

SINGAPORE TELECOMMUNICATIONS LIMITED RESPONSE TO THE INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY OF SINGAPORE PRELIMINARY DECISION REGARDING THE REQUEST OF SINGAPORE TELECOMMUNICATIONS LTD FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE “INTERNATIONAL CAPACITY SERVICES MARKET”

1. STATEMENT OF INTEREST AND STRUCTURE OF SUBMISSION

- 1.1 Singapore Telecommunications Limited (**SingTel**) is licensed to provide telecommunications services in Singapore. It was corporatised on 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 bringing the best of global communications to its customers in the Asia Pacific and beyond.
- 1.2 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.
- 1.3 SingTel hereby responds to the Info-communications Development Authority of Singapore’s (**IDA**) preliminary decision in respect of SingTel’s request pursuant to section 2.6.1 of the Telecommunications Competition Code (**Code**) for exemption from its Dominant Licensee obligations under the Code with respect to the International Capacity Services market (**Preliminary Decision**).
- 1.4 SingTel thanks the IDA for considering SingTel’s initial submissions and this submission, which are all in relation to SingTel’s request pursuant to section 2.6.1 of the Code. SingTel notes that SingTel is the party requesting an exemption and therefore, is qualified to comment about the issues relating to that request.
- 1.5 This submission is structured as follows:
- (a) Section 2 – Summary of major points;
 - (b) Section 3 – SingTel’s response to the IDA’s approach and conclusions in relation to market definition set out in paragraphs 29 to 68 of the Preliminary Decision;

- (c) Section 4 – SingTel’s response to the competitive state of the defined markets in relation to the IDA’s comments in paragraphs 69 to 111 of the Preliminary Decision;
- (d) Section 5 – SingTel’s general comments in relation to the Preliminary Decision, including in relation to the IDA’s decision to review the application of Dominant Licensee regulation to the backhaul market and terrestrial IPLC market; and
- (e) Section 6 - Conclusion.

2. SUMMARY OF MAJOR POINTS

2.1 The major points SingTel makes in this submission are as follows:

- (a) SingTel supports the IDA’s statement in the Preliminary Decision that “*there is little evidence that SingTel has significant market power, or the ability to impede competition*”¹ in the IDA defined markets in which it considers that Dominant Licensee regulation is no longer required.
- (b) SingTel supports the IDA’s Preliminary Decision that Dominant Licensee regulation is no longer necessary in respect of what the IDA refers to as International Managed Data Services (**IMDS**), International IP transit, Leased Satellite Bandwidth, Very Small Aperture Terminal (**VSAT**), Digital Video Broadcast-IP (**DVB-IP**), Satellite TV Uplink, Satellite TV Downlink and Satellite IPLC.
- (c) SingTel has a number of reservations about the IDA’s application of market analysis and its adopted market definition. SingTel’s preferred market definition is set out in its original exemption request, consisting of a single market for international capacity services (**ICS Market**). In the alternative, however, SingTel submits that the following markets exist in respect of international capacity services:
 - (i) Backhaul Market;
 - (ii) Terrestrial IPLC Market;
 - (iii) International Managed Data Services Market, which includes International ATM, International Frame Relay, International IP-VPN;
 - (iv) International IP Transit Market; and

¹ IDA, Preliminary Decision, page 3.

- (v) a Satellite Services Market.
- (d) SingTel believes that the International Managed Data Services Market, International IP Transit Market and the Satellite Services Market are competitive and therefore, supports the IDA's decision to remove Dominant Licensee regulation in respect of those markets.
- (e) In the International Managed Data Services Market, International IP Transit Market and the Satellite Services Market, SingTel faces intense competition from domestic, regional and global service providers. In each of those markets, prices have continually shown a downward trend that will continue into the future. On this basis, it is clear without any doubt that there is vigorous competition and that Dominant Licensee regulation is not necessary.
- (f) SingTel believes that it does not possess significant market power in the Backhaul Market and the Terrestrial IPLC Market and therefore, does not support the IDA's decision to retain Dominant Licensee regulation in respect of those markets.
- (g) SingTel considers that the IDA's conclusion in respect of the Backhaul Market and the Terrestrial IPLC Market is incorrect as a result of:
 - (i) over-stating SingTel's market share in the Backhaul Market by including the backhaul that SingTel provides to itself;
 - (ii) over-emphasis on market share as the determining factor of significant market power, ignoring other key factors such as intense price competition, the existence of numerous competitors and recent changes to the regulatory structure of these markets clearly demonstrate that SingTel is constrained by its competitors; and
 - (iii) ignoring the fact that regulatory obligations imposed on SingTel provide SingTel's competitors with access to SingTel facilities such as SingTel's cable landing stations and connection services on terms and conditions approved by IDA thereby removing any ability for SingTel to affect competition through "control" of these facilities.
- (h) Both the Backhaul Market and the Terrestrial IPLC Market are characterised by multiple service providers and continuous downward movement in pricing. These developments have led to Singapore being widely recognised as one of the most competitive markets for these services. In 2004, Gartner identified Singapore as one of the most competitive

markets for international bandwidth along with Hong Kong, Japan, Taiwan and South Korea.²

- (i) SingTel believes that an assessment of significant market power by reference to all indicia rather than emphasis on market shares will lead to the conclusion that there is vigorous competition and that Dominant Licensee regulation is not necessary, clearly and without any doubt.
- (j) Finally, in the event that the IDA's Preliminary Decision in respect of the Backhaul Market and the Terrestrial IPLC Market is retained, SingTel considers that the IDA should not wait two (2) years to re-consider the application of Dominant Licensee regulation to SingTel in these markets. SingTel considers that the IDA should review its position in respect of these two markets at any time following the final decision at SingTel's request. Alternatively, the IDA should review its final decision in relation to the Backhaul Market and Terrestrial IPLC Market within twelve (12) months after its final decision.

3. MARKET DEFINITION

3.1 In this section 3, SingTel sets out:

- (a) SingTel's response to the IDA's approach to market definition;
- (b) SingTel's alternative approach to market definition; and
- (c) SingTel's observations about the 5 separate markets proposed in SingTel's alternative approach to market definition.

IDA approach to market definition

3.2 SingTel agrees with the IDA's approach to market analysis and market definition as set out in paragraph 19 of the Preliminary Decision. However, SingTel has a number of reservations about the IDA's application of the substitutability analysis.

3.3 Whilst SingTel agrees with the IDA's determination that the markets are competitive and SingTel does not possess significant market power, SingTel does not believe that there are 10 separate markets in respect of international capacity services, namely:

- (i) Backhaul;

² Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004

- (ii) Terrestrial IPLC;
- (iii) International Managed Data Services (**IMDS**);
- (iv) International IP Transit;
- (v) Leased Satellite Bandwidth;
- (vi) Very Small Aperture Terminal (**VSAT**);
- (vii) Digital Video Broadcast-IP (**DVB-IP**);
- (viii) Satellite TV Uplink;
- (ix) Satellite TV Downlink; and
- (x) Satellite IPLC

(each an **IDA Market**).

