SINGAPORE TELECOMMUNICATIONS LIMITED RESPONSE TO IDA CONSULTATION PAPER: REVIEW OF SINGAPORE TELECOMMUNICATIONS LIMITED'S REFERENCE INTERCONNECTION OFFER (RIO)

1. THE COMMENTING PARTY AND STATEMENT OF INTEREST

- 1.1 Singapore Telecommunications Limited (SingTel) is pleased to comment on the Consultation Paper: Review of Singapore Telecommunications Limited's Reference Interconnection Offer, issued by the Info-communications Development Authority of Singapore (IDA) for comment on 18 June 2003 (Consultation Paper).
- 1.2 SingTel is licensed to provide telecommunications services in Singapore. Corporatised since 1 April 1992, SingTel is committed to the provision of state-of-the-art telecommunications technologies and services in Singapore. SingTel has a comprehensive portfolio of services that includes voice and data services over fixed, wireless and Internet platforms. SingTel services both corporate and residential customers and is committed to bring the best of global communications to its customers in the Asia Pacific and beyond.
- 1.3 As a leading provider of telecommunications services and a leading proponent of innovation and competition, SingTel has a strong interest in effective pro-competition regulation of Singapore's telecommunications industry.
- 1.4 SingTel's drafted and approved RIO has been in place for over two years. The RIO is drafted in line with, and subsidiary to, the Code of Practice for Competition in Telecommunications (the Code).¹

2. **EXECUTIVE SUMMARY**

- 2.1 SingTel is concerned with the issues raised for comment in this review. It does not seek to examine the RIO by reference to the Code's principles: to review the current requirements for regulation and remove regulatory obligations where they are no longer necessary or desirable. The Code explicitly states that the IDA will assess the level of competitiveness of the market after three years to determine whether regulation should continue. This assessment of competitiveness is absent from this review of the RIO.
- 2.2 Regulators around the world acknowledge the importance of maintaining relevant and effective rules in telecommunications. This is in order to send the correct signals about investment and infrastructure development. SingTel urges the IDA to apply a

Code of Practice for Competition in the Provision of Telecommunication Services (**the Code**).

competition analysis to the Code and translate its findings to the scope of the existing obligations in the RIO. Otherwise there is a risk of inappropriate regulation and reduced incentives for investment.

- 2.3 Many of the issues raised in the Consultation Paper are subsidiary to the real issue in this review: namely, to determine which services and obligations should be removed from regulatory control. Regulation is appropriate only where there is evidence of market failure. Licensees have had three years since liberalisation to purchase services, and exercise rights under the RIO, at cost-based prices. SingTel believes that the primary task of this review should be to determine whether existing obligations should be retained or removed in order to achieve the objectives of the Code.
- 2.4 The timing of this review is inappropriate. SingTel's obligations under the RIO are derived from the Code. This means the Code needs to be reviewed before the RIO is reviewed. The Code is to be reviewed on or around its upcoming third anniversary. Instead the IDA is reviewing the RIO now, without any reference to the Code review nor the Code's obligations as they currently stand. SingTel therefore believes the IDA should defer further review of the RIO until after the completion of the Code review.
- 2.5 The Consultation Paper therefore assumes that existing regulatory requirements in respect of the formulation and content of an RIO under the Code will not change. This is despite evidence which shows that since liberalisation, licensees have used alternative methods to provide services to customers outside the RIO.
- 2.6 Further, a number of services have never even been ordered by licensees in that time. Those services should no longer be classified as requiring regulatory control. These include:
 - the obligation to build local loop/sub-loop and building MDF distribution frame;
 - sale of internal wiring;
 - licensing of building lead-in duct;
 - licensing of tower space and co-location space at tower sites; and
 - co-location at satellite earth stations.

In addition, line sharing has never been ordered by Requesting Licensees to provide services to their end-users. SingTel submits that this lack of take up of each of these

services must be a threshold test for determining whether a service or obligation should continue to be included in the RIO.

- 2.7 Notwithstanding the above, SingTel also believes that many of the issues raised in the Consultation Paper do not fully appreciate how the RIO operates in practice. Matters such as forecasting, credit management and provisioning timeframes are not novel. Corresponding requirements are a feature of every interconnection agreement around the world. The RIO has not operated to disadvantage any licensees through such requirements.
- 2.8 The existing timeframes and assessment criteria required for particular services are reasonable, efficient and provide certainty to Requesting Licensees. Those requirements reflect the necessary provisioning work and lead time necessary to provide each service as ordered with due care and skill by SingTel. Furthermore, SingTel is concerned by IDA's apparent focus in its paper, for example, the "streamlining" of several processes or proposals to improve their operation. This is despite no evidence that the current processes and criteria raised in the Consultation Paper are inferior, unduly onerous on Requesting Licensees, or unnecessary.
- 2.9 SingTel is concerned to minimise disruptions to its network, the services of all Requesting Licensees and the provision of services to end-users. Accordingly, SingTel strongly recommends against amendments which would permit Requesting Licensees to undertake construction work currently performed by SingTel. This includes connecting of Requesting Licensee ducts to SingTel's manholes; and construction work for connection duct. In a multi-operator environment, the immense risk of damage and loss of services does not justify allowing all Requesting Licensees to undertake construction work of this nature.
- 2.10 A number of issues in the Consultation Paper are relevant to the fundamental basis of the RIO. The RIO is a standardised set of terms which have transparent and non-discriminatory application. SingTel is apprehensive about some aspects of this review which cast doubt on the essential features of the RIO, such as the removal of automatic amendments to each RIO Agreement in line with variations to the RIO. SingTel also cautions against unnecessary regulatory intervention in the day-to-day operation of each RIO Agreement. Aspects such as dispute resolution, suspension and termination rights, credit/debt management and other standard commercial dealings should be the primary responsibility of the parties to administer.
- 2.11 Reciprocity between licensees is a fundamental feature of interconnection regimes. Reciprocity must apply to the opportunity for SingTel to be supplied with an IRS from Requesting Licensees, irrespective of whether or not that Requesting Licensee acquires

that IRS from SingTel. Reciprocity is concerned with equal opportunity to be supplied with services, as well as identical terms of supply. The requirements for reciprocity in the RIO (where a Requesting Licensee provides services to SingTel) need to be clarified and strengthened. This is essential to end unproductive debate concerning the scope of Requesting Licensees' reciprocity obligations.

- 2.12 SingTel recognises that certain clarifications and improvements would assist the overall operation of the RIO. SingTel therefore raises a number of pertinent issues outside the Consultation Paper which should be considered by the IDA in its deliberations. SingTel also foreshadows that it will provide drafting proposals to the IDA during the course of this review.
- 2.13 In summary, SingTel does not believe that this review of the RIO should be occurring before the review of the Code. Further, the primary purpose of this review should be to determine which services should continue to be regulated under the Code and in the RIO, having regard to the more than three years of open competition in Singapore. SingTel nevertheless responds to the issues posed by the IDA and also raises additional issues of concern to SingTel based on the current operation of the RIO.

3. STRUCTURE OF SUBMISSION

- 3.1 SingTel notes that the IDA's call for submissions as part of this RIO review is phrased in terms of two broad areas: an open invitation to comment on any aspect of the RIO; and comments are sought on specific provisions of the RIO. SingTel submits a number of preliminary comments on the review in **Part 1** which addresses:
 - (i) the context and timing of this review;
 - (ii) the need for the RIO to respond to changes in the competitive environment; and
 - (iii) clarification of the IDA's process for conducting this review.
- 3.2 In **Part 2**, SingTel provides comments on the matters raised in Annex 1 of the Consultation Paper.
- 3.3 In **Part 3**, SingTel highlights a number of issues which have arisen outside the IDA's request for specific comments in the Consultation Paper. This approach is consistent with the IDA's invitation to provide for non-exhaustive consideration of issues relevant to the RIO.

3.4 In **Appendix 1** of this submission, SingTel provides a list of additional issues and the rationale for their consideration by the IDA in its deliberations. SingTel foreshadows that it will be providing specific drafting proposals and editorial comments as part of this review process. These drafting amendments will be provided in accordance with our comments in this submission.

