process in which RSPs receive a notification from OpenNet in the event both fibres of the first TP are used up. This is because RSPs will do not have any visibility of other RSPs' services on the TP. |
| **19.4** | This Clause refers to RL being charged "*the applicable*" charges, creating ambiguity as to what the applicable charge is. This Clause should be amended to specify exactly what charges are payable under this Clause. |
| **20** | This Clause proposes a regime in which "*New Requesting Licensees*" can take over a connection from the "*Existing Requesting Licensee*". We believe that this proposed process is deeply flawed, and would note that the "*Existing Requesting Licensee*" has entered into a contract with OpenNet for the circuit in question. It is therefore up to the RL to decide whether to deactivate the existing TP, so long as it continues to pay for the connection. It is not for OpenNet to unilaterally overturn that contract. If the customer requests additional services from another RL, it is up to OpenNet to establish whatever additional network equipment is needed to provide this.<br><br>If the "*Existing Requesting Licensee*" is unable to provide services to the customer because OpenNet has taken over the connection, it is unclear who would provide it with compensation. In addition, it possible that a customer could signs up with different RSPs at the same time, and requires the use of two different TP ports at the same time. It is unclear how this Clause would work in this scenario.<br><br>We see that this Clause will lead to confusion, disputes and service disruptions. We strongly submit that Clause 20 should therefore be deleted in its entirety. |

**Annex D**
**Detailed Comments on Schedule 3:**

| Clause | Comments |
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| **2.6(k)** | There is no valid reason to exclude from the SLGs those connections with a one-month contract term. The SLGs are intended to cover such matters as fault restoration. The inclusion of Clause 2.6(k) effectively means that there is no obligation on OpenNet to restore faults on connections that have one-month contract term. This Clause will significantly undermine any benefit in taking a connection with a one-month contract term, as there is no certainty as to the reliability of the service. We strongly submit that Clause 2.6(k) should be deleted in its entirety. |
| **3.1(A)** | Under this Clause it is stated that "*Unless reasonably considered necessary by OpenNet, OpenNet shall utilize at least 90% of the connections in each splitter before an additional splitter is provisioned*". However, the OpenNet ICO fails to set out the process for determining whether "*at least 90% of the connections in each splitter*" have been utilized. StarHub would propose that an audit process should be established to ensure that OpenNet will not provision new splitters unnecessarily. |
| **4.1, 4.2** | Under these Clauses, OpenNet effectively establishes itself as the defining party for property classifications. Experience has shown that OpenNet: (a) takes an extremely long time in its consideration of such cases; and (b) almost always defines properties with the classification that results in the highest charges. StarHub faced prolonged delays in serving residential customers living in SLA "black and white" properties, as OpenNet insisted that these properties were non-residential.<br><br>Given that OpenNet has a direct financial incentive to define properties with the classification that results in the highest charges, it is entirely inappropriate for OpenNet to act as the arbiter of property classifications. It is more appropriate for IDA to act in that role. We therefore submit that it is necessary for this Clause to be amended so that:<br><br>• If OpenNet disagrees with the classification that a RL is using for a particular property, OpenNet can raise this matter to IDA for resolution; and<br><br>• Until the matter is resolved by IDA, the RL will continue to pay OpenNet based on the RL's classification of the property, with any adjustment and reimbursement taking place after IDA's resolution.<br><br>In regard to the detail of Clause 4.2, we would note that OpenNet's obligation is limited to responding to the RL within 2 Business Days. As this "*response*" could simply be an acknowledgement of the RL's request, there are no assurances whatsoever that OpenNet will address such cases in a timely and responsive manner. |

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| **5.2** | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.<br><br>Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).<br><br>Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.<br><br>Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.<br><br>In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).<br><br>We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(c)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.8** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.8, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.8 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation and power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions. |
| | In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.13, 9.14** | OpenNet is proposing to amend this Clause to absolve itself from any responsibility for the damage it causes to the customer's premises. We believe that this proposal is inappropriate, and would remove from OpenNet any incentive to act in a careful and considerate manner. We therefore submit that OpenNet should be responsible for any damage it causes in removing its equipment from the customer's premises. |
| | It is also important to note that, as far as the RSPs and RLs are concerned, they order circuits and terminate circuits. Removals are not a service for a RL or RSP to order, and it is up to the owner of the premise to request this service (if they so wish). OpenNet should therefore liaise directly with the premise owner, in the same way that OpenNet is currently installing the first TP. It is not practical for RLs to request this service, as RLs will have no visibility as to whether there are other services connected to the TP. |
| **9.16** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that: |
| | • OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet); |
| | • RLs should not be liable to pay OpenNet for any cancellation of faults reported; |
| | • RLs should not be charged for delays beyond their reasonable control; and |
| | • OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |

