

**CONSULTATION ON SINGAPORE
TELECOMMUNICATIONS LIMITED'S PROPOSED
AMENDMENTS TO THEIR REFERENCE
INTERCONNECTION OFFER**

5 MAY 2005

**JOINT SUBMISSION OF MEMBERS OF
THE ASIA PACIFIC CARRIERS'
COALITION**

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STATEMENT OF INTEREST

We appreciate the opportunity given by the Infocomm Development Authority (“IDA”) to comment on the proposed amendments to Singapore Telecommunications Limited’s (“SingTel”) Reference Interconnection Offer (“RIO”) to offer local leased circuits (“LLC”) as a wholesale service

The carriers involved in preparing this joint submission (“Submission”) include (i) BT Singapore Pte Ltd, (ii) Cable & Wireless Global Pte Ltd, (iii) Macquarie Telecoms, (iv) MCI WorldCom Asia Pte Ltd, and (v) T-Systems Singapore Pte Ltd.¹ The carriers may also be submitting their own individual more detailed comments.

All of these carriers are currently purchasing services, such as local leased circuits, co-location and interconnection services from SingTel and will also likely be doing so pursuant to the RIO. The terms of the RIO are therefore extremely important to each of these carriers.

¹ This submission has been approved by the majority of APCC members.

INTRODUCTION

We welcome IDA's request for views and comments on Singapore Telecommunication Limited's ("SingTel") Reference Interconnection Offer ("RIO"). As mentioned, the RIO is of critical importance to us, as it deals with essential services we require in order to conduct our business.

We note that the one-month time frame in which to provide comments is too short, given both the length of the document and the importance of its contents. Accordingly, please note that this Submission contains key concerns only and any omission of comment with respect to any particular section does not mean that such section is acceptable to us.

In light of the number of concerns which the carriers have with the draft RIO terms and the complexity of some of these issues, we request the opportunity to have a meeting with IDA to discuss some of the matters in more detail.

GENERAL COMMENTS

As a general comment, we are concerned that the RIO imposes artificial and unnecessary financial barriers, in terms of inflating the upfront cost to Requesting Licensees (RLs) of seeking interconnection, leading to a bottleneck with respect to the promotion of competition in the market. We strongly urge IDA to review the security deposit and insurance requirements, as well as the ability for SingTel to impose "*other unidentified and additional charges*" which we discuss more specifically below. These are all unnecessary barriers to competition, which IDA should revisit and amend.

In addition, transparency should be further enhanced in the RIO, including in the following areas – information requirements from RLs, credit vetting process, charges etc. The RIO must be as transparent as possible to ensure an equal playing field for all parties.

STRUCTURE OF COMMENTS

Our comments on the draft RIO are set out in the following sequence:

- Part 1: Key concerns regarding the Main Body
- Part 2: Key concerns regarding the Schedules
- Part 3: Comments on Key Overall Issues in Schedule 4B – Cable Connection Services
- Part 4: Comments on Key Overall Issues in Schedule 7A – Wholesale Local Lased Circuits (Full Circuits)
- Part 5: Comments on Key Overall Issues in Schedule 7B – Wholesale Local Leased Circuits (Tail Circuits)
- Part 6: Comments on Key Overall Issues in Schedule 8D – Co-location at Submarine Cable Landing Station

Part 1. Key concerns regarding the Main Body

Part 1 of the Main Body

1. Security Deposit (S1.3 and Pt2; S6.6, S22.3, Attachment A)

We submit that the requirement to provide a security deposit of the greater of S\$20,000 or 2.5 times the estimated monthly Charges is unreasonable. Carriers purchasing a significant quantity of services from SingTel would be detrimentally affected as 2.5 times monthly Charges could equate to incredibly large amounts of money and unnecessarily increases the cost of doing business.

In addition, S6.6 requires RL to top-up this deposit, whenever requested by SingTel, but does not provide for a refund should charges decrease. It is unclear what would trigger such a request by SingTel. Therefore the requirement to provide a security deposit is unreasonable not only because it is an unreasonably large amount but also because there is no requirement for SingTel to refund any monies should Charges for a RL decrease over time. This financial tie-in locks in customers and is a barrier to switch to another service provider.

From a financial perspective, SingTel has not provided clear justification as to why these amounts were chosen and how they are applicable to each RL. Moreover, no explanation was given as to why the current system in place is ineffective to address SingTel's concerns. We note that this proposed security exists within a larger context of extremely (and in our view excessively) onerous credit and payment policies, as well as the fact that the RIO applies only to licensed FBOs and SBOs, who, to differing degrees, have already satisfied IDA of the adequacy of their financial structure, business plans and general suitability to operate in Singapore.

A further concern is that there is no transparency in the credit vetting process (S22.3) and it is not known how SingTel would undertake to assess a RL's creditworthiness nor on what basis. We submit that such arbitrariness promotes discrimination and refusal to supply services and we accordingly request that there should be transparency in SingTel's credit vetting process. IDA could refer to BT's published Credit Policy for its standard interconnection agreements as an example². Treatment of a failure by a RL to provide information as a material breach of the RIO Agreement (S22.5b) is too harsh.

We request that IDA delete the requirement for a security deposit, or failing that, to provide for a reasonable deposit amount on terms that are fair to all parties and to enforce transparency in the credit vetting process.

2. Assessment of notification of acceptance of RIO (S2)

As you would be aware, S6.3.2 of the "Code of Practice for Competition in the Provision of Telecommunication Services in the Republic of Singapore" ("Code") provides *inter alia* that IDA may "*review and revise (by adding to, eliminating from or modifying) the list of Interconnection Related Services and Mandated Wholesale*

² <http://www.btinterconnect.com>

Services and their application requirements (including prices, terms and conditions” by IDA by issuance of a notice in the Gazette and seeking public comment prior to adopting any modification. On the other hand, in S2.2 and S2.3 of the RIO, SingTel has proposed that it be permitted to seek an exemption from providing a service under the RIO. No mention is made in S2.2 and S2.3 of the Code requirement that any additions, eliminations or modifications to the RIO can only be made via the process described in S6.3.2 of the Code. For the avoidance of doubt and to ensure clarity, we urge IDA to delete S2.2 and S2.3, as the Code already provides for the process for additions, eliminations and/or modifications to the RIO.