PART 1: THE CONTEXT AND PROCESS OF THE REVIEW OF SINGTEL'S RIO

4. THE RIO SHOULD ONLY BE REVIEWED FOLLOWING A REVIEW OF THE CODE

- 4.1 Before making a decision to impose new regulatory obligations or maintain existing ones, it is necessary to gauge the present state of competition. The process of this review does not follow this process and reviews the RIO in isolation before assessing the Code. The RIO is based on obligations set out in the Code, meaning that changes to the Code will affect the content of the RIO. Accordingly, any variations to the RIO should only be made following a review of the Code.
- 4.2 It is significant that the timeframe for review of the Code, at least once every three years, is consistent with the effective date of the RIO under clause 5.3.5.8 of the Code. This correlation is deliberate, because it reflects the interaction between the Code and the scope of obligations under the RIO. The IDA approved the three year term of the RIO based on a corresponding timeframe for review of the Code. The Code also states that its three year review will assess the competitiveness of the market. A corresponding assessment of competition, as applied to the RIO, is absent from this review.
- 4.3 SingTel submits that this review of the RIO should include all aspects of interconnection, upon whom obligations are imposed, and any necessary safeguards (including minimum interconnection duties and dispute resolution). Market deregulation must be factored into the Code review process, which is premised on a general lessening in regulation as competition develops. In this context, where the underlying instrument (that is, the Code) is to be reviewed, it does not appear appropriate to review the RIO until conclusions have been reached on the relevance of these obligations and safeguards.
- 4.4 This review of the RIO inverts the process of determining the obligations which rest with Licensees, and the contractual mechanism to give effect to those obligations. The requirements for review of the Code and the RIO were intended to be carried out in conjunction with one another, not separately or without any reference to one another.
- 4.5 Accordingly, SingTel submits that the RIO should not be reviewed at this time. The RIO is currently being reviewed without assessing the relevance of existing IRS and minimum interconnection duties prescribed in the Code. This is despite both the Code and RIO setting out the same timeframe for review of their operation. The primary issue in this review should be whether SingTel's current obligations conform with developments in competition for existing services offered under the RIO. An informed assessment can only be made by examining the RIO in conjunction with, or following a review of, the Code.

4.6 A simple example illustrates the point. If, as a result of the Code review, the obligations concerning interconnection, the designation and IRS and the formulation of an RIO are materially changed to reflect the increase in competition in Singapore over the past three years, then the RIO would need to be reviewed again. Having two reviews of the RIO in a short period of time is inefficient. SingTel therefore believes the IDA should defer further review of the RIO until after the completion of the review of the Code

5. EACH IRS MUST BE EXAMINED TO DETERMINE ITS COMPETITIVE RELEVANCE

- As indicated above, this review does not address whether SingTel's interconnection obligations remain necessary or desirable. This should be the primary task of this review: to determine what obligations and services should remain regulated under the Code. The Consultation Paper makes no reference to the existing designated Interconnection Related Services (IRS) under the Code, or whether those IRS require amendment in accordance with the Code's regulatory principles.
- 5.2 For previous amendments to the RIO, the IDA has formed a preliminary view on whether any variations would meet the objectives of the Code. This competition perspective is missing from the overall review of the RIO. The Consultation Paper makes no reference to the Code's principles of proportionate regulation, or the elimination of provisions which become unnecessary as a result of competition.
- 5.3 The criteria for review of the regulatory scope of the Code, and in turn the obligations of Licensees, is explicit. The procedure for regulatory review is provided at clause 1.5.5.1, which states that as part of the Code's triennial review process:

"IDA will eliminate or modify provisions that it determines, based on experience and the growth and development of competition, are no longer necessary."

5.4 The Code also contains a review mechanism designed to encourage new entry and investment in infrastructure. The prices, terms and conditions applicable to IRS were designed for this outcome and subject to a three year review:

"Unless modified or eliminated by the IDA, the prices, terms and conditions specified in this Appendix will remain effective for 3 years from the effective date of this Code. This approach is intended to facilitate new entry, whilst providing incentive for new entrants to invest in infrastructure. As part of its triennial review of this Code, IDA will assess the competitiveness of the market."²

Appendix 2 of the Code, clause 1.6.

5.5 These principles of review are designed to guard against unwarranted regulation and facilitate the appropriate investment signals in line with the progress of liberalisation. This is consistent with the fundamental Code principle of proportionate regulation, to ensure that intervention is limited to the extent necessary to promote competition.³ It is a universal principle that regulation must change in accordance with the state of competition. Regulators must continually assess the state of the market so that regulation remains effective and appropriate. The OECD notes that indicators of competition should be utilised:

"Regulators as well as consumers can use such indicators. Indicators for the evaluation of effective competition provide regulators with some yardsticks by which to evaluate the success or failure of their competition policies...Monitoring of telecommunications competition sheds light on validating and tracking the effects of regulation imposed on the market."

5.6 Unlike other jurisdictions, the IDA's focus in this review does not reflect the need to evaluate the relevance of regulation. In Australia, for example, telecommunications regulation is continually assessed according to whether it remains warranted and measured against competition objectives. The ACCC has also recently set a timetable for the expiry of regulated services, 5 consistent with the following rationale:

"A foundation principle of competition policy is the need to continually reconsider the case for regulation. This is particularly important in a dynamic environment such as telecommunications. It ensures that the regulation continues to achieve its goals and does not lock the industry into particular technologies or modes of operation that may result in higher costs to market participants and detriment to end-users."

5.7 SingTel has noted above that the review of the SingTel RIO should not be viewed in isolation from the review of the Code. The IDA's decision to exclude or retain an IRS from the Code will impact on whether the SingTel RIO should be amended to account for this. Section 1.5.1 of the Code states:

"Markets forces are generally far more effective than regulation in promoting consumer welfare. Competitive markets are most likely to provide consumers with a wide choice of services at reasonable prices. Therefore, to the extent that

Section 1.5.3 of the Code.

OECD, Working Party on Telecommunication and Information Services Policies: Indicators for the Assessment of Telecommunications Competition, 17 January 2003 at 6.

⁵ ACCC, Expiry Dates for Declared Services, June 2003.

ACCC, Telecommunications Services – Declaration Provisions, July 1999 at 67.

markets or market segments are competitive, IDA will place primary reliance on private negotiations and industry self-regulation, subject to minimum requirements designed to protect consumers and prevent anti-competitive conduct..."

5.8 Similarly, section 1.5.5 of the Code states:

"As competition develops, regulation becomes less necessary and, in many cases, can be counter-productive. Therefore, IDA will strive to eliminate or modify the provisions of this Code to reflect the development of competition..."

- There has been a progressive narrowing of the range of IRS that are subject to the RIO. The reduction in the number of IRS reflects the introduction of effective competition and greater contestability in the relevant markets. SingTel supports the narrowing of IRS subject to the Code and the RIO as the relevant service becomes subject to effective competition. To date, the following IRS and mandated wholesale services have been removed from the RIO following the approval of the IDA on the basis of the above provisions:
- (a) SingTel's obligation to provide access to Duct/Manhole as an Essential Support Facility (ESF) expired in September 2002; and
- (b) the Code required SingTel to offer wholesale Dark Fibre and International Private Leased Circuits services for a period of 18 months from 31 January 2001 to 31 July 2002. During this period, SingTel offered Dark Fibre and International Private Leased Circuits as wholesale services under Schedules 7A and 7B of the RIO. The IDA amended the Code to lift SingTel's obligation to offer these wholesale services with effect from 1 August 2002.
- 5.10 Further, one of the universal criteria for regulation is the assessment of whether a service is essential or important to operators. A failure by Requesting Licensees to take up an IRS is strong grounds that the service is not essential. SingTel submits that where there is no demand for that IRS or obligation under the RIO, that IRS or obligation should be removed from the RIO. Although a number of Requesting Licensees may have signed Schedules for a service, a number of those services have never been acquired under the RIO. SingTel submits that the RIO should exclude IRS that are not used either extensively or at all by Requesting Licensees. Accordingly, the following IRS and obligations should be removed from the RIO:

The obligation to build local loop/sub-loop (Schedule 3A) and building MDF distribution frame (Schedule 3D)

5.11 SingTel has never received an order under Schedules 3A to build local loop/sub-loop and 3D for building MDF frame in the three years of the RIO. However, FBOs are rolling out network in areas, including the CBD, without reliance on SingTel. Accordingly, the obligation to build local loop/sub-loop and building MDF frame should be removed from the RIO.