3.4 SingTel believes that the IDA has identified too many markets. SingTel believes that in undertaking any market definition exercise, it is important not to confuse the concept of a “market” with “inputs” or “service offerings”. Inputs or service offerings are merely one of the many dimensions of a market and any market analysis must consider all the dimensions of a market. In its Merger Guidelines, the Australian Competition and Consumer Commission (**ACCC**) considers a market to consist of four dimensions, namely the product, geographic, functional and time dimensions. The Australian Federal Court referred to this broad concept of a market when it stated:

“It would be simplistic and misleading, in many cases, to see the market as confined to the product produced by the undertaking in question”³

3.5 SingTel notes that it is important for Singapore to reach regulatory outcomes that are consistent with international best practice. Therefore, it is worthwhile to compare the approach of the IDA against the approach taken by other regulators. The approach taken by Hong Kong’s regulator, OFTA, in relation to the application by Reach Limited for declaration of non-dominance in the market for external bandwidth

³ News Limited v Australian Rugby Football League Limited (1995) 58 FCR 447

services is already set out in SingTel's original exemption request. The IDA's market definition differs from that taken by OFTA.

3.6 The IDA's market definition also differs from the approach taken by the United Kingdom's regulator, Oftel, in relation to international services. In 2003, Oftel (now Ofcom) handed down its decision in respect of the market for "wholesale international services".⁴

3.7 In this decision, Oftel categorised services that the IDA identified as separate markets in its Preliminary Decision as "associated international facilities" (i.e. inputs) for the provision of "wholesale international services". Oftel identified the following associated international facilities⁵:

- (a) satellite conveyance;
- (b) satellite uplinks;
- (c) submarine conveyance;
- (d) international backhaul; and
- (e) cable landing stations.

3.8 As Oftel's decision demonstrates, "inputs" or "service offerings" should not be considered as separate economic markets. SingTel believes that, in its market definition, the IDA has considered "inputs" or "service offerings" as separate economic markets. Therefore, the approach of the IDA is not consistent with international best practice.

3.9 SingTel believes that the IDA's consideration of "inputs" or "service offerings" as separate economic markets arises because it:

- (a) has adopted a very narrow view of what constitutes a "reasonable substitute" for a service in its market analysis by requiring too great a degree of demand-side substitutability between services; and

⁴ Oftel, *Wholesale International Services Markets: Identification and analysis of market and Determination on market power*, Final Explanatory Statement and Notification, 18 November 2003, page 9.

⁵ Oftel, *Wholesale International Services Markets: Identification and analysis of markets, determination of market power and setting of SMP conditions*, Explanatory Statement and Notification, 26 August 2003, pages 83-86.

- (b) has not had sufficient regard to supply-side substitutability in its market analysis.
- 3.10 The purpose of the IDA’s market analysis is to identify all relevant substitutes for a service that impose a competitive constraint on SingTel. In order to determine what services impose a competitive constraint, the IDA must identify the smallest area of the product, geographic and functional space within which a hypothetical monopolist could impose a small but significant and non-transitory increase in price (**SSNIP**) without resulting in customers switching to other services (i.e. substitutes) (**SSNIP Test**).
- 3.11 The IDA’s market definition must therefore include all sources and potential sources that are likely to result in a customer switching from one service to another in the event of a SSNIP in respect of the first service.
- 3.12 SingTel is unsure about the economic evidence that the IDA has relied upon to reach its conclusions in relation to the application of the SSNIP Test. Based on the IDA’s comments in the Preliminary Decision, however, SingTel considers that the IDA’s market analysis does not adequately take account of close or reasonable substitutes for the services in each IDA Market.
- 3.13 While the physical and technical characteristics of each service should be considered as part of the IDA’s market analysis, the IDA’s market analysis does not sufficiently consider the end use of each service for the purposes of determining whether other services constitute reasonable substitutes.
- 3.14 The IDA’s market definition overstates actual differences between certain international capacity services from a customer or demand perspective.
- 3.15 The fact that a service contains different technical elements or utilises a different technology to another service does not necessarily mean that that first service is not in fact a substitute or within the same market as the second service. When investigating market definition, it is important to recognise the central principle of technological neutrality as required by the Code:

“IDA’s regulatory requirements will reflect the phenomenon of convergence, which is eroding historical difference among platforms such as wireline, cable, wireless and satellite. Regulatory requirements will be based on sound economic principles and, to the extent feasible, will be technology neutral”⁶

⁶ Code at paragraph 1.5.4

3.16 Furthermore, technological neutrality is a fundamental principle of regulatory best practice. The European Commission has stated in its Explanatory Memorandum in relation to its Recommendation on Relevant Markets⁷:

*“Retail markets should in principle be examined, for market definition purposes, in a way that is independent of the network or infrastructure being used to provide services, as well as in accordance with the principles of competition law”.*⁸

3.17 Oftel has also adopted this approach in respect of the analysis of “wholesale international services”, as well as other services:

*“Oftel’s approach is based on a Competition Law based assessment of markets and an assessment of the extent to which switching among services by consumers constrains prices, irrespective of the infrastructure used by the providers of those services”.*⁹

3.18 Similarly, the fact that a service differs in price and quality in comparison to another service does not necessarily mean that that first service is not in fact a substitute or within the same market as the second service.

3.19 The Office of Fair Trading in the United Kingdom has stated:

*“Substitutes do not have to be identical products to be included in the same market...The products’ prices do not have to be identical. For example, if two products perform the same purpose, but one is of a higher quality, they might be included in the same market. This depends on whether the price of one constrains the price of the other. Although one is of a lower quality, customers might still switch to this product if the price of the more expensive product rose and if they no longer felt that the higher quality justified the price differential”.*¹⁰

⁷ European Commission, *Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector*, L112/45, 8 February 2003.

⁸ European Commission, *Explanatory Memorandum on relevant product and service markets within the electronic communications sector*, page 15.
(http://europa.eu.int/information_society/topics/ecom/useful_information/library/recomm_guidelines/index_en.htm)

⁹ Oftel, *Wholesale International Services Markets: Identification and analysis of markets, determination of market power and setting of SMP conditions*, Explanatory Statement and Notification, 26 August 2003, pages 24.

¹⁰ Office of Fair Trading, *Market Definition Guideline*, March 1999, United Kingdom, page 5.

3.20 Similarly, the Federal Court of Australia has noted:

*“The existence of price differentials between different products, reflecting differences in quality or other characteristics of the products, does not by itself place the products in different markets. The test of whether or not there are different markets is based on what happens (or would happen) on either the demand or supply side in response to a change in relative price”.*¹¹

3.21 SingTel also considers that the IDA has not given sufficient consideration to supply side substitution possibilities in its market analysis. The IDA’s market analysis has focused almost exclusively on demand-side substitutability, with virtually no focus on the supply-side substitution possibilities.

