

7 November 2012

Ms Aileen Chia
Deputy Director-General (Telecoms & Post)
Info-communications Development Authority of Singapore

Dear Ms Chia,

RESPONSE TO IDA CONSULTATION - INTERCONNECTION OFFER FOR THE PROVISION OF SERVICES ON THE NEXT GENERATION NATIONWIDE BROADBAND NETWORK - REVIEW OF NUCLEUS CONNECT PTE LTD'S INTERCONNECTION OFFER

- Singapore Telecommunications Limited (SingTel) refers to the public consultation on the Nucleus Connect Pte Ltd (Nucleus Connect) Interconnection Offer (ICO) for the provision of services on the next generation nationwide broadband network issued by the Info-communications Development Authority of Singapore (IDA) on 8 October 2012 (Consultation).
- 2. SingTel provides our response to the Consultation as attached.
- Please do not hesitate to contact us if you have any queries or require further clarification.

Yours sincerely

Sean Slattery

Vice President

Regulatory & Interconnect

Singapore Telecommunications Limited Company Registration No.: 199201624D

encl.



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference		Recommendations
Master Interconnection Offer (ICO) Agreement	5.6	Nucleus Connect shall make available to the Contracting QP, either in the ICO Agreement or as part of Mandated Services Information, the technical interfaces, specifications and standards, interoperability-testing related information, safety regulations and procedures, process and instructions, in each case, related to the provision to and usage by the Contracting QP of the Mandated Services.	SingTel submits that Nucleus Connect has not fulfilled its obligation to publish all technical interfaces, specifications and standards in its ICO or the Platform.  SingTel proposes that in addition to the review of the Nucleus Connect ICO, the IDA should also review whether Nucleus Connect has complied with its obligations and take such action necessary to ensure Nucleus Connect's compliance with the terms of its ICO and the Code Of Practice For Next Generation National Broadband Network OpCo Interconnection (namely section 2.3(a), section 10.7(a), and section 16.1 of Appendix 1).
			SingTel submits that information relating to the provision to, and usage by, the Contracting QP of the Mandated Services (such as the technical interfaces, specifications and standards) must be published in Nucleus Connect's ICO.  Such information must be made publically available in Nucleus Connect's ICO so that, for example, Licensees who are interested to acquire Mandated Services can procure



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
Kelefelice	Reference		compatible equipment and design their respective network to receive and use Nucleus Connect's Mandated Services.
			Furthermore, SingTel proposes that Nucleus Connect must ensure that all subsequent changes to the Nucleus Connect technical interfaces, specifications and standards must be made backwardly compatible to the existing technical interfaces, specifications and standards, and be subject to public consultation as well as the IDA's approval prior to implementation.
			The IDA would appreciate this necessary to ensure that End-Users and Contracting QPs who have procured compatible equipment or designed their network in compliance with Nucleus Connect's technical interfaces, specifications and standards would be would not be adversely affected in the event that Nucleus Connect makes changes to any of its technical interfaces, specifications and standards that causes the End-Users or
			Contracting QPs to be inhibited or unable to continue receiving and using Nucleus Connect's Mandated Services or causes End-Users or Contracting QPs to incur additional costs.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
Master Interconnection Offer (ICO) Agreement	8.2 and 8.3	8.2 If the Contracting QP Equipment does not comply with any of the provisions of Clause 8.1 or 8.7, the Contracting QP must immediately disconnect them or Nucleus Connect may (but shall not be obliged to) do so, at the Contracting QP's expense. If the Contracting QP asks Nucleus Connect to test the Contracting QP Equipment to ensure that they meet the relevant instructions, standards or laws, the Contracting QP agrees to pay Nucleus Connect any applicable Charges referred to in the relevant Service Schedule.  8.3 Nucleus Connect shall not be liable for failure to meet any service levels or other obligations under the ICO Agreement, if	Nucleus Connect has inserted a reference to Clause 8.7 which is not found in the
		such failure is caused by any Contracting QP Equipment which is found to be connected or used otherwise than in accordance with Clause 8.1 or 8.7.	
Master Interconnection Offer (ICO) Agreement	8.4(b)	(b) facilitate the means of entry and exit by Nucleus Connect or its personnel to the premises where such NC Equipment is to be located, for the purposes of installing, maintaining, repairing, replacing and/or collecting such NC Equipment;	Clause 8.4(b) should only relate to the situation where Nucleus Connect places the