Sale of internal wiring (Schedule 3C)

5.12 SingTel has never sold any internal wiring under Schedule 3C in the three years of the RIO. Accordingly, the obligation to offer the sale of internal wiring should be removed from the RIO.

Licensing of lead-in duct (Schedule 5A)

- 5.13 No lead-in ducts have been licensed under the RIO in the past three years. There are alternatives to using lead-in ducts and parties have deployed services by by-passing SingTel's lead-in ducts.
- 5.14 Since September 1998, and amendments to the *Code of Practice for Infocommunications Facilities in Singapore* on September 2000, SingTel is no longer the only operator in Singapore who receives building lead-in ducts from building owners, nor does it hold rights to all building lead-in in Singapore. SingTel submits alternative sources for lead-in duct have existed in Singapore since September 1999.
- 5.15 Building lead-in ducts supplied by building owners are not the only technically or economically viable means to access into buildings. Other FBOs have implemented their networks without the need to acquire building lead-in ducts from SingTel to serve their customers. FBOs typically construct their own building lead-in ducts into buildings including via breaking into underground car parks or along the building pillar. The lack of interest showed by FBOs in obtaining SingTel building lead-in ducts from SingTel, and their decision to implement their own means of accessing buildings, demonstrates that building lead-in ducts controlled by SingTel are not the only technical means for accessing into buildings.
- 5.16 It has been reported in *The Straits Times* that building developers have dug trenches to lay the necessary lead-in ducts to provide services. SingTel's understanding is that certain FBO business objectives include the provision of telecommunications infrastructure-related services. The IDA should not ignore the fact that there are available alternative

See Fibre-optic networks to be ready by year's end, The Straits Time, 10 June 2000.

See Straits Times Interactive, *Developers cough up trenching costs of up to \$65,000*, 10 July 2003.

suppliers and there is no market demand for acquiring building lead-in duct from SingTel. As such, building lead-in ducts are no longer an infrastructure that a supplier could use to restrict competition. With no demand for an IRS and available alternative means of delivering services, there is no basis to retain that service as an IRS in the RIO. Accordingly, the obligation to offer the licensing of lead-in duct should be removed from the RIO.

Licensing of tower space and co-location space at tower sites (Schedule 5B)

5.17 SingTel has never received a licensing request under Schedule 5B in the three years of the RIO. As there are alternatives available and being utilised by Requesting Licensees to mount tower equipment, the obligation to offer the licensing of tower space and colocation space at tower sites should be removed from the RIO.

Co-location at satellite earth stations (Schedule 8C)

5.18 SingTel has never received a co-location request under Schedule 8C in the three years of the RIO. As there are alternatives available to Requesting Licensees to access space segment satellite capacity, the obligation to offer co-location at satellite earth stations should be removed from the RIO

Line sharing (Schedule 3B)

- 5.19 Line sharing has, so far as SingTel is aware, never been ordered to provide a competitive service by Requesting Licensees to their end-users. SingTel has received only two requests for line sharing, which we understand were ordered by the relevant Requesting Licensee for testing purposes only.
- 5.20 SingTel submits that the regulatory trends of other jurisdictions are instructive with respect to line sharing. De-regulation of line sharing is not novel and has recently been considered in the United States. In February 2003 in its Triennial Review of telecommunications competition, the FCC rules that line sharing will be phased out over three years and no longer required to be made available as an unbundled element. The FCC decision reflected two imperatives: the desire to provide greater incentives for broadband build-out; and greater "granularity" in determining unbundled network elements. The FCC's decision is directly relevant to Singapore, as the goals of competition are very similar. The FCC, however, demonstrated the universal principles of flexible and appropriate regulation:

"So the real goal of Congress was to promote investment in our telecommunications infrastructure so that consumers could benefit from the most advanced technologies at reasonable prices. This means we must create a stable and clear regulatory environment that promotes competition without burdening incumbents with unnecessary obligations to unbundle elements that are otherwise available without impairment."

Requesting Licensees have had three years in which to utilise these services under the RIO. That is, three years to enjoy the benefit of these IRS at cost. The rationale for including these services in the RIO was to encourage service-based entry until Requesting Licensees established their own networks. Requesting Licensees have shown that they do not wish to rely on SingTel at all for these services. Broadband services are still being rolled out in Singapore although through means other than seeking line sharing under the RIO. The absence of interest by Requesting Licensees in line sharing as a means of rolling out broadband shows that there is no competitive need for these services and obligations to remain subject to regulation. There is no justification for retaining these services in the RIO.

6. THE PROCESS OF THE REVIEW MUST BE CLEARLY DEFINED

- 6.1 SingTel submits that the process for this review is unclear. The Consultation Paper does not describe how the submissions received by the IDA will be assessed, or how it will present any recommendations or submit these for public comment, or the manner in which any recommendations will be implemented. SingTel's view is that the IDA's general statement that it will "consider the views and comments and target to complete its review within the next 3-4 months" fosters uncertainty as to its regulatory intentions and outcomes. ¹⁰ In turn, this risks manifesting itself as potentially detrimental to the stability and investment incentives of the telecommunications sector.
- 6.2 SingTel foreshadows that it will be providing drafting proposals to expand on our comments responses in this submission, as well as responding to the submissions received from other parties. We further believe that it is appropriate and highly desirable for the IDA to factor our drafting and responses into its deliberations. Reasons for this include the unique ability of SingTel, again as the authors and administrators of the RIO, to alert the IDA to potential conflicts or inaccuracies which may result from seemingly minor variations to its terms. As the RIO is a complex and inter-linked series of provisions, this is the optimum process in the interests of ensuring a consistent and robust RIO. For example, a single amendment may require cross-referencing throughout the RIO Main Body and across its Schedules to be varied accordingly.

FCC, Separate Statement of Commissioner Jonathan S Adelstein re. review of section 251, Unbundling Obligations of Incumbent Local Exchange Carriers, 20 February 2003.

¹⁰ Consultation Paper at 4.3.

6.3 Accordingly, the IDA's final recommendations should therefore be provided to SingTel to determine corresponding drafting amendments. SingTel would then make necessary drafting amendments, and submit a new conformed copy of the RIO to the IDA for approval. SingTel also foreshadows that it will provide the IDA with drafting proposals arising from the issues raised in this submission.

PART 2: RESPONSES TO SPECIFIC RIO PROVISIONS RAISED IN THE CONSULTATION PAPER

7. INTRODUCTION

- 7.1 In this Part, SingTel sets out its responses to the specific issues raised in Annex 1 of the Consultation Paper. Our comments here may be categorised into the following themes:
- (a) The importance of examining the availability of substitutes for a service, how alternatives to IRS have been used in practice and whether existing services and obligations in the RIO require ongoing regulation to meet competition objectives.
- (b) The adverse incentives created by inappropriate regulation of existing services and obligations. This includes the interests of promoting facilities-based investment and competition.
- (c) The need to preserve commercial certainty and the validity of contractual arrangements.
- (d) Ensuring that the RIO meets the non-discriminatory standard by offering a standardised set of terms offered to all Requesting Licensees.
- (e) Evidence that a number of requirements in the RIO reflect existing commercial practice, do not materially disadvantage Requesting Licensees and do not require amendment.
- (f) The importance of clarifying the IDA's role as regulator and arbitrator for dispute resolution.
- 7.2 SingTel's primary concern with the issues raised at Annex 1 of the Consultation Paper is that the primary purpose of this review is not addressed. The Consultation Paper does not raise any issues relevant to how each IRS should be examined to determine whether ongoing regulation is necessary. SingTel is concerned with an apparent assumption that all existing regulated services will continue to be regulated, regardless of any utilisation or need for ongoing regulation of those services.
- 7.3 SingTel notes the IDA's references to potentially "streamlining" several processes or improving their features. There is no evidence that the current processes and criteria raised in the Consultation Paper are inferior, unduly onerous on Requesting Licensees, or unnecessary. Even if these issues have been previously raised with the IDA, no such concerns have been raised with SingTel. The IDA's rationale for raising these issues is unclear and detracts from what should be the central issue of this review: to exercise the

Code's principles of proportionate regulation, to the extent necessary to meet its competition objectives.