3.22 SingTel believes that there is significant supply side substitution in respect of all products that form part of the ICS Market. This is due to the following reasons:

- (a) All of the individual products that form part of the ICS Market are currently being supplied by SingTel’s competitors;
- (b) The level of spare capacity and free capacity existing in the ICS Market is significant and therefore, no capacity constraints prevent SingTel’s competitors from supplying the relevant products; and
- (c) Customers, typically Multi-National Corporations (**MNCs**), who acquire products in the ICS Market are highly sophisticated and are highly responsive to price changes and therefore, are highly likely to take advantage of any competitive supply from SingTel’s competitors.

3.23 Supply-side analysis requires a consideration of whether the same facility or technology can be used to provide two or more services. Supply side analysis is an essential component of market analysis. The High Court of Australia has stated:

“In setting the limits of a market the emphasis has historically been placed upon what is referred to as the ‘demand side’, but more recently the ‘supply side’ has also come to be regarded as significant. The basic test involves the ascertainment of the cross-elasticities of both supply and demand, that is to say,

¹¹ *Trade Practices Commission v Australian Meat Holdings* (1988) ATPR 40-876 at 49,480.

the extent to which the supply of or the demand for a product may be substituted for another... ”¹²

3.24 SingTel’s approach to market definition takes account of supply side substitution by incorporating the similarities of the conditions of supply within the market definition. For example, in SingTel’s alternative market definition, SingTel has undertaken a functional approach, such as considering all satellite based services to fall within a single Satellite Services Market. This avoids the need to define and analyse many different markets for individual products for which the competitive assessment is qualitatively similar. The approach of SingTel is consistent with international best practice, and for example, the analysis methodology of the United Kingdom Office of Fair Trading¹³.

SingTel’s alternative market definition

3.25 SingTel’s preferred market definition is set out in its original exemption request. It consists of a single ICS Market.

3.26 In the alternative, however, SingTel submits that the following markets exist in respect of international capacity services:

- (a) Backhaul Market;
- (b) Terrestrial IPLC Market;
- (c) International Managed Data Services Market, which includes International ATM, International Frame Relay, International IP-VPN;
- (d) International IP Transit Market; and
- (e) a Satellite Services Market.

(each a **SingTel Market**)

¹² *Queensland Wire Industries Pty Ltd v BHP* (1989) ATPR 40–925 at 50,014.

¹³ United Kingdom Office of Fair Trading, Market Definition – Draft Competition Law Guidelines for Consultation, April 2004 at paragraph 3.16 on page 14

Backhaul Market

- 3.27 For the purposes of this submission, SingTel accepts that there may be a Backhaul Market.
- 3.28 However, SingTel believes that the Backhaul Market is competitive and that SingTel does not possess significant market power.
- 3.29 SingTel does not agree with the IDA's view about the inclusion of self-supply of backhaul in the relevant market. The supply of backhaul services by SingTel to itself should not be included in the definition of Backhaul Market. SingTel does not consider that third party backhaul services are a reasonable substitute for self-supply.
- 3.30 A market is generally defined to be the close field of rivalry between relevant participants. SingTel submits that, in respect of the Backhaul Market, this field of rivalry is in the supply of the backhaul services to other Facilities Based Operators (FBOs). It should not include the SingTel self-supplied backhaul services because these services are not within the relevant field of rivalry.
- 3.31 Although it is theoretically possible for SingTel to purchase backhaul services from SingTel's own cable landing stations from another FBO, this would never occur in practice – SingTel does not (and would not) purchase backhaul services from its own cable landing station from another FBO.
- 3.32 SingTel therefore believes it is incorrect to include SingTel's self-provisioning of backhaul services within the definition of Backhaul Market. Mere theoretical possibilities should not be included in market definition, as they cannot be considered reasonable substitutes. Indeed, no FBO currently offers or markets wholesale backhaul services to SingTel from SingTel's own cable landing stations – nor would it be logical to do so.
- 3.33 The effect of the IDA's inclusion of SingTel's self-supply in the definition of the Backhaul Market on the competitiveness of the market, and on the calculation of SingTel's market share, is set out in section 4. SingTel submits that the Backhaul Market is highly competitive as discussed further in section 4.
- 3.34 SingTel also does not agree with the potential for a route-by-route approach to backhaul which is suggested but not ultimately applied by the IDA in paragraph 32 of the Preliminary Decision. A provider of backhaul services cannot raise the price of backhaul services on a backhaul route without losing business to another provider of backhaul services, because customers will acquire services from the alternative

provider. This is particularly the case in Singapore where each of SingTel's three (3) cable landing stations co-locates at least one (1) other competitor of SingTel providing an alternative backhaul service in direct competition to SingTel. Accordingly, if SingTel increases the price of its backhaul services, customers will shift their backhaul services to an alternative provider.

- 3.35 In any event, as the IDA is aware, this is supported by the market evidence. SingTel does not offer different backhaul service prices from SingTel's three (3) cable landing stations. SingTel's backhaul service prices are the same irrespective of the SingTel cable landing station to which they are provided.

Terrestrial IPLC Market

- 3.36 For the purposes of this submission, SingTel accepts that there may be a Terrestrial IPLC Market. SingTel does not, however, understand why IPLCs and IRUs would be considered to be in the same market in Hong Kong but considered to be separate markets in Singapore.

- 3.37 Nevertheless, SingTel is prepared to accept the IDA's conclusion that the nature of the managed and point-to-point dedicated capacity distinguishes International Managed Data Services and Terrestrial IPLCs. SingTel is also prepared to accept that, on the supply-side, Terrestrial IPLCs and Leased Satellite Bandwidth may be considered insufficiently substitutable to constitute a single market.

- 3.38 However, SingTel does not agree with the IDA's route-by-route approach to this market definition as set out in paragraph 37 of the Preliminary Decision. SingTel maintains that the geographic dimension of the Terrestrial IPLC Market should not be defined on a route-by-route basis, as indirect routing via hubbing provides customers with a reasonable substitute for a direct connection between Singapore and the country of final destination. The fact is that no operator, including SingTel, has a direct connection to every country.

- 3.39 SingTel does not agree with the IDA's view that "*hubbing has ceased to be an economically or technically acceptable substitute for a direct connection because of increased latency (delay) and the increased likelihood of service disruption*".¹⁴ This is simply not the case. There are several legitimate reasons why capacity may be hubbed. It is therefore appropriate for hubbed capacity to be considered to be in the same market as direct connections.

¹⁴ IDA, Preliminary Decision, page 16.

3.40 For example:

- (a) hubbing must be used where there is no direct connection between two countries. There may be several hubs (i.e. substitutes) that can be used to connect between Singapore and the country of final destination; and
- (b) MNCs use hubbing to connect from Singapore to their corporate headquarters in a second country and then to a final destination in a third country. The IDA also acknowledges this practice in paragraph 85 of the Preliminary Decision.

3.41 If, however, the IDA maintains its view that hubbing should not be included in the relevant market definition and maintains its current view about the state of competition in the Terrestrial IPLC Market, SingTel submits that the continued imposition of Dominant Licensee regulation on competitive routes subjects SingTel to an inappropriate and disproportionate level of regulation in respect of those routes.