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| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |
| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.6** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one;<br><br>• Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |

| 11.7(a) | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
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| 11.7(b) | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a), 11.7(c) and 11.7(d) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| 11.7(c) | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |
| 11.7(d) | We would highlight that any damage to OpenNet's Network in the residential premise is beyond RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| 11.14 | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |
| Others | We submit that it is necessary for OpenNet's portal to enable anyone with valid justification, to check:<br><br>• On the relevant details of any particular site, including but not limited to classification (whether the address is residential, non-residential or NBAP), and<br><br>• The status of the building (such as fibre covered passed / reached, or when to be covered etc). |

**Annex E**
**Detailed Comments on Schedule 4:**

The comments on the Schedule are non-exhaustive.  StarHub's comments on Schedule 1 and 2 also apply to Schedule 4 to Schedule 11.

| Clause | Comments |
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| **5.2** | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers.  If maintained, this quota will restrict further the growth of the Next-Gen NBN.  However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.<br><br>Currently, the OpenNet weekly quota stands at 2,400 orders.  If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders.  However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5% reduction).<br><br>Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers.  StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet.  However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.<br><br>Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased.  The weekly quota, as it currently stands, is not sufficient to meet industry demand.  We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period.  If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.<br><br>In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted.  This is an untenable situation for the Next-Gen NBN and must to be addressed.  We submit that there should be a quota set aside for the provisioning of non-residential order each week.  If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).<br><br>We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **6.9** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.9, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.9 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |
| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |

| 11.2 | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that: <br><br> • OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet); <br><br> • RLs should not be liable to pay OpenNet for any cancellation of faults reported; <br><br> • RLs should not be charged for delays beyond their reasonable control; and <br><br> • OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
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| 11.3 | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| 11.4 | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

| 11.6 | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case. |
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| | We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet. |
| | We would also highlight that: |
| | • Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one; |
| | • Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and |
| | • Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.7(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However: |
| | • In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and |
| | • It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.7(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a) and 11.7(c) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| **11.7(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.14** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex F**
**Detailed Comments on Schedule 5:**

| Clause | Comments |
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| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.<br><br>Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).<br><br>Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.<br><br>Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.<br><br>In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).<br><br>We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(b)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.10** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.10, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.10 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.7** | This Clause sets out OpenNet's proposal for the investigation of faults.  However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present.  As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings.  We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.7(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one.<br><br>• Under Clause 11.7(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.7(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation.  In addition, RLs cannot be responsible for the readings/actions taken by OpenNet.  Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.8(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO.  However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges.  For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.8(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.8(a) and 11.8(c) are accepted.  If these changes are not accepted, Clause 11.8(b) would impose an inequitable and unfair burden on RLs. |
| **11.8(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other.  It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.10** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.15** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.15 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex G**
**Detailed Comments on Schedule 6:**

| Clause | Comments |
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| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers.  If maintained, this quota will restrict further the growth of the Next-Gen NBN.  However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.<br><br>Currently, the OpenNet weekly quota stands at 2,400 orders.  If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders.  However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).<br><br>Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers.  StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet.  However, given that OpenNet is receiving up to \$750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.<br><br>Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased.  The weekly quota, as it currently stands, is not sufficient to meet industry demand.  We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period.  If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.<br><br>In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted.  This is an untenable situation for the Next-Gen NBN and must to be addressed.  We submit that there should be a quota set aside for the provisioning of non-residential order each week.  If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).<br><br>We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(b)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.10** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.10, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.10 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.6** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one.<br><br>• Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.7(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.7(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a) and 11.7(c) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| **11.7(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs.  All parties involved in such cases are devoting time and resources to investigating the problem.  It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.14** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery.  Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations.  However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex H**
**Detailed Comments on Schedule 7:**

| Clause | Comments |
|---|---|
| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.

Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).

Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.

Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.

In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).

We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

| 5.4(b) | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
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| 6.12 | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.12, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.12 for failure to meet the SAP be removed. |
| 9 | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

| 11.6 | This Clause sets out OpenNet's proposal for the investigation of faults.  However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present.  As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.