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference		Recommendations
			amended as follows:
			"facilitate the means of entry and exit by Nucleus Connect or its personnel to the End-User Premise where such NTE is to be located, for the purposes of installing, maintaining, repairing, replacing and/or collecting such NTE"
			Should Nucleus Connect wish to deploy NC Equipment other than the NTE at the End-User Premise or to deploy NC Equipment at the Contracting QP's Premise for the provision of the Mandated Services acquired by the Contracting QP, Nucleus Connect must specify the type of NC Equipment to be installed, the purposes of such deployment and obtain the prior agreement of the Contracting QP.
Master Interconnection Offer (ICO) Agreement	8.5	The NC Equipment shall remain the property of Nucleus Connect at all times unless otherwise specifically agreed by the Parties in writing. In the event that the NC Equipment is damaged or lost, Nucleus Connect shall be entitled to impose on the Contracting QP the replacement costs of the NC Equipment.	Similar to SingTel's comments in Clause 8.4(b) of the Master ICO Agreement, Contracting QP should only be responsible for any damage to or loss of the NTE installed at the End-User Premise for the provision of the Mandated Services acquired by the Contracting QP.  Furthermore, SingTel submits that this



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference 8.6	The Contracting QP agrees (and agrees to take reasonable steps) to, if necessary having regard to the particular Mandated Service:  (a) ensure End-Users agree to allow the installation and use of NC Equipment at the End-Users' Sites;  (b) ensure that End-Users provide Nucleus Connect with access to End-Users' Sites and that End-Users provide a suitable and safe working environment for Nucleus Connect at the End-Users' Sites;  (c) prepare and provide a suitable place,	Recommendations  clause should be amended to explicitly exclude all damages due to fair wear and tear.  Nucleus Connect must propose a fair mechanism to apportion such replacement costs between the Contracting QPs in the situation where the NTE used to provide Mandated Services to more than one (1) Contracting QP at the same End-User Premise is damaged or lost.  Similar to SingTel's comment on Clause 8.4(b) of the Master ICO Agreement, the obligation in Clause 8.6 should only relate to situation where Nucleus Connect places the NTE for the provision of the Mandated Services acquired by the Contracting QP at the End-User Premises.  As such, SingTel proposes to replace all references to "Site" and "third party" with "End-User Premises" and "End-Users" respectively.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		by Nucleus Connect, for NC Equipment and electricity at the Site in accordance with Nucleus Connect's reasonable instructions, if any; and	
		(d) either:	
		(i) obtain all necessary third party consents (excluding wayleaves); or	
		(ii) provide reasonable assistance to Nucleus Connect where Nucleus Connect is the party obliged to obtain necessary third party consents, in relation to building alterations or additions, access to land or permission to put NC Equipment on property if such consents are necessary for Nucleus Connect to provide the Mandated Services.	
Master Interconnection Offer (ICO) Agreement	11.1 (d)	(d) the Contracting QP shall (at its own costs) (i) retrieve and return to Nucleus Connect all NC Equipment installed at the relevant End-User premises or (ii) arrange for appointments for Nucleus Connect's collection of such NC Equipment from the End-User premises. If any NC Equipment is	Similar to SingTel's comment on Clause 8.4(b) of the Master ICO Agreement, the obligation in Clause 8.6 should only relate to the situation where Nucleus Connect places the <u>NTE</u> for the provision of the Mandated Services acquired by the Contracting QP.
		lost, damaged or (as the case may be) Nucleus Connect is unable to collect the NC Equipment from the End-User premises,	On the issue of recovering Nucleus Connect's NTE at the End-User Premise, based on SingTel's experience as a RSP,