International Managed Data Services Market

3.42 For the purposes of this submission, SingTel accepts that there may be an International Managed Data Services Market. SingTel considers that there exists an International Managed Data Services Market, which comprises each of the following services:

- (a) International ATM;
- (b) International Frame Relay; and
- (c) International IP-VPN.

3.43 SingTel agrees with the IDA that International ATM, International Frame Relay and International IP-VPN form part of the same market and that these services are subject to effective competition.¹⁵ SingTel competes vigorously against other FBOs (on price and non-price terms), including Infonet, AT&T, British Telecom, Cable & Wireless, Equant, MCI, Sprint and StarHub

¹⁵ IDA, Preliminary Decision, pages 17 and 27.

International IP Transit Market

- 3.44 For the purposes of this submission, SingTel accepts that there may be an International IP Transit Market.
- 3.45 SingTel considers that at a geographical level, the International IP Transit Market is not restricted to Singapore but rather, incorporates a much wider regional market. In the provision of International IP Transit services, Singapore competes with various other hubs like Hong Kong and Japan and against regional and global providers such as UUNET, Cable & Wireless, Equant, Equinix, Reach, Sprint and Verizon.
- 3.46 In any assessment of the level of competition in the International IP Transit Market, the IDA should take account of the fact that liberalisation of International IP Transit services commenced before 2000 and that there are now twenty-five (25) providers of internet exchange services in Singapore¹⁶ (also known as International IP Transit services) including those noted in paragraph 3.45 above.
- 3.47 Similar to SingTel's comments in relation to the BackHaul Market, SingTel believes that self-supply of International IP Transit services should be excluded from the market definition because self-supply is not in the relevant field of close rivalry.

Satellite Services Market

- 3.48 For the purposes of this submission, SingTel considers that there exists a single Satellite Services Market, which includes the following services:
- (a) Leased Satellite Bandwidth;
 - (b) Satellite IPLC;
 - (c) VSAT;
 - (d) Digital Video Broadcast-IP (**DVP-IP**);
 - (e) Satellite TV Uplink; and
 - (f) Satellite TV Downlink.

¹⁶ www.ida.gov.sg, 31 December 2004

3.49 Leased Satellite Bandwidth is an input (i.e. the space segment) for VSAT services, Satellite TV Uplink, Satellite TV Downlink and Satellite IPLC. However, SingTel does not agree with the IDA's view that Leased Satellite Bandwidth should be considered to be in a separate market on the basis that it is only an input for other satellite services.

3.50 The fact that Leased Satellite Bandwidth is an input or component of a larger service does not preclude it from falling within the definition of the Satellite Services Market. It is commonly accepted that inputs or components of a service should be included in a broader market definition. The Trade Practices Commission in Australia has stated:

*“Within the bounds of the market, substitution possibilities may be more or less intense, and more or less immediate: the field of substitution is not necessarily homogenous but may contain within it sub-markets wherein competition is especially close or especially immediate. There may be, too, certain key sub-markets such that their competitive relationships have a wider effect upon the functioning of the market as a whole. In these matters we have found that the identification of sub-markets may be rather helpful in clarifying how competition works”.*¹⁷

3.51 Leased Satellite Bandwidth should therefore be included in the definition of Satellite Services Market. Similarly, Satellite TV Uplink and Satellite TV Downlink are each an input into Satellite IPLC services. As such, Satellite TV Uplink and Satellite TV Downlink should also be included in the definition of Satellite Services Market.

3.52 SingTel considers that the IDA has placed too much emphasis on the technological differences between satellite services in determining the IDA Market. The IDA should place greater emphasis on the demand and supply-side substitution possibilities in the event of a SSNIP in relation to a specific service.

3.53 For example:

- (a) a SSNIP increase in respect of a satellite based service (e.g. VSAT), is likely to result:
 - (i) in customers switching to other satellite based services or a service identified in the ICS market; and

¹⁷ *Trade Practices Commission v Tooth & Co Ltd* (1979) ATPR 40-113 at 18,197

- (ii) in more FBOs providing VSAT services thereby defeating any benefit that would be gained from the SSNIP.
 - (b) although DVB-IP is technology specific (i.e. using Internet Protocol), it is ultimately a variant of other satellites services and therefore substitutable for other services in the Satellite Services Market.
- 3.54 SingTel considers that satellite based services should be included in a single Satellite Services Market and that VSAT, DVB-IP and Satellite IPLC services each constitute a reasonable substitute for one another.
- 3.55 In any assessment of the level of competition in the Satellite Services Market, the IDA should take account of the fact that liberalisation of satellite services commenced well before 2000 and that there are now multiple providers of satellite services in Singapore.

4. COMPETITIVENESS OF SINGTEL'S PROPOSED MARKETS

- 4.1 In this section 4, SingTel considers the competitiveness of each of the markets identified above. In the case of the Backhaul Market and Terrestrial IPLC Market, SingTel has adopted the IDA definition (with some modifications as discussed above). It is the competitiveness of these markets that SingTel wishes to focus on, given that the IDA's Preliminary Decision is to continue to subject SingTel to Dominant Licensee regulation in these two markets.
- 4.2 SingTel supports the IDA's conclusions in respect of the remaining IDA Markets, using either the IDA's definition or the alternative definition proposed by SingTel above.

IDA approach to competitiveness

- 4.3 SingTel does not agree with the IDA's finding that SingTel has significant market power in the Backhaul Market and Terrestrial IPLC Market (**Two Markets**). SingTel's view is based on the following, which are discussed in detail in this section on the IDA approach to competitiveness and subsequently in a discussion of each of the Two Markets:
- (a) The IDA's assessment of significant market power is based on an excessive reliance on market shares at the expense of other indicia; and

- (b) The IDA has miscalculated market share in the Backhaul Market by including both self-supply and the provision of services to third parties in the market share calculations.
- 4.4 Traditionally, market share thresholds were applied as a presumptive test in assessing significant market power. Over the last few years, regulators across the world have moved away from this presumptive test to a broader test where market share is only one of the criteria for assessing significant market power. Regulators have identified this change as being crucial to ensuring that the assessment of significant market power better reflects the evolution of complex and dynamic markets.¹⁷
- 4.5 As an example, the EU in 2002 updated its methodology for assessing significant market power by moving away from a presumptive test based on market share. Under the new EU test, an entity is deemed to have significant market power, if either individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.¹⁸
- 4.6 The IDA itself, in its inquiry into the designation of SingTel's local leased circuits as a mandated wholesale service (**LLC Decision**) undertook a similar approach. In the LLC Decision, the IDA's assessment of competitiveness was based on an assessment of the market structure (number of operators, relative market shares and ease of market entry and exit), choice of substitute products and pricing levels and trends.¹⁹ The IDA noted that its approach was driven by two key considerations, namely, the desire to maintain economic incentives for infrastructure rollout and the need to bring about competitive telecommunications prices in the immediate to short term to benefit end users in Singapore.²⁰
- 4.7 SingTel believes that the IDA's finding that SingTel has significant market power in the Two Markets is based on an excessive reliance on market shares at the expense of other indicia. In particular, SingTel believes that the IDA has not given sufficient weight to the level of overall competition and the resulting impact of the continuous and significant downward trend in prices in the Two Markets.