In S2.4(a), SingTel’s stated commitment to respond “promptly” to requests for interconnection is too arbitrary, subject to interpretation and thus incapable of effective enforcement. SingTel should be required to commit to reverting to RLs’ within a stated period of time (e.g. within 5 days) on their requests for interconnection.

3. Representations and warranties (S3.1, S3.2 & S3.4)

S3.1 and S3.2 provide for certain representations and warranties on RLs and SingTel. These representations and warranties should be reciprocal. Specifically, S3.1(c) should also apply in full to SingTel and S3.1(d) should apply to SingTel insofar as the information provided to RLs by SingTel should also be complete, true and not misleading. The indemnification provision in S3.4 should also be reciprocal to also cover a breach by SingTel – otherwise, it should be deleted.

4. Time frames for amending RIO to include new services (S5)

We submit that SingTel should be required to include new services in the RIO within a certain timeframe. This requirement is notably absent from the RIO.

As IDA would be aware, all new services have a certain lead-time before they are officially activated. This allows SingTel adequate time to prepare for the service activation. We would urge IDA, as a basic principle, to require SingTel to include a new service in the RIO with sufficient lead time so as to enable competitive providers to make all necessary preparations for implementation and activation of a new dependent service so that it may be commercially available at the same time that SingTel is able to provide the same or similar service to its customers. In our view, this is necessary to promote a level playing field and for these provisions of the RIO to be consistent with the guiding non-discriminatory principles. These timeframes will necessarily differ from service to service. For example, in the case of cable landing station services, this notification to IDA should be provided by SingTel 6 months in advance of the associated cable system Ready For Provisional Acceptance (“RFPA”) date. The reason for this is that SingTel knows many months (if not years) in advance of the details of any new cable systems landing at its cable stations, and has ample experience with cable station management and existing cable station related services to determine the charges for these services in advance of the RFPA date. If SingTel argues that each new cable system is unique and terms need to be tailored to an individual cable system, and that SingTel is not in a position to do this until or after the RFPA date, this gives RLs even greater cause for concern. This would suggest that SingTel is contemplating significant changes from charges for current cable station access to cable systems, and RLs may find themselves burdened with new additional

costs and obligations to gain cable station access to new cable systems – delaying their ability to connect to these new cable systems. In any event, if any new cable system is likely to incorporate significantly different cable station landing techniques or technology, SingTel should again be aware of this well in the future and have had more than sufficient opportunity to develop and refine its charging arrangements in advance of the RFS date. This would allow all carriers a similar timeframe in which to begin their preparations for implementation and activation of a new service, promotes non-discrimination and levels the playing field. Allowing SingTel to amend the RIO, only once a service has been activated, would give SingTel a significant lead time over competitive carriers and accordingly an unfair competitive advantage. This is discussed in more detail in respect of Schedule 4B below.

Part 2 of the Main Body

5. Application of RIO to RL (S3.1)

In S3.1 of the RIO, SingTel purports to require RLs to provide services to SingTel on the basis of the terms and conditions of the RIO. This is unacceptable and contrary to the Code. Pursuant to the Code, SingTel is required to submit a RIO to IDA for approval. Accordingly, the RIO should be applicable to SingTel only and RLs should not be required to provide services to SingTel on the same conditions as provided for in the RIO. Requiring RLs to provide services to SingTel, the dominant licensee on the same basis would be contrary to the principles of competition. The reference in S3.1 to the applicability of the RIO to RLs should be deleted.

6. Expiration/termination of RIO (S4.2)

The RIO proposes an expiration date of the earlier of a number of occurrences, including 28 September 2006 (S4.2d). This timeframe would not provide for any meaningful use of SingTel's proposed RIO by RLs. We urge IDA to revise this expiry date to ensure that the RIO continues in force for at least 3 years from the revised Code date, i.e. 18 February 2008. We believe that a minimum of 3 years applicability would not only be in line with the intentions of the Code but also the minimum necessary to promote competition.

7. Additional Costs (S5.2, 12.4)

Throughout the Main Body and the Schedules³, there are references to the recovery of additional costs, outside the scope of Schedule 9, by SingTel. These sections allow SingTel to impose these additional costs on RLs, without IDA's approval. It is not clear to us what such additional costs (apart from the comprehensive Schedule 9) could entail – this is unacceptable.

In order to ensure business certainty and transparency and as a matter of principle, SingTel should not be allowed to impose charges on RLs that are not included in

³ Including but not limited to the following sections of the RIO: Sch3D: 8.1(a)&(b), Sch4A: S2, 3 & 4, Sch5A: S5.3, S17.4, S19.3 & 19.5, Sch5A Annex B: S2.4 & S3.8, Sch5B: S4.9 & S12.10, Sch 5B&C: S1.2, S1.5.2, S1.5.5, S1.6.4, Sch8: S1.2, S1.5.2, S1.5.5, S1.6.4, Sch8A: S11.1, Sch8B: S3.3, S11.1, Sch8D: S11.1.

Schedule 9. We urge IDA to insist that all additional costs be explicitly stated in Schedule 9 of the RIO.

In addition, throughout the Main Body and the Schedules, SingTel requires RLs to pay for connection/disconnection charges in circumstances where an RL did not request such services. RLs should only be required to pay for services which it actually orders for which the charges are filed and approved by IDA and listed in Schedule 9.

8. Suspension (S12)

As a general comment, the right to suspend services is too widely drafted. For example, in S12.1(i), a party is permitted to suspend services where “any action is taken by any creditor of the other Party to recover, realise or enforce any security over any assets of the other Party or to enforce any judgement against the other Party”. This is a very wide right to suspend services and potentially encompasses circumstances in which the other party is in a dispute with a third party. As IDA would be aware, the services encompassed by the RIO include “mission-critical” services and accordingly, IDA should limit suspension of services as far as possible. Another example is S12.1(j) which allows a party to suspend services where “the other Party fails to, or no longer satisfies, the requirements for Interconnection set out in Schedule 1”. S12.1(j) appears to give a party discretion to determine whether the other party satisfies the Interconnection requirements or not. This has the potential to be interpreted subjectively.