We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings.  We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.

We would also highlight that:

- Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one.

- Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and

- Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation.  In addition, RLs cannot be responsible for the readings/actions taken by OpenNet.  Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
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| 11.7(a) | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO.  However:

- In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and

- It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges.  For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| 11.7(b) | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a) and 11.7(c) are accepted.  If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| 11.7(c) | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other.  It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

| 11.9 | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
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| 11.14 | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex I**
**Detailed Comments on Schedule 8:**

| Clause | Comments |
|--------|----------|
| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.

Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).

Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.

Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.

In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).

We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(b)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.11** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.11, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.11 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.6** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one; and<br><br>• Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one.<br><br>• Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.7(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.7(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a), 11.7(c) and 11.7(d) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| **11.7(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.7(d)** | We would highlight that any damage to OpenNet's Network in the residential premise is beyond RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.14** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex J**
**Detailed Comments on Schedule 9:**

| Clause | Comments |
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| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota. |
| | Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction). |
| | Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN. |
| | Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level. |
| | In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa). |
| | We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

| 5.4(b) | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
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| **6.13** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.13, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.13 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.6** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one;<br><br>• Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.7(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.7(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a), 11.7(c) and 11.7(d) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| **11.7(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.7(d)** | We would highlight that any damage to OpenNet's Network in the residential premise is beyond RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer. <br><br> In addition, we submit that: <br><br> • If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and <br><br> • To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.14** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform. <br><br> We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex K**
**Detailed Comments on Schedule 10:**

| Clause | Comments |
|--------|----------|
| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers. If maintained, this quota will restrict further the growth of the Next-Gen NBN. However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota. |
|  | Currently, the OpenNet weekly quota stands at 2,400 orders. If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders. However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction). |
|  | Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers. StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet. However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN. |
|  | Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased. The weekly quota, as it currently stands, is not sufficient to meet industry demand. We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period. If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level. |
|  | In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted. This is an untenable situation for the Next-Gen NBN and must to be addressed. We submit that there should be a quota set aside for the provisioning of non-residential order each week. If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa). |
|  | We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(c)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and.<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.9** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.9, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.9 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions.<br><br>In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that:<br><br>• OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet);<br><br>• RLs should not be liable to pay OpenNet for any cancellation of faults reported;<br><br>• RLs should not be charged for delays beyond their reasonable control; and<br><br>• OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

| 11.7 | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.

We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.

We would also highlight that:

- Pursuant to Clause 11.7(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one.

- Under Clause 11.7(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and

- Under Clause 11.7(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
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| 11.9(a) | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:

- In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and

- It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| 11.9(b) | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.9(a) and 11.9(c)are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| 11.9(c) | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.9(d)** | We would highlight that any damage to OpenNet's Network in the residential premise is beyond RSPs' control. In such cases it is only reasonable for OpenNet to pursue the matter directly with the customer. This is the standard arrangement today for wholesale services in the telecoms sector. |
| **11.11** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.16** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.16 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex L**
**Detailed Comments on Schedule 11:**

| Clause | Comments |
|---|---|
| 5.2 | The low level of the OpenNet weekly quota has led to prolonged and painful service delays for RLs, RSPs and customers.  If maintained, this quota will restrict further the growth of the Next-Gen NBN.  However, rather than increasing the quota, OpenNet is effectively proposing to reduce it, by moving to a daily quota.

Currently, the OpenNet weekly quota stands at 2,400 orders.  If RSPs submit 500 orders per day to OpenNet on Monday to Wednesday, and 450 orders on Thursday and Friday, OpenNet must provision all 2,400 orders.  However, under the same scenario, if OpenNet is allowed to move to a daily quota of 480 orders, the maximum number of orders OpenNet must provision would fall to 2,340 (a 2.5%reduction).

Moving to a daily quota of 480 orders will simply exacerbate delays in circuit provisioning for customers, leading to increased frustration for customers.  StarHub acknowledges that moving to a daily quota of 480 orders will make life easier for OpenNet.  However, given that OpenNet is receiving up to $750mill in Government funding, we do not believe that making life easier for OpenNet should be the primary objective of the Next-Gen NBN.