8. POLICY POSITION ON THE RIO

8.1 The Consultation Paper states that:

"Given that SingTel continues to possess market power and controls facilities that directly connect to end-users, IDA's policy position is that SingTel's RIO continues to be relevant and critical..." ¹¹

- 8.2 SingTel submits that the IDA's use of the term "market power" must be applied to each IRS and other obligations mandated under the Code. SingTel has commented in sections 4 and 5 above about the timing of this review and the need to consider the need for regulation of a particular service as part of the Code review and hence the review of the RIO.
- 8.3 As noted in **Part 1**, a number of IRS have never been utilised by Requesting Licensees. This is often due to the availability of substitutable services, which Requesting Licensees have chosen to use instead of regulated services. It is also due to the service simply not being required by Requesting Licensees, as is the case with line sharing. This highlights the importance of examining whether certain IRS should continue to be designated under the Code, which requires a review of the Code prior to reviewing the RIO.
- 8.4 Requesting Licensees have been offered IRS at regulated prices, terms and conditions for three years under the RIO. Where those services have not been (or hardly been) required by Requesting Licensees, as evidenced by those services not having been ordered over the past three years, those services should now be excluded from regulation. SingTel should now be able to offer those services on commercial terms.

9. ACCEPTANCE PROCEDURES: PART 1 OF THE RIO

9.1 A Notification of Acceptance of RIO will be non-conforming if the services (the subject of the Notification) are already being supplied under an existing agreement. The removal or dilution of this requirement is highly undesirable. It will mean that a Requesting Licensee may order a service under both a RIO Agreement and an existing agreement. There would be no certainty as to the applicable terms and conditions which would apply to the supply of that service. Parties will be able to pick and choose which parts of different agreements apply to the supply of the same service. The acceptance procedure

¹¹ Consultation Paper at 2.2.

is therefore sound from a contractual and commercial perspective. If there is doubt as to whether a service will be subject to an existing contractual arrangement, it is in the interests of both parties to refrain from commencing supply of that service under the RIO. The purpose of this acceptance procedure is to preserve contractual certainty.

- Olause 2.1(e) does not require a Requesting Licensee to terminate the supply of a service under an existing agreement before submitting the Notification of Acceptance. It does not cause disruption to the supply of services or invalidate existing agreements. It only requires the Requesting Licensee to notify SingTel of its intention to cease acquiring services under that existing agreement. This gives the Requesting Licensee the opportunity to terminate its existing agreement and seamlessly commence ordering new services under its RIO Agreement. This is a logical precursor to clause 29 of the RIO, which states that a RIO Agreement will supersede all other agreements in relation to its subject matter. A Requesting Licensee therefore cannot insist that a prior existing agreement for a service should remain on foot when it enters into a RIO Agreement for supply of the same service.
- 9.3 The removal of clause 2.1(e) will not provide any benefits to Requesting Licensees. It will only result in contractual uncertainty and lead to more disputes.

10. CLAUSE 4 OF THE MAIN BODY: COMMENCEMENT, DURATION AND REVIEW

- 10.1 The fundamental feature of the RIO is that it is a standing offer contract. It is a standardised set of terms offered to all Requesting Licensees on a non-discriminatory basis. Each Requesting Licensee is given commercial and regulatory certainty because it knows that SingTel supplies to every other similarly situated Requesting Licensee on non-discriminatory terms and conditions. The only way to satisfy the Code's non-discrimination requirement is to automatically amend every RIO Agreement exactly in accordance with any amendments to the RIO.
- 10.2 A RIO Agreement cannot be unilaterally varied by SingTel. Requesting Licensees have ample notice of automatic variation, opportunity for input into how their RIO Agreement is varied and the option to enter into a contract which is not automatically varied (that is, an individualised interconnection agreement). Any proposed amendments to the RIO are sanctioned by the IDA and are open to public consultation. The automatic amendment procedure is publicly known to all Requesting Licensees as a term of the RIO (clause 36.1). If a Requesting Licensee does not favour the automatic variation of its agreements, it is open to enter into another contractual option under section 5.2 of the Code.
- 10.3 If automatic variation were removed or diluted, different terms would apply between Requesting Licensees. There would be different terms depending on the date a RIO

Agreement is executed. The non-discrimination obligation would be impossible for SingTel to administer in these circumstances, particularly when there are multiple numbers of RIO Agreements in operation. Any amendment to this provision would negate the entire concept of the RIO as a standardised set of terms.

10.4 Further, the automatic variation requirement should explicitly apply to services provided by Requesting Licensees to SingTel. As noted in **Part 3** of this submission there has been uncertainty concerning the scope of the reciprocity obligation, where SingTel acquires services from a Requesting Licensee. The Code and the RIO need to be amended to require variation of reciprocal agreements for supply to SingTel, automatically and exactly, in line with any amendments to the RIO.

11. CLAUSE 21 OF THE MAIN BODY: INSURANCE

- 11.1 The requirement of S\$20 million public liability insurance coverage for an FBO is not excessive. The quantum is within the range of existing practice in telecommunications, which reflects the scope of potential claims. In comparable jurisdictions, the quantum required is up to S\$50 million. The existing level for FBOs in the RIO is therefore reasonable.
- 11.2 FBOs are not disadvantaged by the current public liability requirement. A premium for the coverage required is typically between \$3,000 and \$5,000 per year. This amount is insignificant when compared to the actual level of investment typically undertaken by FBOs.
- 11.3 The proposal to link the public liability requirement to the quantum of services taken by an individual Requesting Licensee would be unworkable. A risk profile would need to be undertaken for each RIO service. Each Requesting Licensee would need to obtain separate public liability insurance for each service. This would significantly delay the acquisition of each new service by Requesting Licensees.
- 11.4 Public liability under the RIO has been crafted for a quantum amount, not an estimation of the risk involved in each individual service. The risk potential is based on the fact that each Requesting Licensee has the opportunity to acquire all relevant services available under the RIO. The only variable in each case is the identity of the insured party. The RIO already differentiates the risk profiles of Requesting Licensees, with a S\$1 million requirement for SBOs.
- 11.5 There is no justification for reducing the existing public liability insurance requirements for Requesting Licensees. It does not impose a material disadvantage and is at the low end of the typical quantum scale. In contrast, the imposition of differential public liability

requirements for each service will cause undue administrative difficulties and delays for Requesting Licensees.

12. CLAUSE 22 OF THE MAIN BODY: CREDIT MANAGEMENT AND INSURANCE REQUIREMENTS

- 12.1 SingTel's option to withhold the Security Requirement for up to three months can only be exercised in response to two events: termination of the RIO Agreement and payment of outstanding monies. These trigger events and timeframes are not excessive. They are highly reasonable compared to common practice.
- 12.2 A Requesting Licensee may have monies owing to SingTel after termination which are not classed as "outstanding amounts". These include the possibility of SingTel incurring future cost, depending on the nature of the service. In the case of co-location a Requesting Licensee may fail to recover their equipment following termination, or not make good the site in accordance with the RIO requirements. Any costs incurred by SingTel in fulfilling the Requesting Licensees obligations are charged to the Requesting Licensee. Similar situations may also arise for licensing of local loop/sub-loop and building MDF distribution frame.
- 12.3 Further, an action against SingTel for a pre-termination event may only arise after termination and a reasonable (albeit a short one under the RIO) period of time is required to assess likely liability for actions arising after termination before security can be released.
- 12.4 For situations where further costs in addition to monies actually owing may arise, it is common commercial practice for a supplier to retain a security right. In some cases, there is no limit to the timeframe in which a supplier may exercise that right. In contrast, SingTel has a ceiling within which it may exercise its right to withhold security. It is linked to SingTel's billing cycle, which is an appropriate and reasonable timeframe because it is the period in which SingTel will invoice the Requesting Licensee for additional costs. This provision remains essential for SingTel to manage its legitimate debt recovery rights and to safeguard possible liabilities arising due to actions which commence after termination.

