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7 May 2012

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

By Email: IDA Consultation@ida.gov.sg

Dear Ms Chia,

REVIEW ON INTERCONNECTION OFFER ("ICO") FOR THE PROVISION OF SERVICES ON THE NEXT GENERATION NATIONWIDE BROADBAND NETWORK ("NEXT-GEN NBN")

1. We refer to the Authority's Consultation Paper of 18-April 2012 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, and a summary of StarHub's position is set out below.

SUMMARY OF STARHUB'S POSITION:

- 2. We are surprised and disappointed that OpenNet has failed to comply with the Authority's Direction of 27 February 2012 in regard to amendments to the OpenNet ICO. In a range of areas OpenNet has failed in whole or in part to take into account the ICO amendments directed by the Authority.
- 3. Some of the key areas where OpenNet has failed to make the directed amendments include:
 - ➤ OpenNet Directly Billing End Users: In its Direction of 27 February 2012, the Authority stated that "it would promote greater efficiency and convenience if endusers are able to deal directly with OpenNet, and be billed directly by OpenNet, for TP-related services". However, this requirement does not appear to have been included by OpenNet in its proposed ICO revisions.
 - ➤ OpenNet's Maximum Quota: In its Direction of 27 February 2012, the Authority stated that OpenNet's existing quota is "no longer sufficient"; and that OpenNet was to propose a revised quota that was "substantially better than the currently weekly quota". The Authority has spoken publicly of the need for the quota to



meet up to 5,600 orders per week.¹ However, under Version 1, OpenNet's "revised" Maximum Quota, of 500 orders per-day, is entirely inadequate and fails to meet the Authority's requirements. To give one simple illustration, for any week that contains a public holiday, OpenNet's "revised" Maximum Quota would mean that OpenNet actually has to process <u>fewer</u> orders than it does today. Version 2 is similarly inadequate, as it limits the maximum number of Non-Residential orders to only 40 per day.

- "Seasonal Slots" In its Direction of 27 February 2012, the Authority stated that OpenNet must ensure that the quota mechanism "accounts for and accommodates increased demand to cater to seasonal fluctuations (e.g. IT fairs)."I While OpenNet's revised ICO makes reference to "Seasonal Slots" for "quarterly major IT fairs (namely IT Show in March, PC Show in June, Comex Show in September, and SITEX in November)", the revised ICO fails to provide any detail on how those Seasonal Slots will work. The ICO fails to set out how many Seasonal Slots will be made available, when they will be made available, the terms and conditions associated with them, or how they will be allocated. As such, the reference in the revised ICO to Seasonal Slots is (unfortunately) meaningless.
- Quota Review Mechanism: In its Direction of 27 February 2012, the Authority stated that OpenNet must "provide a mechanism for adjustments to its newly proposed quota on an ongoing basis". This Review Mechanism was intended to provide much-needed flexibility to the Maximum Quota, and was meant to make the Quota "responsive to market demand". However, OpenNet has proposed a Review Mechanism that will ensure that the Quota is almost never changed. In order for the Quota to increase, more than 95% of the Quota must be used "consistently" for a 3-month period preceding a review month. Should "only" 95% of the Quota be used for periods of that three-month period, no change will be made to that Quota. OpenNet will be aware from its own experience that there will be individual days in a 3-month period that will not generate 95% utilization levels. We therefore strongly believe that a more nuanced and effective Quota Review Mechanism is needed if the Authority's objective is to be met. We would also note that OpenNet has entirely failed to provide "justifications on why they [the elements of the Review Mechanism] are reasonable", as requested by the Authority.
- ➤ Security Deposit and Escort Charges In its Direction of 27 February 2012, the Authority stated that "it is highly inequitable for the RL to be guaranteeing the performance of OpenNet's contractors. OpenNet should bear its own charges such as security deposits and escort charges." However, in the revised ICO, OpenNet is still requiring that those charges are borne by the Requesting Licensees. It is unclear why OpenNet has sought to ignore the Authority's Direction in this respect.

¹ Please see: "OpenNet offers to boost weekly installation quota", Straits Times, 19-April 2012



- ➤ TP in the Vertical Telecommunication Riser: In its Direction of 27 February 2012, the Authority stated that "OpenNet should extend greater flexibility by allowing RLs to also pick up OpenNet's connection at an intermediate point between the serving FTTB Node/MDF room and the Non-Residential premise". However, in its revised ICO, OpenNet has proposed that: "the RL shall perform all the necessary work to provision its services and be responsible from the TP in the vertical telecommunication riser to the Non-Residential Premise served". Essentially, OpenNet has distorted the Authority's intention, and instead of providing flexibility and choice to Requesting Licensees, OpenNet is imposing additional obligations on them.
- ➤ Classification of Building Types: In its Direction of 27 February 2012, the Authority highlighted the need for certainty in the definition of properties, and for OpenNet to establish a process in which disputes over property classifications can be resolved. The Authority specified that the process should be shorter than dispute resolution under the ICO "as the item under dispute is not complex". However, in the revised ICO, OpenNet has refused to do this, leaving Requesting Licenses with no alternative but to go through the same drawn-out dispute resolution process as for major commercial disputes. StarHub strongly believes that greater clarity is needed for the ICO definitions, particular in regard to NBAPs (as the current ambiguity is discouraging take-up of that service). As OpenNet is unwilling to provide that clarity, we submit that building classifications should be mandated by the Authority, with the Authority ruling on any disputes or ambiguities. This would provide greater certainty to the parties, with the ability to establish a reasonably short process.
- ➤ Service Level Guarantees: In its Direction of 27 February 2012, the Authority has referred to the need "to ensure that OpenNet's service levels remain at an acceptable level. However, in the revised ICO, OpenNet has sought to limit and minimise its obligations. The revised ICO now contains a number of subjective conditional statements, such as "its best endeavours", "such evidence as may be available" and "beyond the reasonable control of OpenNet". If such loose terms are allowed in the ICO, it would be extremely difficult to enforce the Service Level Guarantees. We therefore submit that these references should be removed from the ICO. We also submit that the remedy in the form of rebates under the ICO for failure by OpenNet in meeting the stipulated Service Level Guarantees for any Residential End-User Connection, Non-Residential End-User Connection, NBAP Connection and other services should not be the sole and exclusive remedy available to the Requesting Licensee, in particular in the event there occurs a series of such failures in meeting the Service Level Guarantee.
- Fibre Takeover Process: We note that, in its Direction of 27 February 2012, the Authority has not supported or endorsed OpenNet's "Fibre Takeover Process". This Process was thoroughly criticised by respondents earlier in the consultation, and if implemented would create confusion and controversy in the industry.



There is no basis under law or contract for OpenNet to demand the return of circuits legitimately acquired by a Requesting Licensee. If OpenNet faces demand for multiple circuits into a single location, we strongly submit that OpenNet should simply comply with its RFP bid and build a second TP in that location. As such, the proposed Fibre Handover Process should be deleted in its entirety.