Given the ongoing delays for customers in getting Next-Gen NBN connections, and the fact that OpenNet's provisioning times are well above the mandated SAPs, we strongly believe that the existing weekly quota should be significantly increased.  The weekly quota, as it currently stands, is not sufficient to meet industry demand.  We would propose a mechanism for increasing the weekly quota, which is to monitor OpenNet's SAP over a rolling 2-week period.  If the SAPs are consistently exceeded (e.g. for more than 20% of the orders in the period exceeds the OpenNet ICO prescribed SAP), then OpenNet should increase its quota to ensure that SAP is maintained at its ICO level.

In addition, we would highlight that, given the overflow from residential orders, non-residential SAPs are also being severely impacted.  This is an untenable situation for the Next-Gen NBN and must to be addressed.  We submit that there should be a quota set aside for the provisioning of non-residential order each week.  If such quota is not filled by non-residential orders, OpenNet should use the unused non-residential slots to fulfil residential orders (and vice versa).

We submit that these measures would help to address some of the issues associated with the OpenNet quota. |

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| **5.4(c)** | This Clause is of concern to StarHub, as it widens OpenNet's ability to delay notifying RLs of the order status. This delay will lead to greater uncertainty and to prolonged waiting times for customers. We therefore submit that it is necessary to amend this Clause so that:<br><br>• OpenNet must demonstrate that it has exhausted its efforts in attempting to resolve the obstruction with the building owner / management / customer before rejecting a request for service; and<br><br>• It should be IDA (and not OpenNet) who would determines whether the BM or customer has breached any regulatory requirements, and must therefore be denied service. Leaving OpenNet with this responsibility is entirely inappropriate (as OpenNet is meant to be a commercial entity, not a regulatory body). |
| **6.9** | We strongly submit that it is necessary to increase the compensation payable by OpenNet under Clause 6.9, to create a realistic incentive for OpenNet to improve its service delivery. OpenNet has had more than 18 months to dimension its workforce, improve its performance and ensure that it provisions its circuits on time. It is no longer possible to assume that OpenNet's delays are simply "teething troubles".<br><br>The current compensation amounts in regard to OpenNet's failure to meet the mandated QoS and SAP levels are too low. Such low compensation amounts do not impose a sufficient incentive on OpenNet to perform in accordance with the SLGs. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage OpenNet caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 6.9 for failure to meet the SAP be removed. |
| **9** | This Clause gives OpenNet very wide powers to determine its network deployment (including location of the TP). We are concerned that TPs may be installed in unsuitable locations. We therefore submit that this Clause should be amended to require OpenNet to ensure that the TP is installed in:<br><br>• A serviceable condition; and<br><br>• A location that can accommodate the deployment of active equipment, with adequate ventilation, with power points within the reach of active equipment. |

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| **9.6** | We submit that this Clause should be amended to clarify that the notifications in question related to scheduled service interruptions. |
| | In addition, we would highlight that this Clause requires RLs to respond to such notifications within 1 Business Day. This timeframe is inappropriate and unnecessary (given that OpenNet is providing at least 1-month's written notice of the interruption). We therefore submit that Clause 9.6 should be amended to require RLs to acknowledge receipt of OpenNet's notification to be within 7 Business Days (instead of 1). |
| **9.14** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges. This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error. In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges. We strongly believe that this Clause should therefore be deleted in its entirety. |
| **11.2** | Under this Clause OpenNet will impose charges wherever a fault report is cancelled. However, we have experienced cases in which the technical problems escalated to OpenNet took a very long time to be resolved, resulting in customers wanting to terminate the Next-Gen NBN service. In such cases, we submit that: |
| | • OpenNet should compensate RLs for losing such accounts (as most of these delays are due to OpenNet); |
| | • RLs should not be liable to pay OpenNet for any cancellation of faults reported; |
| | • RLs should not be charged for delays beyond their reasonable control; and |
| | • OpenNet should reimburse the RL should the fault lie within OpenNet's control. |
| **11.3** | This Clause requires OpenNet to investigate faults experienced by customers, but does not set any obligation on OpenNet to respond in a timely manner. This has led to customers facing prolonged delays in having their faults corrected. We therefore submit that it is necessary for a reasonable SLG to be imposed on OpenNet for resolving faults. |
| **11.4** | As "Transmission Tie Cable" at the central office is a service provided and maintained by OpenNet, we can see no scenario in which the RL could possibly cause any fault. We therefore submit that re-patching charges should not be imposed. OpenNet should be responsible for rectifying the fault at no charge. |

