

**REACH LTD.**

**SUBMISSION IN RESPONSE TO IDA'S PUBLIC CONSULTATION  
REQUEST BY SINGAPORE TELECOMMUNICATIONS LIMITED FOR  
EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT  
TO THE INTERNATIONAL CAPACITY SERVICES MARKET PURSUANT TO  
SUBSECTION 2.6.1 OF THE CODE OF PRACTICE FOR COMPETITION IN  
THE PROVISION OF TELECOMMUNICATIONS SERVICES**

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**EXECUTIVE SUMMARY**

- REACH is disappointed and concerned that SingTel has submitted another dominance exemption request which is non-compliant with the Code, and even further concerned that IDA has proceeded to put this out for consultation.
- The SingTel exemption request for ICS should be rejected outright by the IDA for a number of reasons, but primarily because it does not meet Code requirements to include verifiable data on SingTel's market position.
- It should also be dismissed by the IDA as the limited 'data' provided by SingTel is flawed, for example, it misrepresents overseas precedent.
- REACH also points out that there are a number of other critical regulatory issues that IDA needs to address particularly in relation to cable connection under the RIO. This frivolous application by SingTel wastes IDA time and diverts IDA resources from those issues
- Assuming IDA proceeds with the ICS Consultation, it must ensure that its consultation and follow up analysis is thorough.
- IDA must ensure that the industry consultation allows a right of reply to SingTel verifiable data: this will require at least three rounds of consultation, assuming SingTel is forced to provide data in the second round.
- In proceeding to assess competition in ICS markets, IDA will need to define the markets in accordance with best practice.
- IDA must treat SingTel's supply of bandwidth to itself as part of the relevant market i.e. the "addressable market" concept should be rejected.
- REACH submits that the ICS market is limited to international, dedicated, point-to-point cable bandwidth. This includes IPLCs but excludes other products listed in SingTel's exemption request.
- In particular, broadcast/point-to-multipoint, satellite, managed/switched services and domestic backhaul are not part of the market and should be excluded from the ICS consultation based on substitutability analysis. Hong Kong precedent supports this approach.

- Wholesale and retail functional markets exist because of the different entry conditions.
- Geographic markets should be segmented by routes and cable system due to lack of substitutability. This is not countered by hubbing options as customers are more sophisticated these days and require ICS on specific routes and even cable systems. Therefore current Singapore conditions justify a segmented approach cf. Hong Kong in 2001
- The geographic market is Singapore based as clearly a customer in Singapore needs an ICS that connects to Singapore.
- Once IDA has properly defined the markets, it must properly assess dominance, rather than rely on SingTel's rhetoric in its exemption request. IDA should use the same criteria as for assessing dominance classification in the first place.
- Caution should be exercised when reviewing SingTel arguments that the ICS market is competitive as these lack substance.
- In particular, SingTel's reliance on Hong Kong assessment risks making a mockery of the IDA regime.
- IDA must take a more thorough approach – market share analysis is required, including SingTel self-supply.
- SingTel's high market share of over 75% total activated capacity should lead to presumption of dominance.
- There are no other factors countering this presumption and certainly no verifiable counter-evidence provided by SingTel.
- Barriers to entry are high with regard to market bottlenecks at the wholesale level such as access to cable stations and backhaul. Regulation under the RIO is inadequate in reducing these barriers to a competitive level.
- The apparent absence of IRU offerings on the i2i and TIS cable systems and the constraint this lack of IRU capacity imposes on competitive FBO licensees acquiring and operating cable station access and backhaul facilities demonstrates clearly that there are no viable alternatives to SingTel "packages" on certain routes.
- Local tails are also significant bottlenecks impacting competition in ICS markets, regardless of which cable system international capacity is delivered over or any backhaul arrangements.
- The conditions in Hong Kong that reduce barriers to entry are not replicated in Singapore.
- Further, in Singapore SingTel has demonstrated a tendency to obstructive conduct in ICS markets.

- IDA must also treat SingTel's vertical integration as critical to its dominance assessment. SingTel can leverage its domestic dominance into international service markets and also from wholesale to retail markets. This is a key differentiator from the structurally separate Hong Kong market.
- Given that SingTel remains dominant in the ICS markets as properly defined, exempting SingTel from each and every dominance safeguard would cause harm. Ex ante regulation is needed until ICS markets are effectively competitive.

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- Attachment 1**      **Expert Statement on Self-supply - The treatment of self-supply in market definition and market analysis – Prof. Martin Cave**
- Attachment 2**      **Expert Statement on Market Definition – SingTel’s approach to market definition is manifestly inadequate – Prof. Martin Cave**
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**STATEMENT OF INTEREST**

Reach Ltd. ("**REACH**") provides this submission in response to IDA's Public Consultation *Request By Singapore Telecommunications Limited For Exemption From Dominant Licensee Obligations With Respect To The International Capacity Services Market Pursuant To Subsection 2.6.1 Of The Code Of Practice For Competition In The Provision Of Telecommunications Services* ("**ICS Consultation**") and the SingTel Request for Exemption attached to the ICS Consultation ("**Exemption Request**").

Our comments are made on behalf of our subsidiary, Reach International Telecom (Singapore) Pte Ltd. This entity is the holder of a Facilities Based Operator Licence ("**FBO**") in Singapore under which it supplies a broad range of products to other operators, including the type of services included in the Exemption Request. Aside from an overarching interest in Singapore being a competitive telecommunications hub, REACH therefore has a particular interest in the ICS Consultation as a competitor of SingTel. REACH also has a particular interest as a wholesale acquirer of other services included in (e.g. domestic backhaul), or relevant to (e.g. cable station access and connection services), the Exemption Request.

At the outset, REACH wishes to express its concern and disappointment that IDA has decided to put the Exemption request to public consultation. The Exemption Request is baseless and should have been rejected without further wasting regulator and industry resources. Not only does SingTel continue to dominate the markets for services included in the Exemption Request, it also dominates other key markets such that it can leverage market power across the board.

Leaving aside this fundamental point, the Exemption Request should also be rejected as it does not meet requirements for the content of such a request under *The Code Of Practice For Competition In The Provision Of Telecommunications Services* ("**Code**") and so is invalid. SingTel has failed to provide verifiable data on its market position such as market share and concentration. Further, SingTel has proposed such patently wrong market definitions that the ICS Consultation has been distorted to include a wide range of services that are not International Capacity Services ("**ICS**"). In our submission, REACH rejects this approach and uses the term ICS purely to describe the market for dedicated international point-to-point bandwidth, excluding point-to-multipoint, domestic and switched or managed services.

We begin by commenting further on why the ICS Consultation should not proceed. However, given IDA's decision that it should at least take SingTel's invalid Exemption



Request as far as public consultation, REACH also feels obliged to comment on why SingTel is still dominant such that IDA must still ultimately reject the request.

REACH points out that its comments are made in response to the ICS Consultation document. We have received the IDA's letter to certain licensees dated 12 April 2004 in response to the concerns we expressed in relation to IDA's approach to exemption requests. At this stage, we do not seek to address this IDA letter here. We reserve our position and will reply to IDA separately. Clearly, we are aware that the IDA's letter covers a number of issues in this submission but REACH still believes the concerns expressed below remain valid.

## **PART I COMMENTS ON PROCESS**

### **IDA SHOULD REJECT EXEMPTION REQUEST OUTRIGHT**

#### **Exemption Request is non-compliant with Code**

Section 2.6.1 of the Code makes clear that the Exemption Request should have contained the following:

- An explanation of why each specific dominance provision is unnecessary to protect end users or preserve effective competition in relation to each specific service.
- Verifiable data in respect of its explanations, based on the criteria for assessing dominance in s2.5.2.2.

As in most jurisdictions, the onus/burden of proof is on SingTel to demonstrate that it is non-dominant in the supply of ICS. It is not a matter of SingTel making a crude application and then expecting IDA to do SingTel's work for it or for commentators to have to demonstrate that SingTel is still dominant.

We strongly submit that the Exemption Request does not meet IDA requirements specified in the Code as essential to commencing a non-dominance review. It does not contain key verifiable data including on proper market definition and market share/concentration. Further, it does not explain on a provision by provision and service by service basis why dominance safeguards are no longer necessary.

REACH considers that the IDA putting the Exemption Request out to consultation when it does not comply with s2.6.1 means the ICS Consultation is inconsistent with the Code. Further, not only has SingTel failed to provide substantive material to comment on, IDA has not added anything substantive upon which interested parties can comment. This wrongly pushes the onus of proof onto commentators.

We note that IDA allowed the SingTel International Telephone Service ("ITS") non-dominance application to proceed on the grounds that it was SingTel's first attempt at this sort of process, an excuse expressly accepted in the IDA's decision ("ITS

**Decision**).<sup>1</sup> Notwithstanding reservations why this was allowed in the first place, REACH believes IDA should have rejected the current Exemption Request for ICS without going to consultation as it has the same failings or worse than the ITS application. The “first time” excuse no longer applies.

While we believe that even still IDA should reject the ICS Exemption Request as non-compliant with the Code, we nevertheless feel obliged to provide submissions as to why SingTel is still dominant in the supply of ICS. There is a serious cost to industry in terms of time and effort in having to respond to such a seriously flawed application, particularly where the onus of proof is wrongly shifted to it.

### **Limited ‘data’ provided by SingTel is flawed**

In the Exemption Request, SingTel extensively quotes/relies on Reach Networks Hong Kong Limited (“**Reach Networks**”) external bandwidth market non-dominance application (“**Reach Networks’ Application**”)<sup>2</sup> and OFTA’s decision on this application (“**OFTA Statement**”).<sup>3</sup> Clearly, the IDA must not accept the SingTel material on Hong Kong ICS as evidence of Singapore conditions. IDA must also ensure that it reads and understands the OFTA Statement in its context to fully appreciate why it should not accept the SingTel material. Throughout this submission we point out differences between the Hong Kong and Singapore context but we note upfront some key concerns with SingTel’s reliance on the OFTA Statement:

- SingTel simply states the conclusions in the OFTA Statement and does not show how they apply to SingTel’s circumstances in the ICS market.
- The Exemption Request does not recognise that different market conditions applied in the OFTA Statement.
- SingTel ignores that Reach Networks was, and is, not a vertically integrated provider of both international and domestic or wholesale and retail services – Reach Networks is solely an external wholesale supplier, and was fully structurally separated from any domestic operations.
- Reach Networks had a market share of less than 20% of activated external bandwidth capacity in Hong Kong at the time it was declared non-dominant,<sup>4</sup> while REACH estimates SingTel to have above 75% market share in Singapore.

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<sup>1</sup> “Explanatory Memorandum issued by Info-communications Development Authority of Singapore: Request by Singapore Telecommunications Ltd for Exemption from Dominant Licensee Obligations with respect to the International Telephone Services Market”, 12 November 2003.