Section 12 also covers the situation where a SingTel invoice remains unpaid for 30 days (normal commercial terms) and following the issuance of a demand notice requiring a 7 days’ response (S12.1(a)). This is excessively and, in our view, inappropriately tight credit control. It does not make sufficient provision for mistakes and miscommunications that will inevitably occur from time to time (including by both provider and customer). In the context of the complex, high volume and high monetary value dealings that characterise transactions between competitive telecommunications service providers and incumbent operators, we believe that these tight time frames – as well as SingTel’s demonstrated and enthusiastic preparedness to seek enforce them – are excessive, unreasonable and atypical of the terms of credit that SingTel that would face in its capacity as a customer in other jurisdictions. In our experience, normal terms of trade for creditworthy customers would provide for a further 30 day period in respect of any follow-up letter of demand.

We urge IDA to reconsider the circumstances in which SingTel can suspend services and limit such circumstances as far as possible.

9. Assumption that IDA will issue an order to suspend or terminate services (S12.6)

The proposed S12.6 and S13.4(a) would allow SingTel to cease processing requests from RL and cease incurring costs, pending a decision from IDA. The effect of such a provision would be to allow a competitive operator’s entire business development (inasmuch as it is dependent on the provision of essential input services from SingTel) to be ground to a halt by SingTel as a result of a single act which, in SingTel’s untested opinion, warranted service suspension. We are unimpressed that such a provision has

even been proposed. In addition, these provisions wrongly assume that IDA will approve all requests by SingTel to suspend or cease services. SingTel should be required to continue complying with the RIO pending any decision from IDA.

10. Suspension and Reinstatement of services (S12.7)

We request clarification from IDA as to whether the entire process of obtaining a service would need to be followed again should SingTel or a RL suspend services and subsequently wish to reinstate the services.

11. Insurance (S21.1)

The insurance coverage required from each RL is unnecessarily onerous and utterly unrelated to the supply of services pursuant to the RIO. We struggle to see how SingTel has any legitimate interest in this aspect of an RL's internal business operations. Insurance is a business concern unique to each RL and a commercial decision appropriately left to each RL to undertake, rather than one subject to mandatory imposition by another company. In the circumstances, this insurance requirement does not seek to achieve any other purpose than to unnecessarily increase a RL's business cost and erect an artificial barrier to obtaining SingTel's RIO services. In any case, we believe that the indemnification provisions in the SingTel RIO would adequately cover for any such risks. For example, BT in the UK relies on express indemnity provisions in its standard interconnection agreements and insurance requirements are not applicable. We urge IDA to delete this insurance requirement in its entirety. Furthermore, SingTel has referenced a letter from IDA to SingTel dated 21 February 2005 ("Letter").⁴ In order to comment on sections of the RIO referencing the Letter, we would be grateful if IDA could provide a copy of this to us.

12. Confidentiality (S23)

As a general comment, the confidentiality provisions in this S23 are quite onerous. Confidential Information is defined as "the contents of those aspects of this RIO which the Authority has withheld from publication", whether provided "before, during or after the date of the RIO Agreement". As IDA would be aware, the RIO is drafted pursuant to the Code, and accordingly should adhere to the principles of competition and transparency. Accordingly, we urge IDA to revisit S23 to determine whether such onerous provisions are indeed necessary for SingTel's protection.

13. Consistency in Notice Periods

We note that notice obligations for SingTel as compared with the notice obligations for RLs are inconsistent. As a general rule, the RIO provides for SingTel's notice periods in "business days", whereas notice periods for RLs are stated in "calendar days". This is an example of the inconsistent treatment provided by SingTel to RLs. We urge IDA to review both the notice periods and the RIO generally to ensure RLs are fairly treated.

⁴ This Letter is also referenced elsewhere in the RIO, including but not limited to Sch3A: S22.

Part 2. Key concerns regarding the Schedules

Parts 3-7 of our Submission below discuss our specific concerns with respect to certain key Schedules. As mentioned, given the short timeframe in which to provide our Submission, this Part 2 addresses only some of our key concerns which are relevant to more than one Schedule.

1. Applications Limit⁵

Throughout the Schedules, arbitrary limits on the number of applications attended to by SingTel daily have been unnecessarily imposed. It is unacceptable that an artificial bottle-neck, in which SingTel limits itself to attending to only a certain number of applications per day, is imposed on carriers. Moreover, SingTel has stated that these limits are based on historical records. With the advent of the RIO and in the spirit of increasing competition, it is our belief that the number of applications for SingTel's services would increase. We urge IDA to lift all limits on application numbers to be processed by SingTel throughout the Schedules.

2. Security Issues⁶

The RIO allows SingTel to assess the availability of its services depending on the security and confidentiality requirements imposed by Governmental Agencies or Customers on SingTel. We contend that such assessments of security and availability be made at the application stage, rather than this later stage.

3. Decommissioning⁷

The RIO allows SingTel to assess the availability of its services depending on whether SingTel has plans or otherwise proposes to decommission such service. We are concerned that SingTel might use this section as a reason not to provide certain services to certain RLs. This would be discriminatory. Should SingTel require this section to be included in the RIO, we propose that SingTel should first be required to give a "decommissioning notice" to IDA of its plans and IDA should monitor the decommissioning to ensure that it does in fact proceed.

4. Series of requirements imposed by SingTel⁸

Of general concern is the "in series" requirement that a RL have certain equipment and co-location space before SingTel will process applications for other services. For example, SingTel will not provide a local loop until the RL has co-location space and equipment in place, although SingTel is equally aware that the necessary associated

⁵ Including but not limited to the following sections of the RIO: Sch3A: S5.2, Sch3B: S4.2, Sch3C: S3.2, Sch5A: S3.5, Sch5B: S3.7, Sch6: S1.2.2, S1.2.3, Sch8A: S3.7, Sch8B: S3.7, Sch8D: S3.7.

⁶ Including but not limited to the following sections of the RIO: Sch3A: S2.2(d), Sch3B: S2.2(c), Sch3D: S2.2(d), Sch5A: S2.2(d), Sch7A: S3.2(b), Sch7B: S3.2(b), Sch8B: S2.1(d).

⁷ Including but not limited to the following sections of the RIO: Sch3A: S2.2(e), Sch3B: S2.2(d), Sch8A: S2.1(e), Sch8D: S1.7, S.2.1(e).

⁸ Including but not limited to the following sections of the RIO: Sch3A: S5.4(i), Sch3B: S4.4(j), Sch5A, S11.1.

applications and installation work are in progress. This unnecessarily lengthens the timeframe to provide service to an RL. A mechanism to obtain all the required elements in parallel should be implemented.