13. SCHEDULE 1A: PHYSICAL AND/OR VIRTUAL INTERCONNECTION FOR FBOs

13.1 Forecasting is a universal feature of every interconnection agreement. It is essential for a supplier to plan and provision sufficient capacity to satisfy expected demand. In the case of Schedule 1A, it enables SingTel to provision resources at the relevant IGS including operating and capital expenditure, physical work and analysis. SingTel is not aware of a

Reference Interconnection Offer in any jurisdiction which does not contain a forecasting requirement.

- 13.2 A Requesting Licensee is only required to provide forecasts if its interconnect capacity exceeds 63 E1s.¹² At this level of capacity, a Requesting Licensee would be undertaking forecasting for its own internal network capacity purposes and accordingly the RIO imposes no unnecessary burden on a Requesting Licensee which it would not impose on itself.
- 13.3 The forecasting requirements therefore affect very few Requesting Licensees. Independently of the RIO, forecasting is also undertaken by each Requesting Licensee as part of their business planning and modelling. If a Requesting Licensee satisfies this threshold, forecasts are required only twice annually for the first year and then annually thereafter.
- 13.4 There is nothing novel or onerous with the forecasting requirements of Schedule 1A. There is no need to attempt to "streamline" or improve their operation.

14. SCHEDULE 1B: VIRTUAL INTERCONNECTION FOR SBOs

14.1 The minimum interconnection capacity for interconnection by the Requesting Licensee for virtual interconnection pursuant to Schedule 1B of the RIO is two 2 Mbps E1 links to each SingTel SGS. This standard ensures the stability of both networks and is the minimum requirement to justify CCS SS7 signalling links. This requirement therefore remains relevant and necessary.

15. SCHEDULE 2A: CALL ORIGINATION SERVICE

- 15.1 The processes in clause 3 of Schedule 2A are based on the most efficient option for the service. The timeframes for those processes are necessary for SingTel to study, plan and schedule the implementation of a new call type. It also provides scope for any clarifications to ensure the service is commissioned correctly. In practice, sufficient time is required to consult with the Requesting Licensee and settle the requirements for the new call type. This is to avert any negative issues arising from the implementation stage.
- 15.2 Call type requests also involve work in addition to network conditioning in the SingTel network. Additional time is needed at this stage for complex procedures including modifications to specifications, changes to the agreed billing processes and modifications to the Requesting Licensee's network. The timeframe of sixty business days provides the

Schedule 1A, clause 8.1(b).

most realistic assessment of the time and resources involved in this process. SingTel's experience is that the level of complexity of the call type request cannot be predetermined and will differ in each case. The actual timeframe also depends on the complexity of negotiations with the Requesting Licensee.

15.3 It should also be noted that in a case where SingTel requested certain call types to be open at other Requesting Licensees' network, it took from 30 business days to over 60 business days to negotiate the required implementation. It therefore is dubious as to whether Requesting Licensees could satisfy lesser timeframes than that already contained in the RIO.

16. SCHEDULE 2B: CALL TERMINATION SERVICE

- 16.1 SingTel reiterates the above comments in section 15 regarding the processes for the call termination service.
- 16.2 The number level activation timeframe is provided in Annex 2B-5 of Schedule 2B. From SingTel's experience, this two week timeframe is necessary and appropriate.

17. SCHEDULE 2C: CALL TRANSIT SERVICE

17.1 SingTel reiterates the above comments in section 15 regarding the processes for the call transit service.

18. SCHEDULE 3A: LICENSING OF LOCAL LOOP/SUB-LOOP

- 18.1 The criteria in clause 2 are necessary to enable the efficient assessment and allocation of local loop/sub-loop as they are ordered. These criteria give certainty and transparency to the process of assessing the availability of local loop/sub-loop. Each factor to which SingTel may have regard when determining availability is reasonable and a standard feature of interconnection agreements.
- 18.2 The estimated provisioning timeframe of five business days for local loop/sub-loop is contained in clauses 4.4(c). This is a realistic timeframe and again provides certainty to Requesting Licensees. The Requesting Licensee would be notified if there is a delay in installation beyond this estimated time. SingTel does not even commit itself to deliver its own services to end-users within five business days. No additional certainty can feasibly be provided to Requesting Licensees without incurring additional and unwarranted costs.
- 18.3 As noted in Part 1 of this Submission, SingTel has never received a request to construct local loop/sub-loop pursuant to clause 6 of Schedule 3A. This proves that there is no

demand and no competitive rationale for retaining the "SingTel build" obligation as an IRS. Its continued IRS status is contrary to the objective of encouraging facilities-based infrastructure investment in telecommunications. The market has determined that the requirement is not a useful or feasible option. The alternative to the SingTel build obligation is for Requesting Licensees to construct local loop/sub-loop to meet their own requirements, which would be consistent with the above objective.

- 18.4 Some FBOs have already rolled out networks in certain areas, including the CBD. FBOs are therefore capable of constructing their own networks and have chosen not to rely on SingTel, despite the option being available for the past three years. It is known that FBOs have been deploying fibre-optic networks connecting the CBD and building local loop to their customers. This shows a preference to build own network infrastructure, rather than relying on the RIO.
- In addition to the above comments, the daily peak capacity for processing applications under clause 4.3 is far below the actual numbers submitted in practice. The maximum requirement of 200 wire pair applications to be processed per business day should be amended in line with actual demand in the past three years. The most number of applications received by SingTel in a single day under the RIO over the past three years is six. Nevertheless, SingTel has been required to commit actual resources for the past three years to meet this 200 application requirement. This is a misallocation of resources which should be redressed in this review.

19. SCHEDULE 3B: LINE SHARING

- 19.1 Currently the spectrum plan is appropriate given that ADSL is the current proven technology capable for line sharing. The spectrum plan may be amended as and when any new technology capable of line sharing is implemented. SingTel notes that other xDSL technologies such as HDSL, SHDSL and VDSL technologies are pure data line. The lower spectrum of the bandwidth which caters for POTS are being utilised by these xDSL technologies. As such, these technologies are not designed to support line sharing.
- 19.2 SingTel also repeats its comments in **Part 1** about the lack of utilisation of this service as a means of rolling out broadband services by Requesting Licensees and its removal from regulation in other jurisdictions.

20. SCHEDULE 5A: LICENSING OF LEAD-IN DUCT AND ITS ASSOCIATED LEAD-IN MANHOLES

20.1 The criteria in clause 2 are necessary to enable the efficient assessment and allocation of building lead-in duct/manhole as they are ordered. These criteria give certainty and

transparency to the process of assessing the availability of building lead-in duct/manhole. Each factor to which SingTel may have regard when determining availability is reasonable and a standard feature of interconnection agreements.

- 20.2 The current ordering and provisioning processes are also adequate. A proposed ten business day requirement for processing all applications does not reflect the substantial time and human skills required to undertake this process. The timeframe reflects the daily number of applications which can be realistically processed using the finite resources available.
- 20.3 Finally, SingTel strongly rejects any proposal to allow Requesting Licensees to undertake construction to connect its ducts directly to SingTel's lead-in manhole. Further, there is no assurance that any "additional measures" will be capable of averting damage to SingTel's underground plant. Any damage caused by a Requesting Licensee would disrupt the services of SingTel and potentially other Requesting Licensees. Even if SingTel were indemnified by the Requesting Licensee for damage caused, this would be inadequate from a consumer perspective because they will incur costs and inconvenience through service disruption. It would be impossible for SingTel to manage the potential risk exposure in a multi-operator environment if Requesting Licensees were free to build directly to SingTel's lead-in manholes. SingTel must remain the only party responsible for structural work on SingTel's manholes.

21. SCHEDULE 5B: LICENSING OF TOWER SPACE & CO-LOCATION SPACE AT TOWER SITE

21.1 No Requesting Licensee has sought licensing or co-location space under Schedule 5B in the three years of the RIO. SingTel submits that the retention of the licensing obligations in Schedule 5B are not necessary to meet industry need.