StarHub's Solution to the Maximum Quota Issue:

- 4. StarHub strongly agrees with the Authority that it "is imperative that there should be an adequate provisioning quota", and that the existing Quota "is no longer sufficient and is not responsive to market demand resulting in long waiting times for end-users." However, as noted above, OpenNet's proposed ICO revision will not rectify this problem (and in many cases will deliver a lower quota than is in place today).
- 5. Clearly, OpenNet's proposed ICO revision is unacceptable. To address this problem, StarHub would propose the following regime:
 - (i) The current Maximum Quota should be significantly increased (to at least 5000 new applications per week);
 - (ii) An Adjustment Mechanism should be structured around the Service Activation Periods ("SAPs") set out under the NetCo RFP (and the contract between the Authority and OpenNet dated 20 October 2008). OpenNet has agreed to comply with these SAPs, and so it is only fair that they should be required to comply with them.
 - (iii) OpenNet's SAP should be assessed on a rolling 2-week period. If the SAPs are exceeded (i.e. if more than 20% of orders in the period exceed the prescribed SAP), OpenNet would have to increase its quota to ensure that the SAPs are achieved. In this way, OpenNet is focused on meeting its SAPs, and the Maximum Quota can change according to variations in market demand.
 - (iv) OpenNet is aware of the major IT shows to be held each year ("namely IT Show in March, PC Show in June, Comex Show in September, and SITEX in November"). OpenNet will also be aware, from previous years' experience, what the likely levels of demand can be expected from those IT shows. Therefore, the rolling 2-week review should apply to those IT shows, without the need for specific "Seasonal Slots".
 - (v) We understand the Authority's comment that splitting the Quota between Residential and Non-Residential orders could result in a "sub-optimal usage of resources within the sub-quota". Nevertheless, given the importance of ensuring the timely provisioning of Non-Residential circuits, we believe that there is considerable merit in establishing separate sub-quotas for Residential and Non-Residential orders. However, if the sub-quota is not filled by Non-Residential orders, OpenNet should use the unused Non-Residential slots to fulfil Residential



orders (and vice versa). In this way, we can avoid any sub-optimal usage of resources within the sub-quota.

6. Through the use of this process, we can avoid having to create an arbitrary, artificial and inflexible quota. The SAPs are an established element of the Next-Gen NBN, and are well understood by the Parties. Most importantly, the mechanism set out above focuses on the critical issue:- the length of time customers have to wait to get services. The level of the Maximum Quota is only relevant insofar as it leads to delays in provisioning customers. It is therefore entirely logical to focus the level of the Maximum Quota on the SAPs. The mechanism set out above will meet the Authority's requirement that the Quota "accounts for and accommodates increased demand to cater to seasonal fluctuations (e.g. IT fairs)".

CONCLUSION:

- 7. StarHub strongly supports the Authority's review of the OpenNet ICO. It is important to remember that this review has been necessitated by OpenNet's failure to perform. OpenNet's actions to-date have resulted in serious provisioning delays, service quality issues, customer frustration, and damage to the reputation of the Next-Gen NBN. It is critical for the Authority's review to get to the heart of OpenNet's failures, and to correct them. If the Authority's review of the OpenNet ICO fails to resolve OpenNet's failures, the problems with the Next-Gen NBN will continue, and customers will continue to suffer.
- 8. We would therefore request that, prior to finalizing the OpenNet ICO, the Authority meets with the RSPs, who have experienced first-hand the problems with OpenNet's services. We believe that this dialogue would help to ensure that OpenNet's failures are addressed and corrected. We are grateful for the opportunity to comment on this matter. 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



Detailed Comments: Main Body:

Clause	Comments
9	The addition made by OpenNet to this clause is extremely broad. The amendment also fails to specify who would determine whether a connection is consistent or inconsistent "with the provision of any of the services described in the Schedules", or how that determination would be made. Given this ambiguity, we submit that the proposed modification should be deleted.
	We would also note that the definition of "Network" has not been clarified in either the Main Body nor in the Definitions, worsening the ambiguity of this clause.
11.5	Given that this clause pertains to the rights of the Suspending Party, the right to terminate where clauses 11.1(a) or 11.1(c) applies should vest in the Suspending Party. Accordingly, the clause should be amended as follows: "If this ICO Agreement or Schedule is suspended under this clause 11 for more than sixty (60) Calendar Days, the Suspending Party may, subject to clause 12.3, terminate this ICO Agreement or Schedule (as the case may be) with immediate effect by giving the other Party written notice. Additionally, where clauses 11.1(a) or 11.1(c) applies, the Suspending Party may, subject to clause 12.3, terminate this ICO Agreement or Schedule (as the case may be) with immediate effect by giving the other Party written notice."
12.5 (a)(ii)	We would note that OpenNet's proposed amendments are inconsistent with the Authority's Direction. We propose to retain the industry's and the Authority's position of deleting "any costs, other than those provided under Schedule 15, as may be incurred by the Terminating Party in terminating this ICO Agreement or Schedules".
13.1	The words "unless the Authority determines that such suppliers and/or contractors are parties for whom the affected Party is responsible" are unnecessary in this clause. We propose to remove these words to ensure that any failure or delay by OpenNet's or as the case may be, the Requesting Licensee's suppliers and contractors, shall not constitute Force Majeure under this clause 13.1.



Annex B Detailed Comments on Schedule 1:

Clause	Comments
Page 1	We note that the Authority has directed OpenNet to waive cancellation charges 'for long unresolved delays". We would respectfully note that any delays to the installation date can result in the customer cancelling the order or requesting compensation. We therefore submit that in the event that there is any delay to the installation date which can be attributed to OpenNet, OpenNet should waive all cancellation charges.
2.2	We note that the proposed process does not address the issue of unresolved claims. In particular, it is unclear what would happen if the Requesting Licensee disputes OpenNet's assessment that a claim is invalid. This ambiguity needs to be clarified.
	In addition, OpenNet should be required to provide written justifications for the rejection of any claim. It is not clear what process and timeframe would apply in the handling such cases. If OpenNet's concern is in regard to duplicative claims, it is suggested that all valid claims by the Requesting Licensee should be processed, except for duplicative claims.
	Furthermore, it is necessary for the terms "valid claims", "invalid claims" and "corresponding rebate" to be clearly defined in this Clause.
2.6(d)	The proposed amendment, on the evidence of best endeavours by OpenNet, needs to be amended, to conform to the Authority's Direction. We would propose the following amendment:
	"where OpenNet had used its best endeavours to obtain expeditiously or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection. Notwithstanding the above, in determining whether the Service Level Guarantees have been met by OpenNet, the time taken by OpenNet to obtain or maintain any licence or permission necessary to the provision or restoration of the Residential End-User Connection shall always be excluded, provided that OpenNet had used its best endeavours in obtaining or maintaining such licence or permission. In the event the Requesting Licensee raises a dispute or query on whether OpenNet had used its best endeavours in obtaining or maintaining the licence or permission in the manner contemplated under this Schedule, OpenNet will upon request provide the Requesting Licensee with evidence of such relevant licence or permission, the steps taken to obtain such licence or permission and the reason for failure to obtain or maintain such licence or permission;"