5. Self Supply⁹

The RIO states that SingTel licenses its services on the same conditions as if it were providing itself with the equivalent service. We request IDA's clarification as to whether the reference to "same conditions" includes the cost of the service.

6. Notice Requirement for repairs and upgrades¹⁰

The RIO allows SingTel to carry out planned repairs or upgrades without notice to RL if it reasonably considers that it would not disrupt an RL's services for more than three hours. This is clearly unacceptable to RLs and would serve to seriously jeopardise their relationships with their customers. Furthermore, these sections could easily be abused as there are no checks and balances in place. Pursuant to these sections, for example, planned repairs and upgrades could be (i) carried out during peak periods of usage, (ii) exceed three hours (the only limitation is that SingTel reasonably considers they would not exceed three hours), (iii) carried out daily or more often etc.

All disruptions of RLs' services should be notified to RLs well in advance of the planned repair or upgrade. This would allow RLs to ensure the continuity of its services to customers and where necessary allow RLs to notify their customers of such downtime.

7. Termination Period¹¹

RLs are required to give lengthy notice to SingTel of its termination of services. For example, RL is required to give SingTel six months' notice of termination of its local loop license. This notice period should be shortened to one month.

Part 3. Comments on Key Overall Issues in Schedule 4B –Cable Connection Services

1. Remedies

S1.7 sets out the remedies available to a RL where SingTel has, through its own fault, failed to comply with the timeframes set out in the Schedule.

Compensation is currently limited to service credits equating to the period of the delay, which the RL is required to acknowledge constitutes a genuine pre-estimate of its losses. In fact, where such non-compliance results in delays in a RL's ability to activate capacity for commercial use, such a remedy is clearly inadequate: rather, such losses

⁹ Including but not limited to the following sections of the RIO: Sch3A: S9.3, Sch3B: S8.3.

¹⁰ Including but not limited to the following sections of the RIO: Sch3A: S11.1.4, Sch3B: S10.9, Sch5B&C: S1.5.6, S1.6.5.

¹¹ Including but not limited to the following sections of the RIO: Sch3A: S13.3, Sch3B: S12.3, Sch3D: S14.3, Sch5A: S16.3, Sch5B: S12.4.

may amount to economic losses arising from lost business. In these circumstances, losses would be readily quantifiable with reference to executed customer contracts.

The competitive commercial significance of this situation is greatly intensified given SingTel's character as a vertically integrated operator competing with the RL in dependent downstream markets, where SingTel stands to benefit directly from such delays in two ways:

- (a) in relation to specific commercial contracts in place between a RL and a customer; and
- (b) in creating a commercial environment in the Singapore market whereby downstream wholesale and retail customers perceive that only SingTel is capable to meet contracted provisioning times as a result of its control of key elements of the service activation process for international capacity.

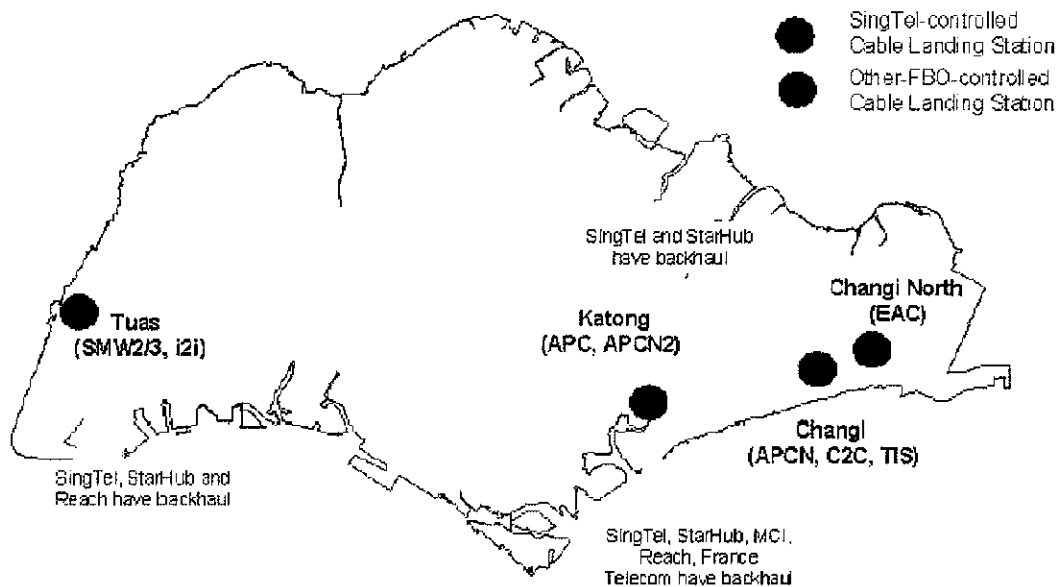
Given these factors, which are of direct significant to the competitiveness of the Singapore market for international services, together with the highly proximate and readily foreseeable nature of specific commercial losses that may be suffered by competitive operators arising from SingTel's failure to comply with the RIOs, we submit that this section should be amended to permit the recovery of economic losses from SingTel by a RL.

2. New Cable Systems

S2.2(a) provides that "*Where a new Cable System, which is not specified in S2.1 and Annex 4B.5 (New Cable System), lands at any Submarine Cable Landing Station, SingTel shall submit to the Authority for approval any necessary amendments to the RIO (including but not limited to Schedules 4B and 8D) to incorporate the New Cable System into the RIO, within **14 Calendar Days** from the Ready for Service date of the New Cable System. Upon approval by the Authority, SingTel shall amend the RIO and this RIO Agreement accordingly.*"

SingTel is either sole cable landing station partner (see Figure 2.1 below) or a significant owner of initial capacity in nearly all of the submarine cable systems landing in Singapore; and, as such, is actively and intimately involved in the deployment of these systems in Singapore, including in the preparation of landing stations, installation and testing of equipment and provisioning and activation of backhaul in preparation for the subsea cable landing. Accordingly, SingTel has long-term advance knowledge of the likely commercial Ready-For-Service date of the Singapore leg of these systems.