	Clause	Clause	SingTel's Concerns and
Reference R	eference		Recommendations
		Nucleus Connect shall be entitled to impose on the Contracting QP the replacement costs of the NC Equipment.	both the End-Users and Contracting QP will have limited or no rights to access the End-Users' Premises where the last day of the Contracting QP's services to the End-Users coincide with the last day of the End-Users' stay or presence at the Premises or the commencement of renovation or construction works at the End-Users' Premises.
			As such, it makes reasonable sense for Nucleus Connect to inform the Contracting QP of its intention to recover its NTE from the End-User Premise immediately upon receipt of the Contracting QP's Order for termination.
			Where Nucleus Connect requires the Contracting QP to coordinate appointments for Nucleus Connect's collection of its NTE at the End-User Premise, Nucleus Connect must collect its equipment within such period as coordinated and notified by the Contracting QP. If Nucleus Connect fails to recover its NTE within such period as coordinated and notified by the Contracting QP, neither the End-user nor the Contracting QP shall be made liable to Nucleus Connect for any damage or loss of



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference		
		Clause	the NTE.  In addition, the Nucleus Connect's NTE may be used to provide Mandated Services to more than one (1) Contracting QP. It is thus unacceptable to require the Contracting QP who terminates its Mandated Service to retrieve and return the NTE to Nucleus Connect without obtaining prior verification with and confirmation from Nucleus Connect. Nucleus Connect should propose a more robust mechanism in its ICO on authorising the Contracting QP to recover the NTE from the End-User Premises.  Nucleus Connect should also propose a fair mechanism for the recovery of NTE as well as apportion of such replacement costs where the NTE is damaged or lost in the situation where the Nucleus Connect's NTE is used to provide Mandated Services to more than one (1) Contracting QP.
			Finally, SingTel submits that this clause should be further amended to explicitly exclude all damages due to fair wear and tear.



Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
Master Interconnection Offer (ICO) Agreement	13.4	Without prejudice to the foregoing but subject to Clause 13.5, in no event will either Party's liability under the Master ICO Agreement for damages, losses, costs or expenses suffered or incurred by the other Party (or anyone else) or claimed by the other Party (or anyone else through the other Party) whether in contract, tort, negligence, misrepresentation, strict liability or statute or otherwise, exceed the total Charges paid or payable by the Contracting QP for the affected service in the twelve (12)-month period prior to the event giving rise to such liability, provided that in the case where such liability relates to Intellectual Property, the applicable limit shall be three (3) times the total Charges paid or payable by the Contracting QP for the affected service in the twelve (12)-month period prior to the event giving rise to such liability.	The liability which relates to Intellectual Property Rights infringement is limited to three (3) times the total Charges paid or payable by the Contracting QP for the affected service in the twelve (12)-month period prior to the event giving rise to such liability.  SingTel submits that the limit on the liability with regards to Intellectual Property Rights infringement should be independent of the charges payable. SingTel considers setting a limit of S\$10m with regards to the liability for Intellectual Property Rights infringement more reasonable.  On the limit of liability other than liability which relates to Intellectual Property Rights infringement, SingTel proposes to set the limit at three (3) times the total Charges paid or payable by the Contracting QP for the affected service in the twelve (12)-month period prior to the event giving rise to such liability.
Master Interconnection Offer (ICO) Agreement	21.6	Nucleus Connect will notify the Contracting QP in writing of any amendments to the ICO Agreement made in accordance with Clauses 21.3 to 21.5. Such notification may	SingTel submits that Nucleus Connect should notify Contracting QPs of amendments to the ICO Agreement in accordance with Clause 25 of the Master