<sup>2</sup> “Reach Ltd Application on behalf of Reach Networks Hong Kong Limited for a Declaration of Non-Dominance in External Bandwidth Services”, dated 1 June 2001. <<http://www.ofta.gov.hk/report-paper-guide/paper/consultation/cp-20011019-1.pdf>>

<sup>3</sup> “Application by Reach Limited for Declaration of on-dominance in the Market for External Bandwidth Services, Statement of the Telecommunications Authority”, dated 15 March 2002. <<http://www.ofta.gov.hk/tas/ftn/ta20020315.pdf>>

<sup>4</sup> “Reach Ltd. Comments on the Telecommunications Authority’s Supplementary Consultation Paper about Reach Ltd.’s Application for a Declaration of Non-Dominance in the Market for External

Aside from the fact that it is inappropriate to rely on a finding in another market as evidence of Singapore conditions, the Exemption Request is also misleading in its references to the OFTA Statement including because it:

- cherry picks points.
- lists only some of the OFTA tests for non-dominance and implies that by meeting these few, SingTel is non-dominant.
- implies that OFTA includes ATM/FR and other managed services in the ICS market, when OFTA specifically excludes them.

The Exemption Request is also flawed in a number of other respects including circularity of arguments as identified later in this submission. Examples include SingTel claims that the geographic market for ICS is not route-specific alongside other claims that its customers are sophisticated and demand capacity on certain routes or systems. SingTel also argues that it does not have incumbency advantages but then alleges that its competitors do in their home markets (despite competition being more mature in these countries).

The significant flaws in the Exemption Request are immediately apparent to the international telecommunications community. The deficiencies and low standard of the Exemption Request, and SingTel's presumed expectation that it will be successful in this application, creates a poor impression of Singapore generally and as a telecommunications hub.

All these, and other factors, add up to this being a frivolous submission by SingTel that should have been rejected outright by IDA, with SingTel being reminded in the strongest terms of its responsibilities when filing an application for relief from Dominant Licensee obligations.

#### **IDA time and resources diverted**

REACH is particularly concerned that both IDA and the industry are having to expend time and resources in considering SingTel's deficient and inappropriate exemption request. REACH is aware that IDA has a number of key matters before it - such as the mandatory wholesale pricing scheme for local loops, inclusion of new cables under the SingTel Reference Interconnection Offer ("**RIO**") and its regime review – and consideration of this SingTel application is diverting IDA resources from such matters.

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Bandwidth Services of 21 December 2001" 18 January 2002. <[http://www.ofa.gov.hk/report-paper-guide/paper/consultation/2002\\_01\\_25/0125\\_8.pdf](http://www.ofa.gov.hk/report-paper-guide/paper/consultation/2002_01_25/0125_8.pdf)>

## **THOROUGH CONSULTATION AND ANALYSIS REQUIRED IF IDA PROCEEDS**

### **Need for proper industry consultation and right of reply to SingTel verifiable data**

Should IDA intend to review the Exemption Request based on all relevant information, it must allow adequate input from industry. This input cannot be made in a vacuum as appears to be the expectation of the ICS Consultation. The Exemption Request does not constitute evidence from SingTel that industry can verify or negate. Nor does the ICS Consultation indicate any initial conclusions by IDA on the Exemption Request that industry can provide any guidance on.

A proper consultation in accordance with best practice approaches of overseas regulators would give several opportunities for input by industry on any evidence put forth by an incumbent and the initial conclusions of the regulator. The essential requirement is that industry has a right of comment on substantive material. Transparent decision making would also require that IDA seek industry comment on its approach. Regulators typically either issue consultation papers indicating their initial views or, if the consultation is vague on this, follow up with a draft or preliminary decision for comment. Industry does not view such extended processes as slow or a sign of an unresponsive regulator; rather it is more concerned that unduly quick and superficial consultations signal this.

Although IDA has intimated that there might be a second round of consultations on the Exemption Request, the way the ICS Consultation has started means that there needs to be a minimum of three rounds of consultation. This first round tells commentators nothing of IDA's views and provides very little SingTel information. When the consultation goes to a second round, SingTel will have had the benefit of seeing its competitors' comments and will be able to target these comments with their response – but we competitors will not have seen anything of substance of SingTel's case. A third round will therefore be necessary to provide an opportunity for competitors to respond to SingTel's comments.

### **IDA review methods must be rigorous**

As REACH submits above, the Exemption Request should be rejected outright as failing to meet Code requirements. However, assuming that IDA does consider this invalid Exemption Request, IDA must be rigorous in its approach so that further damaging precedent is not set.

It is critical that IDA adopt correct market definitions and correctly identify the markets which bottlenecks, like cable station access, apply to. The IDA must give proper weight to industry views in this regard, given operators are the ones competing in the markets and assessing competition on a daily basis.

IDA must also use correct assessment methodologies for defining the scope of transactions in the market and calculating market shares. In particular, it would be out of line with best practice to use the addressable market concept. Rather, the ICS market must include SingTel self-supply and assessment of SingTel control of this market must take into account the power that stems from this self-supply.

In its 12 April 2004 letter, IDA responds to comments by a number of competitive carriers regarding use of the addressable market concept in its ITS Decision. While REACH reserves its opinion here regarding the basis of the market assessment concept IDA says it used, IDA does state that it excluded self-supply in its assessment of the wholesale ITS market. As, regardless of the rationale for excluding self-supply, the effect is the same as adopting the addressable market approach, for convenience REACH refers in this submission to such methodologies as “addressable market” approaches or concepts.

REACH provides detailed comments on review methods in its discussion of market definition and dominance.

## **PART II COMMENTS ON MARKET DEFINITION**

### **MARKETS MUST BE DEFINED IN ACCORDANCE WITH BEST PRACTICE**

#### **Overview of ICS market definition**

REACH comments in this section on how ICS markets should be defined, what these markets are and why the SingTel definitions are incorrect. However, before we provide detailed explanations, we believe it useful to set the context for comment by outlining the correct ICS market definition:

- Product Market – Capacity which is:
  - International (excluding domestic backhaul and LLCs)
  - Point-to-point (excluding broadcast services)
  - Dedicated (excluding managed and switched services)
  - Cable-based and therefore provides high quality/reliability and speed of service (excluding services such as satellite and VSAT).
- Functional Levels – Capacity supplied:
  - Wholesale (supply to other operators) and
  - Retail (supply to corporate and government end users)
- Geographic Markets – Capacity which:
  - Has one end in Singapore
  - Goes directly to a particular country OR is on a particular cable system to a particular country i.e. markets are defined on a route-by-route if not system-by-system basis.

#### **“Addressable market” concept should be rejected**

It would be a fundamental error to define ICS markets based on the “addressable market” concept in which SingTel’s sales or supply from its wholesale operation (“**SingTel Wholesale**”) to its retail operation (“**SingTel Retail**”) are excluded from the relevant market for the assessment of SingTel’s market power in the ICS market. As REACH expands upon later, the “addressable market” concept has been rejected in relevant international competition law decisions and by reputable regulatory bodies as totally inappropriate for application to an assessment of dominant or significant market power. REACH submits that application of the “addressable market” concept to the ICS markets in Singapore is equally inappropriate.

REACH would ordinarily assume that markets would be defined to include all transactions of substitutable products and proceed to examine substitutability. However,

given IDA's explanation to us that it applied an addressable market definition in the ITS Decision, we are now aware that IDA may continue to take a non-standard approach. We will therefore address this point at some length in an effort to convince IDA to reject the addressable market concept in the ICS Consultation.

While IDA may have felt a need to follow its external consultants in its first ITS Decision, it should now take a more considered approach to ICS markets based on best practice instead. REACH believes this is so critical to the future rigour of IDA's competition analysis, and therefore the success of the regime overall, that we have also requested an independent expert economist, Prof. Martin Cave, to provide comments on the treatment of self-supply in other jurisdictions as well as other aspects of market definition. His statement is provided with this submission as **Attachment 1 ("Expert Statement on Self-supply")**. It should be clear from this Expert Statement that best practice / precedent dictates that IDA should reject the addressable market concept and include SingTel self-supply of ICS. We hope that IDA will also see Prof Cave's own economic analysis on this issue (aside from best practice references) as useful in demonstrating that there are strong counter views to other consultants who may advocate use of the "addressable market" concept.

As per the Expert Statement on Self-supply:

*These practices raise the question of how to treat self-supplied wholesale inputs in the course of market definition and analysis. The question arises whether to define the market as including only services which are subject to transactions between firms (sometimes called an 'addressable market') or to include both the addressable market and output of the wholesale service which is retained within the firm for ultimate sale to end-users. In a recent market analysis, the IDA has chosen to include in the market definition and analysis only the addressable market. However this approach yields wrong conclusions in general, and does so in particular when applied to international capacity services.*

As is made clear in the Expert Statement, only when all services are included can a clear picture of the market be obtained. The objective of market definition is to identify the set of services which constrain a supplier of those services. In the case of a supplier of services to itself, the supplier can easily divert services from self-supply to third party supply and back again. This puts the services in the same market. Equally, on the demand side, third party customers will be equally happy with the services being used for self-supply as those for third party supply.

Further, it is clear that the self-supply of a product constrains the pricing of third party supply. If a competing wholesale operator supplies third parties with the relevant wholesale product at too high a price then those third parties will be unable to compete at the retail level with the retail operations of the self-supplying incumbent.

As is also explained by the Expert Statement on Self-supply, including self-supply is not only important for market definition but also assessing market power. The market share figures produced when self-supply is included ensure that market share data is not distorted to the point where new entrants appear to have greater market share and

economies of scale just because they may engage in more third party supply than the incumbent who keeps most of its services to itself.

In a similar vein, using the “addressable market” concept for determination of market share means that SingTel could be declared non-dominant in a market while having an actual market share in excess of 99%. It is, therefore, critical for the future of telecommunications competition in Singapore that IDA consider all supplies within the ICS market including SingTel self-supply.

### ***Lack of actual competing supply does not mean no market***

REACH submits that it is wrong in principle to exclude SingTel self-supply on the basis there is currently no competing source of supply. The services supplied and demanded in the addressable and non-addressable market segments are the same and economically comprise a single market.