2.6 (e) We strongly submit that this clause should be amended to clarify that the exclusion to 5.4 (b) the Service Level Guarantee under this clause only applies to specific buildings or premises with genuine access difficulties, and does not apply to buildings or Residential End-User's Premises with "spring-boarding" issues. We would also propose the following amendments to align this clause with the Authority's Direction: "OpenNet has difficulty accessing or working in the building or Residential End-User's Premise due to the building or premise being inaccessible, in unsafe working condition or in any other inadequate or deficient state, provided that OpenNet had used its best endeavours to remedy expeditiously any building access difficulties (including any cases of obstruction by building management, building owner, home owner or End User). In the event the Requesting Licensee raises a dispute or query on whether OpenNet had used its best endeavours in remedying the building access difficulties expeditiously in the manner contemplated under this Schedule , OpenNet will upon request provide evidence of such difficulties, the steps taken to remedy such difficulties expeditiously and the reasons for failure to remedy such difficulties;" 2.6(f) To align this clause to the Authority's Direction, we would propose the following amendment: "delay in the provision or restoration of the Residential End-User Connection caused by events beyond the reasonable control of OpenNet. For the avoidance of doubt, any such delay caused by events beyond the reasonable control of OpenNet's suppliers and/or contractors shall not exempt OpenNet from its obligation to meet the Service Level Guarantee;" We would note that the term "Repair and Replacement" is capitalized in this clause, but 2.6 (k) appears to be undefined. We submit that this term should be defined. In addition, we submit that requests made under this clause should not be exempted from the Service Level Guarantees. It is reasonable to expect OpenNet to complete such work expeditiously, in line with the Service Level Guarantees. 2.8 & 2.9 The Service Level Guarantee remedy framework is inadequate in ensuring OpenNet's service levels remain at an acceptable level. Therefore we strongly submit that these clauses should be deleted in their entirety. After 3.1 StarHub is very concerned by this clause, which seeks to impose additional obligations (A)(d) on Requesting Licensees, and to absolve OpenNet from any responsibility. This is clearly contrary to the Authority's Direction. We therefore submit that this clause should be deleted after the first sentence.



4.1 (b)	Under this clause Requesting Licensees can only change the End-User's contact details 3 Business Days before the requested service activation date. We respectfully submit that this period is too long. To give greater flexibility to customers and Requesting Licensees, we submit that this period should be reduced to a maximum of 1 Business Day.
4.2	Under this clause the Requesting Licensee is required to liaise with OpenNet for such matters as the location of TPs. However, in its Direction of 27 February 2012, the Authority stated that "it would promote greater efficiency and convenience if end-users are able to deal directly with OpenNet, and be billed directly by OpenNet, for TP-related services".
	We therefore submit that the revised ICO should include a detailed process in which OpenNet will deal directly with the End-User for TP-related services, where so requested. It is unclear why OpenNet has failed to reflect the Authority's Direction on this matter.
	In addition, it is unclear what OpenNet is seeking by including a reference to the "OpenNet Platform when available". As this reference creates ambiguity, and suggests that the OpenNet Platform will not be available, we believe that it should be removed from the clause.
4.2 (a)	In this clause OpenNet refers to "any obstruction from any building owner, building management, home owner or End User". However, OpenNet has failed to specify which "building owner, building management, home owner or End User" it is referring to in this clause. We are concerned that OpenNet will use this clause to prolong and expand the "spring-boarding" problem (which is already causing significant problems for customers and Requesting Licensees).
	Simply put, if OpenNet encounters serious obstructions from the "building owner, building management, or home owner" in the premises occupied by the customer, there may be some justification in limiting the liability on OpenNet. However, if OpenNet encounters obstructions from any other building owner, building management, or home owner, the liability on OpenNet should continue to apply in full. Like any other network operator, OpenNet must be responsible for the rollout and operation of its network.



4.3 Last Para

Under this clause OpenNet seeks to reserve for itself the sole discretion in determining the classification of building types. Requesting Licensees who are dissatisfied with OpenNet's (quasi-regulatory) ruling have no option but to go through the lengthy (and expensive) dispute resolution process set out under the Code. This procedure is in direct contravention to the Authority's Direction.

Unfortunately, StarHub's experience with OpenNet on this matter shows that OpenNet has every incentive to classify properties in the most expensive rating possible. For example, OpenNet has even sought to charge customers living in SLA "black-and-white" homes as "Non-Residential" customers.

Regretfully, we have no confidence that OpenNet can be trusted to determine the classification of properties in a reasonable manner. We therefore submit that it is necessary for:

- The OpenNet ICO to set out in greater detail the definition of "Residential" and "Non-Residential" premises (preferably setting out how specific types of properties will be characterised); and
- For the Authority, rather than OpenNet, to act as the final arbiter of property classifications. We believe that it should be possible for the parties to define such properties in five Business Days.

If these steps are not taken, we can expect controversy and customer dissatisfaction to result.

4.4

While this clause allows switching from GPON to OE (and vice versa), the revisions proposed by OpenNet fail to specify the timeframes required for the switch. In addition, we submit that the reference to "Cost-Oriented" charges is ambiguous, and will discourage take-up of this service.

We therefore submit that this clause should be amended to clearly specify the timeframes and charges for switching.

4.6 New Addition

While this clause allows switching from GPON to OE (and vice versa), the revisions proposed by OpenNet fail to specify the timeframes required for the switch. In addition, we submit that the reference to "Cost-Oriented" charges is ambiguous, and will discourage take-up of this service.

We therefore submit that this clause should be amended to clearly specify the timeframes and charges for switching.



4.6 (g)

This clause states that OpenNet will advise on the status of "affected orders". However, it is unclear whether OpenNet is referring to orders being processed, to completed EUCs, or to both. We submit that this point needs to be clarified in the ICO. StarHub submits that OpenNet should provide Requesting Licensees with regular updates on orders being processed and on completed EUCs.



5.2 Version 1 Version 2

StarHub's views on the proposed quota are set out in the attached cover letter. In summary:

- The proposed level of the quota is far too low, and would directly conflict with the Authority's Direction in this regard. To give one example, under OpenNet's revised quota, if there is a public holiday in any particular week, OpenNet will actually have to provision fewer orders than it does under the existing quota.
- The proposed mechanism for changing the level of the quota is entirely unreasonable. The requirement for more than 95% of the quota to be met "consistently" over a 3-month period is entirely unrealistic, and will result in stagnation in the industry.

StarHub would instead propose a regime in which:

- (i) The current Maximum Quota should be significantly increased (to at least 5000 new applications per week);
- (ii) An Adjustment Mechanism should be structured around the SAPs set out under the NetCo RFP (and under the contract between the Authority and OpenNet dated 20 October 2008). OpenNet has agreed to comply with these SAPs, and so it is only fair that they should be required to comply with them.
- (iii) OpenNet's SAP would be assessed on a rolling 2-week period. If the SAPs are exceeded (i.e. if more than 20% of orders in the period exceed the prescribed SAP), OpenNet would have to increase its quota to ensure that the SAPs are achieved.
- (iv) OpenNet is aware of the major IT shows to be held each year ("namely IT Show in March, PC Show in June, Comex Show in September, and SITEX in November"). OpenNet will also be aware, from previous years' experience, what the likely levels of demand can be expected from those IT shows. Therefore, the rolling 2week review should continue to apply to those IT shows, without the need for specific "Seasonal Slots.
- (v) We understand the Authority's comment that splitting the Quota between Residential and Non-Residential orders could result in a "sub-optimal usage of resources within the sub-quota. Nevertheless, given the important of ensuring the timely provisioning of Non-Residential circuits, we believe that there is considerable merit in establishing separate sub-quotas for Residential and Non-Residential orders. However, if the sub-quota is not filled by Non-Residential orders, OpenNet should use the unused Non-Residential slots to fulfil Residential orders (and vice versa).