Figure 2.1 – Singapore cable landing station ownership



There is no legitimate reason why SingTel’s obligation to inform IDA of the new cable system’s existence – thereby bringing the new cable system within the scope of the RIO and enabling other carriers to commence necessary capacity activation processes - should be delayed until the physical landing of the system at the cable landing station. Such delay only serves to benefit SingTel at the expense of its competitors; namely, those seeking to activate new capacity on competitive backhaul services, as well as competitive backhaul operators themselves.

This is not consistent with standard international practice. Members of the APCC contributing to this submission own and manage cable stations throughout the world and are consortium partners in the world’s major cable systems. We possess extensive experience in these processes spanning many decades.

In other cable systems, collocation requests are expected to be submitted to cable landing station owners well in advance of the system’s RFPA date. The key reason for this is that there is no nexus between RFS (Ready for Service) and the execution of collocation agreements. Rather, the expectation (and commercial imperative) is that the cable station owner and interested parties are able to ensure, firstly, that adequate provision is made by the cable station owner to meet collocation requirements and, secondly, that interested parties are able to finalise the installation and testing of their equipment in advance of the RFS date. This enables the cable system to be fully utilized upon activation, including connectivity to competitive backhaul suppliers. Unless this process is completed in advance of RFS, the system cannot be used by interested parties upon activation, unless they purchase their backhaul from SingTel.

All of the C&MAs (Construction and Maintenance Agreements) with which we are familiar, as well as the Landing Party Agreements for most private cable systems,

require station operators to make collocation space available by no later than the RFPA date. This is in the best interests of all parties. It enables the station owner both to make adequate provision for these requests, including the possible build-out of additional floor space and power and the retrofitting of existing floor space; and to receive financial commitments from requesting parties for any such build-out work. It also eases any pressure on the cable station owner to make space available on time (although, as noted above, SingTel stands to benefit commercially from such failure). We also note that in recent years, due to developments in optronic technology, lead times for collocation requests have generally become less critical as carriers' needs are typically met through the utilization of rack space as opposed to the need for larger, caged floor space.

The adverse competitive effect of the existing notification obligation is extremely significant and inconsistent with the non-discrimination provisions of S3.1. This is because, as discussed above, SingTel, as a vertically integrated operator competing in dependent downstream markets, is not subject to the RIO provisions. It is therefore able to install and test its own collocation equipment in order to enable it to activate its own international services from the RFS date. We urge IDA to make its own inquiries in regard both to SingTel's internal procedures and the implementation of these procedures in relation to the impending landing SWM4 cable system, in order to assess the current practical extent of discriminatory practices and the resultant effect on competitive dynamics in the market for international services in Singapore.

We recommend S2.2 of this Schedule be amended to require SingTel to notify IDA by no later than 6 months prior to the anticipated Ready for Provisional Acceptance date of the New Cable System.

3. Ordering and Provisioning Procedure

S3.2 provides that *"SingTel shall process a maximum of five (5) Requests for Connection Service per day from all Requesting Licensees under this Schedule 4B. Any requests received by SingTel in excess of this maximum shall overflow to the next Business Day, in which case SingTel shall advise the Requesting Licensee of the queue number of the relevant request."*

We believe that this S3.2 should be removed. There is no practical bottleneck in relation to this service; the effect of this section is to create an artificial administrative bottleneck.

The subject matter of this process is not a mass market service involving bulk orders submitted by a large amount of service providers or consumers, but rather a mission-critical key upstream service required by a small and known number of carriers. The ordering and provision processes must reflect this fact.

Moreover, the technical requirements for enabling a cross-connection service are not overly complex and do not impose a heavy work requirement on SingTel. This is discussed in more detail below.

4. Ordering Lead Time

S4.1 provides that *“The Requesting Licensee shall submit its link activation and/or capacity activation requests in the form of a Link Capacity Activation Request Form (LCAR Form) provided in Annex 4B.3, with the relevant boxes checked. The LCAR Form must be provided to SingTel no less than twenty **(20) Business Days** prior to the requested date of activation of the (a) link (Link Activation Date) (b) capacity (Capacity Activation Date); or (c) both link and capacity (Link Capacity Activation Date)”*

The lead time of 20 business days for Link Activation and Capacity Activation is excessive.

The implementation of optical cross connection service typically takes about one 1 to 2 hours for a single technician to perform. This task that comprises the following activities:

- (a) installation of Fibre Cable: pulling a fibre cable connection between the Undersea Cable Frame (“Wet Frame”) and the Backhaul Network Frame (“Dry Frame”);
- (b) connection of Fibre Cable: labeling the fibre cable and connecting it into the Wet and Dry Frames; and
- (c) testing of the Connection and Updating database: checks to determine that the connection is proper and updating of local databases with the cross-connect details.

The time required to perform the described activities is typically independent of the quantity of capacity connected: that is, it takes about the same amount of time to perform an optical cross connect for a STM-1 as it does for an STM-4 or an STM-16.

SingTel’s operational experience with the provision of cross-connection services should not differ significantly from that described above. The engineering set up for connecting the Wet Frame to the Dry Frame is fairly straightforward from an engineering perspective.

It is therefore unreasonable for SingTel to require of 20 Business Days to enable a competitive licensee to access its own cable capacity on the cable system or to access the cable capacity owned by any Third Party for the provision of backhaul services or to enable that Third Party to transit traffic between Cable Systems.

In our experience, the network administrator of most submarine cable systems is required to activate wet capacity within 5 days of receiving the request.

We recommend S4.1 of this Schedule be amended to require the LCAR form to be submitted to SingTel no less than five (5) Business Days prior to the required date of activation.

Part 4. Comments on Key Overall Issues in Schedule 7A – Wholesale Local Leased Circuits (Full Circuits)

1. Circuit Migration

Schedule 7A Wholesale Local Leased Circuits (Full Circuits) does not provide for an effective framework migration from the commercial offer (DigiNet) to the Regulated Retail Minus offer.

The existing language of Schedule 7A appears to suggest that a carrier seeking to migrate DigiNet local leased lines (which may number in the hundreds) to the regulated offer must provide individual termination notices for each circuit followed by a corresponding activation of that customer connection on a dedicated FLLC application form. This is cumbersome and unnecessarily introduces resource constraints on both the RL and SingTel. The migration of the commercial DigiNet local leased lines into the regulated offer does not entail any further technical re-configuration on SingTel's end and as such should not warrant further terminations and activations to be done to the individual circuits. The delicate nature of the migration effort also puts at risk the ability to ensure that customer connections are not affected by downtime as result of the process.