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference	be made by way of publication on the RSP Portal.	Recommendations  ICO Agreement. Given that all amendments to ICO Agreement affects the rights and obligations of both parties who have entered into the ICO Agreement. Notices of amendment are significant matters and must be delivered to the other party in accordance with the requirements under Clause 25 of the Master ICO Agreement.  SingTel proposes to delete the changes proposed by Nucleus Connect.
General Service Terms and Conditions	2.2	The Contracting QP shall use the Platform to place Orders, or (only if the Platform is not in operation) shall send Orders using the application form attached to the relevant Service Schedule by email to orderdesk@nucleusconnect.com (and/or such other email address as Nucleus Connect may notify the Contracting QP from time to time) in the first instance or if email is not available for any reason by facsimile to (65) 6808 2820 (or such other facsimile number as Nucleus Connect may notify the Contracting QP from time to time) (the latter method shall hereinafter be referred to as the "Manual Process").	SingTel has significant amount of experience in participating in and implementing tenders that require SingTel's lease of multiple Mandated Services from Nucleus Connect to various locations around Singapore.  SingTel noted from its experience that it is very time-consuming and thus impractical for Contracting QPs to submit Orders and track each individual Order over the Platform. Tracking, updating the progress and processing a large number of Orders via excel worksheet is operationally more efficient for both Contracting QP and Nucleus Connect. Both parties would benefit from such an arrangement.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
			SingTel submits that Nucleus Connect should propose processes for the Contracting QP to submit and monitor the progress on processing a large number of Orders using excel worksheet submitted via email to orderdesk@nucleusconnect.com.
General Service Terms and Conditions	5.3	Notwithstanding paragraph 5.2, in situations whereby due to requirements imposed by data centre operators or other third party premises' owners, management or operators, Nucleus Connect needs to incur charges or fees (which can be one-time as well as recurring, including without limitation cabling charges, rack rental charges and power supply charges) in order to acquire and/or maintain access to data centres or third party premises in connection with the provision of the Basic Mandated Services, Nucleus Connect shall be entitled to impose on the Contracting QP such Charges as published on the RSP Portal.	centres or third party Premises and the charges or fees incurred by Nucleus Connect for acquiring and maintaining such access would benefit all Contracting QPs who acquired services from Nucleus Connect to serve the data centre operators or other third party within the Premises.  Nucleus Connect should propose a fair mechanism to apportion such charges or fees incurred by Nucleus Connect for acquiring and maintaining access to data
General Service Terms and Conditions	5.4	Save as stated in the applicable Service Schedules, the term of each activated Basic Mandated Service shall be for a Minimum	amended to explicitly state that the



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		Term of twelve (12) months. Each activated Basic Mandated Services shall continue for the entire Minimum Term until it is Deactivated in accordance with:  (a) these General Service Terms and Conditions; and/or  (b) the Master ICO Agreement.	Mandated Services with one (1) month's notice after the Minimum Term of twelve (12) months has elapsed.  As such, End-Users who have acquired
General Service Terms and Conditions	5.6(a)	(a) where Nucleus Connect is unable to procure fibre to the relevant building or premises from OpenNet;	SingTel proposes that Clause 5.6(a) should be amended as follows:  "where OpenNet is unable to provide fibre coverage to the relevant building or premises"  Nucleus Connect not being able to procure fibre from OpenNet could be due to many reasons other than OpenNet not able to provide fibre coverage to the relevant building or Premises.  For example, Nucleus Connect may be in breach of its own agreement with OpenNet. As such Nucleus Connect should only be entitled to reject an Order and not proceed