In this way, we can avoid having to create an arbitrary, artificial and inflexible quota. The SAPs are an established element of the Next-Gen NBN, and are well understood by the Parties. Most importantly, the mechanism set out above focuses on the critical issue: the length of time customers have to wait in order to get services. The level of the Maximum Quota is only relevant insofar as it leads to delays in provisioning customers. It is therefore entirely logical to focus the level of the Maximum Quota on the SAPs. The mechanism we have set out meets the Authority's requirements that "accounts for and accommodates increased demand to cater to seasonal fluctuations (e.g. IT fairs)".

5.2 Seasonal Slots

We note that the term "Seasonal Slot" does not appear to be defined.

As noted above, we believe that OpenNet should be able to forecast, based on its previous experience, the likely levels of demand for the major IT fairs (which take place at set dates each year). As no Requesting Licensee will have visibility as to the total number of orders OpenNet actually received (or will receive), only OpenNet is able to make a realistic and practical forecast.

We also submit that OpenNet should update the Requesting Licensees, on a daily basis, on the usage status of the quota, to allow the Requesting Licensees to better plan for their next orders.

- This clause sets out the circumstances in which OpenNet can reject request. We would note that:
 - Clauses (a) and (d) both refer to the Requesting Licensee committing a material breach of the ICO Agreement or this Schedule;
 - Clauses (b) and (e) both refer to cases where the first and second fibres of the first TP are in use (although clause (e) provides an alternative);
 - Under clause (c), OpenNet can reject orders if the "OpenNet Platform is experiencing technical problems", regardless of the scale or severity of those "technical problems". We believe that this clause is far too broad, and would allow OpenNet to reject requests under a wide range of circumstances. We strongly believe that this clause must be deleted.
- This clause refers to "Insufficient Capacity", as a capitalized term. However, this term is not defined in the Dictionary, and other areas of the ICO use this term without capitals. It is unclear whether this term is a typographical error or not.



serve buildings outside the scope of OpenNet's FBO licence) will operate. For the avoidance of doubt, we believes the it necessary for this clause to specify: • The relevant clause of OpenNet's FBO licence; and • The circumstances in which this clause will be used. 5.5 Under this clause OpenNet is able to reject orders in those cases where "OpenNet's Network has not been rolled out to that location". Given that OpenNet is supposed to have rolled out 95% of its network by mid-2012, it is unclear when this clause will be used. We therefore believe that either the statement quoted above should be deleted or amended to clarify the circumstances in which this clause will be used. In addition, if OpenNet does lack sufficient capacity, the Requesting Licensee is only given 1 Business Day to select a new appointment or to cancel the order. However, 1 Business Day is insufficient, given the need for the Request Licence to liaise with the RSP, and for the RSP to liaise with the customer. As such, we submit that OpenNet should give the Requesting Licensee at least 3 Business Days to select a new appointment or to cancel the order. In addition, the Requesting Licensee should be given for the next available RFS date if it fails to respond in time. 5.11 (d) This clause refers to Requesting Licensees submitting the Cancellation Request via the OpenNet Platform when available." It is unclear whether this clause is referring to: (a) the OpenNet Platform not being available; or to (b) the Cancellation Request not being available. We believe that this point needs clarification. In case (a), it is also necessary to clarify whether the Requesting Licensee is allowed to submit a Cancellation Request, and not incur any charges in doing so, if the OpenNet Platform is not available. 5.11 (f) We believe that this new paragraph is unnecessary, and that it should be deleted in its entirety. It is critically important for OpenNet to provide Mandated Services Information ("MSI") in a timely and accurate manner. The fact that OpenNe	5.4 (d)	We are concerned as to how this clause (which removes the obligation from OpenNet to
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6.2 (b)(a) First, the clause fails to specify the timeframes within which OpenNet will revert to the Requesting Licensee.

This clause has two main flaws.

Second, it is unclear whether, under the clause, the Requesting Licensee is obliged to arrange the reappointment, where requested by OpenNet.

We strongly submit that OpenNet should be responsible for the installation of the TP. The transferring of that responsibility should only be transferred to the Requesting Licensee: (a) in defined and limited circumstances; and (b) with the agreement of the Requesting Licensee.

6.3 As noted above, the Authority's Direction mandates that OpenNet must bill the customer directly for TP related services. OpenNet has not taken this into account in the revised ICO. We strongly believe that this concept must be clearly set out in the ICO.

6.10(a) We propose the following amendments to align the clause to the Authority's Direction:

"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. In such an event, OpenNet shall use its best endeavours in remedying expeditiously such obstruction. In the event the Requesting Licensee raises a dispute or query on whether OpenNet had used its best endeavours in remedying expeditiously such obstruction, OpenNet will upon request provide to the Requesting Licensee evidence of such obstruction, the steps taken to remedy such obstruction expeditiously and the reasons for failure to remedy such obstruction."

6.10(d) We propose the following amendments to align the clause to the Authority's Direction:

"In the event of any obstruction from building owner or building management to OpenNet's installation or installation schedule or any of the circumstances described in Clauses 2.6(c) and 2.6(f) above during the express service activation, OpenNet shall use its best endeavours to remedy it expeditiously. The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays arising from such obstruction if OpenNet had used its best endeavours in attempting to resolve expeditiously any obstruction from building owner or building management. In the event the Requesting Licensee raises a dispute or query on whether OpenNet had used its best efforts in expeditiously remedying the obstruction, OpenNet will upon request provide evidence of such obstruction, the steps taken to remedy such obstruction expeditiously and the reasons for failure to remedy such obstruction."



6.11(d)	We propose the following amendments to align the clause to the Authority's Direction:
	"The Requesting Licensee hereby acknowledges and agrees that OpenNet shall not be held liable for any delays where OpenNet has exercised its best endeavours in its attempt to expeditiously remedy any obstructions from building owner, building management, home owner or End-User to OpenNet's installation schedule or any of the circumstances described in Clauses 2.6(e) and 2.6(f) above during the express service activation. In the event the Requesting Licensee raises a dispute or query on whether OpenNet had used its best efforts in expeditiously remedying the obstruction, OpenNet will provide evidence of such obstruction, the steps taken to remedy such obstruction expeditiously and the reasons for failure to remedy such obstruction."
6.11 (g)	Under this clause, the provision of express services is made "Subject to clauses 6.7 and 6A". These cross-references appear to be wrong (clause 6A relates to the joint investigation of faults, while clause 6.7 relates to optical power loss). We therefore submit that these cross-references should be deleted.
6.11 (h)	We would highlight that OpenNet's compensation under the ICO is considerably below the actual costs Requesting Licensees will incur, particularly in their dealings with customers. We therefore submit that Requesting Licensees should be able to claim all direct and indirect costs incurred due to OpenNet's failure to provision the express service in time.
6.12	Regardless whether the resulting delay is due to OpenNet's fault or otherwise, if this delay exceeds 2 weeks from the Date of Request, we submit that Requesting Licensees should be allowed to cancel Requests without incurring cancellation charges. In cases where delays are protracted, Requesting Licensees are experiencing numerous cases of customers terminating their orders. In such cases, the Requesting Licensees should also be able to cancel Requests without incurring cancellation charges.
8.1	We are very concerned by the proposed Fibre Takeover arrangements, which have not been endorsed by the Authority or by Requesting Licensees.
	These arrangements are contrary to the standard principle that one Requesting Licensee has no right to override the existing Requesting Licensee's service. We strongly submit that the proposed amendments to the ICO for Fibre Takeover should be deleted in their entirety.
	If OpenNet faces demand for multiple circuits into a single location, we strongly submit that OpenNet should simply comply with its RFP bid and build a second TP in that location.