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| **11.6** | This Clause sets out OpenNet's proposal for the investigation of faults. However, the investigation focuses solely on whether, at the time of the investigation, OpenNet's equipment records that a signal is present. As noted above, we have encountered a number of cases where circuits with no signal have (mysteriously) corrected themselves once OpenNet has investigated the case.<br><br>We therefore submit that it would be inappropriate to base a finding of "No-Fault-Found" just on OpenNet's readings. We submit that where the RL or RSP can show that, where the circuit had no signal (or only a weak signal) at the time the fault was reported, "No-Fault-Found" charges cannot be imposed by OpenNet.<br><br>We would also highlight that:<br><br>• Pursuant to Clause 11.6(a), it is necessary to specify that, three readings should be taken, with the highest reading being recorded as the final one;<br><br>• Under Clause 11.6(a), if (after all the necessary steps have been taken and the readings are still exceeding the limits specified), OpenNet should be required to provide a new fibre cable separate from the existing one; and<br><br>• Under Clause 11.6(c), it is unnecessary for RLs to jointly sign off the investigation report during the Joint Investigation, as the RL has to "*first perform all necessary checks*" before the joint investigation. In addition, RLs cannot be responsible for the readings/actions taken by OpenNet. Rather, the RL should however be only responsible to ensure that the optical signal readings at the TP are compliant with the guidelines at the end of the joint investigation. |
| **11.7(a)** | This Clause prohibits OpenNet from imposing charges where the fault is due to OpenNet or its contractors, and we welcome its inclusion in the OpenNet ICO. However:<br><br>• In such cases, RLs should be allowed to impose joint investigation charges on OpenNet (given that the fault is due to OpenNet or its contractors); and<br><br>• It is unclear from this Clause whether OpenNet (even if it is responsible for the fault) can impose other charges on the RL, such as onsite charges. For the avoidance of doubt we believe that this Clause should specify that OpenNet must absorb all the costs associated with the investigation (including onsite charges). |
| **11.7(b)** | This Clause would be acceptable to StarHub, if our proposed changes to Clauses 11.7(a) and 11.7(c) are accepted. If these changes are not accepted, Clause 11.7(b) would impose an inequitable and unfair burden on RLs. |
| **11.7(c)** | We respectfully submit that if a fault is not due to OpenNet or to the RL, the parties should not impose charges on each other. It would be inequitable and unfair to impose a charge on RLs if the RL is not responsible for the fault. |

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| **11.9** | We believe that it is inappropriate for OpenNet to impose "*joint investigation*" charges on RLs. All parties involved in such cases are devoting time and resources to investigating the problem. It is therefore unreasonable to only impose costs on RLs and RSPs, particularly when: (i) the fault will frequently lie with OpenNet; and (ii) RSPs are already having to incur significant costs to pacify the (frustrated) customer.<br><br>In addition, we submit that:<br><br>• If OpenNet misses an appointment, OpenNet would be required to: (i) pay a Missed Appointment charge; and (ii) make the arrangements for the next appointment; and<br><br>• To enable the efficient scheduling of joint investigations, OpenNet should be required to table with RLs on a monthly basis its availability for joint investigations in the coming month. |
| **11.14** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery. Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations. However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limit on the compensation amount under this Clause 11.14 for failure to meet the MTTR for a particular month in respect of services affected be removed. |

**Annex M**
**Detailed Comments on Schedule 12:**

| Clause | Comments |
|---|---|
| **1.8** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges.  This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error.  In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges.  We strongly believe that this Clause should therefore be deleted in its entirety. |
| **7.10** | We believe that for planned maintenance, RL should have the option to request for more time should it required. OpenNet should convene a meeting to discuss the options and alternative solutions and should not just "*use reasonable endeavours*". |
| **Annex 12A, 1 to 3** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery.  Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations.  However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limits on the compensation amounts under Clauses 1 to 3 be removed. |
| **Annex 12D, 1.5.2(b)** | Under this Clause, OpenNet will consider any request for a power increase on a "case-by-case basis".  However, RLs and RSPs require greater certainty in regard to the availability of a power increase.  We therefore submit that OpenNet should be required to provide a power increase, where requested by the RL. |