22. SCHEDULE 8A: CO-LOCATION FOR POINT OF INTERCONNECTION (POI)

- 22.1 SingTel reiterates the above comments in section 18 regarding the criteria for assessing the availability of co-location space at a co-location site.
- 22.2 The timeframe to complete site preparation work is provided in the project study report.

 A fixed timeframe for performing site preparation work is not feasible, as each site is unique and site preparation work necessarily differs between sites and operators.
- 22.3 SingTel reiterates its comments in paragraph 20.3 against allowing Requesting Licensees to undertake construction work for connection duct. The risk exposure for SingTel and other Requesting Licensees is too excessive to justify any change in the construction process.

22.4 SingTel proposes that the renewal of a licence should be linked to the renewal of a particular service or obligation as an IRS under the Code. The validity of each licence is currently three years, with renewal contingent on a service remaining an IRS. If a renewal or "rollover" process is applied to the RIO (whereby the RIO continues to operate for 12 monthly intervals, subject to termination in accordance with its terms – see comments in section 33 below) then a licence should be renewed consistent with this basis

23. SCHEDULE 8B: CO-LOCATION FOR POINT OF ACCESS (POA)

- 23.1 SingTel reiterates the above comments in section 18 regarding the criteria for assessing the availability of co-location space at a co-location site.
- 23.2 The timeframe for site preparation work is contained in the project study report. SingTel reiterates its comments in paragraph 20.3 against allowing Requesting Licensees to undertake construction work for connection duct. The risk exposure for SingTel and other Requesting Licensees is too excessive to justify any change in the construction process. Access to POA via the SingTel manhole is the most efficient means of providing co-location. As all access to SingTel's exchanges is provided through its manholes, SingTel reserves the right to determine access to its exchanges on a non-discriminatory basis.
- 23.3 SingTel reiterates its comments in paragraph 22.4 in respect of the licence term.

24. SCHEDULE 8C: CO-LOCATION AT SATELLITE EARTH STATIONS

24.1 No Requesting Licensee has sought licensing or co-location at satellite earth stations under Schedule 8C in the three years of the RIO. SingTel submits that the retention of the obligations in Schedule 8C are not relevant to meet industry need.

25. SCHEDULE 8D: CO-LOCATION AT SUBMARINE CABLE LANDING STATIONS

SingTel considers it necessary and desirable to require Requesting Licensees to own some capacity in a cable system, before allowing additional uses such as backhaul and transit. This ownership prerequisite would not have any impact on a Requesting Licensee's ability to co-locate equipment for accessing their own cable capacity, or a third party's capacity. This ownership requirement preserves the investment objectives for facilities-based competition. In any event, operators primarily co-locate to access their own cable capacity. Requesting Licensees will not be disadvantaged by the retention of the ownership requirement. The ownership prerequisite in clauses 1.2 and 1.3 must be

- retained, even where access to co-location space is used for other than accessing a Requesting Licensee's own capacity.
- 25.2 SingTel reiterates the above comments in section 18 regarding the criteria for assessing the availability of co-location pace at a co-location site.
- 25.3 SingTel reiterates its comments in paragraph 20.3 against allowing Requesting Licensees to undertake site preparation work. The risk exposure for SingTel and other Requesting Licensees is too excessive to justify any change in the construction process.
- 25.4 SingTel reiterates its comments in paragraph 22.4 in respect of the licence term.

26. SCHEDULE 9: CHARGES

- 26.1 SingTel is concerned that the current call origination charges and call termination charges in the RIO do not address an interconnection configuration which is currently being used. The charges in the RIO are based on trunk switch interconnection configuration. However, some FBOs have sought to interconnect their local exchange switches with SingTel's Interconnect Gateway (Tandem Hierarchy) Switches.
- 26.2 In such cases, there is only one switching element involved; just as it is in the case of interconnection at the trunk side of a local switch. A local switch with IGS functionalities has no additional transmission links involved in providing interconnection. Hence, such FBOs are being over-compensated.
- 26.3 Clause 5.3.5.6 of the code requires the price that a licensee offers for IRS must be cost-based. Furthermore, clause 3.2.1 of Appendix One of the Code requires that cost be allocated based on the number of connections, actual usage and capacity requested. Separate call origination and termination charges are necessary to ensure that interconnection charges at the trunk side of the local exchange switches are cost-reflective.

27. SCHEDULE 11: DISPUTE RESOLUTION

27.1 Schedule 11 of the RIO lists the procedures that apply to any disputes that arise under the RIO (other than Billing Disputes, which are dealt with under Schedule 10). Matters in dispute can be referred to an Inter-Working Group. In the event that the Inter-Working

Group does not resolve the dispute, either party can refer the dispute to the IDA in accordance with section 5.7 of the Code 13

- 27.2 The IDA's powers in relation to a dispute notified to it under Schedule 11 of the RIO are governed by:
- (a) section 5.7 of the Code, which permits the IDA, at its discretion, to impose a binding resolution on the parties; and
- (b) clause 3.2 of Schedule 11, which requires the IDA to refer the dispute back to the Inter-Working Group if:
 - (i) it does not have the power to under the Telecommunications Act or the Code; or
 - (ii) it is unwilling to resolve the dispute.
- 27.3 Section 5.7 of the Code gives the IDA an option for dispute resolution, namely that it may impose a binding resolution on the parties. However its investigatory or other enforcement powers are unclear. The dispute may be referred to the IDA, but here the Code lacks a transparent process. The IDA has the discretion to impose a binding resolution, but its role as arbitrator is not defined. The IDA Dispute Resolution Framework does not provide optimum assistance on this threshold question of jurisdiction. It states that:

"IDA will review whether it is appropriate to use regulatory intervention to resolve the dispute. IDA may choose not to intervene to resolve the dispute if it does not have the power to do so or if it believes that it is inappropriate to do so." 14

27.4 This statement sits uneasily with the IDA's overall approach to dispute resolution and its preference for the primacy of commercial agreements:

"Once an interconnection agreement between two licensees becomes effective, IDA will not involve itself in the implementation of the interconnection agreement. Where there is a dispute between licensees arising out of implementation of their interconnection agreement, licensees are required to

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¹³ Clause 2.5(a).

IDA, Dispute Resolution Framework to Resolve any Dispute Arising out of the Implementation of an Interconnection Agreement Between IDA's Licensees at (ii).

resolve the dispute in accordance with the dispute resolution provisions that are commonly provided for in their interconnection agreement." ¹⁵

- 27.5 SingTel believes that the IDA's power with respect to dispute resolution requires clarification and qualification. Firstly, the primacy of commercial arrangements risks, and in some cases is, being compromised. Secondly, it is important for the IDA's dispute resolution power to be confined to deciding the matters that are in dispute under the terms and conditions of the RIO. Thirdly, SingTel appreciates that the IDA is required to exercise its decision making powers to meet certain objectives and to secure particular outcomes consistent with the Code. However, the dispute resolution functions of independent regulators do not include using dispute resolution as a basis for achieving a particular policy outcome. If a dispute under the RIO is referred to the IDA, the scope of the IDA's function is in respect of that discrete issue. SingTel considers it important to amend the Code and subsequently the RIO, to ensure that the IDA's functions as a regulator and arbitrator are clearly separated.
- 27.6 SingTel submits that the IDA should only hear disputes which involve an interpretation of the Code and the Telecommunications Act. This should form the scope of the IDA's dispute resolution powers. All other disputes should be left to settlement by the parties to the RIO Agreement.

IDA, Dispute Resolution Framework to Resolve any Dispute Arising out of the Implementation of an Interconnection Agreement Between IDA's Licensees at 1.