¹⁷ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a Common Regulatory Framework for Electronic Communications Networks and Services (Framework Directive), March 2002 at section 25

¹⁸ EU, Commission Guidelines on Market Analysis and the Assessment of Significant Market Power under the Community Regulatory Framework for Electronic Communications Networks and Services (2002/C 165/03), July 2002 at section 3

¹⁹ IDA, Explanatory memorandum issued by the IDA: Designation of Singapore Telecommunications Limited's Local Leased Circuits as a Mandated Wholesale Service, 16 December 2003 at pages 1 and 2

²⁰ IDA, Explanatory memorandum issued by the IDA: Designation of Singapore Telecommunications Limited's Local Leased Circuits as a Mandated Wholesale Service, 16 December 2003 at page 4

- 4.8 There is a substantial body of evidence that clearly shows that the Two Markets have experienced a continuous and significant downward trend in prices which is expected to continue. In a recent study, Gartner noted this trend as follows:

*“Pricing is a function of supply, demand and the number of competitors offering the service. In the current market with its excess capacity and large number of competitors, a further drop in bandwidth prices is inevitable. We believe bandwidth prices will continue to decline by 20 percent to 25 percent annually during the next three years. IPLC prices have declined dramatically, and price erosion is slowing down but will still be significant in the next two years because of continued pressure from special deals.”*²¹

- 4.9 Market power is defined as the ability to increase price above the competitive level for a significant amount of time.²² The ultimate test of whether SingTel has market power is whether SingTel “can give less but charge more”. As noted in the United States:

*“The basic characteristic of effective competition in the economic sense is that no one seller, and no group of sellers acting in concert, has the power to choose its level of profits by giving less and charging more”.*²³

- 4.10 SingTel believes that the IDA has incorrectly sought to equate market share with market power. Market share is only one of several factors that the IDA should take into account when considering whether SingTel has significant market power. SingTel believes that the IDA should take a broader approach to its assessment of the competitiveness of the market. SingTel submits that price competition and price declines represent a more accurate indicator of competition in each market.

- 4.11 Evidence noted above and further discussed separately below for each of the Two Markets clearly show that the Two Markets have experienced continual and substantial price reductions that are projected to continue into the future. This trend has occurred and will continue to occur irrespective of SingTel’s market shares. This evidence clearly shows that SingTel cannot act independently of its competitors in the Two Markets and therefore, does not possess market power, let alone significant market power.

²¹ Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004

²² See e.g. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, 1992. Economists typically use the terms significant market power and monopoly power interchangeably in this context.

²³ United States Attorney-General’s National Committee to Study the Antitrust Laws, *Report*, 1955, page 320.

4.12 SingTel also believes that the IDA has miscalculated SingTel's market share to be about 50 per cent in the Backhaul Market. As discussed in section 3 above, the IDA's finding in relation to market share in the Backhaul Market stems from the fact that the IDA has miscalculated market share by reference to both self-supply and the provision of services to third parties.

Backhaul Market

4.13 As discussed in section 3 above, SingTel does not agree with the IDA's calculation of market share in the Backhaul Market. This miscalculation stems from the IDA's approach to market definition whereby self-supply is included in the market definition. SingTel does not agree with this approach because self-supply is not in the relevant field of close rivalry and SingTel's reasoning is set out in section 3 above.

4.14 The IDA's assessment of significant market power in the Backhaul Market places excessive reliance on market shares. The IDA's approach does not appear to take account of the other indicia of significant market power, such as the overwhelming evidence about the competitiveness of and the continuous downward trend in pricing in the Backhaul Market.

4.15 It is widely accepted that the Singapore market has a number of alternative backhaul service providers giving customers extensive choice. A key driver of this growth in service providers has been the availability of regulated access to SingTel's cable landing stations to competitive service providers. Under SingTel's RIO, SingTel is required to provide any service provider that has IRU capacity with regulated co-location access to SingTel's cable landing stations at cost price under Schedule 8 of the SingTel RIO.

4.16 The existence of multiple backhaul service providers also discounts the existence of market power on SingTel's part (if any) and demonstrates that there are low barriers to entry in respect of backhaul services.

4.17 FBOs can acquire backhaul services from several providers, including SingTel, StarHub, France Telecom, MCI and Reach. There is therefore no basis for the IDA's assertion that SingTel's control of 3 out of 4 cable landing stations gives it the potential to affect competition in the Backhaul Market. SingTel faces vigorous competition from other service providers at each SingTel controlled cable landing station.

4.18 Providers of backhaul services offer FBOs considerable choice through service differentiation and multiple service offerings, including point-to-point services, special customised backhaul services, generic or "no frills" services and services that

include specific service level guarantees. The existence of service differentiation and multiple service offerings proves that there is intensive and extensive competition between the providers of backhaul services.

- 4.19 The competitive strength of these alternative backhaul service providers is further evidenced by the following statements made by StarHub in its recent Prospectus about the extent of its service capacity and the importance of the Backhaul Market as a source of revenue growth:

“Connecting the domestic core network with its extensive international network, we own our own backhaul fibre and co-locate termination gear in most undersea cable landing stations in Singapore.”

“We also offer FBO and SBO customers reliable and efficient wholesale services including backhaul and co-location facilities. The various packages for the provision of backhaul services to major submarine cables such as the Asia Pacific Cable Network (“APCN”), South East Asia Middle East Western Europe 3 (“SMW3”) and APCN2 comes with a standard Synchronous Transport Module (“STM”)-1 bandwidth, up to STM-16 and above.”²⁴

“Others. Other data and Internet services comprise Asynchronous Transfer Mode (“ATM”), Frame Relay, ISDN, backhaul and facilities management services, which accounted for 11.5%, 14.0% and 21.8% of total data and Internet services for 2001, 2002 and 2003. The growth in this category is mainly attributable to the increased revenue from backhaul services.”²⁵

- 4.20 As discussed above in the IDA approach to competitiveness, there is substantial evidence that clearly shows that prices in the Backhaul Market have experienced a continuous and substantial downward trend for many years and this trend is expected to continue. SingTel has also developed customised backhaul service offerings to meet the specific requirements of competitors seeking to acquire backhaul.
- 4.21 Further, the IDA’s preliminary conclusion that SingTel has significant market power in respect of the previous market structure also does not take account of the IDA’s decision on 10 September 2004 in respect of Co-Location and Submarine Cable Connection Services (**Connection Services**). In doing so, the IDA has not examined the market by reference to its future structure and the potential for competition within that structure. The European Commission has noted:

²⁴ StarHub Pte Limited, Prospectus at page 93 (last paragraph)

²⁵ StarHub Pte Limited, Prospectus at page 51

*“As the market analyses carried out by NRAs have to be forward looking, markets are defined prospectively. Their definitions take account of expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of the next market review”.*²⁶

- 4.22 The IDA’s decision with respect to Co-Location and Connection Services provides for a new market structure and enhanced regulatory regime to further increase competition in respect of the provision of backhaul services.
- 4.23 Clause 4.1 of Schedule 4B of SingTel’s RIO requires SingTel to process a request from a Requesting Licensee for Connection Services within 30 business days. SingTel also has an obligation to process requests on a “first come first served” basis under clause 3.2 of Schedule 4B of the SingTel RIO.
- 4.24 There is no basis for complaints by industry participants that SingTel is using its rights under Schedule 4B of the SingTel RIO to restrict competition in respect of Connection Services. Schedule 4B of the SingTel RIO ensures that SingTel treats FBOs in a non-discriminatory manner and processes their requests in a timely manner.