8.4	This clause refers to Requesting Licensees being liable for the termination charges "for removing the Patching Service" at the Central Office.
	Requesting Licensees will have no visibility as to whether OpenNet needs to remove the Patching Service at its Central Office. In addition, it is OpenNet's responsibility to manage its own network (as it is the Requesting Licensees' responsibility to manage their networks).
	We strongly disagree that there should be such a charge, and we believe that this wording should be deleted from the revised ICO.
9.1	StarHub has encountered numerous cases where OpenNet's contractors have installed TPs in completely inappropriate locations (such as locations without power outlets). This makes it extremely difficult for StarHub to provide services to the customer.
	We would also note that customers will generally not be familiar with the complexities of optical fibre networks and the consequences of the decision they take on the location of the TP. We therefore suggest that, in event that the customer does not follow OpenNet's assessment and recommendation on the location of the TP, OpenNet must:
	(a) Explain to the customer the consequences of their decision; and
	(b) Obtain the customer's written acceptance of those consequences (with a copy of the customer's written acceptance being provided to the Requesting Licensee, at its request).
	We believe that such a regime will help to address the problems Requesting Licensees are currently facing.
9.15	We would note that the wording in this clause does not address situations where OpenNet's presence is required to perform the service (for example, the installation of the TP), where Onsite charges should not be incurred.
11.3 18.1 19.1	We submit that it is important to clarify what is meant by "Platform when available". We are concerned as to when (and how often) OpenNet will use this reference.
18	It is unclear how OpenNet will handle issues that arise from the relocation of service to another address. There could be a scenario in which the new address is a "home pass", but is not fibre-covered, where a second TP is required, or where there is a delay due to capacity issues, or "BM issues".
	It is therefore necessary for the revised ICO to specify how the service will be provisioned seamlessly in the new location.



19	We would highlight that there could be a scenario in which the customer wishes to move the location of the second TP. The ICO should set out the processes by which such requests will be processed.
20	StarHub is very concerned by this process. OpenNet is essentially seeking to disregard the rights of the Existing Requesting Licensee, in passing the connection over to the New Requesting Licensee. This process is unfair, inequitable, and unnecessary. If a New Requesting Licensee wants to establish a connection to a premise, and OpenNet has failed to provision sufficient capacity to that premise, OpenNet should simply comply with its NetCo RFP obligations, and install additional capacity.
	The process proposed by OpenNet will lead to controversy, delay, and customer frustration. New Requesting Licensees will have no visibility of the terms and conditions the Existing Requesting Licensee has with its customers. Ultimately the onus for the coordination and implementation of the works must lie with OpenNet, rather than with the Existing Requesting Licensee.
	We strongly submit that the proposed Fibre Takeover Process must 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
1	This clause implies that OpenNet does not have to perform (or pay for) the digging and building of the underground fibre trunks. For reasons of simplicity, we submit that OpenNet should simply handover the works to the Requesting Licensee at the TP (and not in the telecommunication riser). We would therefore propose that the new additions to this paragraph should be deleted.
2.2	It is unclear what is meant in this clause by "corresponding". We submit that this point must be clarified in the revised ICO. In addition:
	 It is unclear what would happen, under this clause, if ON is not able to resolve any claim within 30 days. We submit that, in such cases, the claims should be deemed to have been approved. If this is not done, OpenNet has no incentive to assess claims in a timely manner.
	We submit that that if OpenNet decides that a claim is invalid, it must give a written decision, supported by its justifications.
	 The processes and timeframes for handling such cases are still unclear. We submit that, to avoid subsequent confusion, it is necessary for these processes and timeframes to be clarified in the ICO.
2.6 (d) 2.6 (e) 2.6 (f) 5.4 (b)	We strongly submit that this clause should be amended to clarify that the exclusion to the Service Level Guarantee under this clause <u>only</u> applies to specific buildings or premises with genuine access difficulties, and does <u>not</u> apply to buildings or Residential End-User's Premises with "spring-boarding" issues.
	We would highlight that OpenNet has sought to limit its obligations, through the use of the terms "best endeavours", "such evidence as may be available" and "beyond the reasonable control of OpenNet". If these terms are included in the finalised ICO, this will create uncertainty, delay, and disputes. We respectfully request that these terms should be deleted from the ICO.



2.6 (k)	We would note that the term "Repair and Replacement" is capitalized in this clause, but appears to be undefined. We submit that this term should be defined.
	In addition, we submit that requests made under this clause should not be exempted from the Service Level Guarantees. It is reasonable to expect OpenNet to complete such work expeditiously, in line with the Service Level Guarantees.
2.8 & 2.9	The Service Level Guarantee remedy framework is inadequate in ensuring OpenNet's service levels remain at an acceptable level. Therefore we strongly submit that these clauses should be deleted in their entirety.
After 3.1 (A)(d)	StarHub is very concerned by this clause, which seeks to impose additional obligations on Requesting Licensees, and to absolve OpenNet from any responsibility. This is clearly contrary to the Authority's Direction. We therefore submit that this clause should be deleted after the first sentence.
3.3	It is reasonable for the Requesting Licensee to be responsible for obtaining the approval of the building owner / manager to use the cabling of the building owner / manager. However, it is necessary to state, for the avoidance of doubt, that OpenNet is still responsible for obtaining all approvals to have its cabling installed into the building.
Last Sentence Before 4.1	In disputes over property classifications, OpenNet has ignored the Authority's requirement for a short dispute resolution, and has stated that it will use "best endeavours" to resolve such disputes within a month. This is unacceptable.
	It will not be possible to provide service to customers while the dispute is outstanding (as it will not be possible to advise the customer how much they will be paying for the service). As such, OpenNet's proposal will lead to month-long provisioning delays and to extreme levels of customer dissatisfaction.
	In addition, given our experience with OpenNet (for example, with OpenNet seeking to classify SLA "black-and-white" homes as "Non-Residential" premises), we believe that OpenNet will seek to define properties so as to maximise the return OpenNet receives in serving that property. We therefore have no confidence that OpenNet can be trusted to determine the classification of properties in a fair and reasonable manner. We therefore submit that it is necessary for:
	 The OpenNet ICO to set out in greater detail the definition of "Residential" and "Non-Residential" premises (preferably setting out how specific types of properties will be characterised); and
	 For the Authority, rather than OpenNet, to act as the final arbiter of property classifications. We believe that it should be possible for the parties to define such properties in five Business Days.