PART 3: SPECIFIC ISSUES WITH THE RIO RAISED BY SINGTEL

28. INTRODUCTION

- 28.1 In this Part, SingTel raises a number of issues which are relevant to the following matters:
- (a) Standard risk management practices and commercial conditions of interconnection agreements, including triggers and consequences of suspension and termination events.
- (b) The importance of appropriate reciprocity obligations under the RIO.
- (c) The lessening of regulatory intervention in standard commercial dealings, such as exercise of suspension and termination rights.
- (d) Greater flexibility in order to maximise efficient investment in and use of interconnection links.
- (e) More accurate reflection of the requirements of Requesting Licensees in practice and a reduction in resource mis-allocation.
- (f) Designing and implementing the most appropriate charging principles for origination and termination.
- 28.2 SingTel stresses the importance of reviewing the operation of the RIO from a commercial perspective: that is, the RIO should be consistent with practice in a competitive, commercial environment. This Part sets out issues relevant to both these aspects and makes some specific recommendations for adjustment in the RIO. It includes matters such as reciprocity of arrangements for all IRS between SingTel and other Licensees, credit assessment, debt recovery, suspension and termination provisions, charging principles for originating call types, provisioning of emergency services, unauthorised access to SingTel's underground plant, physical access procedures, and the operation of the RIO dispute resolution process. SingTel makes a number of recommendations on these points and submits that they are essential to reviewing the RIO.
- 28.3 In addition, SingTel raises in Appendix 1 a number of other issues for consideration by the IDA in this review.

29. ACCEPTANCE PROCEDURES: PART 1 OF THE RIO

29.1 SingTel submits that a number of creditworthiness and risk management aspects of the RIO must be updated to reflect the current commercial and economic climate. The

requirement in clause 1.3(e) of Part 1 is that where the paid up capital of the Requesting Licensee is less than S\$1 million, a banker's guarantee or security deposit (to the value of 2.5 times the value of the services likely to be acquired on a monthly basis) must be provided.

- 29.2 SingTel considers that the risk profiles upon which this requirement is based needs to more accurately reflect the status of the Requesting Licensee. FBOs will have a different estimation of risk from SingTel's perspective. FBOs are able to purchase a wider variety of services under the RIO. For an operator deploying its own network, the S\$1 million threshold is not a reasonable expectation of creditworthiness. SingTel estimates that S\$5 million would be a more realistic paid-up capital requirement for FBOs.
- 29.3 It is also a common feature of commercial contracts to enable a party to vary creditworthiness requirements for failure to pay monies owning. The RIO Acceptance Procedures impose obligations favourable to Requesting Licensees in this respect: a Notification of Acceptance of RIO will be valid on creditworthiness grounds as long as the Requesting Licensee satisfies one of the initial criteria noted above. This does not take into account the fact that a Requesting Licensee who satisfies the paid-up capital requirement may still breach the payment terms of the RIO. SingTel notes that this has happened on a number of occasions and our only recourse has been to continue demanding payment.
- 29.4 SingTel proposes that the RIO Acceptance Procedures (or such other appropriate part of the RIO) include an ability to require a banker's guarantee to be provided, or to vary the terms of a banker's guarantee which has been provided under clause 1.3(e), if certain conditions are satisfied. SingTel considers this is essential for management of its risks and proper administration of debts. The fact that the RIO is required to contain certain features under the Code should not preclude standard payment and debt-recovery practices being exercised.
- 29.5 The Acceptance Criteria does not address situations where, by any objective commercial standard, the Requesting Licensee is a bad risk. The Acceptance Procedures are silent on the scenario where the Requesting Licensee may have previously entered into a RIO Agreement, but that Agreement was validly terminated in accordance with its terms for breach by the Requesting Licensee. In this instance, there is nothing which limits a Requesting Licensee's right to request a new RIO Agreement with SingTel at a later date.
- 29.6 SingTel considers that it should have the option to manage its risks. Where a Requesting Licensee's breach of a former RIO Agreement has caused that Agreement to be validly terminated, SingTel should not be compelled to enter into a new RIO Agreement at a later date.

30. RECIPROCITY: CLAUSES 3.2 AND 19.1 OF THE MAIN BODY

- 30.1 The current reciprocity provisions in the RIO requires strengthening. The RIO needs to be amended to include reciprocal rules for when SingTel seeks IRS from Requesting Licensees. Requesting Licensees must be required to provide SingTel with any IRS sought, even if SingTel does not supply that IRS to the Requesting Licensee. Reciprocity on the part a Requesting Licensee must apply, irrespective of whether or not a service is supplied by SingTel to that Requesting Licensee. Reciprocity is based on equal opportunity to be supplied with a service, as well equal terms of service supply.
- 30.2 Reciprocal opportunities to be supplied with services, and the actual supply of those services, is fundamental to interconnection arrangements in a multi-carrier environment. As a matter of fairness and reasonableness, SingTel should be offered interconnection on equal and reciprocal terms to that which it is required to provide under the RIO. Eli Noam, Professor of Finance and Economics at Columbia University has stated:

"Common carriers serve all willing users, and an interconnecting network can be viewed as just another one, albeit a large one. These common carriers are also likely to seek interconnection themselves from some other carriers and should, therefore, be held to reciprocal rules. Such reciprocity is likely to enhance the quality of the debate over interconnection among the various parties, because what a carrier demands from other carriers through the regulatory process it must also grant. In today's dynamic telecommunications environment, every traditional incumbent is also a potential new entrant somewhere, and vice versa". 16

30.3 The current reciprocity arrangements in the RIO do not satisfy the above standard. This has led to inefficiencies in present interconnection arrangements where SingTel requires services from Requesting Licensees. Clause 19.1 of the Main Body of the RIO requires the Requesting Licensee to provide IRS necessary to allow physical interconnection, stating in part that:

"The Requesting Licensee must provide the Necessary IRS to SingTel on the same terms and conditions specified in Schedules 1 and 8 of the RIO Agreement and in accordance with the pricing principles set out in Appendix One of the Code. Alternatively, the Requesting Licensee may, at its option, provide the Necessary IRS at the prices specified in this RIO Agreement".

Noam, E.M, *Interconnecting the Network of Networks*, The MIT Press, London, 2001 at 30.

- 30.4 In our experience, SingTel's effort to seek IRS on reciprocal terms under clause 19.1 of the Main Body have been frustrated by FBOs. SingTel believes that this provision must be strengthened to ensure that all FBOs fulfil their obligations to reciprocate when SingTel is seeking to interconnect. Despite the absolute obligation of clause 19.1, SingTel is continually engaged in unproductive debates concerning the scope of reciprocity. This is particularly the case for reciprocity of price. Reciprocity should firstly equal opportunity to be supplied with services, as well as identical prices, terms and conditions.
- 30.5 SingTel submits that reciprocity of prices, terms and conditions should now apply to all IRS acquired by SingTel from other Licensees. Reciprocity for all IRS is consistent with the Code's regulatory principles including fairness and reasonableness, the simplicity and practicality of its implementation, its ability to ensure a level playing field, and its more broadly neutral effect on network development.
- 30.6 The current reciprocity obligations in the RIO do not reflect the growth of competing Licensee services. For example, SingTel is not the sole Licensee landing submarine cables in Singapore. Requesting Licensees have the ability under the RIO to obtain Connection Service from SingTel, however there is no corresponding obligation on other Licensees to provide the same services to SingTel. In the area of ESF, Requesting Licensees can obtain ESF from SingTel under the RIO, however there is no corresponding guarantee of reciprocal supply to SingTel. The same also applies in the area of UNEs where the Requesting Licensee has established its local loop from its distribution point.
- 30.7 There are numerous other areas in which full reciprocity is relevant to SingTel's acquisition of IRS from other Licensees. For physical interconnection, reciprocity will mean that SingTel is not unnecessarily prejudiced when establishing interconnect links with other Licensees. Where a Licensee has established connectivity with an emergency organisation, full reciprocity will enable SingTel to obtain the same emergency service connectivity.
- 30.8 SingTel considers that the terms of clauses 3.2 and 19.1 have generated uncertainty to date and have undermined the principle of reciprocity. On one hand, clause 3.2 requires OT&T and number portability to be offered to SingTel on the prices, terms and conditions set out in the RIO. However clause 19.1 provides the option of the Licensee offering IRS to SingTel on prices which are either the same as the RIO or are formulated in accordance with Appendix One of the Code. This situation is inequitable and unproductive, because FBOs have demonstrated on number of occasions that they are prepared to exploit this provision for commercial benefit. This was never the IDA's intention of reciprocity.