Instead, we favour the approach adopted by IDA in its 8 October 2002 Decision to regulate SingTel's Cross Connection services – which, like leased lines, also comprise a key bottleneck service. In that decision, IDA mandated cross connection services provided by SingTel at its Cable Landing Stations as a RIO service. For these critical services, IDA mandated that a paper migration be effected. Carriers were able to migrate seamlessly to the regulated offer without the implementation of any cumbersome termination and reactivation procedure.

Part 5. Comments on Key Overall Issues in Schedule 7B – Wholesale Local Leased Circuits (Tail Circuits)

1. Un-Multiplexed V.35 Interfaces for the Regulated Local Leased Lines

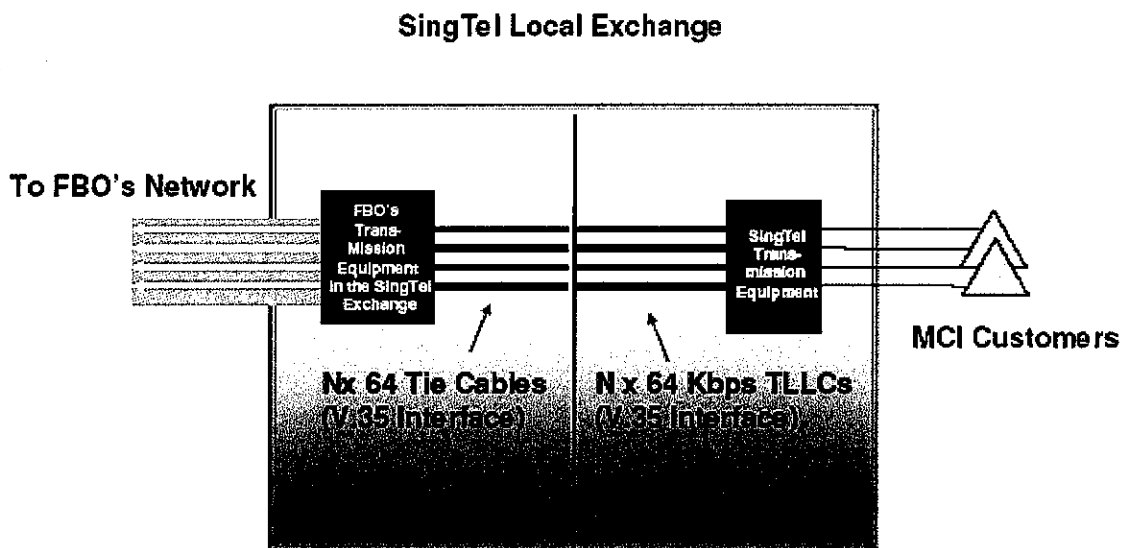
We are extremely concerned about the un-multiplexed V.35 interface for the regulated SingTel wholesale local leased lines.

An un-multiplexed V.35 interface is suitable for an “end-user” premise to “end-user” premise type connection and is inappropriate for a carrier-to-carrier interconnection.

This section contrasts the interface equipment required in IDA's mandated un-multiplexed V.35 for the regulated SingTel wholesale local leased lines with the multiplexed G.703 interface commonly found in SingTel's “DigiNet” commercial offer.

The regulated V.35 interconnection is depicted schematically in the following diagram provided by MCI (please note that this configuration is applicable to all competitive operators – and thus their customers – interconnecting with SingTel for this purpose):

TLLC Interconnection

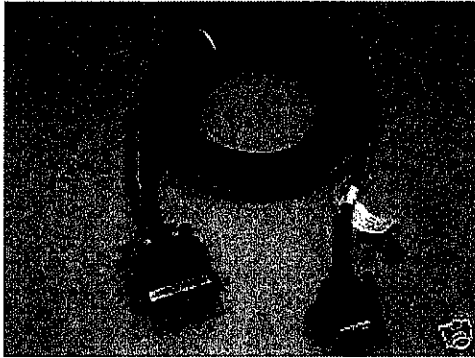


The interface equipment required to fulfill the above interconnection rules are as follows:

- (i) Winchester V.35 Interface Equipment
- (ii) An associated V.35 Serial Cable

V.35 SingTel LX Interconnection - the Interface Equipment Requirements

V.35 Serial Cable



V.35 Interface Equipment



Each set of connecting cable, consisting of a Winchester Interface equipment and a dedicated V.35 Serial cable, is required to meet the interconnection needs for every individual customer.

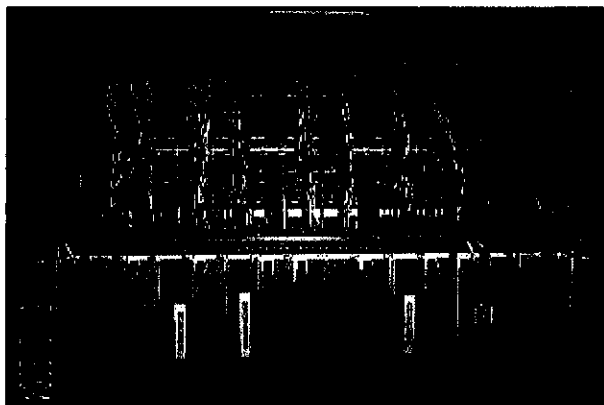
To demonstrate the sheer volume of meeting the interconnection rules under RIO Schedule 7B, a carrier seeking to serve 300 customers in the vicinity of a SingTel local exchange would require 300 dedicated sets of equipment to be installed at the local exchange. The V.35 Winchester interface equipment needs to be housed in collocation racks. The V.35 and its auxiliary equipment (for example, power amp fuses) could result in considerable collocation requirements. This results in considerable demands on space in each of the SingTel local exchanges in which the competitive carrier plans to collocate for Local Leased lines. Investing in customer premise type connection equipment to meet the demands of a carrier to carrier interconnection is also highly inefficient from an engineering perspective.

V.35 SingTel LX Interconnection – The Co-location Requirements



The cumbersome interconnection arrangement under an un-multiplexed V.35 interface can be remedied with the designation of a multiplexed G.703 interface at SingTel's local exchanges for the regulated local leased lines. A multiplexed G.703 interface does away with the Winchester type connections and the heavy demands on collocation racks, replacing it with a one-collocation rack to meet the needs of hundreds of customer connections. An efficient carrier-to carrier interconnection is depicted in the following diagram.