After 4.1 (d)	We are very concerned by OpenNet's proposals in regard to NBAPs. Take-up of NBAPs is already very low (primarily due to the charges and processes that OpenNet has put in
(4)	place for those services). OpenNet's proposed regime would worsen this problem, and further suppress demand.
	OpenNet has failed to provide any clarity as to the definition of NBAPs. OpenNet has also failed to propose a timely process for dispute resolution. OpenNet has a direct financial incentive to define connections according to which classification will generate the highest return for OpenNet.
	We therefore believe that it is important to establish clear and principled classifications. We would propose that:
	 All locations within a Non-Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs;
	 All locations within a Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs; and
	• In line with their name, NBAPs would only apply in non-building circumstances (for example, for circuits to lampposts and to outdoor billboards).
	These definitions would help to address any disputes in regard to the definition of properties.
4.1 (d)(c)	We respectfully submit that Requesting Licensees should simply request the Non-Residential EUC service, and should not have to specify whether or not such installation of in-building enclosures, ducting and cabling is required. It is OpenNet's responsibility to determine such requirements. OpenNet should also indicate if it will be installing cable trays.
4.1	We respectfully submit that OpenNet should specify in this clause the precise
Last Sentence	circumstances in which it may reject an order.
4.1 4.2	As noted above, we submit that reference to "best endeavours" is too vague, and will lead to ambiguity and controversy. We submit that, in the interests of clarity, this reference should be deleted.



4.5	We respectfully submit that this process is unreasonable, unreasonable, and unnecessarily bureaucratic. The issue of property classifications only arises because the existing definitions are vague and subjective, and because OpenNet has a financial incentive to categorise properties according to which category generates the highest return for OpenNet. We strongly submit that this process should be deleted in its entirety, and should be replaced by a regime in which: • The property definitions are clarified (as outlined above) to give additional certainty to all the parties; and • The Authority should resolve any disputes on property classifications in a defined
	and time-bound process.
4.6	While this clause allows switching from GPON to OE (and vice versa), the revisions proposed by OpenNet fail to specify the timeframes required for the switch. In addition, we submit that the reference to "Cost-Oriented" charges is ambiguous, and will discourage take-up of this service.
	We therefore submit that this clause should be amended to clearly specify the timeframes and charges for switching.
4.9 New Addition	While this clause allows switching from GPON to OE (and vice versa), the revisions proposed by OpenNet fail to specify the timeframes required for the switch. In addition, we submit that the reference to "Cost-Oriented" charges is ambiguous, and will discourage take-up of this service.
	We therefore submit that this clause should be amended to clearly specify the timeframes and charges for switching.
4.9 (g)	This clause states that OpenNet will advise on the status of "affected orders". However, it is unclear whether OpenNet is referring to orders being processed, to completed EUCs, or to both. We submit that this point needs to be clarified in the ICO. StarHub submits that OpenNet should provide Requesting Licensees with regular updates on orders being processed and on completed EUCs.



5.2 Version 1 Version 2

We are deeply concerned by both options proposed by OpenNet, neither of which meets the requirements of the industry or the Direction issued by the Authority on this matter.

StarHub would instead propose a regime in which:

- (i) The current Maximum Quota should be significantly increased (to at least 5000 new applications per week);
- (ii) An Adjustment Mechanism should be structured around the SAPs set out under the NetCo RFP (and under the contract between the Authority and OpenNet dated 20 October 2008). OpenNet has agreed to comply with these SAPs, and so it is only fair that they should be required to comply with them.
- (iii) OpenNet's SAP would be assessed on a rolling 2-week period. If the SAPs are exceeded (i.e. if more than 20% of orders in the period exceed the prescribed SAP), OpenNet would have to increase its quota to ensure that the SAPs are achieved.
- (iv) OpenNet is aware of the major IT shows to be held each year ("namely IT Show in March, PC Show in June, Comex Show in September, and SITEX in November"). OpenNet will also be aware, from previous years' experience, what the likely levels of demand can be expected from those IT shows. Therefore, the rolling 2week review should continue to apply to those IT shows, without the need for specific "Seasonal Slots".
- (v) We understand the Authority's comment that splitting the Quota between Residential and Non-Residential orders could result in a "sub-optimal usage of resources within the sub-quota". Nevertheless, given the important of ensuring the timely provisioning of Non-Residential circuits, we believe that there is considerable merit in establishing separate sub-quotas for Residential and Non-Residential orders. However, if the sub-quota is not filled by Non-Residential orders, OpenNet should use the unused Non-Residential slots to fulfil Residential orders (and vice versa).

5.2 Seasonal Slots

We note that the term "Seasonal Slot" does not appear to be defined.

As noted above, we believe that OpenNet should be able to forecast, based on its previous experience, the likely levels of demand for the major IT fairs (which take place at set dates each year). As no Requesting Licensee will have visibility as to the total number of orders OpenNet actually received (or will receive), only OpenNet is able to make a realistic and practical forecast.

We also submit that OpenNet should update the Requesting Licensees, on a daily basis, on the usage status of the quota, to allow the Requesting Licensees to better plan for their next orders.



- This clause sets out the circumstances in which OpenNet can reject requests. We would note that:
 - Clauses (a) and (d) both refer to the Requesting Licensee committing a material breach of the ICO Agreement or this Schedule;
 - Clauses (b) and (e) both refer to cases where the first and second fibres of the first TP are in use (although clause (e) provides an alternative);
 - Under clause (c), OpenNet can reject orders if the "OpenNet Platform is
 experiencing technical problems", regardless of the scale or severity of those
 "technical problems". We believe that this clause is far too broad, and would
 allow OpenNet to reject requests under a wide range of circumstances. We
 strongly believe that this clause must be deleted.
- We are concerned as to how this clause (which removes the obligation from OpenNet to serve buildings outside the scope of OpenNet's FBO licence) will operate. For the avoidance of doubt, we believes the it necessary for this clause to specify:
 - The relevant clause of OpenNet's FBO licence; and
 - The circumstances in which this clause will be used.
- This clause allows OpenNet to reject orders in those cases where "OpenNet's Network has not been rolled out to that location". Given that OpenNet is supposed to have rolled out 95% of its network by mid-2012, it is unclear when this clause will be used. We therefore believe that either the statement quoted above should be deleted or clarify the circumstances in which this clause will be used.

In addition, if OpenNet does lack sufficient capacity, Requesting Licensee is only given 1 Business Day to select a new appointment or to cancel the order. However, 1 Business Day is insufficient, given the need for the Request Licence to liaise with the RSP, and for the RSP to liaise with the customer. As such, we submit that OpenNet should give the Requesting Licensee at least 3 Business Days to select a new appointment or to cancel the order. In addition, the Requesting Licensee should be given for the next available RFS date if it fails to respond in time.

5.10 (d) This clause refers to Requesting Licensees submitting the Cancellation Request via the OpenNet Platform "when available". It is unclear whether this clause is referring to: (a) the OpenNet Platform not being available; or to (b) the Cancellation Request not being available. We believe that this point needs clarification.

In case (a), it is also necessary to clarify whether the Requesting Licensee is allowed to submit a Cancellation Request, and not incur any charges in doing so, if the OpenNet Platform is not available.