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
			with the provisioning of the Basic Mandated Service only where OpenNet is unable to provide fibre coverage to the relevant building or Premises.
General Service Terms and Conditions	5.6(d)	(d) where the building/home owner, building management or End-User at the relevant premises obstructs or prohibits the performance by Nucleus Connect of the relevant and necessary works for the purpose of provisioning such Basic Mandated Services;	
General Service Terms and Conditions	5.7(b)	(b) in the case of paragraph 5.6(d), the Contracting QP shall indemnify Nucleus Connect against any claims or legal proceedings which are brought or threatened against Nucleus Connect by such building/home owner, building management or End-User as a consequence thereof.	SingTel submits that the Contracting QP shall not be required to indemnify Nucleus Connect for any claims or legal proceedings which are brought or threatened against Nucleus Connect where the claims or legal proceedings is caused by the deliberate or wilful breach or negligence of Nucleus Connect including its contractors.
General Service Terms and Conditions	6.4	Notwithstanding paragraph 6.3, in situations whereby due to requirements imposed by data centre operators or other third party premises' owners, management or operators, Nucleus Connect needs to incur charges or fees (which can be one-time as	



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		well as recurring, including without limitation cabling charges, rack rental charges and power supply charges) in order to acquire and/or maintain access to data centres or third party premises in connection with the provision and activation of any Modification, Nucleus Connect shall be entitled to impose on the Contracting QP such Charges as published on the RSP Portal.	
General Service Terms and Conditions	7.2		Nucleus Connect is currently obligated to offer relocation services for any Basic Mandated Service under its ICO Agreement.  SingTel noted that Nucleus Connect's new proposed Clause 7.2 has instead; restrict its offer for relocation to Residential Per-End-User Connection and Non-Residential Per-End-User Connections only. SingTel submits that Nucleus Connect's proposed amendments deviate significantly from its existing ICO Agreement and must be rejected.
			In particular, Nucleus Connect must continue to offer relocation services for all End-User Connections, namely the Residential Per-End-User Connections, Non-Residential Per-End-User Connections, NBAP Per-End-User Connections, L2 VPN



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
			Services, L3 VPN Services and E-LAN Services.
General Service Terms and Conditions	8.3	In connection with the Deactivation of any Connection, if Nucleus Connect receives any request from the Contracting QP for Removal, Nucleus Connect will check if the Termination Point is in use by any party. Nucleus Connect will reject the request if the Termination Point is in use, otherwise Nucleus Connect shall perform such Removal which shall not include removal of any part of NetCo Network or Nucleus Connect's Network, surface trunking and/or Termination Point that are concealed either by a false ceiling, within any furniture or rendered inaccessible. The Contracting QP shall render all necessary assistance for the purposes of obtaining the relevant approvals or consents from the relevant building owner or authorities such that Nucleus Connect and/or its contractors have ease of access to perform such Removal. The Parties shall cooperate in good faith to secure the approvals or consents. Nucleus Connect shall not be responsible or liable for moving and/or shifting of any furniture or items at the relevant premises, re-plastering of the wall, performing any painting works and/or	On the issue regarding the collection of NTE at the End-User Premise, please refer to SingTel's comment on Clause 11.1(d) of the Master ICO Agreement.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		reinstating the wall and/or other fittings accordingly. The Contracting QP shall bear all applicable ON Charges and other third party charges for the Removal.	
General Service Terms and Conditions	9.13(c)	(c) the restoration of the Affected Connection where any site coordinating meeting, joint investigation meeting or fault identification coordination meeting is involved, except where (i) the fault is due to Nucleus Connect and (ii) the Contracting QP has not contributed to any delay in setting up the meeting. Notwithstanding the aforesaid, in determining whether or not Nucleus Connect has met the MTTR, the time taken from the start of arranging any site-coordination meeting, joint investigation meeting or fault identification coordination meeting up to the conclusion of the meeting, shall be always excluded;	The time spent during any site coordinating meeting, joint investigation meeting or fault identification coordination meeting that is necessary to resolve a fault is an integral part of Nucleus Connect fault restoration process.  As such, SingTel submits that it is inappropriate for Nucleus Connect to exclude the time spent during such site coordinating meeting, joint investigation meeting or fault identification coordination meeting from its computation of MTTR.  SingTel proposes to include the duration taken from the start of arranging any site-coordination meeting, joint investigation meeting or fault identification coordination meeting to the conclusion of the meeting in the computation of the MTTR.  Only the duration from the time Nucleus Connect informed the Contracting QP on its requirement to arrange a site-coordination meeting, joint investigation meeting or fault