**Annex N**
**Detailed Comments on Schedule 12A:**

| Clause | Comments |
|---|---|
| **1.11** | This Clause states that, whenever a RL requests OpenNet to be onsite, OpenNet will impose onsite charges.  This Clause is too broad to be acceptable, as there will be circumstances where OpenNet needs to be onsite, due to an OpenNet fault or error.  In such cases, it would be entirely unreasonable for OpenNet to impose onsite charges.  We strongly believe that this Clause should therefore be deleted in its entirety. |
| **Annex 12AB, 1 and 2** | Based on the large number of incidents where OpenNet has failed to meet the mandated service levels in its service provisioning, it is evident that the current SLG remedies in the OpenNet ICO are inadequate in deterring OpenNet from continuing with its poor service delivery.  Indeed, it is likely that the current (low) compensation amounts under the OpenNet ICO make it economically rational for OpenNet to miss the QoS and SAP levels, rather than incurring costs to meet its contractual obligations.  However, this attitude overlooks the significant damage caused to the Next-Gen NBN ecosystem when OpenNet fails to perform.<br><br>We propose that the maximum limits on the compensation amounts under Clauses 1 and 2 be removed. |

**Annex O**
**Detailed Comments on Schedule 15:**

While we note that the amendments to this Schedule are to be reviewed by IDA, we believe that it is important to set out StarHub's views on the proposed amendments.

As a general point, we are concerned by the imposition of additional charges on RLs (and eventually on RSPs and their customers), when those charges are unwarranted, excessive, and one-sided. We respectfully submit that any changes to OpenNet's charges should be subject to a full public consultation, given the level of Government funding that OpenNet is receiving.

StarHub's comments on the Schedule are as follows:

| Clause | Comments |
|--------|----------|
| 1.3.3 | OpenNet is proposing to set Installation Charges for $2^{nd}$ TPs which are: <br><br> • 50% more expensive than the installation of the $1^{st}$ TP, in the case of High-Rise Residential Building; and <br><br> • 20% more expensive than the installation of the $1^{st}$ TP, in the case of Landed Residential Premises. <br><br> We believe that these charges are excessive and cannot be justified on any reasonable cost basis. |
| 1.3.4 | This Clause sets out a wide and non-exhaustive list of fees that are not covered by the Installation Charges. This creates uncertainty and ambiguity, as it is not clear what additional charges will be imposed on RLs and RSPs during the installation. It also creates a possibility that RLs and RSPs will be faced with significant additional fees as part of the installation. We therefore submit that this Clause should be deleted in its entirety. It is necessary for OpenNet to be open and transparent in its charging. |
| 1.4.1 | OpenNet is proposing to set a charge for patching in MDF rooms that is 4 times higher than the charge for patching in the CO. We believe that these charges are excessive and cannot be justified on any reasonable cost basis. |
| 1.4.2 | There appears to be a numbering error in this section. |

| 1.4.3 | OpenNet is proposing to set a charge for patching in MDF rooms that is 5 times higher than the charge for patching in the CO. Again, we believe that these charges are excessive and cannot be justified on any reasonable cost basis.

It is our understanding that the deactivation of the Patching Service and/or removal of the Patch Cable is of no relevance to the service ordered by the RL. Hence this should not be included in the OpenNet ICO. It is an operational matter for OpenNet to housekeep and maintain its Network. |
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| 1.5.2 | OpenNet is proposing to charge $33 for every 5 metres of cabling beyond the first 15 metres. We believe that these charges are excessive and cannot be justified on any reasonable cost basis. |
| 1.12.1 | We would note that the proposed one-time $55 charge for a request for express activation service is very high, particularly when compared to the monthly service charge of $15. We believe that this charge will discourage use of the express service, and undermine its effectiveness. |
| 1.13.1 | OpenNet is proposing a cancellation charge of $55 for express services. If the order is cancelled before OpenNet carry out any work, OpenNet will not have incurred any costs. We believe that this charge is excessive and cannot be justified on any reasonable cost basis. |
| 1.14 | As noted above, we submit that OpenNet should liaise directly with the owner of the premise for matters related to the TP. The removal of the TP has nothing to do with the RL or the RSP, and so those parties should not be involved in the removal of the TP. |
| 1.15 | This Clause sets a cancellation charge for Express Service Activations. We would note that there may well be cases in which the cancellation arises due to issues with OpenNet's performance (such as delays in performing the service). In such cases, where the delay is due to OpenNet, we submit that no charges should be payable to OpenNet. We believe that such measures are necessary to ensure that OpenNet deploys its service on-time and within the mandated SAPs.