The Retail ICS market comprises the whole of actual and potential transactions in ICS services at the retail functional level, not just actual transactions. This issue was considered by the High Court of Australia in the leading Australian case of *Queensland Wire Industries v BHP*. BHP argued that there was no “market” for the relevant product because BHP didn’t offer it for sale. Deane J said, *obiter*:

*“While actual competition must exist and be assessed in the context of a market, a market can exist if there be the potential for close competition even though none in fact exists. A market will continue to exist even though dealings in it be temporarily dormant or suspended. Indeed, for the purposes of the Act, a market may exist for particular existing goods at a particular level if there exists a demand for (and the potential for competition between traders in) such goods at that level, notwithstanding that there is no supplier of, nor trade in, those goods at a given time - because, for example, one party is unwilling to enter any transaction at the price or on the conditions set by the other.”<sup>5</sup>*

For the same reasons, the non-addressable segment of the market cannot be excluded from the Retail ICS market merely because there is at this time only a single supplier to the customers in that market segment.

### ***Self-supply by vertically integrated business is relevant to market definition***

Second, where a participant in the market is vertically integrated, self-supply from one functional level to another is relevant supply for the purposes of market analysis. In the *Queensland Wire* case, the Full Federal Court found that because BHP only provided steel “Y-bar” to its wholly-owned subsidiary AWI, there was no market for Y-bar in Australia. In the High Court of Australia Deane J disagreed:

*“The Full Court of the Federal Court concluded that one of those arguable markets, the market for raw Y-bar, did not exist in this country. I do not agree with that conclusion. Notwithstanding some expert economic evidence on the hearing, I am unable to accept the proposition that the fact that A.W.I. is a wholly*

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<sup>5</sup> [1989] HCA 6 para 7, per Deane J.



*owned subsidiary of B.H.P. means that sales of Y-bar by B.H.P. to A.W.I. must, for the purposes of market identification and definition, be treated as if they simply did not exist as sales or purchases. B.H.P.'s ownership of the issued shares in the capital of A.W.I. may mean that actual competition in the market for Y-bar is effectively stifled. The two companies are, however, separate entities with different employees, distinct obligations and responsibilities (e.g. to creditors and employees) and, to some extent, varying objectives. Notwithstanding the economist's tendency to see them as part of one "firm", it would be as unreal to completely disregard the distinction between them for the purposes of market identification as it would be to treat them as independent. Be that as it may, the evidence establishes a local market for Y-bar in the relevant sense even if the distinction between B.H.P. and A.W.I. be ignored. While B.H.P. does not sell to other than A.W.I., it is a potential seller to purchasers other than A.W.I. in that market in that it is prepared to sell Y-bar albeit at an excessive price. That being so, there is a local market for Y-bar in the relevant sense in that there is an arm's length potential purchaser (Q.W.I.) and potential vendor. The fact that there are no local arm's length sales is only because the potential vendor's price is unrealistically high.<sup>6</sup>*

The same reasoning applies to self-supply of ICS services from the wholesale to the retail levels of a vertically integrated telecommunications operator. While SingTel Wholesale is the sole supplier to SingTel Retail, it is also a potential (and actual) seller to purchasers other than SingTel.

### ***Exclusion of self-supply distorts picture of market power***

Third, if the non-addressable part of the market is excluded, the analysis is significantly biased in favour of the incumbent and ignores the principal source of market power consistently identified by commentators and regulators – the substantial structural advantage they gain from being vertically integrated. For example, at an early stage of liberalisation in a hypothetical market, the incumbent might be the only supplier of ICS services to 99% of retail customers. One or more entrants compete with the incumbent for only 1% of retail end-users. On the “addressable market” analysis the incumbent should be considered non-dominant if those entrants manage to supply a majority of those addressable customers, say 70% of them, notwithstanding that 99.3% of all retail customers are supplied by the incumbent and 99% have no choice in that.

Market definition serves an instrumental role: relevant markets are defined in order to assist the process of market analysis. The market must be defined in such a way as to further the assessment of market power, not to skew it.

### ***Best practice supports inclusion of SingTel self-supply***

REACH's review of the practices of overseas regulators demonstrates that use of the addressable market concept would not be in line with best practice. Rather, market analysis should include self-supply. The Expert Statement confirms our review, with a

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<sup>6</sup> [1989] HCA 6 para 8, per Deane J.

focus on the European context. Below, we outline the findings of our review and refer IDA to the Expert Statement for details of European precedent.

The Australian Competition and Consumer Commission (**ACCC**) states in its Merger Guidelines that: “[w]hile most mergers will involve the identification of markets where there is actual trade in goods or services, this is not necessarily the case.” The ACCC quotes the *Queensland Wire* case referred to above.

In Hong Kong, OFTA (refer TA below) has dealt with applications by PCCW-HKT as well as REACH for declarations of non-dominance in the market for external bandwidth services. In relation to PCCW-HKT’s application, OFTA found:<sup>7</sup>

*“152. The TA concludes that, in relation to the PCCW Application, the relevant market is the market for the supply of ‘external bandwidth services’, which are services providing external transmission capacity, except services which may be provided by satellite circuits only for transmission on a point-to-multipoint or broadcasting basis, between the point of interconnection with the local networks in Hong Kong (or commonly known as the ‘external gateway’ or ‘Point-of-Presence’) and the overseas destinations. The relevant market does not include the local connectivity (domestic tails).”*

OFTA did not distinguish or disregard non-addressable customers. OFTA considered market share based on “activated” and “equipped capacity” and other relevant factors.

OFTA has expressly rejected the argument put by the incumbent that relevant markets should not include self-supply:

*“30. Before discussing the various issues raised by interested parties in relation to the Application, it is important to define clearly the wholesale market share. CWHKT<sup>8</sup> in its submission adopted the concept of “addressable wholesale market share”, which expresses competitors’ outgoing traffic via CWHKT external gateway as a proportion of total competitors’ outgoing traffic. The TA agrees with NWT that it is not acceptable to use “addressable wholesale market share” in the review of the Application. A more appropriate definition of market share must include the traffic delivered by CWHKTI on behalf of CWHKTC<sup>9</sup>.*

*31. Based on the appropriate definition of the wholesale market share, OFTA derived CWHKT’s wholesale market share in the outgoing Mainland China call services market by using traffic data submitted by CWHKT in the Application. The market share of CWHKT so derived for the past few months was much higher than the “addressable market share” submitted by CWHKT and was in line*

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<sup>7</sup> “Application by PCCW-HKT Telephone Limited for Declaration of Non-Dominance in the Market for External Bandwidth Services: Statement of the Telecommunications Authority”, dated 1 June 2002. <<http://www.ofta.gov.hk/tas/ftn/ta20020601.pdf>>.

<sup>8</sup> Now PCCW-HKT.

<sup>9</sup> CWHKTI is now known as Reach Networks Hong Kong Limited (**Reach Networks**), and CWHKTC as PCCW-HKTC. Reach Networks is 100% owned by REACH, which in turn is 50% owned by PCCW-HKT through indirect shareholdings, and the other 50% by Telstra Corporation Limited of Australia. There is now full structural separation of Reach Networks and PCCW-HKTC.

*with the wholesale market share information compiled by OFTA based on monthly statistics returns from FTNS and ETS operators.”<sup>10</sup> (footnotes added)*

In New Zealand, the Commerce Commission (“**NZCC**”) had regard to the existence of competing access network in defining the relevant downstream (i.e. retail) markets for the purposes of a determination in respect of business wholesale services but it did not disregard market share in those markets (“**non-metropolitan**”) that currently lack competing access network. In relation to international services, the NZCC found the relevant markets were: the retail market for international toll-free services; the retail market for international data services; and metropolitan and non-metropolitan business and residential markets for broadband Internet access service.<sup>11</sup>

On 18 November 2003, the Director General of Telecommunications (“**DG**”) in the UK, in implementing the various provisions and requirements of the new EU regulatory framework which came into effect on 25 July 2003, issued his Final Explanatory Statement and Notification of his analysis and Determination on market power in the Wholesale International Services market (“**DG’s Final Wholesale Statement**”) <sup>12</sup>. In the DG’s Final Wholesale Statement, the DG defines the relevant wholesale international services market as:

*“2.2 The Director has decided to define the relevant market as wholesale international services to network termination points that are outside the UK on a route by route basis such that each route constitutes a separate economic market.”*

In the DG’s interim statement on market power in the Wholesale International Services market (“**DG’s Interim Wholesale Statement**”) <sup>13</sup>, which was adopted in the DG’s Final Wholesale Statement, the DG explained that four of the new EU Communications Directives have been implemented in the UK via the new Communications Act 2003 (“UK Act”). Accordingly, and as required, the DG assessed whether any person or persons have significant market power as defined in section 78 of the UK Act (Article 14 of the Framework Directive). Paragraph 3.3 of the DG’s Interim Wholesale Statement says:

*“Further, Article 14(3) of the Framework Directive states that:*

*“Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market,*

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<sup>10</sup> “Reclassification of Mainland China Routes, Preliminary Analysis of Comments Received and Further Consultation, 12 April 2000”, OFTA. <<http://www.ofta.gov.hk/report-paper-guide/paper/consultation/cp20000412.pdf>>

<sup>11</sup> See <<http://www.comcom.govt.nz/telecommunications/accdet/tclwd12may2003.pdf>>.

<sup>12</sup> “Wholesale International Services markets, Identification and analysis of market and Determination on market power, Final Explanatory Statement and Notification, Published 18 November 2003”, Oftel. <[http://www.ofcom.org.uk/static/archive/oftel/publications/eu\\_directives/2003/wis1103.pdf](http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/wis1103.pdf)>

<sup>13</sup> “Wholesale International Services markets, Identification and analysis of markets, Determination of market power and setting of SMP conditions, Explanatory Statement and Notification, Published 26 August 2003”, Oftel. <[http://www.ofcom.org.uk/static/archive/oftel/publications/eu\\_directives/2003/idd0803.pdf](http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/idd0803.pdf)>

*where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking”.*

The DG goes on to say:

*“3.12 The Director believes that the wholesale international services providers that are also active in the retail market are in a stronger position than standalone wholesale providers, since such wholesale providers effectively benefit from economies of scope. This is because a vertically integrated service provider is able to benefit from a guaranteed wholesale revenue stream (from its retail business), together with the ability to manage its wholesale business more efficiently as a result of information and analysis received from its retail business. The Director has taken this factor into account when considering competition on wholesale international services routes.”*

The DG later demonstrates how he factored vertical integration into his assessment of significant market power:

*“3.65 BT also argues that it does not have any advantage due to its position as a vertically integrated provider (citing the fact that most of the other international providers are vertically integrated). The Director, and the majority of respondents, disagree with this. The parallel with other vertically integrated providers is misleading since:*

- BT Retail has 28.6 million retail lines which constitutes approximately 81.5% of the total access line market (OfTel analysis);*
- BT Retail has 50.3% by value of the combined retail international calls market (OfTel analysis);*
- BT Retail maintains a policy of only purchasing wholesale international services from its vertically integrated wholesale business, BT Wholesale;*
- BT Wholesale maintains a policy of only purchasing wholesale international services from its associated company CNS.*

*3.66 Accordingly the Director considers that as BT Wholesale and CNS receive more than 50% of the traffic generated by the combined UK retail international markets, BT overall receives a significant benefit as a result of being a vertically integrated provider.”*

While REACH does not have actual figures giving the split of SingTel’s share of the retail ICS market, given SingTel’s position of incumbency and its long standing relations with corporate and government retail customers, not to mention the retail cost advantage it has arising from its dominance in the supply of local tails, its share of the retail ICS market must be considered very substantial. Substituting SingTel for BT in the remainder of the DG’s tests and in the ICS context; SingTel Retail maintains a policy of only purchasing wholesale capacity from SingTel Wholesale; and, SingTel Wholesale

self-supplies its wholesale capacity. Clearly, whatever SingTel's precise share of the retail ICS market, SingTel receives a significant benefit as a result of being a vertically integrated provider.