Schedule	Clause	Clause	SingTel's Concerns and
Reference	Reference		Recommendations  identification coordination meeting to the time the meeting is scheduled to commence may be excluded.  Where Nucleus Connect is unable to attend the site-coordination meeting, joint investigation meeting or fault identification coordination meeting as scheduled by the Contracting QP for any reason, the meeting shall be deemed to have commenced at the
Conoral Sanias	0.12(a)	(a) (without projudice to out personal (d)	time the Contracting QP has scheduled for the purpose of computing the MTTR.
General Service Terms and Conditions	9.13(e)	(e) (without prejudice to sub-paragraph (d) above) Nucleus Connect is unable to obtain or maintain any licence or permission necessary to the restoration of the Affected Connection despite using its best efforts to obtain expeditiously or maintain such licence or permission. Notwithstanding the aforesaid, in determining whether or not Nucleus Connect has met the MTTR, the	Similar to SingTel's comments in Clause 8.4(b) of the Master ICO Agreement, Contracting QP should only be responsible to obtain and maintain all rights and permission necessary for Nucleus Connect to provision of the Mandated Services acquired by the Contracting QP at the End-User Premise.
		time taken by Nucleus Connect to obtain or maintain such licence or permission shall be always excluded; provided that in the event that the Contracting QP raises a dispute as to whether or not Nucleus Connect has used its best efforts to obtain or maintain such licence or permission, Nucleus	Accordingly, Clause 9.13(c) should be removed as Nucleus Connect must obtain and maintain all rights and permission necessary for the deployment of its own network.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		Connect will provide evidence that it has used such best efforts and provided further that where such evidence is to be obtained from OpenNet, Nucleus Connect will provide such evidence only upon receiving the same from OpenNet;	
General Service Terms and Conditions	9.13(i)	(i) the service unavailability is due to a planned network maintenance between Nucleus Connect and OpenNet;	SingTel proposes that the Contracting QP shall not be entitled to make any claim under this Clause 9.13(i) only in the situation where Nucleus Connect has informed the Contracting QP of its planned maintenance in advance.
General Service Terms and Conditions	14.1(d)	(d) the Contracting QP shall (at its own costs) (i) retrieve and return to Nucleus Connect all NC Equipment installed at the relevant End-User premises in connection with the Basic Mandated Service or (ii) arrange for an appointment for Nucleus Connect's collection of such NC Equipment from the End-User premises. If the NC Equipment is lost, damaged or (as the case may be) Nucleus Connect is unable to collect the NC Equipment from the End-User premises, Nucleus Connect shall be entitled to impose on the Contracting QP the replacement costs of the NC Equipment.	Please refer to SingTel's comment on Clause 11.1(d) of the Master ICO Agreement.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
General Service Terms and Conditions	Appendix 1 & 5 (a) and (b)		SingTel proposes to remove Clause 5(b) as it is a duplicate of Clause 5(a).
General Service Terms and Conditions	Appendix 1 -5(g)	(g) Where such Order relates to the taking up of a Basic Mandated Service and prior to the relevant RFS Date in respect thereof, the Contracting QP submits an Order to Modify such Basic Mandated Service.	should have the right to cancel an order without liabilities to Nucleus Connect in the
			It is unreasonable to require the Contracting QP to be responsible for charges where it cannot reach agreement following a negotiation with Nucleus Connect on the RFS date. Compelling the Contracting QP to bear Nucleus Connect's cost would shift the balance of the negotiation to Nucleus Connect's favour. As a result, the End-User would be gravely affected as the charges would be passed on to the End-User. The End-User would have to pay the charges as determined by Nucleus Connect if it cannot agree with Nucleus Connect on a RFS Date. This is neither acceptable to the End-User nor the Contracting QP.
General Service Terms and Conditions	Appendix 1 -9		Please refer to SingTel's comments for Clause 9.13(c), 9.13(e) and 9.13(i) of the General Service Terms and Conditions.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
Service Schedule - Non-	5.1(b)	(b) One (1) month's contract term	SingTel welcomes Nucleus Connect's offer for a one (1) month contract term.
Residential Per End-User Connection		(i) Subject to sub-paragraph (iii) below, when the Contracting QP subscribes to a Non-Residential Per-End-User Connection with a Minimum Term of one (1) month, the Contracting QP shall pay NC Charges ("1-month NC Charges") as calculated below:	The move would definitely benefit End- Users with the requirement for short duration services as well as Contracting QPs putting up road shows to demonstrate the capabilities of NGNBN services.
		- 1-month NC Charges = MRC x 3	However, Contracting QPs should only pay for the duration of its leases and not three
		where MRC means all relevant Monthly Recurring NC Charges as set out in paragraph 5.1(a).	times the monthly recurring charges. The charges for installation, rental and termination for a one (1) month's service is already quite substantial (\$500) without
		(ii) Nucleus Connect will commence charging the Contracting QP the 1-month NC Charges on the RFS Date.	Nucleus Connect imposing an arbitral three (3) months charge for every month of rental.
		(iii) When placing the Order for such Non- Residential Per-End-User Connection, the Contracting QP shall select the date of	As such, SingTel proposes to amend the computation for the "1-month NC Charges" as follows:
		Deactivation, failing which:	"1-month NC Charges = MRC"
		(1) such Non-Residential Per-End-User Connection will not be Deactivated upon the expiry of the said 1-month term but will continue to remain active until it is Deactivated in accordance with the General	