5.10 (f)	We believe that this new paragraph is unnecessary, and that it should be deleted in its entirety. It is critically important for OpenNet to provide MSI in a timely and accurate manner. The fact that OpenNet has changed the classification of a property does not absolve OpenNet from its responsibility to provide accurate MSI.
6.13 6.14 6.15	The revised ICO now contains a number of subjective conditional statements, such as "its best endeavours", "such evidence as may be available" and "beyond the reasonable control of OpenNet". If such loose terms are allowed in the ICO, it would be extremely difficult to enforce the Service Level Guarantee. Therefore, we respectfully request that these terms should be deleted from the ICO.
6.16	Regardless whether the resulting delay is due to OpenNet's fault or otherwise, if this delay exceeds 2 weeks from the Date of Request, we submit that Requesting Licensees should be allowed to cancel Requests without incurring cancellation charges. In cases where delays are protracted, Requesting Licensees are experiencing numerous cases of customers terminating their orders. In such cases, the Requesting Licensees should also be able to cancel Requests without incurring cancellation charges.
9.1	StarHub has encountered numerous cases where OpenNet's contractors have installed TPs in completely inappropriate locations (such as locations without power outlets). This makes it extremely difficult for StarHub to provide services to the customer. We would also note that customers will generally not be familiar with the complexities of optical fibre networks and the consequences of the decision they take on the location of the TP. We therefore suggest that, in event that the customer does not follow OpenNet's assessment and recommendation on the location of the TP, OpenNet must: (a) Explain to the customer the consequences of their decision; and (b) Obtain the customer's written acceptance of those consequences (with a copy of the customer's written acceptance being provided to the Requesting Licensee, at its request). We believe that such a regime will help to address the problems Requesting Licensees are currently facing.
9.13	We note that OpenNet has failed to amend this clause in compliance with the Authority's Direction. We believe that it is necessary for this clause to specify that: a) The Request Licensee should not be responsible for any request made by any other party. The costs of such removal should not be borne by the Request Licensee; b) OpenNet should be responsible to secure the relevant approvals and consents and bear such costs.



9.15	We would note that the wording in this clause does not address situations where OpenNet's presence is required to perform the service (for example, the installation of the TP), where Onsite charges should not be incurred.
11.3	Under this clause, OpenNet is to provide Requesting Licensees with updates on the fault. However, the clause is vague and subjective as to when OpenNet will provide those updates. Given the need for RSPs to update their customers on OpenNet's faults, we propose that OpenNet must give Requesting Licensees with updates on an hourly basis until the fault is resolved.
18.1 19.1	This clause refers to Requesting Licensees submitting the Cancellation Request via the OpenNet Platform "when available". It is unclear whether this clause is referring to: (a) the OpenNet Platform not being available; or to (b) the Cancellation Request not being available. We believe that this point needs clarification. In case (a), it is also necessary to clarify whether the Requesting Licensee is allowed to submit a Cancellation Request, and not incur any charges in doing so, if the OpenNet Platform is not available.
20	In its Direction, the Authority stated that "OpenNet should extend greater flexibility by allowing RLs to also pick up OpenNet's connection at an intermediate point between the serving FTTB Node/MDF room and the Non-Residential premise". However, in OpenNet's draft, it is stated that "the RL shall perform all the necessary work to provision its services and be responsible from the TP in the vertical telecommunication riser to the Non-Residential Premise served". We would highlight that OpenNet has failed to follow the Authority's Direction. Instead of offering a flexible option to Requesting Licensees, OpenNet is imposing an extra obligation on Requesting Licensee for certain Non-Residential EUC scenarios.



Annex D Detailed Comments on Schedule 3:

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
1	We respectfully submit that, if the scope of the service being provided under this schedule is a "Layer 1 Service" (as with any other Residential or Non-Residential EUC), then OpenNet should not be charging Requesting Licensees for the digging and building of the underground fibre trunks to the NBAP (in the same way that OpenNet does not charge Requesting Licensees for the digging and building of the underground fibre trunks for Residential and Non-Residential EUCs).
2.2	It is unclear what is meant in this clause by "corresponding". We submit that this point must be clarified in the revised ICO. In addition:
	 It is unclear what would happen, under this clause, if ON is not able to resolve any claim within 30 days. We submit that, in such cases, the claims should be deemed to have been approved. If this is not done, OpenNet has no incentive to assess claims in a timely manner.
	 We submit that if OpenNet decides that a claim is invalid, it must give a written decision, supported by its justifications.
	 The processes and timeframes for handling such cases are still unclear. We submit that, to avoid subsequent confusion, it is necessary for these processes and timeframes to be clarified in the ICO.



2.6 (d) 2.6 (e) 2.6 (f) 5.4 (c)	We strongly submit that this clause should be amended to clarify that the exclusion to the Service Level Guarantee under this clause <u>only</u> applies to specific buildings or premises with genuine access difficulties, and does <u>not</u> apply to buildings or Residential End-User's Premises with "spring-boarding" issues.
	We would highlight that OpenNet has sought to limit its obligations, through the use of the terms "best endeavours", "such evidence as may be available" and "beyond the reasonable control of OpenNet". If these terms are included in the finalised ICO, this will create uncertainty, delay, and disputes. We respectfully request that these terms should be deleted from the ICO.
2.8 & 2.9	The Service Level Guarantee remedy framework is inadequate in ensuring OpenNet's service levels remain at an acceptable level. Therefore we strongly submit that these clauses should be deleted in their entirety.
After 3.1 (A)(d)	StarHub is very concerned by this clause, which seeks to impose additional obligations on Requesting Licensees, and to absolve OpenNet from any responsibility. This is clearly contrary to the Authority's Direction. We therefore submit that this clause should be deleted after the first sentence.
3.3	It is reasonable for the Requesting Licensee to be responsible for obtaining the approval of the building owner / manager to use the cabling of the building owner / manager. However, it is necessary to state, for the avoidance of doubt, that OpenNet is still responsible for obtaining all approvals to have its cabling installed into the building.



We are very concerned by OpenNet's proposals in regard to NBAPs. Take-up of NBAPs is already very low (primarily due to the charges and processes that OpenNet has put in place for those services). OpenNet's proposed regime would worsen this problem, and further suppress demand.

OpenNet has failed to provide any clarity as to the definition of NBAPs. OpenNet has also failed to propose a timely process for dispute resolution. OpenNet has a direct financial incentive to define connections according to which classification will generate the highest return for OpenNet.

We therefore believe that it is important to establish clear and principled classifications. We would propose that:

- All locations within a Non-Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs;
- All locations within a Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs; and
- In line with their name, NBAPs would only apply in non-building circumstances (for example, for circuits to lampposts and outdoor billboards).

These definitions would help to address any disputes in regard to the definition of properties.



4.3 This Clause sets out a list of the information that Requesting Licensees must provide to OpenNet. This list is apparently non-exhaustive (and so it is unclear exactly what information needs to be provided), and is unnecessarily duplicative. For example, it is unnecessary to provide the address and a map of the TP location, as well as the GPS coordinates.

This process is bureaucratic and unnecessary, and will further suppress demand for NBAP services. StarHub both provides and purchases leased circuit services to out-door locations. We do not give, and we do not provide, this level of information for those services.