While the DG did look at “addressable market” information in the DG’s Interim Wholesale Statement<sup>14</sup>, this was only to allow him to consider how much traffic was attributable to BT Retail and how much to other retail operators.

It can be seen, therefore, that other regulatory jurisdictions do not acknowledge market share based on the “addressable market” as a valid or rational indicator of the absence of market power – especially not for comparison against market share thresholds used as a basis for presumptions of dominance or non-dominance.

### **Market limited to international, dedicated, point-to-point cable bandwidth**

The process of defining markets has been well developed in other jurisdictions based on sound economic principles. Key to this process is an assessment of substitutability of products, particularly from a demand side. We urge IDA not only to be rigorous in its assessment of substitutability of the products identified in SingTel’s Exemption Request but to also check its own assessment against best practice. While competition law analysis is still new to Singapore, IDA should have due regard to relevant overseas approaches. In doing so, it must be mindful to carry out independent investigations and avoid reliance on SingTel “interpretations” of precedent that suit its interests.

Given that OFTA has recently reviewed External Bandwidth Services (equivalent to ICS, and so for ease of reference hereinafter referred to as ICS also) in Hong Kong, the market analysis in the OFTA Statement is a highly relevant starting point. The market definitions in these statements must then be subject to adjustment given the different factual scenarios that exist in Singapore and also changes in ICS markets since the OFTA reviews.

The OFTA reviews concluded that ICS product markets should be limited to dedicated, point-to-point, international bandwidth with a focus on cable transmission. OFTA clearly excluded most managed/switched services as well as point-to-multipoint services such as satellite broadcast. It expressly found that even point-to-point satellite was not a substitute for cable. It also focused market definition on international segments. While the competitive conditions for domestic services such as backhaul were considered, they were not expressed as substitutes for, or in the same market as, international services.

REACH submits that best practice approaches to market definition, such as the Hong Kong example, dictate that IDA must reject outright the market definition in the Exemption Request. SingTel has attempted to define an all-encompassing ICS market that includes services as diverse as dedicated international point-to-point bandwidth, point-to-multipoint bandwidth, domestic bandwidth and managed services. This is patently wrong. SingTel has justified its definition by reference to the Hong Kong precedent. As is clear from the above overview of the OFTA Statement, Hong Kong

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<sup>14</sup> See paragraph 3.69 of the DG’s Interim Wholesale Statement.

precedent does not support SingTel's case. SingTel's attempt to mislead the IDA with false references to Hong Kong precedent should be of concern.

As an example, we refer to the Exemption Request para 4.16 where SingTel states that *"IPLCs are inputs for and compete with International Frame Relay, International ATM, International IP VPN and other managed services. Again, this view is consistent with the OFTA position in Hong Kong regarding the Reach non-dominance submission so far as managed network services (which provide dedicated capacity) were held to be substitutable for IPLCs"*. This SingTel statement is at best marginal in terms of veracity, presenting the facts as though OFTA included IP, ATM/FR in the bandwidth market - services which OFTA specifically excluded.

Even if SingTel had attempted to distinguish the Hong Kong precedent on market definition, it would have failed. There are no local Singapore conditions that justify grouping products with such different functionality and therefore substitutability in the same market. SingTel is clearly cognisant of this given its approach of misrepresenting the Hong Kong precedent rather than trying to distinguish it.

Leaving aside precedent, an independent assessment of the ICS markets in Singapore would also show that most of the products identified in the Exemption Request are not substitutable for the sort of services commonly understood as ICS, being IPLC or IRU bandwidth. However, we have not attempted to include a full substitutability assessment here, given time restraints and the fact that the onus to do so should not be on us.

In any event, REACH assumes that IDA is well familiar with the different functionality of the products in the Exemption Request given that they are services IDA is regularly involved in licensing. In fact IDA's licensing scheme clearly differentiates between a number of the services. For example, the direct supply of IPLCs (cf. resale) requires an FBO licence. In contrast, the direct supply of switched and managed services such as ATM, FR and IP services only requires an SBO (Individual) licence. This differential licensing also makes the supply conditions and therefore competitive conditions for such services different.

The above material should make clear that IDA should exclude from the ICS Consultation services that are not substitutable for ICS and have been excluded on this basis from ICS markets in other jurisdictions:

- *International Frame Relay* – this is a managed service not connectivity, and therefore not part of the same market as IPLCs. These sorts of managed service were excluded from the bandwidth market by OFTA. FR is analogous to ATM and IP VPN services which were expressly excluded. We refer to the OFTA Statement para 53:

*"The TA considers that the 'external bandwidth services' are basically for the supply of capacity dedicated to the customers. As such, 'switched' or 'on-demand' services which provide capacity to customers upon request and the capacity is shared by customers are basically value added services using the 'external bandwidth services' as an input. 'Switched' or 'on-demand' services, including IDD, Internet and VPN services are therefore not in the 'external*

*bandwidth services' market relevant to the Reach Application. The TA considers that services based on the ATM or IP protocols and for which the customers pay volume-sensitive prices belong to this category.*

*On the other hand, IPLCs are external capacity dedicated to the customers. IPLCs are at present the main type of products in the market for 'external bandwidth services'."*

It is clear that OFTA did not see services such as FR, ATM and IP VPN, which are common services, as in the relevant ICS market, given that it only identified IPLCs as in this market.

- *International ATM* – this is a managed service as per Frame Relay. ATM was expressly excluded from the bandwidth market by OFTA.
- *International IP VPN* – simply internet access with added security features. More akin to ATM/FR as managed services. IP and other VPNs were expressly excluded from the bandwidth market by OFTA.
- *Domestic backhaul* – while an integral part of delivery of bandwidth services, this is a domestic point-to-point service. It is a complement and is *not* a substitute for service between points within Singapore and points external to Singapore. For example, a monopolist in backhaul would not be prevented from raising its prices by competition from a provider of international capacity segments.

OFTA examined dominance or competitive access to backhaul in the context of whether it constituted a bottleneck, not as a substitute, and concluded that backhaul in Hong Kong is competitive. Similarly, the IDA must undertake a standalone assessment of backhaul to determine its competitiveness, rather than include it as part of the ICS market. REACH maintains that the supply of backhaul is not competitive, and considers it more appropriate to discuss backhaul under barriers to entry.

IDA should also reject SingTel's claim that backhaul and ICS form a cluster market. While these services may be supplied in combination at the retail level, it is not necessarily the case that this will be the most efficient option at the wholesale level. In fact, as IDA knows, a number of operators in Singapore supply backhaul as a standalone product to ICS operators who have their own international capacity. SingTel confirms this in para 5.16 of the Exemption Request where it highlights that FBOs offer backhaul as a specific product and other operators therefore do acquire it separately. In this regard SingTel's claim there is a cluster market fudges the separate wholesale and retail ICS markets discussed below to suit its arguments. IDA must see through this and identify that backhaul is not clustered with ICS at the wholesale level. Given that the Domestic Backhaul for which SingTel seeks exemption is a wholesale product, this falls outside the scope of ICS markets.

The conclusion that backhaul is not clustered with ICS is consistent with OFTA's analysis of cluster markets in Hong Kong. In para 32 of the OFTA Statement,

OFTA considered whether local connectivity was in a cluster market with ICS. It used a similar test of whether wholesale customers were free to acquire these two services separately. Only if separate acquisition was not a real option should a cluster market be found. IDA found that not only was separate acquisition possible but wholesale customers are very sophisticated. The cost or additional hassle in obtaining local connectivity and ICS separately was minimal compared to their large outlays for telecommunications giving them the incentive to shop around rather than necessarily take the bundle. OFTA also noted that demand focused around the core ICS service such that competition was more likely to be focused on this segment.

While we believe that an assessment of the domestic backhaul market falls outside the scope of the ICS Consultation, we note at this point that if IDA were to consider it, it must find that it is not competitive. Although OFTA found provision of backhaul in Hong Kong was competitive, this was because a number of backhaul options were available in Hong Kong (see below). Clearly, that does not mean that supply of backhaul in Singapore is competitive. SingTel has provided no evidence of competitive local conditions. For example we refer to its weak argument in para 4.8 of the Exemption Request where SingTel talks about how SingTel connects cable stations to SingTel's Global Network Connection Centre, and offers a backhaul service to other FBOs' PoPs, but does not detail competitive supply of backhaul by other FBOs.

- *Satellite TV Uplink/Downlink* – these are point-to-multipoint or broadcasting transmission services. Excluded from the bandwidth market by OFTA.
- *VSAT service* – the limitations of VSAT services mean they cannot support capacities required in bandwidth market and they are in any event typically only used where IPLCS are not available (rather than as a substitute).
- *Digital Video Broadcast (DVB) IP* – this is a broadcast or point-to-multipoint service, with other features associated with IP. As such it is not in the ICS market.
- *Leased Satellite Bandwidth* – the limitations of satellite such as latency, propagation, quality of service issues, etc, mean they are not a substitute for IPLCs. Excluded as a substitute for cable by OFTA. OFTA found that:<sup>15</sup>

*“For point-to-point transmission services, as cable and satellite have different technological characteristics, satellites are not close substitutes for cables. In particular:*

- *satellite capacity is small relative to submarine cable capacity; and*
- *satellite transmission quality is lower relative to cable because of its greater signal propagation delay time, echo effects and susceptibility to climatic conditions.*

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<sup>15</sup> OFTA Statement, paras 46-47.