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
		Service Terms and Conditions; and  (2) the Contracting QP shall continue to be liable to pay the 1-month NC Charges even after the expiry of the said 1-month term until such Non-Residential Per-End-User Connection is Deactivated in accordance with the General Service Terms and Conditions.	
Service Schedule - Non- Residential Per End-User Connection	5.2(c)	<ul> <li>(c)Express SAP Charge</li> <li>(i) In addition to the Charges referred to in paragraph 5.2(b), an NC Charge of \$100 per Connection shall be imposed on the Contracting QP upon the submission of an Order for Express SAP in respect of the Connection.</li> <li>(ii) In addition to the Charges referred to in paragraph 5.2(b), an NC Charge of \$100 per Connection shall be imposed on the Contracting QP if the Contracting QP cancels the Order for Express SAP after Nucleus Connect's acceptance of such Order.</li> </ul>	In accordance with Nucleus Connect's obligation under section 3 of the Code Of Practice For Next Generation National Broadband Network OpCo Interconnection, Nucleus Connect must provide services at cost-oriented basis.  SingTel submits that the new charges must be audited and approved by the IDA in accordance with the principles set out in Appendix 1 of the Code of Practice for Competition in the Provision of Telecommunication Services 2012.
Service Schedule – Co- location Service			Nucleus Connect is currently offering access to its Co-location Space commercially.



Schedule Reference	Clause Reference	Clause	SingTel's Concerns and Recommendations
			SingTel submits that it is Nucleus Connect's regulatory obligation to provide open access to its network. Nucleus Connect should offer access to its Co-location space as an Ancillary Mandated Service at cost-based prices.
			Nucleus Connect should not be allowed to profiteer in order to fulfil its regulatory obligation to provide open access to its network.
			Furthermore, in line with the fundamental principle of modularity applicable to the ICO, Nucleus Connect must be required to allow a Contracting QP to deploy its own fibre in the same way that SingTel is required under its Reference Interconnection Offer (RIO).
			The ICO should be revised to require Nucleus Connect to offer fibre access at cost-based charges to enable a Contracting QP to deploy its own fibre to access Nucleus Connect's Mandated Services at the Nucleus Connect Co-location Space.