Terrestrial IPLC Market

- 4.25 SingTel does not agree with the IDA’s calculation of market share in the Terrestrial IPLC Market.
- 4.26 SingTel believes that the IDA’s assessment of significant market power in the Terrestrial IPLC Market places excessive reliance on market shares. The IDA’s approach does not appear to take account of the other indicia of significant market power, such as the overwhelming evidence about the existence of vigorous competition in the Terrestrial IPLC Market and the continuous downward trend in pricing in the Terrestrial IPLC Market.
- 4.27 SingTel believes that the IDA’s assertion that SingTel’s ownership interest in cable systems gives it significant market power in the Terrestrial IPLC Market to be incorrect and contrary to the market evidence. Despite SingTel’s ownership interest in cable systems such as C2C, i2i and TIS, SingTel is subject to vigorous competition due to the fact that each of the cable systems has alternative cable systems that are available to SingTel’s competitors. As noted in the table below, there are more than

²⁶ European Commission, *Explanatory Memorandum on relevant product and service markets within the electronic communications sector*, page 8.

two (2) alternative cable systems that can serve the same destination as the C2C, i2i and TIS cables:

CABLE SYSTEM	ALTERNATIVE CABLE SYSTEM
C2C	APCN2, SMW3, APCN, ANC
i2i	SMW3, Tata Indicom, SMW4 (end 2005)
TIS	SMW3, APCN

4.28 As discussed above, in the IDA approach to competitiveness, there is substantial evidence that clearly shows that the Terrestrial IPLC Market has experienced a continuous downward trend in prices which is expected to continue. In 2004, Gartner noted that international bandwidth prices will continue to decline by 20 percent to 25 percent annually in the next three years.²⁷

4.29 The price reductions in Singapore have resulted in Singapore being identified by Gartner as one of the most-competitive markets for international bandwidth along with Hong Kong, Japan, Taiwan and South Korea.²⁸

4.30 This downward trend for prices is further supported by the recent independent study from Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004:

IPLC Pricing Forecast for 1 Mbps Link (Dollars per Month)

	2001	2002	2003	2004	2005	2006	2007	2008	CAGR (%)
Singapore to Hong Kong	5,800	1,450	1,150	910	680	540	460	420	-31.3
Singapore to Tokyo	5,800	1,450	1,150	910	730	620	580	560	-28.4
Singapore to Sydney	6,400	3,850	2,700	2,150	1,510	1,150	870	700	-27.1
Singapore to Kuala Lumpur	7,150	5,000	3,750	3,000	2,400	1,800	1,440	1,150	-23.0
Singapore to Jakarta	9,750	8,300	7,050	6,000	5,100	4,340	3,470	2,080	-19.8
Singapore to Bangkok	9,850	7,400	4,800	2,400	2,160	1,940	1,160	990	-28.0
Singapore to Mumbai	9,500	8,550	6,850	4,800	3,120	1,720	1,030	800	-29.8

Source: Gartner Dataquest: (August 2004)

4.31 Further, under the IDA price control framework, SingTel is required to comply with benchmark prices set to ensure that IPLC services remain internationally competitive vis-à-vis other major financial centres, newly-industrialised economies and neighbouring countries. SingTel's IPLC prices are thus subject to pair-wise comparisons where they are to be equal or less than the prices for similar circuits in

²⁷ Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004

²⁸ Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004

Jakarta, Kuala Lumpur, Manila, Bangkok, China, New Delhi, Hanoi, HongKong, Tokyo, Sydney, Taipei, Seoul, New York and London.

- 4.32 The competitiveness of the Singapore market and the competitive strengths of SingTel's competitors can be further seen from the following comments by StarHub²⁹:

“International Leased Circuits (“ILC”). For 2002 and 2003, the declining trend in ILC revenue from 49.8 per cent to 29.8 per cent was attributable to falling ILC rates due to excess capacity on most international routes, which more than offset the increase in volume of international circuit capacity sold. This trend continued into 2004 and for the six months ended 30 June 2004, our ILC revenue was S\$18.1 million.”

For global connectivity we have established international gateways for voice and data as well as for Internet traffic. StarHub owns submarine cable capacity from major submarine cables that terminate in Singapore. Together with the leased satellite earth station of ST Teleport Pte Ltd (“STTP”) and the global networks of BT and Nippon Telegraph and Telephone Corporation (“NTT”), we offer a worldwide connectivity and global solutions to our customers. Domestically our network is interconnected with SingTel, MobileOne, 1-Net and major international carriers.

Our international network provides international connections with overseas carriers to support both our voice and non-voice services. We are directly connected with more than 30 international carriers in 20 countries including the United States, Australia, Japan, China, Hong Kong SAR, Taiwan, Korea, India, Bangladesh, the United Kingdom and Germany. Our international networks also provide indirect connections from Singapore to more than 200 countries. Our current international bandwidth is 11.1 Gbps. We also hold a section 214 authorisation in the United States and a PNETS licence in Hong Kong.

Submarine Cables. Our main international connectivity rides on a multitude of submarine cables providing diversity and resiliency to our international network. These cables include APCN, APCN2, SMW3, FLAG, Japan-US, East Asia Crossing (EAC), Pacific Crossing – 1 (PC1), Trans-Pacific Cable – 5 (TPC5) and Trans-atlantic – 14 (TAT14). These are new cable networks which are efficient and of higher capacity using advance SDH, Dense Wavelength Division Multiplexing (DWDM) technology and network management, employing fibre

²⁹ StarHub Pte Limited, Prospectus at pages 51, 96 and 97

ring architecture to achieve self healing performance. With these new cables, we are able to incorporate designs using traffic engineering to route traffics on different cables to achieve efficiency and diversity.

Satellite Links. We also utilise INTELSAT and ThaiCom satellites to connect to countries that are not covered by submarine cables. We utilise the earth station facilities of STTP to uplink and downlink traffic to these destinations.

Terrestrial Links. For border communications with West Malaysia and Batam, Indonesia, we have established terrestrial fibre and microwave links. These terrestrial links facilitate us with interconnection with the major carriers in both countries at low cost.”