*Thus in the analysis of restraints on Reach Networks in the supply of point-to-point transmission services, the effect of satellites may be disregarded.*

*While some marginal customers may find satellite circuits to be substitutes, the issue from a market definition perspective is whether a sufficient number of customers view them as close substitutes such that they would constrain a small but significant increase in cable prices. The TA does not consider that to be the case.”<sup>16</sup>*

- *IP Transit service* – internet access involving connection to a port on an IP router plus a usage charge based on access speed or actual traffic. Usage sensitive and so falls into “switched” or “on demand” category. Excluded from the bandwidth market by OFTA. Additionally, per TeleGeography, on the demand-side customers do not see IP Transit and the like as substitutes because of quality and certainty issues:

*“IRU holders can generally sublease capacity as they wish, provided the sublesser is aware of the IRU holder’s ongoing obligations (e.g., O&M payments) to the network’s owners. As noted, default of those obligations can lead the owner to suspend the IRU holder’s transmission rights, thus cutting off any sublesser’s ability to use the network. This is one reason why some bandwidth buyers, such as multinational companies, will not deal with unknown sellers of IRUs on bandwidth exchanges.”<sup>17</sup>*

REACH strongly refutes the SingTel suggestion in para 4.4 of the Exemption Request that the regulatory requirement for technological neutrality requires all these services to be treated as in the same converging market. Where different technologies do not produce the same result and the customer perceives a difference, then they are not substitutes and the “sound economic principles” SingTel refers to dictate that the products fall in separate markets.

SingTel also implies that anything that uses bandwidth is in the same bandwidth market, e.g. IP, ATM/FR and other managed services. Taking this approach to the extreme would mean for example that switched minutes are part of the bandwidth market as minutes use bandwidth. However, IDA and other regulators have already found that this is not the case.

Prof. Martin Cave has also provided another statement in relation to market definition (“**Expert Statement on Market Definition**”), which is included as **Attachment 2**. This supports our position that SingTel’s list of services in its Exemption Request bears no resemblance to a proper market definition. As stressed in this statement, application of

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<sup>16</sup> OFTA did go on to find that while satellite was not a substitute for cable and so would not dilute any market power held in cable markets, cable might be a substitute the other way, for satellite. A finding that a party was non-dominant in the cable-based transmission market could therefore be extended to satellite services. As OFTA found REACH non-dominant in cable capacity, it was only on this basis that OFTA included satellite in its decision on ICS. Satellite was not included based on being a substitute in the cable transmission market.

<sup>17</sup> TeleGeography Research, PriMetrica, Inc. © 2004. “International Bandwidth 2004, Volume 1, Submarine Networks, Products and Contracts”, page 38.

the hypothetical monopolist test shows that services provided at different speeds, with different technologies will often be in different markets. The same applies to services at different levels of the value chain such as ICS and backhaul. The statement also points out the shortcomings of SingTel's attempt to use cluster market analysis.

Given the above, if IDA is to examine "ICS" markets it should only be looking at services involving the supply of dedicated, point-to-point international cable bandwidth. On this basis, the only service that should even be considered for exemption as part of the Exemption Request is item:

- (i) International Private Leased Circuits

in para 2.1 of the Exemption Request.

REACH points out that SingTel has made no application in respect of IRU or raw capacity services making it inappropriate for any exemption to be considered or granted in respect of these services. To do so would be inconsistent with s2.6.1 of the Code which requires facilities and services to be clearly specified and does not permit applications for broad categories of service or even defined markets without further specification to the service level.

REACH also points out the vagueness of the SingTel services listed given their "inclusive" terminology which could allow SingTel to squeeze in other services under the Exemption Request through the back door. Again, this is non-compliant with s2.6.1. On the other hand, it would be consistent with the Code approach of designating dominance on an umbrella basis to find that SingTel remained dominant across all ICS services even if not specified in the Exemption Request, including IRUs.

REACH therefore reiterates that if IDA is to consider the Exemption Request at all, despite it failing to meet Code requirements, it should limit its review to dedicated, point-to-point international cable bandwidth. Given that SingTel has not included IRUs in its Exemption Request, the ICS Consultation should further be limited to the possibility of exempting IPLCs from dominance obligations, although considered in the broader ICS market including SingTel's dominance from owned and self-supplied capacity.

### **Wholesale and retail functional markets exist**

We note that SingTel has not made any serious attempt to define functional markets, or to identify who are the customers in the different functional markets. In any event, as REACH comments above, most of the products identified as possibly in different functional markets are not even in the relevant product market.

In relation to relevant ICS, there are different supply and demand conditions for such services as between wholesale customers such as FBOs and SBOs and retail customers such as MNCs and governments. For example, wholesale customers will typically require services with greater capacity. They are more likely to acquire IRU capacity than retail customers, because of their greater and more stable demand, but also because retail customers may face regulatory issues in owning capacity. Perhaps most significantly, the competitive conditions are different at wholesale and retail levels due to the existence of bottlenecks at the wholesale level such as the need to obtain

access to incumbent cable stations, connection to cables and to build or obtain competitive backhaul. Suppliers purely at the retail level do not face these issues and in fact operators such as SBO licensees are unable to acquire wholesale backhaul.

The requirement for FBO licensing to directly supply IPLCs cements the existence of a wholesale functional level to this market, given that operators such as SBOs must acquire capacity from an FBO somewhere upstream and can only resell that capacity or use it as a service input.

The Expert Statement on Market Definition supports a finding of separate function levels. A finding of separate wholesale and retail ICS markets would also be consistent with the IDA's ITS Decision. While the broad finding of separate functional markets is sound in that decision, REACH does note that the analysis of competition and bottlenecks at each level was confused.

REACH submits that ICS are key services in both wholesale and retail functional markets. The ICS Consultation should be clear in its analysis of this, despite the fact that in the Exemption Request SingTel drops reference to use of ICS by wholesale customers when this suits its arguments. IDA must not only define markets properly, it must go on to assess competition in each of those markets otherwise the exercise of market definition is pointless.

### **Geographic markets should be segmented by routes and cable system**

IDA should define the ICS markets by direct routes e.g. from Singapore-Country A; Singapore-Country B etc and by cable system. Different routes are not substitutable for each other from a demand perspective and customers are typically also specific in requiring capacity on a certain cable system. Aside from these issues of substitutability, a segmented analysis is necessary as competitive conditions are different on each route and cable system. It is only by examining specific routes and cables that IDA will be able to identify that SingTel retains control over capacity to key destinations such as India. IDA must therefore require SingTel to provide verifiable data that each route and system over which it provides ICS is competitive in that there are real alternatives to SingTel.

Customer demand to reach a country, e.g. UK, from Singapore cannot be substituted by another country e.g. Australia. The possibility of hubbing through another country, e.g. Australia, to reach the desired country, e.g. UK, is exactly that – a possibility, but *not* a practical or realistic substitute. The sort of customers that buy ICS are both sophisticated and demanding in their service requirements, particularly given that telecommunications is often mission critical. Quality is paramount and customers are not prepared to put up with inefficient tromboning of services where direct routes are available. There are also strong arguments that the markets should be further defined by reference to which cable system is used, given differences in reputation/quality and consequent customer demand for specific cables.

SingTel itself stresses that ICS customers are sophisticated in their demands when it claims that the sophisticated nature of the corporate and government market means that there is countervailing market power. That is precisely why REACH submits that the market is route-by-route in geography. While customers may in theory be able to use

hubbing arrangements, the market reality is that they demand quality and direct routes, even specifying the cable systems they want to use.

We refer also to para 5.49 of the Exemption Request where SingTel provides material in support of our view. It details that these days purchasers more often go to tender, specifying not only price, but also cable systems, cable routes, latency measures, network availability, etc. Again, this demonstrates that hubbing and cable systems are not regarded by customers as substitutable, therefore an individual route and cable system market approach is appropriate. We expand on this further below.

The Expert Statement on Market Definition supports a thorough approach being taken to market definition, including examining substitutability across routes. There is also substantial overseas precedent that route-by-route market definition is appropriate in international telecommunications markets. REACH and other operators have already detailed this precedent in submissions to the IDA's ITS Consultation. Much of the analysis applies equally if not more to ICS. The arguments are even stronger in relation to ICS due to the more specific demands of customers buying ICS in contrast to ITS.

We do not repeat material on ITS here but do briefly outline relevant points. In the UK, the DG of Oftel (now Ofcom) considers it both appropriate and necessary for analysis and assessment of both the retail and wholesale international services markets to be on a route-by-route basis. The DG arrived at the conclusion that route-by-route market analysis was necessary after considering, among other factors, any undue facilities advantages or control which the incumbent operators had over a particular route, the degree of liberalisation of the distant end market, and the lack of demand substitution given that a customer (wholesale or retail) does not see a connection to country A as a substitute for a connection to country B. The DG provides a comprehensive explanation of his rationale for route-by-route market analysis, along with other relevant factors to be considered in an assessment of market power, in the DG's Interim and Final Wholesale Statements and their appendices.

The European Commission has adopted a route-by-route market analysis in similar situations.

The TA in Hong Kong also adopted a similar route-by-route wholesale international services market and competition analysis in classifying (and subsequently reclassifying) routes for external switched minutes as either competitive (Category A routes – on which no dominant operator regulatory controls are imposed) or non-competitive (Category B routes – on which dominant operator regulatory controls, including the determination of the dominant operator's outgoing international wholesale prices by the TA, are imposed). The TA's basis for route-by-route market analysis is:

*“6. It is expected that while many of the external traffic routes would be competitive from 1 January 1999, others would remain non-competitive during 1999 and even thereafter, depending on the opportunities for alternative physical connections and genuine price competition to be established. As the operating economics are different for the competitive and non-competitive routes, it is*

*necessary to apply different arrangements for local interconnection charges for these two categories of external traffic routes.”<sup>18</sup>*

The TA subsequently made it a condition that for the vertically integrated incumbent to be considered non-dominant over a route in the retail international services market, the route had first to be classified as competitive at the wholesale level:

*“79. The TA considers that in view of the way that he has defined the market it may not be necessary and/or appropriate to entertain applications about reclassification of individual routes at the retail level. He proposes that the reclassification of a destination at the wholesale level should be used as an automatic trigger for moving it from the non-competitive market to the competitive one and thus lifting the constraints both at the wholesale as well as the retail level.”<sup>19</sup>*

This approach is consistent with common regulatory acceptance of, and concern that, incumbent operators can exercise significant market power in one market and leverage that market power in downstream markets by individual route. In the case of Hong Kong, the TA concluded that non-dominance in the retail market would be dependent upon a route becoming competitive at the wholesale level, thereby imposing route-by-route market assessment at the retail level as well. Similarly, in Singapore, IDA should find SingTel dominant at the wholesale level in relation to key routes and systems, with a flow through effect to its retail assessment also.