In addition, we would note that this Clause contradicts Schedule 1, Clause 18.6, which states that "*there shall be no Express Service Activation for a request for Relocation Service*". If there is no Express Service Activation for a request for Relocation Service, how can there be a "*Cancellation Charge under Express Service Activation under Relocation Service*"? |
| 1.16 | As noted above, we strongly submit that OpenNet should liaise directly with the customer directly for TP-related matters. Involving RLs and RSPs in such matters will simply delay the process and create disputes.

In addition, we strongly submit that the Missed Appointment should be removed or made reciprocal. |

| 1.17 | We submit that it is unnecessary to have a separate charge for the Relocation Service, when there is already an Installation Charge, as well as activation and deactivation charges. We believe that it is necessary for OpenNet to clarify exactly what additional work it will be carrying out in this scenario to justify the $67.52 charge. |
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| 1.18 | In addition, we strongly submit that the Missed Appointment should be removed or made reciprocal. |
| 2.2 | OpenNet is proposing to charge RLs $300 for a 1-month connection, when it charges $50 per month for a 12-month contract term. We believe that the 1-month charge is unwarranted and unjustified, and will suppress demand for this service. We submit that the charge for a 1-month connection should be no more than $100 (i.e. twice the monthly charge for a 12-month contract term). |
| 2.3 | We have encountered cases in which OpenNet is unable or unwilling to get the necessary approvals from the building owner / management. In such cases, we believe that where the RSP/RL then takes over OpenNet's responsibilities, and is able to negotiate access, OpenNet should reimburse the RSP/RL for the costs they have incurred. |
| 2.3.3 | This Clause sets out a wide and non-exhaustive list of fees that are not covered by the Installation Charges. This creates uncertainty and ambiguity, as it is not clear what additional charges will be imposed on RLs and RSPs during the installation. It also creates a possibility that RLs and RSPs will be faced with significant additional fees as part of the installation. We therefore submit that this Clause should be deleted in its entirety. It is necessary for OpenNet to be open and transparent in its charging.<br><br>In addition, OpenNet is proposing terms (such "*non-standard installations*", "*access fees*" and "*other fees specifically described*") which are vague and undefined. Given that the OpenNet ICO was one of the key criteria for the award of the NetCo contract, we are concerned by OpenNet's attempts to impose additional costs on RLs and RSPs. We therefore submit that this Clause should be deleted in its entirety. |
| 2.3.4 | We would highlight that the deactivation of the Patching Service and/or removal of the Patch Cable is of no relevance to the service ordered by the RL. Therefore this charge should not be included in the OpenNet ICO. These matters are an operational matter for OpenNet to housekeep and maintain its Network. |
| 2.11 | We note that OpenNet is proposing to set a one-time Express Service Charge of $150, when the monthly charge for the service is only $50. We believe that this charge is excessive and cannot be justified on any reasonable cost basis. |
| 2.12 | Again, we believe that the proposed cancellation charge (of $150) is excessive and cannot be justified on any reasonable cost basis. If the order is cancelled before OpenNet commence the work, no costs have been incurred, and so no charges should be imposed. |

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| **2.13** | As noted above, we strongly submit that OpenNet should liaise directly with the customer directly for TP-related matters. Involving RLs and RSPs in such matters will simply delay the process and create disputes. |
| **2.15** | We submit that it is unnecessary to have a separate charge for the Relocation Service, when there is already an Installation Charge, as well as activation and deactivation charges. We believe that it is necessary for OpenNet to clarify exactly what additional work it will be carrying out in this scenario to justify the $67.52 charge. |
| **3.2** | OpenNet is proposing to set a charge of $1100 for a 1-month NBAP connection when the charge for a 12-month NBAP connection is $185 per month. We believe that the 1-month charge is unwarranted and unjustified, and will suppress demand for this service. We submit that the charge for a 1-month connection should be no more than $370 (i.e. twice the monthly charge for a 12-month contract term). |
| **3.3.3** | This Clause states that, where OpenNet incurs "*any additional cost*", OpenNet will pass this cost onto the RLs and RSPs. This Clause creates a number of concerns for StarHub, as:<br><br>• OpenNet could use this Clause to pass on significant additional costs to RLs and RSPs;<br><br>• This Clause is open-ended and non-exhaustive, thereby creating uncertainty and ambiguity for RLs and RSPs; and<br><br>• There is no incentive under this Clause for OpenNet to manage its costs in an efficient manger. Under this Clause, if OpenNet incurs any additional costs, it can simply pass those costs onto RLs and RSPs.<br><br>We therefore submit that this Clause should be deleted in its entirety. |
| **3.6** | Under this Clause, OpenNet is proposing to charge $627.54 if the RL fails to accept OpenNet's SAPs or installation charges. We believe that this requirement is unreasonable and unwarranted. If OpenNet's SAPs or installation charges are excessive, the RL should have the right not to accept them. In such circumstances, the most that RLs should pay should the costs efficiently incurred by OpenNet in the preparation of its proposal. If this Clause is implemented as drafted, it will further discourage the take-up of NBAP services. |
| **3.11** | As noted above, we strongly submit that OpenNet should liaise directly with the customer directly for TP-related matters. Involving RLs and RSPs in such matters will simply delay the process and create disputes. |