The International Practice: A G.703 Groomed Carrier to Carrier Interconnection



We believe there is no legitimate technical, commercial or policy reason why SingTel proposes to use a grossly more inefficient solution (which SingTel itself does not use) which unnecessarily raises rival's costs, increases administrative burdens and unfairly increases SingTel's revenues. In our view, the proposed requirement is totally inconsistent with the underlying principles of competitive equality and the economic efficiency supporting the Singapore regulatory regime.

Part 6. Comments on Key Overall Issues in Schedule 8D – Co-location at Submarine Cable Landing Station

1. Excessively long timeframes

We attach a plan setting out current procedures applying to SingTel-controlled cable landing station collocation requests, where the carrier wishes to connect cable system capacity to that of a competitive backhaul provider (see Annex A of this Submission).

Under current timeframes, we estimate that this process could require up to 5-6 months lead time. This is excessive and subjects competitive operators to significant commercial disadvantage. While we appreciate that a degree of streamlining has been implemented to previous processes, we regard this improvement as being of a marginal nature only. Current processes:

- contain a number of unnecessary stages, which should be condensed into a 1 or 2 stage process; and
- the time frames for SingTel activity are excessive.

This issue becomes of critical competitive significance in regard to new cable systems, as competitive operators are currently prevented from initiating collocation procedures once the new cable system has been incorporated into the RIO – which under current RIO provisions is within 14 days of the cable system RFCS date. In these circumstances, competitive carriers may lag a number of months behind SingTel in their ability to activate new capacity over their networks. The weeks and months following the initial activation of a system are often of particular commercial significance, as the competitive environment adjusts to new supply and pricing dynamics.

We note SingTel’s comment on new S3.6 and S3.7 in the revised draft that:

“SingTel considers that it is reasonably (sic) to impose a per week limit on the number of Requests for Co-Location. SingTel’s ability to handle requests for Co-Location, given the complicated and technical nature of such requests.”

In our view, SingTel’s assertions lack merit. We refer to our comments in relation to Schedule 4A above, in which we stated, in part:

- There is no practical bottleneck in relation to this service; the effect of this section is to create an artificial administrative bottleneck.
- The subject matter of this process is not a mass market service involving bulk orders submitted by a large amount of service providers or consumers, but rather a mission-critical key upstream service required by a small and known number of carriers. The ordering and provision processes must reflect this fact.
- Moreover, the technical requirements for enabling a cross-connection service are not overly complex and do not impose a heavy work requirement on SingTel.

The technical requirements relevant to collocation requests are, if anything, simpler than those for cross-connection.

We recommend that, consistent with international practice, the current process (including both the number of stages and the timeframes within each stage) should be radically simplified so as to enable RL’s to obtain necessary access within 5 business days of making an application. We would welcome the opportunity to working further with the IDA to develop a fair process.

2. Remedies

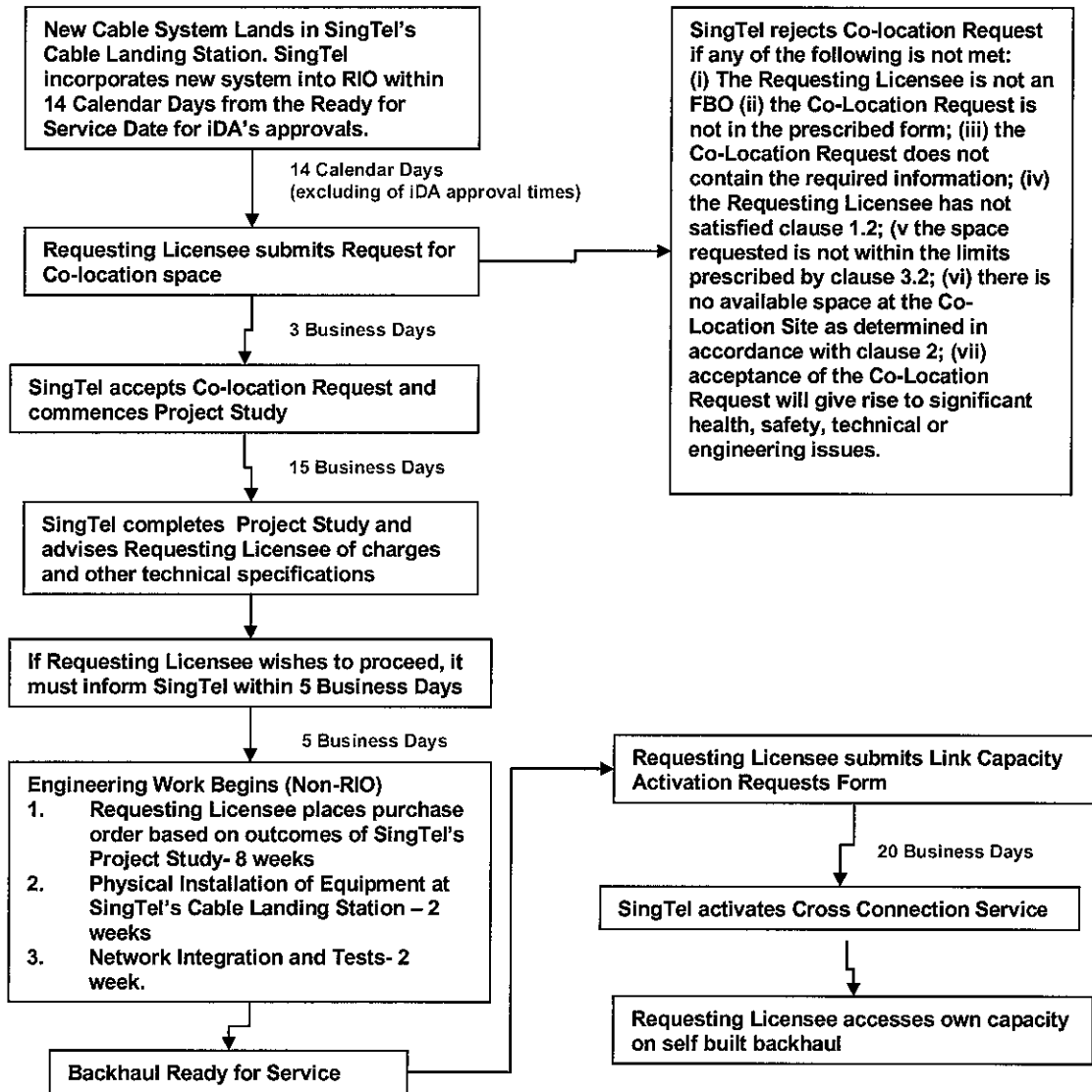
We note that S1.11 of this schedule limits SingTel’s liability for delays for which it is responsible, to service credits. We note that this is similar to the provisions contained in S7 of Schedule 4A, which discussed above. We affirm our earlier comments in relation to S1.11 of this Schedule.