- 4.33 SingTel also disagrees with the IDA that the “other factors” noted by the IDA in paragraph 76 of the Preliminary Decision allegedly demonstrate that SingTel continues to have significant market power.
- 4.34 The fact that SingTel is the sole provider of Connection Services (an input into the Terrestrial IPLC service) does not mean that SingTel is able to leverage any power in the downstream Terrestrial IPLC Market. On 25 April 2002, the IDA amended the Telecom Competition Code designating Connection Services at SingTel cable landing stations as Unbundled Network Services for which SingTel must offer to provide under the RIO. The amendments to the SingTel RIO were subject to public consultation and ultimately directed by the IDA. Accordingly, Schedule 4B of the SingTel RIO ensures that SingTel treats FBOs in a non-discriminatory manner and processes their requests for Connection Services in a timely manner. As such, SingTel fails to see how it can be concluded that SingTel exercises market power under such circumstances. Clearly, IDA intervention has removed any ability for SingTel to impede competition through the provision of Connection Services to competitors.
- 4.35 Similarly, there is no basis for the suggestion that SingTel may use its position in respect of Local Leased Circuits (LLCs) to impede FBOs in the Terrestrial IPLC Market. SingTel notes that the IDA’s decision in relation to LLCs requires SingTel to provide Requesting Licensee with Full LLCs (FLLCs) and Tail LLCs (TLLCs) at a 30 per cent and 50 per cent discount respectively from the prevailing retail price. This discount will increase market entry and ensure greater competition in the markets for FLLC and TLLC services. SingTel also notes that Schedules 7A and 7B of the RIO also impose strict timeframes on SingTel in respect of the provisioning of FLLCs and TLLCs. Furthermore, in 2004, Gartner noted that local access costs are lowest in

Taiwan, India, Hong Kong and Singapore and local access costs are highest in Thailand, Philippines, Japan and Indonesia.³⁰

- 4.36 SingTel also notes that the IDA's comments in respect of SingTel's supposed market power in the Terrestrial IPLC Market is in the context of the previous market structure. The IDA's comments therefore do not take account of the IDA's decision on 10 September 2004 in respect of Connection Services and Co-Location and its more recent decision in respect of LLCs.
- 4.37 Therefore, SingTel's provision of Connection Services, Co-Location and LLCs will not result in an outcome that is detrimental to other FBOs in the context of Terrestrial IPLC services.
- 4.38 Finally, SingTel notes that the IDA view that SingTel's lower market share on the Hong Kong and Japan routes "reflects the fact that they are being served by many cable stations including C2C, APCN2 and East Asia Crossing".³¹ The IDA's comments clearly indicate that it considers the Hong Kong and Japan routes to be subject to effective competition.
- 4.39 Obviously, the continuation of Dominant Licensee regulation on competitive routes, such as the Hong Kong and Japan routes, imposes costs on SingTel and distorts market outcomes. In doing so, it places SingTel at a disadvantage to its competitors.
- 4.40 The Code specifically provides that regulation will be applied proportionally and only to the extent required to fulfil its objects:

"IDA will seek to impose regulatory requirements that are carefully crafted to achieve the IDA's stated goals. Such requirements will be no broader than necessary to achieve IDA's stated goals".³²

- 4.41 SingTel therefore submits, notwithstanding the discussion above about market definition and the competitiveness of the Terrestrial IPLC Market as a whole, that the IDA should grant exemptions on competitive routes, including:
- (a) the Hong Kong route;
 - (b) the Japan route; and

³⁰ Gartner, International Bandwidth Pricing Trends, Asia/Pacific, 2004

³¹ IDA, Preliminary Decision, page 27.

³² Telecommunications Competition Code, sub-section 1.5.3.

- (c) the Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Luxembourg, Netherlands, Netherlands Antilles, New Zealand, Norway, South Korea, Spain, Sweden, Switzerland, UK and USA routes.
- 4.42 All the routes identified above are those which the IDA has already established as Category 1 routes and therefore, fully liberalised with respect to the provision of all international telecommunications facilities and services.³³ The IDA's assessment methodology is comprehensive and is based on an assessment of all aspects of competition in Category 1 routes, including whether or not there is effective price competition, availability of ISR and other alternative calling substitutes and the freedom of market entry.³⁴ Given the IDA's assessment that these routes are fully liberalised in respect of all international telecommunications facilities and services, SingTel believes that there are no grounds for the IDA to continue to regulate them in respect of Terrestrial IPLC services.
- 4.43 SingTel notes the IDA's concern about the costs to SingTel and the IDA associated with granting exemptions to SingTel in respect of specific routes.³⁵ SingTel considers that these costs are likely to be far less than the costs associated with SingTel being subject to Dominant Licensee regulation in an otherwise competitive market. In particular, the continuation of Dominant Licensee regulation will result in inefficiencies in the Terrestrial IPLC Market generally.

International Managed Data Services Market

- 4.44 SingTel supports the IDA's conclusions in respect of the International Managed Data Services Market.
- 4.45 As noted in SingTel's original submission to the IDA, the International Managed Data Services Market is characterised by domestic, regional and global service providers with extensive international capacity investments that have a reach equivalent to, or in excess of, SingTel's international network.
- 4.46 Global service providers such as Cable & Wireless, Sprint, MCI, Equant, and AT&T offer a suite of International Managed Data Services products. For example, Sprint has a Singapore node which is used to offer Sprint Global Frame Relay and Sprint Global ATM, amongst other services. Equant offers International Frame Relay in more than

³³ IDA, Guidelines in International Settlement Arrangements Relating to Provision of International Telecommunications Services at section 2.1.2

³⁴ IDA, Guidelines in International Settlement Arrangements Relating to Provision of International Telecommunications Services at section 2.1.2

³⁵ IDA, Preliminary Decision, page 28.

600 locations in more than 130 countries and International ATM Services in more than 50 countries with more than 300 points of presence. Similarly, MCI and Cable & Wireless offers extensive International Frame Relay and International ATM Services.

4.47 In addition, local entities such as StarHub offer extensive International Frame Relay and International ATM services with its global joint partners such as ArcStar Global Managed Services and BT Global Managed Services.

4.48 The global strength of SingTel's competitors can be seen from the following announcement by Equant:

“Equant is the recognized industry leader in global IP and data services for multinational businesses, offering network, integration and managed services to global businesses. The network has unmatched seamless global reach, connecting key business centres in 220 countries and territories, with local support in 145 countries and territories. Building on more than 50 years of experience in data communications, Equant serves thousands of the world's top companies. Equant, a member of the France Telecom Group, meets the diverse needs of global companies with the industry's most extensive portfolio of managed data network services. Equant's 2001 revenues, on a pro forma basis, were more than \$3 billion.”³⁶

4.49 The importance of the Singapore market for SingTel's competitors can be seen from the following announcement by MCI:

“Recognising Singapore's importance in the region, we have opened our Asia Call Centre and two Network Operations Centres offering a full range of advanced services including: co-location, advanced data and network management. Direct connections to the MCI high-speed global backbone provide our customers ample bandwidth for the most sophisticated IP applications. With protection against both natural and man-made disasters, global businesses large and small will find a secure environment for their web hosting and data operations.”³⁷

4.50 Most of SingTel's current competitors were offering International Managed Data Services prior to 2000 through business arrangements with SingTel. Therefore, at the time these operators obtained licences, they already had significant customer bases that they had built-up over time. The table below sets out the time periods when

³⁶ Equant website at www.equant.com
³⁷ MCI website at www.mci.com

SingTel first started to offer various International Managed Data Services and the time periods when similar services were first offered by SingTel's competitors through business arrangements with SingTel:

	Bi FR	C+ FR	Bi-ATM	C+ATM	C+ VPN	IP-
Date/Year SingTel started offering service	1994	1998	1998	1999	1998	
Prior to 2000, the operators already offering such services in Singapore through business arrangements with SingTel	Infonet, C&W, Equant, GlobalOne, BT, TMI (Orient Telecom), Sprint, IBM Global Network and AT&T (Since 1995) Frame relay service was offered by these carriers as early as mid 1990s.		GlobalOne, C&W and TMI (Orient Telecom) ATM service was offered by these carriers in Singapore as early as 1998.			