### **Current Singapore conditions justify segmented approach cf. Hong Kong in 2001**

REACH acknowledges that when OFTA reviewed ICS, it did not apply route-by-route analysis. However, this is a clear instance where IDA needs to adjust overseas precedent for current Singapore conditions. REACH provides IDA with explanations in this section that should assist IDA to distinguish the Hong Kong precedent on this point. The key differences are:

- Customers have become even more sophisticated and demanding since the Hong Kong decisions in 2001. As detailed above, there is increasing evidence that customers want capacity on direct routes and specific cable systems.
- Hong Kong ICS markets were much more competitive across the board than in Singapore such that it was less important for OFTA to be so specific and rigorous in its approach. The incumbent had a very low market share and was not even the market leader; the international services incumbent was structurally separated from the domestic incumbent; there were alternative suppliers of capacity on all cables in which the incumbent had an interest; there were limited

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<sup>18</sup> “Local Access Charge and Modified Delivery Fee Arrangements, Statement of the Telecommunications Authority, Hong Kong”, dated 25 November 1998. <<http://www.ofta.gov.hk/tas/interconnect/lacstate.pdf>>

<sup>19</sup> “Application for a Declaration of Non-Dominance in the International Call Services Market for Non-China Routes by Cable & Wireless HKT Telephone Limited, Statement of the Telecommunications Authority, Hong Kong”, dated 4 August 1999. <<http://www.ofta.gov.hk/tas/ftn/ta998042.pdf>>

bottleneck features with other operators freely collocating and self-providing backhaul etc.

We expand on the difference between Hong Kong and Singapore ICS markets below.

***Weaker competition in Singapore requires more rigorous market approach***

In its international services decisions prior to the external bandwidth decision in the OFTA Statement, OFTA had defined the geographic market as being the market in Hong Kong on a route-by-route basis. In the OFTA Reviews of external bandwidth, OFTA moved from this view because it considered that in Hong Kong there was sufficient non-discriminatory access to telecommunications hubs making it unnecessary to assess the market on a route-by-route basis. However, the international bandwidth market in Singapore is *not* as open and non-discriminatory as the equivalent Hong Kong market.

In the table below, we highlight some key differences, with further detail provided as **Attachment 3**

Interestingly, in para 4.6 of the Exemption Request, SingTel identifies the APCN, ACPN2, C2C, and SMW3 cable systems as consortia cable systems on which FBO licensees are able to acquire IRU capacity. Given the ownership structure of the C2C cable system – 100% owned by C2C Pte Ltd – and SingTel’s control of C2C Pte Ltd, REACH does not consider C2C to be a consortia cable system. Further, by implication, as SingTel does not include the i2i or TIS cable systems (both of which are owned/controlled at the Singapore end by SingTel, are new cable systems, and cover routes over which there is capacity scarcity) in the list of cable systems on which FBOs can acquire IRUs, there is no competitive IRU access to these cables systems – FBOs can only acquire IPLCs on the i2i and TIS cable systems. Both the i2i and TIS cable systems are notable by their absence throughout the SingTel Exemption Request in any discussion of competitive access to capacity on international submarine cable systems.

	<b>Hong Kong</b>	<b>Singapore</b>
Total cable systems <sup>20</sup>	7	7
Cables where incumbent has no interest	3/7	1/7
Cables with incumbent interest	4/7	6/7
Cables with incumbent interest where alternative supply source for all routes:	4/4	Limited/6 See comments below.
- Consortium cables with incumbent interest where capacity	3/3	Limited/3 Unlike when the REACH market assessment was undertaken, the

<sup>20</sup> Leaving aside very old and small cable systems.

	<b>Hong Kong</b>	<b>Singapore</b>
available from other consortium members		Singapore consortium cables have reached equipped capacity on key routes.
- Private cables with incumbent interest where capacity is available other than from incumbent	1/1	0/3 SingTel controls the Singapore end of the 3 private cables.
Low incumbent market share	Yes. Less than 20% of total activated bandwidth capacity.	No. More than 75% of total activated bandwidth capacity.
Other operators collocated with incumbent at cable stations	Yes.	Limited. SingTel controls cable station co-location, connectivity service and backhaul to all six cable systems – either because of private ownership (co-location and connection service terms and conditions for access to the i2i cable system have still not been incorporated in the SingTel RIO over 15 months after the i2i system went live), or because of the access conditions it sets out in its RIO. StarHub may have gained co-location, but REACH is not aware at what price.
Other operators have own backhaul or backhaul supplied other than by incumbent	Yes.	Limited. Other operators can have their own backhaul but the use of this is limited given SingTel restrictions e.g. SingTel will not allow this to be used for IPLC capacity or capacity on new cables.
Structural separation between international and local service incumbents	Yes.	No.

In Singapore, as bandwidth usage for certain routes reaches capacity on the older cable systems, the only viable alternative capacity available is on the private cable systems which SingTel controls, exercising monopoly operator power. For example, virtually the only available capacity into India at the moment from Singapore is via the i2i cable system. Alternatives like transiting other regional hubs are not practical because, not only do the distances involved add cost and technical complexity, but the bottleneck is still the last link into India itself - and the i2i cable system is the best means to access India. From the SingTel's statement above, access to the i2i cable system by competitive carriers is limited to IPLCs as SingTel does not make IRU capacity available. The same is true for certain other locations. This is why from a supply-side perspective the geographic market for this ICS Consultation must be route-by-route, and even cable system-by-cable system.

The SingTel restrictions on backhaul identified above have a particular relevance to geographic market definition. Self provision of backhaul by FBO licensees is not allowed unless they have ownership or an IRU interest in the specific cable system. In REACH's case, although it has equipment co-located at the Tuas cable station connecting to the SMW3 cable system and has its own backhaul facilities from Tuas to its PoP in New Tech Park, SingTel does not allow REACH to use this equipment and backhaul to connect to the STM4 it leases on the i2i cable system. REACH is obliged to take a backhaul service from SingTel and then a local circuit connection from a SingTel PoP to REACH's PoP. Clearly, constraints imposed by SingTel on backhaul usage for particular cable systems and, therefore, the routes served by those cable systems require the competitiveness of those routes to be assessed on an individual basis. SingTel's "reluctance" noted above to make IRU capacity available on the i2i and TIS cable systems effectively prevents competitive FBO licensees from ever being able to own and operate their own backhaul for connection to these two cable systems – and the destinations they serve. REACH notes there were no such backhaul restrictions impacting particular cables or routes in Hong Kong.

As must be clear from the above, the market conditions in Hong Kong at the time of the OFTA Statement and the current market conditions in Singapore are drastically different. In the Hong Kong case, there was open and full access to all locations either directly or via regional hubs.

In Singapore's case, competitors cannot even get from central Singapore to the cable station before route and cable system distinctions and differentials imposed by SingTel start to kick in. It is less expensive for competitors to use cable systems for which they have their own backhaul (particularly given dry segment costs are now more significant than wet segment costs in relation to international bandwidth), but in Singapore they cannot get to the destinations they need to. They have no alternative but to take SingTel backhaul services to connect to SingTel cable systems – and SingTel have the cost and price advantage every step of the way. Once at the cable stations, constraints on the current availability of international bandwidth on certain routes, with SingTel controlling the "last link" capacity to these locations, means that assessment of the ICS market on a regional or global basis would be totally inappropriate. Therefore, any supply-side assessment of the ICS market must be undertaken route-by-route and cable system-by-cable system.



***Market definition must shift with recent increase in ICS customer demands***

Demand-side market conditions have also changed dramatically since the OFTA Statement, with the result that it is no longer appropriate to consider the ICS market on a regional or global basis.

At the time of the OFTA decision, the collapse of international bandwidth prices was fresh, and price was King - this ruled the decisions of buyers of capacity and everything else was (largely) disregarded. As bandwidth prices have dropped significantly over the last three years, more recent drops, while big in percentage terms, have not been so significant in absolute terms and price differentials are now sufficiently small as not to be the sole factor in decision making. With only a small price differential, it is now a case that quality of service, cable system integrity/diversity, etc, are equally important to capacity purchasers as price. Bandwidth capacity purchasers are sophisticated buyers and know the available cable systems well, specifying specific routes and cable systems for their capacity needs. Therefore, the scope of definition of the relevant market/s for bandwidth has narrowed and is at least route if not cable system specific.

This is a view shared by TeleGeography:<sup>21</sup>

*“With the recent discussion of bandwidth commoditization, it’s tempting to think that one circuit from London to New York is much like any other and that the buyer need not be concerned with the actual routing of a circuit ....*

*In reality, routing does matter. No buyer wants to rely on systems with a history of network failure. Many wholesale buyers are intensely interested in the physical routing of a circuit, despite general improvements in the performance of submarine cables over the last decade. Especially for buyers taking on lifetime IRUs, it is important to know something about the performance of the cable and its owners.”*

SingTel itself recognises that there is now demand-side differentiation between routes and cable systems. Customers have become more discerning and do not consider bandwidth capacity on different cable systems or supplied/routed through hubbing arrangements as substitutes for each other. SingTel is very clear about this in para 5.59 of the Exemption Request:

*“Customers are also beginning to request ICS on specific cables, specific cable routes, latency measures, network availability etc.”*

It is apparent that the factors driving purchasing decision have changed since the OFTA decision. Price is no longer the only factor to be considered, and customers are specific about the routes and cable systems they want their capacity to be provided over. SingTel itself shares this opinion. Consequently, relevant demand-side factors also demonstrate that the geographic market for the ICS market is not a regional or global market, but is in fact a route-by-route/cable system-by-cable system market.

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<sup>21</sup> See earlier reference, page 40.

### ***Other criticisms of SingTel's case on geographic markets***

SingTel has made certain other points on geographic market definition that can quickly be rejected:

- Just because regional or global names compete in a market does not mean that the geographic scope of market is regional or global. A couple of sweeping statements by SingTel does not make this so.
- SingTel also implies that you can get access to any country at competitive prices, further implying that conditions are the same across all routes. This is simply not true. Just because competitors can reach any country, does not mean that they can do so at competitive prices. In any event, it is not possible to get access to all countries directly through IRUs. In Hong Kong, REACH's submarine cable interests were mainly in consortium cables where any of the owners would sell IRUs to anyone (i.e. multiple suppliers). In Singapore's case, a far larger proportion of private cables are controlled by SingTel where there are no competitive suppliers, especially on routes where for example non-i2i capacity is in short supply, e.g. India. Further, access to any country may not be subject to the same competitive pricing due to SingTel controls over dry segments. Wet segments are now cheap and it is the dry segments that have significant impact on competitive pricing – and SingTel owns and controls most of the dry segments in Singapore. These points were addressed in greater detail earlier in this section.
- Acquiring co-location at a cable station does not mean you can access all cable systems landing at that cable station and equally supply all routes. REACH has co-location, connection service, and backhaul at SingTel's Tuas cable station for SMW3 (in which REACH is an owner). However, REACH cannot gain access to the i2i cable system landing at the same cable station.