Each of the carriers participating in this Submission would be happy to discuss these comments in more detail with IDA, at IDA's convenience. Please do let us know when would be a convenient time for this discussion.

ANNEX A
Schedule 8D Co-location at Submarine Cable Landing Station
Ordering and Provisioning Procedure

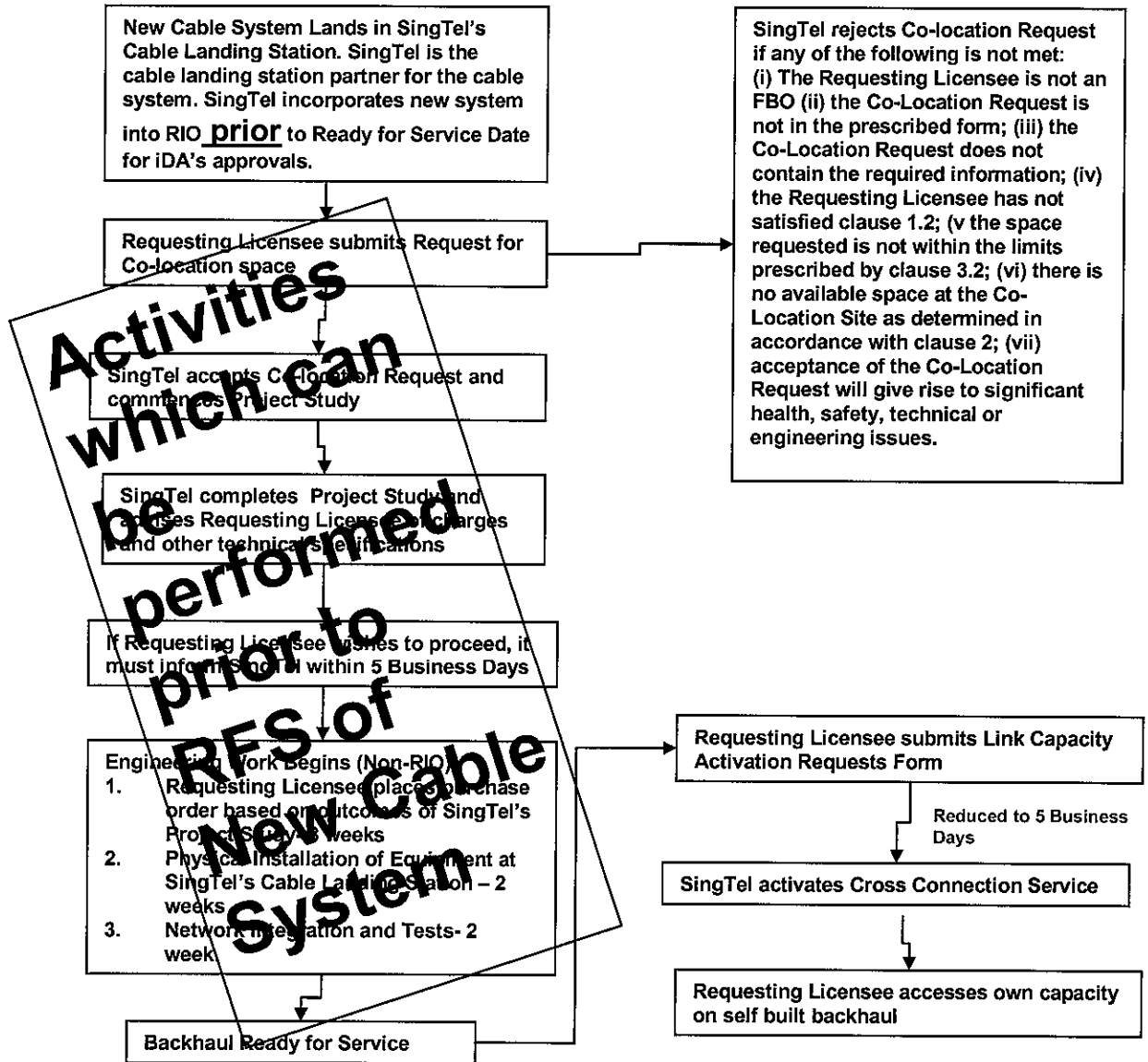
1	Submit Request for Colocation Space	3.7 SingTel shall process a combined total of no more than three (3) Co-Location Requests under Schedules 8A, 8B and 8D per week and any additional requests shall overflow to the next week.
2	SingTel commences Project Study within fifteen (15) Business Days after three (3) Business Days of the date of the Co-Location Request. SingTel completes the Project Study within fifteen (15) Business Days of its commencement and informs Requesting Licensee the charges and site preparation details.	4.1 Except where SingTel has rejected a Colocation Request, SingTel will commence a Project Study within fifteen (15) Business Days of the expiry of the timeframe for rejection of the Co-Location Request under clause 3.3. 3.3 If the Co-Location is rejected, SingTel will provide the reasons for such rejection to the Requesting within three (3) Business Days of the date of the Co-Location Request... 4.3 SingTel shall schedule the preliminary site survey and a joint site survey. SingTel shall complete the Project Study within fifteen (15) Business Days of its commencement.
3	Requesting Licensee to confirm in writing if it wishes to proceed with Co-location and agrees to pay the estimated Charge for the Site Preparation work within five (5) Business Days	

Capacity Activation and Co-Location application Procedure for Backhaul-New Cable Systems



**5-6 months lead time for the activation of
Cable Capacity on self built backhaul for
new cable systems (eg: SMW-4)**

Proposed Capacity Activation and Co-Location application Procedure for Backhaul-New Cable Systems



1 week lead time for the activation of Cable Capacity on self built backhaul for new cable systems (eg: SMW-4)