We believe that the problem with NBAPs arises due to lack of clear definitions as to what should be considered a NBAP. We would propose that:

- All locations within a Non-Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs;
- All locations within a Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs; and
- In line with their name, NBAPs would only apply in non-building circumstances (for example, for circuits to lampposts and outdoor billboards).

If these definitions are adopted, there would be no need for the processes set out in this clause.

While this clause allows switching from GPON to OE (and vice versa), the revisions proposed by OpenNet fail to specify the timeframes required for the switch. In addition, we submit that the reference to "Cost-Oriented" charges is ambiguous, and will discourage take-up of this service.

We therefore submit that this clause should be amended to clearly specify the timeframes and charges for switching.

- This clause states that information on network outages will be sent to the Requesting Licensee "via email or OpenNet Platform". We believe that this clause should be modified to:
 - State that it is up to the Requesting Licensee whether it wishes to receive this information via email or via the OpenNet Platform; and
 - Specify the timeframes within which OpenNet will provide Requesting Licensees with information on network outages. If that information is delayed, it is essentially worthless.



4.7 (g)	This clause states that OpenNet will advise on the status of "affected orders". However, it is unclear whether OpenNet is referring to orders being processed, to completed EUCs, or to both. We submit that this point needs to be clarified in the ICO. StarHub submits that OpenNet should provide Requesting Licensees with updates on orders being processed and on completed EUCs.
5.2	We would note that NBAPs, by their nature, will be one-off installation, rolled out as unique projects. NBAP installations are likely to differ on a case-by-case basis. We therefore submit that NBAPs should not be included within the Maximum Quota.
5.3	We respectfully submit that OpenNet should not be rejecting orders simply because its "Platform is experiencing technical problems". In such cases, OpenNet should implement a stand-by system (using emails if necessary), and continue to receive orders.
5.4 (c)	We strongly submit that this clause should be amended to clarify that the clause <u>only</u> applies to specific buildings or premises with genuine access difficulties, and does <u>not</u> apply to buildings or Residential End-User's Premises with "spring-boarding" issues.
5.10	It is unclear from this clause what SAP would apply for NBAP Nodes. We believe that it is necessary to clarify this point. Moreover, if the Requesting Licensee elects to self-provide the NBAP TP from NBAP Node, the Requesting Licensee would presumably need time to do this. Therefore, it is necessary for this clause to set out an agreed process with agreed timeline for the activation of the NBAP Node service.
6.9 (a)	As noted above, in the interests of clarity, we submit that terms such as "best endeavours" and "evidence as may be available" should be removed from the ICO.
9.13	We note that OpenNet has failed to amend this clause in compliance with the Authority's Direction. We believe that it is necessary for this clause to specify that: a) The Request Licensee should not be responsible for any request made by any other party. The costs of such removal should not be borne by the Request Licensee; and b) OpenNet should be responsible to secure the relevant approvals and consents and bear such costs.



11.3	It is unclear what OpenNet is seeking by including a reference to the "OpenNet Platform when available". As this reference creates ambiguity, and suggests that the OpenNet Platform will not be available, we believe that it should be removed from the clause.
	• It is also necessary for this clause should specify the timeframes within which OpenNet will provide Requesting Licensees with information on network outages. If that information is delayed, it is essentially worthless.
Annex 3D	The purpose of this report is unclear. We cannot see any justification for this report (particularly on a 6-monthly basis). This report will simply increase the bureaucratic burdens associated with this service, without providing any offsetting benefit. We respectfully submit that the obligation to provide this report should be removed.



Annex 3E

This annex is bureaucratic, unreasonable, and unworkable. The annex appears to have been drafted with the sole purpose of discouraging Requesting Licensees from taking the service. In particular we would highlight that:

- Under clause 2.2, OpenNet reserves the right to reject any request for the service, apparently without explanation.
- Under clause 2.4, the Requesting Licensee can only begin the Digging and Trenching Work upon OpenNet's approval (with no timeframes as to when or if that approval will be given).
- Clause 2.4 also requires the Requesting Licensee to accept OpenNet's quote, regardless of how unreasonable it is, or pay Cancellation Charges;
- Under clause 2.6, the Requesting Licensee is obliged to provide OpenNet with written reports, along with pictures;
- Clause 2.6 also requires the Requesting Licensee to provide those written reports to OpenNet on the NBAP Connections on "such periods as ON may specify";
- Under clause 2.8.2, there can only be one NBAP Termination Point per fibre per NBAP Order, while clause 2.8.3 restricts the service to one End-User per Termination Point. These obligations undermine the economics of self-providing the NBAP TP, and unreasonably restrict how the Requesting Licensee provides its service; and
- Under clause 2.8.5, Requesting Licensees are obliged to accept an expensive and unnecessary audit process (which has been imposed for undefined reasons).

These provisions are so onerous and unbalanced as to make this service entirely unattractive to prospective Requesting Licensees. As OpenNet's responsibilities end at the NBAP Node, it should be entirely irrelevant to OpenNet what happens beyond that point. StarHub is not aware of any other operator in Singapore that imposes this type of obligations on users of wholesale services.

In order to make the service viable and reasonable, it is necessary to entirely redraft the Annex, to balance out the obligations of the parties, and to remove those points highlighted above.



Annex E Detailed Comments on Schedule 15:

While we note that the amendments to this Schedule are to be reviewed by the Authority, 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 Requesting Licensees (and eventually on RSPs and their customers), when those charges are unwarranted, excessive, and one-sided. We are also concerned that OpenNet has failed to make any changes to Schedule 15 mandated in the Authority's Direction of 27 February 2012. The Requesting Licensees and RSPs have considerable experience with OpenNet's charges, and will be able to provide valuable input as to the impact of those charges on the take-up of the Next-Gen NBN.

We therefore 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, prior to those charges coming into operation.

We would also note the following comments:

Clause	Comments
2.11.2	This clause proposes a Cancellation Charge for Express Service Activations. However, we respectfully submit that Cancellation Charges should not apply in those cases where OpenNet is unable to provision the service within the specified timeframe for this service.
12.3	We respectfully submit that Power Charges should be based on PowerGrid rates, and should not be set by OpenNet.
12.4	There is no justification or logic in imposing a \$50 "Ordering Charge". We submit that this charge should be removed from the ICO.



Annex F Detailed Comments on Schedule 18:

Clause	Comments
"NBAP"	As noted above, we strongly believe that greater clarity is needed in regard to the definitions of "NBAPs". We would propose that, in line with their name, NBAPs would only apply in non-building circumstances (for example, for circuits to lampposts and outdoor billboards).
	For the avoidance of doubt, the revised ICO should state that:
	 All locations within a Non-Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUCs; and
	 All locations within a Residential Premises that are not utilised for human habitation, should be classified as Non-Residential EUC; and
"Requesting Licensee's	We would note that this definition is flawed.
Network"	This definition defines "Requesting Licensee's Network" to mean "a Network owned or operated by the Requesting Licensee." However, OpenNet has defined "Network" to mean "the passive infrastructure portion of the NGNBN to be implemented and operated by OpenNet".
	Clearly, the Requesting Licensee will not own or operate the passive infrastructure portion of the NGNBN to be implemented and operated by OpenNet.
"Seasonal Slots Notification"	As noted above, this term is undefined. We believe that this issue can be address via the review mechanism StarHub has proposed.