### ***Any avoidance of route/ cable specific analysis should err in favour of competition***

Clearly, based on both supply-side and demand-side factors, the relevant geographic market for ICS services is a route-by-route and cable system-by-cable system market.

While REACH believes that this is the only correct conclusion, we are concerned that IDA may simply want to avoid the analysis involved in specific route and cable markets. We urge the IDA to push the onus back onto SingTel by requesting it to provide information on specific markets. It should not simply give in and allow broad markets just because it has not collected sufficient industry information.

However, should IDA still back away from the task of assessing competition on all routes, it should err in favour of protecting competition by finding that, since some key routes are not competitive, the whole ICS market is not competitive. It should not take the dangerous approach of granting the Exemption Request across all ICS just because a few routes might have alternative supply sources, without first understanding the extent to which SingTel still has market power.

### **Geographic market is Singapore based**

This market is also one which is in Singapore for the same reasons OFTA determined that the Hong Kong external bandwidth market was a market in Hong Kong. Substituting Singapore for Hong Kong in the OFTA Statement on this point: for a customer who operates an office in Singapore, or a service provider supplying 'switched', 'on-demand' or value added services to customers in Singapore, the external capacity required by these customers is that to and from Singapore. Thus the external capacity supplied by operators in other cities is not a close substitute to that supplied by Singapore operators.<sup>22</sup>

A finding that the market is one in Singapore would also be consistent with the IDA's opinion in para 19 of the ITS Decision.

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<sup>22</sup> Para 71 of the OFTA Statement.

## **PART III COMMENTS ON DOMINANCE**

### **PROPER ASSESSMENT OF DOMINANCE INVOLVES MORE THAN RHETORIC**

#### **Criteria for assessing dominance**

SingTel claims that s2.6.1 of the Code sets out the criteria to be demonstrated in requesting an exemption. It says the criteria are to demonstrate that the exemption will not harm end users or competition. This is a misleading attempt by SingTel to avoid providing the verifiable evidence required by the section.

The test of no harm to end users or competition is exactly that – a test. It does not elaborate the criteria for determining this. Section 2.6.1 therefore requires “verifiable data” to be provided in a clearly intended reference back to the sort of criteria required for assessing dominance in the first place, including the “verifiable data” required under s2.5.2.2. While s2.6.1 could have been more precisely drafted, the intention is clear. We note that the IDA intends to be more precise on this point in the revised Code but SingTel should still comply with the intention of the current Code pending these amendments.

In the Exemption Request, SingTel makes no reference to the criteria/verifiable data required in s2.5.2.2 of the Code such as market share and concentration, etc. This is clearly not an oversight. Omission of such information leads to the obvious conclusion that SingTel does not provide this type of data because the data does not paint a favourable picture of competition. Rather, it would lead to clear presumptions of dominance given REACH estimates of a SingTel 75% plus market share (and therefore high market concentration as well).

SingTel also refers to the OFTA 1995 Competition Guidelines for relevant dominance tests and opines that these are consistent with the criteria in s2.6.1 of the Code, but:

- as noted above, s2.6.1 doesn’t set out criteria;
- the SingTel Exemption Request does not satisfy the few OFTA tests it identifies – e.g. no analysis of market concentration or data on prices declines;
- SingTel does not list the full set of OFTA tests (only identifies market concentration and availability of alternative suppliers; barriers to entry; and, prices over time) when OFTA would require all tests to be met before lifting Dominant Licensee obligations:
  - **Market share** and the degree of market concentration
  - **The power to implement decisions**
  - Height of barriers to entry
  - **Product differentiation and sales promotion**
  - **The nature of corporate relationships**

More recently, in section 6 of the Draft Revised OFTA Competition Guidelines, 28 February 2004, OFTA has revised its tests for non-dominance, which neither the Exemption Request nor SingTel in practice meet. OFTA identifies these tests as:

- Market share
- Power to make pricing and other decisions
- Barriers to entry – Structural
  - Sunk costs
  - Economies of scale and scope
  - Network effects
  - Reputational barriers
  - Essential facilities
  - Regulatory barriers
- Barriers to entry – Strategic behaviour
- Product differentiation and sales promotion
- Past conduct
- Collective dominance

REACH reminds the IDA that it is for SingTel to prove that it is not dominant under the Code. Criteria used in other jurisdictions may assist in understanding the Code criteria and objectives. However, SingTel must still provide the necessary evidence. REACH therefore urges IDA to require this before continuing with the ICS Consultation. It may then be appropriate for us and other commentators to dispute the evidence. However, at this stage, it should not be up to us to provide the verifiable data showing the above criteria are not met.

### **SingTel arguments that ICS market is competitive are lacking**

The Exemption Request lists indicators of the competitiveness of ICS markets according to SingTel (summarised in para 2.2). These indicators are provided as if “verifiable data” when they are really distortions of the actual market situation. REACH submits that SingTel’s claims have no merit including for the following reasons:

- *Substantial submarine cable capacity and connectivity do not constrain SingTel* – SingTel’s claim to the contrary ignores key issues including: most capacity is owned and/or controlled by SingTel (e.g. i2i, C2C, and TIS are private cables); the existence of access bottlenecks; SingTel’s control of the dry segment, which now represents the high cost element.

- *Substantial submarine capacity in Asia does not constrain SingTel* – SingTel’s claim to the contrary is not relevant to the ICS Consultation, which should be decided on a cable and route specific basis because of the control SingTel has and differing degrees of competitiveness of the routes. The ICS Consultation should also only be concerned with capacity landing in Singapore given the geographic scope of the market.
- *Multiple competitors do not constrain SingTel* – SingTel’s claim to the contrary is misleading where SingTel still has 75% market share, and the market is highly concentrated in SingTel. SingTel loosely points to the total number of FBOs and SBOs without identifying how many are involved in the supply of ICS and how much market share they have between them when SingTel has over 75%.
- *Many alternative technologies including satellite, managed services, and IP connectivity do not constrain SingTel ICS* – SingTel’s claim to the contrary misrepresents Hong Kong precedent, which makes clear that these technologies are not competing alternatives constraining the incumbent in its supply of ICS. OFTA actually says the opposite to what SingTel claims (refer also to our market definition comments earlier):
  - Cable is not a substitute for satellite in relation to point-to-multipoint or broadcasting.<sup>23</sup>
  - Broadcasting is in a separate market (including the provision of content, despite SingTel’s assertions that companies like Walt Disney constrain SingTel dominance in the supply of ICS).
  - Satellite is not a close substitute constraining cable even if cable might be a viable substitute for satellite point-to-point.<sup>24</sup>
  - “ ‘Switched’ or ‘on-demand’ services, including IDD, Internet and VPN services are therefore not in the ‘external bandwidth services’ market relevant to the Reach Application. The TA considers that services based on ATM or IP protocols and for which the customers pay volume-sensitive prices belong to this category”<sup>25</sup>
  - Managed network services that provide what appears to customers as dedicated capacity (e.g. guaranteed constant bit rate transmission) would be close substitutes to IPLCs. (However, OFTA did not specify any and said that IPLCs were the main product in the market) Other lesser forms of managed network services may be closer to ‘switched’ or ‘on demand’ services.<sup>26</sup>
  - The OFTA licensing regime distinguishes between bandwidth type services and managed network services. Managed services can be provided under a PNETS licence (cost HK\$750 and available as a matter of course). This is

<sup>23</sup> Para 45 of the OFTA Statement.

<sup>24</sup> Para 48 of the OFTA Statement

<sup>25</sup> Para 53 of the OFTA Statement.

<sup>26</sup> Para 56 of the OFTA Statement.

equivalent to an SBO licence in Singapore, which covers similar managed services.

- *Entry barriers are high* – SingTel's claim to the contrary ignores SingTel ownership of private cables such that other operators are unable to obtain capacity to compete. Also there are only 4 cable stations in Singapore of which SingTel owns 3 (the other being the privately owned EAC station). Barriers also include restrictive co-location, connectivity and backhaul conditions in the SingTel RIO – SingTel's admission that IRU capacity on the i2i and TIS cable systems is not freely available confirms this as the RIO does not allow these types of cable station access unless a competitive FBO has at least an IRU interest on a specific cable system. By comparison, in Hong Kong at the time of the OFTA Statement, there were 6 cable stations of which 4 were owned by REACH – but 3 were for consortium cables not private ones and all other FTNS licensee had co-location or virtual co-location at these stations as they required. The 4<sup>th</sup> one was jointly "owned" by FLAG and they had full access rights. The other 2 cable stations were owned by other FTNS licensees and were private cable systems like C2C. SingTel's claim also ignores its significant bottleneck control over local circuits for distribution of capacity within Singapore (which it leverages through price squeezes – no wholesale local circuit price only retail price).
- *Global and regional competitors do not constrain SingTel* – SingTel's claim to the contrary ignores that these competitors are not making headway in Singapore due to SingTel's bottleneck control and other advantages of incumbency. This is evidenced by SingTel's 75% market share.

The Exemption Request is also inconsistent in claiming that SingTel does not have incumbency advantages yet at the same time SingTel claims that its global and regional competitors have incumbency advantages at the distant end of ICS. Singapore might be smaller than other countries but SingTel is quite clearly a strong company with a big domestic and regional network itself.

Further, SingTel's suggestion that the regional cable system interests of other FBOs mean that SingTel is constrained in Singapore is of no consequence to the ICS Consultation. The supply constraints that the IDA should be looking at are in relation to cables landing in Singapore and SingTel's control over these cables and their landing stations.

- *Other bandwidth businesses do not constrain SingTel* – SingTel's claims to the contrary including that Internet or bandwidth exchanges are competing sources of supply is limited as buyers do not currently see these as reliable sources of supply. Similarly, SingTel is incorrect in submitting that the growth of telehouses/data centres has made the ICS market more competitive. This may have increased demand for ICS but this is not evidence that the demand is being met on a competitive basis.
- *Substantial ICS price declines are not due to competitive constraints on SingTel* – SingTel's claim to the contrary is misleading in suggesting that this is due to

competition in Singapore. Prices have fallen due to falls in wet segment prices common across the region/globe – this cannot be ascribed to competitive pressure on SingTel. We refer to the Figures 1 and 2 below which are extracts from TeleGeography International Bandwidth 2004. These show that Singapore is not unique in experiencing price reductions, and that other places which have been open to competition for years have also experienced similar reductions. Therefore price declines are not the result of removal of barriers to competitive entry in Singapore but a fall in prices due to oversupply of capacity in the submarine cable market.