4.51 As seen above, SingTel is subject to vigorous and intense competition from many service providers, including Asia Netcom, AT&T, BT, Equant, MCI, Reach, Sprint and StarHub. The prices for International Managed Data Services have continually fallen and this trend will continue into the future. It is beyond question that the International Managed Data Services Market is competitive.

International IP Transit Market

4.52 SingTel supports the IDA's conclusions in respect of the International IP Transit Market.

4.53 As noted in SingTel's original submission to the IDA, the liberalisation of the International IP Transit Market occurred before 2000 and as a result, there is a proliferation of large global service providers such as UUNET, Cable & Wireless,

Equant, Reach and Verizon. The global strength of SingTel's competitors can be seen from the following announcement by MCI³⁸:

“MCI can provide you with managed high-speed and high performance access to the world’s largest and most resilient Internet backbone service...MCI Transit Services provide you with the following benefits: Peering arrangements with all major international and local backbone providers...direct connection to the most important US backbone...”

“The MCI IP network spans more than 3,800 POPs around the globe, including Transit connectivity to ISP customers in 76 countries. MCI’s IP network maintains the highest level of reliability...enables you and your customers to take advantage of MCI’s global network and world-wide peering arrangements...”

- 4.54 SingTel's competitors own and operate extensive submarine cables with a reach equivalent to or greater than SingTel's network reach. For example, Reach has ownership interests in more than 50 submarine cables and international satellite systems globally, nearly 40 of which are located in the Asia-Pacific. Through its cable interests and ownership, Reach offers connectivity to all major networks in the region. As another example, Asia Netcom advertises that its ownership and operation of EAC, a fibre optic cable system connecting five major Asian centres, including Singapore, and its connectivity to the Asia Netcom trans-Pacific IRU circuits that terminate on the West Coast of the United States as a key product differentiation³⁹:

“Asia Netcom’s IP transit service targets ISPs and service providers who want one-hop global connectivity to major Internet peering points and content providers. Powered by our pan-Asia fibre optic cable systems, the network of China Netcom and partners, Asia Netcom’s IP Transit service is delivered over a truly global IP infrastructure...We offer comprehensive peering arrangements to major overseas networks and top content providers on the World Wide Web.”

“[our] IP backbone consists of over 8.5Gbps of intra-Asia capacity and an overall global capacity of close to 20Gbps. Backed by an extensive portfolio of peering partners in key Asian and global markets, Asia Netcom’s IP Transit service now offers one of the best Internet connectivity performances in the Asia Pacific region.”

³⁸ MCI website at www.mci.com

³⁹ Asia Netcom website at www.asianetcom.com

4.55 In May 2004, France Telecom announced an agreement to provide IP transit capacity to the MSN network of Internet services. In its media release of 5 May 2004, France Telecom stated that:

“Through the agreement, France Telecom will increasingly deliver bandwidth-intensive content and applications to customers who use MSN in London, Singapore and Tokyo. With a single global Autonomous System Number, France Telecom’s Open Transit Internet service offers customers access from more than 50 POPs throughout the Americas, Asia and Europe, where the service reaches 80% of web-users within one single AS-hop.”

4.56 In June 2004, France Telecom and Reach joined the Equinix GigE Exchange Platform. In its 30 June media release, Equinix announced that the addition of France Telecom and REACH followed both operators operating POPs within the Equinix Singapore Internet Business Exchange (IBX) centre.

4.57 As seen above, SingTel is subject to vigorous and intense competition from many service providers with global submarine cable coverage that is far in excess of SingTel’s and who readily use that to compete aggressively in Singapore. It is beyond question that the International IP Transit Market is competitive.

Satellite Services Market

4.58 SingTel refers to the IDA’s conclusions in respect of the competitiveness of leased satellite bandwidth, VSAT services, DVB-IP, Satellite uplink and downlink, and satellite IPLC. It is beyond question that the Satellite Services Market (and the individual services that are offered within it) is vigorously competitive. SingTel has a very small market share in this market, based on either SingTel’s proposed market definition or the IDA’s definition.

4.59 SingTel does not possess significant market power in this market.

4.60 There is no issue that SingTel’s proposed widening of the IDA’s market definition in respect of leased satellite bandwidth, VSAT services, DVB-IP, Satellite uplink and downlink, and Satellite IPLC into one Satellite Services Market will result in a conclusion that is consistent with the IDA’s findings in its Preliminary Decision in respect of the competitiveness of each specific IDA defined market.

5. OTHER COMMENTS

Timeframe for the review of Dominant Licensee regulation

- 5.1 SingTel notes that the IDA is prepared to review the state of competition in the Backhaul Market and Terrestrial IPLC Market 2 years after the effective date of its decision in relation to this matter.
- 5.2 SingTel does not believe that it should have to wait 2 years before the IDA considers reviewing the state of competition in each of these markets. This delay would result in SingTel being subject to Dominant Licensee regulation, notwithstanding further increases in competition in each market. Such an outcome is inconsistent with the IDA's regulatory principle of "proportionate regulation" as set out in sub-section 1.5.3 of the Code and will place SingTel at a disadvantage in relation to its competitors, which are not subject to such onerous obligations.
- 5.3 In the event that the IDA does not alter its position in respect of the application of Dominant Licensee regulation to backhaul and terrestrial IPLC services in its final decision, SingTel considers that the IDA should review its position in respect of these two markets at any time following the final decision at SingTel's request. Alternatively, the IDA should review its final decision in relation to the Backhaul Market and Terrestrial IPLC Market within twelve (12) months after its final decision.

6. CONCLUSION

- 6.1 It is clear from the issues and evidence noted in this Submission to the IDA that the IDA's Preliminary Decision that Dominant Licensee regulation is no longer necessary in respect of the International Managed Data Services, International IP Transit, Leased Satellite Bandwidth, Very Small Aperture Terminal (VSAT), Digital Video Broadcast-IP (DVB-IP), Satellite TV Uplink, Satellite TV Downlink and Satellite IPLC is based on sound reasoning and international best practice.
- 6.2 It is also clear from the issues and evidence noted in this Submission to the IDA that SingTel does not possess significant market power in the Backhaul Market and the Terrestrial IPLC Market and therefore, Dominant Licensee regulation should be removed in respect of those markets. Such a conclusion would be consistent with international best practice and the IDA's own methodologies in relation to the determination of significant market power in other markets.