30.9 SingTel requires this review process to establish full reciprocity from Requesting Licensees. If SingTel is required to provide an IRS to a Requesting Licensee, SingTel submits that it should also be able to acquire that IRS from the Requesting Licensee on exactly the same terms (to the extent that the Requesting Licensee provides that IRS to itself or another party). Currently, a Requesting Licensee can request IRS from SingTel under the RIO, but SingTel cannot make a corresponding request. This anomaly must be removed by inserting a specific requirement for full reciprocity from Requesting Licensees to SingTel.

31. INTERNATIONAL SETTLEMENTS DEFICIT

- 31.1 Singapore's growing international settlements deficit is a significant concern to the national telecommunications sector as a whole. This deficit has increased substantially since the advent of liberalisation, to the extent that Singapore now stands as one of the lowest countries in the region in terms of international settlement rates. Currently, Singapore-based operators must accept international outpayments to foreign operators of up to 400% higher, as compared to the inpayment rates. This asymmetry between the international inpayment rate and international outpayment rate represents a significant costs to Singapore in additional international outpayments to foreign operators. This growing international settlement deficit adversely affects Singapore in the following ways:
- (a) Singapore operator's costs are higher than they should otherwise be;
- (b) Singapore end users ultimately bear the burden of the higher costs in the form of higher retail prices; and
- (c) the outpayments are a direct transfer from the Singapore economy to the foreign operator's economy, resulting in a welfare loss for Singapore.
- 31.2 SingTel submits that this is an unsustainable situation which needs to be redressed as part of this review. Regulatory action to curb differential outpayments has already been taken in other jurisdictions. In the United States, for example, the FCC took action to redress this imbalance.
- 31.3 SingTel submits that this asymmetry can and should be addressed with appropriate charging rates for operators who bring international calls into Singapore for termination. These international incoming calls should be treated separately and not subject to cost-based termination under the RIO. SingTel submits that these types of calls should instead subject to separately commercially negotiated terms and conditions. This is an immediate and necessary step to alleviate the above asymmetries in settlement rates.

31.4 SingTel strongly urges the IDA to implement this action to provide a level of immediate relief from the adverse consequences on Singapore's telecommunications sector and all consumers. Amendments to the RIO to remove cost-based charging for operators who bring international calls for termination into Singapore is a necessary starting point, pending further deliberation and implementation of a solution by the IDA and the industry as a whole.

32. NETWORK ALTERATIONS AND CHANGES: CLAUSE 10 OF THE MAIN BODY

32.1 SingTel considers that the scope of "Network Changes" needs to be clarified. As currently drafted, neither Clause 10 or the Dictionary accurately capture the scope of what are commonly understood as network changes. SingTel's view is that a Network Change does not include changes in call routing, decommissioning of links or closing of POI. These are appropriately covered in Schedule 1 of the RIO and should not be included in the scope of clause 10.

33. SUSPENSION EVENTS: CLAUSE 12 OF THE MAIN BODY

- 33.1 It is common practice in telecommunications for risk to be assessed according to numerous agreements for the supply of services. The suspension events in clause 12 are currently linked to breaches by the Requesting Licensee for use of a service supplied only under the RIO Agreement. These include non-payment by a party under one agreement, which may trigger a suspension event under another agreement.
- 33.2 SingTel considers that for use of a service by a Requesting Licensee in contravention of law, the obligation to supply that service should cease. This should apply irrespective of whether the service was supplied under the RIO or another agreement. The critical issue is that the service was used to commit an offence, regardless of the terms of its supply.
- 33.3 Under clause 12.2, SingTel is required to obtain IDA approval prior to suspending a service. SingTel considers this requirement to be unworkable and a misallocation of the IDA's resources. The IDA should not have to concern itself with determining whether a failure to pay monies should be a ground for suspension. In cases of persistent non-payment, SingTel has incurred further costs during the process of obtaining IDA approval for suspension. For large sums of money, a delay of a few days can compound the loss suffered by SingTel and the liability of the Requesting Licensee. It would be more productive and commercially practical from SingTel's view if the IDA were required to be informed of, but not approve, the valid exercise of SingTel's suspension rights.

34. TERMINATION: CLAUSE 13 OF THE MAIN BODY

- 34.1 SingTel's management of debtors and billing should only be regulated to the extent required under the Code to ensure competition. The Code does not preclude SingTel from exercising its contractual rights to recover money owing to it. Even in the case of persistent non-payment by a Requesting Licensee, and where all avenues for redress under the RIO have been exhausted by SingTel, the IDA must still give written approval before a termination right is exercised.
- 34.2 As noted above, SingTel does not consider that this is an optimum use of the IDA's time and resources. SingTel also incurs additional costs in the IDA approval process while the debts remain outstanding. SingTel's management of its finances and debtors are subject to the RIO Agreement, but should not require regulatory approval to be actioned. The requirement on SingTel in this regard should be limited to informing the IDA of the exercise of a termination right.

35. SCHEDULE 1A: POINT OF INTERCONNECTION - CLAUSE 3.1(c)

35.1 The RIO is presently unclear as to the rights of parties to use jointly built interconnection links. SingTel submits that the RIO must follow the principle of utilising existing interconnection links as efficiently as possible. This may require flexibility in terms of the use of interconnection links where the capacity requirements of a party are different to the other party. Efficient use of jointly build interconnection links would allow both parties to use capacity on the interconnection links up to the maximum capacity of those links, without any strict and arbitrary allocation of capacity between the parties.

36. FORECASTING ISSUES: CLAUSE 5.1 OF SCHEDULE 1B

36.1 As stated in **Part 2**, forecasting is a standard requirement of all interconnection agreements. If an acquiring party fails to provide a forecast, it is also common practice to release the supplier from any liability for late delivery. SingTel submits that clause 5.1 currently does not reflect the correlation between providing forecasts late (or not at all) and the affect on delivery timeframes. The RIO should be amended for consistency with this practice.

37. CHARGING PRINCIPLES: CLAUSE 4 OF SCHEDULE 2A

37.1 SingTel submits that the RIO should be amended to allow flexibility in the charging arrangement for Origination Call Type. In practice, two types of charging arrangements could be implemented for Origination Call Type: Origination charge for call to a toll free number where the Supplier does not collect the local call charge from the calling customer; or where the parties mutually agreed, Termination charge to the Acquirer for calls where the Supplier bills its own customers.

38. SALE OF INTERNAL WIRING: SCHEDULE 3C

38.1 SingTel has never sold any internal wiring under Schedule 3C in the three years of the RIO. SingTel submits that Sale of Internal Wiring should be removed as an IRS, consistent with the principles highlighted in **Part 1** of this submission.

39. LICENSING OF BUILDING MDF DISTRIBUTION FRAME: SCHEDULE 3D

39.1 SingTel submits that the build obligation and put option under Schedule 3D should be removed. Where Building MDF Distribution Frame is not available, SingTel requires the Requesting Licensee to build a Building MDF Distribution Frame at a location agreed by SingTel. If IDA retains the build obligation on SingTel, then the Requesting Licensee should pay the upfront costs of construction.

40. EMERGENCY SERVICES: SCHEDULE 4A

40.1 Schedule 4A currently lacks clarity in the provisioning of emergency services. SingTel proposes that provisioning and processing timeframe and charges be included.

41. CO-LOCATION SPACE FOR TOWER SITE, POINT OF INTERCONNECTION (POI), POINT OF ACCESS (POA), SATELLITE EARTH STATION AND SUBMARINE CABLE LANDING STATION: SCHEDULE 5B/ 8/ 8B/ 8C/ 8D

41.1 The maximum of ten square metres of foot space should be reduced to five square metres. In SingTel's experience, the current ten square metres requirement is excessive. This has resulted in certain Requesting Licensees not optimizing the space utilized, or placing excess equipment whereby the capacity is not utilized. The actual space required for implementation by Requesting Licensee is less than five square metres. SingTel's proposed reduction is both adequate and will assist in preventing frivolous applications for the scare collocation space