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| **3.12, 4.11, 5.11, 6.11, 7.11, 8.11, 9.11, 10.11, 11.11** | In these Clauses, OpenNet is seeking to impose a Missed Appointment Charge on RLs. We believe that the Missed Appointment in these Clauses should be removed or made reciprocal. There is no justification for imposing the charge on a unilateral basis. |
| **4.10, 5.10, 6.10, 7.10, 8.10, 9.10, 10.10, 11.10** | In these Clauses, OpenNet is proposing to impose a $20 charge for providing optical power readings. We respectfully submit that, as a service provider OpenNet should be required to provide optical power readings at no charge. We submit that a $20 charge is unreasonable and unwarranted, and that these Clauses should be removed from the OpenNet ICO. |

**Annex P**
**Detailed Comments on Schedule 18:**

| Clause | Comments |
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| **"Network"** | The definition of "*Network*" has been amended to only refer "*the passive infrastructure portion of the NGNBN to be implemented and operated by OpenNet.*" However:<br><br>• The Main Body, Clause 8.1, refers to each Party being "*responsible for the safe operation of its side of the Network*". This statement does not make logical sense if the "*Network*" in question is just the OpenNet network.<br><br>• The Main Body, Clause 8.1, refers to neither Party warranting that "*its Network or Network Facilities are or will be free from faults*". If "*Network*" only refers to OpenNet's network, the OpenNet ICO cannot (by definition) refer to the RL's "*Network*".<br><br>• The Main Body, Clause 11.1(a) allows for suspension if "*the other Party's Network affects the normal operation of the Suspending Party's Network*". Again, this statement is illogical if "*Network*" is only defined with reference to the OpenNet network.<br><br>We therefore submit that it is necessary to revert to the original definition of "*Network*". |

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| **"Residential Premise"** | We are concerned by this definition, for a number of reasons.<br><br>First, the definition appears to exclude residential properties rented or leased on a monthly basis. This is unjustified as many residential properties are rented or leased on a monthly basis, and it would be unreasonable to exclude them from the definition of "*Residential Premise*".<br><br>Second, the definition excludes many other types of premises which should be considered "*Residential*". These premises include: serviced apartments, staff quarters, the residential areas of foreign embassies, and student dormitories. We submit that all of these premises should be considered "*Residential Premises*" under Schedule 18.<br><br>Third, for the avoidance of doubt we believe that it is important to clarify that a "*Residential Premise*" can exist within a building that also contains non-residential customers (i.e. in a "*mixed*" building).<br><br>Fourth, is inappropriate to have OpenNet as the final arbiter of building classifications, as OpenNet has a directly financial incentive to classify properties according to the highest charge. We therefore submit that this definition must be amended to explicitly refer to IDA having the power to determine the building classifications. |
| **"Non-Residential Premise"** | It has been proposed to amend the definition of "*Non-Residential Premise*" to refer to COPIF. We believe that this is inappropriate and would lead to greater confusion and frustration.<br><br>If the COPIF reference is retained, this will mean that:<br><br>• A residential customer living in shop-houses would be defined as living in a "*Non-Residential Premise*" (as "*shophouses*" are defined as "*non-residential*" under COPIF); and<br><br>• A residential customer living in a residential apartment on the top of a shopping complex (such as ION) would be defined as living in a "*Non-Residential Premise*" (as "*shopping complexes*" are defined as "*non-residential*" under COPIF).<br><br>The reference to COPIF will discourage take-up of Next-Gen NBN services (as residential customers will be charged at non-residential rates). We therefore submit that the reference in this definition to COPIF should be deleted from the OpenNet ICO. |