Figure 1

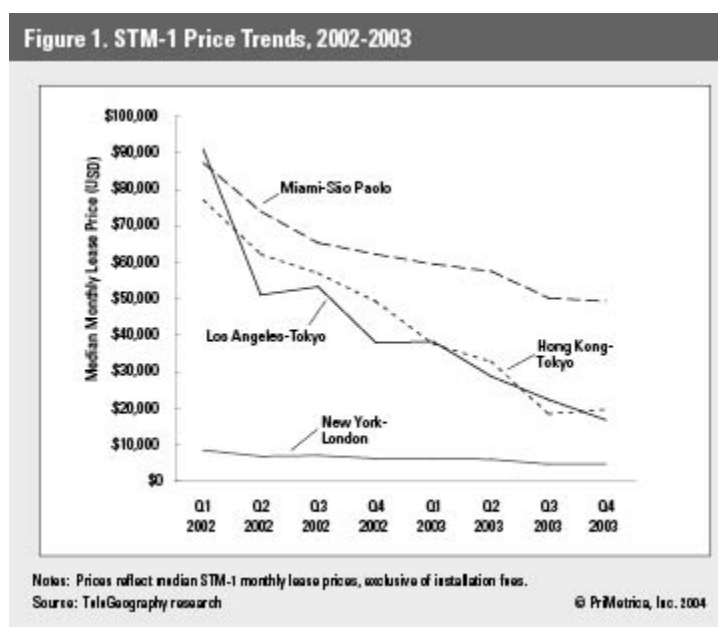




Figure 2

**Figure 2. Median STM-1 Monthly Lease Prices on Major Routes Q1-Q4 2003**

	Q1 2003	Q2 2003	Q3 2003	Q4 2003	Change Q1-Q4	Distance (km)	Price/ KM
<b>Trans-Atlantic</b>							
New York-London	\$6,039	\$5,797	\$4,500	\$4,461	-26%	5,585	\$0.80
New York-Frankfurt	\$8,762	\$8,540	\$6,500	\$6,302	-28%	6,215	\$1.01
New York-Paris	\$8,762	\$8,779	\$6,500	\$6,302	-28%	5,850	\$1.09
<b>North-South America</b>							
New York-São Paulo	\$64,041	\$62,879	\$55,000	\$54,000	-16%	7,653	\$7.06
Miami-São Paulo	\$59,298	\$57,346	\$50,000	\$49,000	-17%	6,549	\$7.48
<b>Trans-Pacific</b>							
L.A.-Tokyo	\$38,065	\$28,500	\$22,107	\$16,625	-56%	9,815	\$1.89
L.A.-Hong Kong	\$50,173	\$40,258	\$26,296	\$23,000	-54%	11,640	\$2.84
L.A.-Sydney	\$115,000	\$100,000	\$95,000	\$85,000	-26%	12,049	\$7.05
<b>Europe-Asia</b>							
Hong Kong-London	\$72,213	\$64,781	\$38,005	\$37,500	-48%	9,740	\$3.85
London-Tokyo	\$51,353	\$49,538	\$33,100	\$29,600	-42%	9,583	\$3.09
London-Singapore	\$85,000	\$68,018	\$40,000	\$40,000	-53%	10,845	\$3.69
<b>Intra-Asian</b>							
Hong Kong-Tokyo	\$37,301	\$32,539	\$18,250	\$17,290	-54%	2,854	\$6.06
Hong Kong-Singapore	\$47,141	\$34,540	\$17,500	\$20,400	-57%	2,564	\$7.86
Hong Kong-Taipei	\$43,275	\$33,754	\$15,000	\$15,830	-63%	769	\$20.59
Seoul-Tokyo	\$45,000	\$35,000	\$20,539	\$19,390	-57%	1,153	\$16.81
Singapore-Tokyo	\$51,432	\$35,000	\$23,766	\$18,908	-63%	5,313	\$3.56
Taipei-Tokyo	\$49,041	\$40,000	\$20,539	\$19,550	-60%	2,097	\$9.32

Notes: Prices represent median STM-1 monthly lease prices excluding installation fees.  
Source: TeleGeography research © PrMetrica, Inc. 2004

One must also remember that the wholesale ICS market has only recently been liberalised, and price declines only reflect a reduction from SingTel's very high monopoly era pricing to more normal, but still high, levels as potential competition has started to have some limited effect. Price declines are not the result of a fully competitive market in Singapore.

Further, price falls on routes have not been uniform. Where there has been less competitive pressure, price falls have been less. For example, from marketplace information, i2i cable system charges are more for India/Singapore capacity (US\$250k per month for an STM 1 of leased capacity) than they are for India/US (US\$225k per month) even though the latter distance is greater.

- *Tariff and product diversity does not mean SingTel is competitive* – SingTel's claim to the contrary is not substantiated by evidence in the Exemption Request. Also, the recent OFTA consultation paper on Competition Guidelines suggests that high tariff and product diversity may actually indicate a market is not competitive since if diversity is high, the products/services are no longer

substitutable for each other.<sup>27</sup> Also, as per para 5.59 of the SingTel Exemption Request, customers are requesting capacity on specific cables and routes. This demonstrates there is no demand-side substitution, therefore the relevant markets are cable and route specific.

- *The bottleneck of access to co-location and connection services is not removed by the RIO* – SingTel’s claim to the contrary places undue weight on regulation as having removed the bottlenecks. However, as explained in this submission, bottleneck features persist and restrictions on access apply even under the SingTel RIO. As IDA will be aware from the RIO Consultation, there are a number of shortcomings to the RIO and industry does not feel that bottlenecks have been adequately removed.

Further, we note that application of the RIO by SingTel does not align with the spirit of the Code. For example, the RIO allows SingTel up to 30 days to provide cable station connection service, but this does not mean that SingTel must or should take 30 days. However, SingTel typically takes the full 30 days to provide service for its competitors while self provisioning in a few days. This gives SingTel a competitive advantage as a shorter provisioning time is often the deciding factor for many potential customers. In Hong Kong, Reach Networks generally provides cable station connection service to its competitors within 10 working days.

- *Key wholesale services are not freely available from other licensees* – SingTel’s claim to the contrary cannot be given weight as it has given no details of alternative supply e.g. what price, what difference in provisioning times, given alternative supply will be dependent upon SingTel and SingTel will favour itself.

In relation to backhaul, SingTel wrongly implies that in Hong Kong there was not alternative supply of backhaul but that the market was still found competitive. It therefore suggests that Singapore must be more competitive because any FBO can provide backhaul. This ignores the obstacles to using backhaul created by RIO conditions as described elsewhere in this submission. Further, it misrepresents the Hong Kong situation. The four FTNS licensees could provide backhaul and had backhaul capacities including STM16s and dark fibre. Backhaul prices in Hong Kong fell 70% in 2001. This meant that there was substantial competition as a matter of fact, even though there were restrictions on international operators other than the existing four FTNS licensees providing backhaul until 2003.

- *Price control does not mean competition is effective* – SingTel’s claim to the contrary is counter-intuitive. The need for the framework indicates that SingTel prices would not otherwise have fallen. Therefore SingTel price declines are more a result of government control than competitive forces. Further, price squeezes can still thrive under these price controls.

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<sup>27</sup> Para 6.38 Draft Revised OFTA Competition Guidelines, 28 Feb 2004 <  
<http://www.ofa.gov.hk/report-paper-guide/paper/consultation/cp20040228.pdf>>

- *Cost of changing supplier is not insignificant* – SingTel's claim to the contrary ignores technical realities. With the sophisticated network configurations there are today, there is a significant cost in changing supplier and associated systems and interfaces.

In providing the above weak arguments SingTel continues to take an inconsistent and deficient approach to market definition, not only by taking into account irrelevant products but also by fudging functional levels of the market. It focuses on retail competition by identifying the main customers for ICS as corporate and government end users. However, it provides nothing to substantiate this assertion. It ignores the wholesale market of supply of ICS to other FBOs and SBOs, although SingTel does refer to them later when it suits SingTel's purpose. A proper assessment of dominance backed by verifiable data as required by the Code would involve clear discussions of competitive conditions in each market.

Even when it focuses on the retail corporate and government market where it has more competitors, it still does not indicate market shares.

In describing this retail market as lucrative, SingTel tries to suggest that this means stronger competition. However, it fails to point out that this market is most lucrative for SingTel. Wet segment prices have fallen for all operators but there is little margin on wet segments. Making money relies on domestic dry segments. In Singapore, SingTel control dry segments and win two ways:

- SingTel charges above cost for co-location and connection services (for those cable systems competitors are allowed to access by SingTel), making money out of its SBO and FBO customers (and retail competitors).
- The cost advantage SingTel has because of its control of cable stations, etc. enables it to undercut its SBO and FBO competitors in the corporate and government retail market. SingTel already does so in a focused, strategic, manner – often targeting its competitors' customers with special customised offers.

REACH comments further in this section on a number of the dominance indicators identified above. However, the flawed nature of the current Exemption Request makes it onerous and unfair to require us to put a full counter-analysis to IDA. Once again, we ask that IDA push the onus back onto SingTel to prove its claims rather than require competitors to disprove them in a vacuum.

### **SingTel reliance on Hong Kong assessment risks making a mockery of IDA regime**

REACH has already stressed its concern with the lack of evidence in the Exemption Request as to SingTel's market position in Singapore. SingTel relies substantially on the fact that the ICS market in Hong Kong was found to be competitive and that *ipso facto* the Singapore market must also be so. It does not identify any distinguishing features (of which there are many as explained elsewhere in this submission) and it certainly does not attempt to explain the distinctions.

Aside from the distinguishing features already identified in our Part I analysis of the need for route specific market definitions, as per OFTA's March 2003 decision to extend the earlier directions to PCCW-HKT and REACH:

- Reach Networks and Reach Cable Networks Limited (Level 3 Asia) combined was not the market leader throughout 2002. Its market share based on activated capacity and upgradeable capacity was consistently below 25%, and that based on equipped capacity was consistently below 25% from March 2002 onwards;
- the market concentration ranks among other market segments without a dominant player;
- prices have fallen in the range of around 40-50% during the probationary period;
- the external telecommunications market has been fully liberalised from 1 January 2003, enabling external facilities-based licensees to self-provide backhaul capacity;
- equipped capacity and activated capacity have expanded by 27 and 10 times respectively, implying a decline of capacity utilisation from 43% to 16% during the probationary period;
- the Reach Conditions were no longer warranted given the competitiveness of the market and the licence obligations in place for both Reach Networks and PCCW-HKTC; and
- PCCW-HKTC is simply reselling the bandwidth acquired from Reach Networks.<sup>28</sup>

SingTel has not provided data to the same effect so it is ludicrous for it to rely on the Hong Kong precedent as direct evidence of local conditions.

IDA must not allow SingTel to get away with conduct so dismissive of the Singapore regime. It must recognise the limits of the Hong Kong precedent and certainly should not follow it simply in an attempt to show that Singapore is as competitive as Hong Kong. Holding out Singapore as a competitive hub will not achieve this objective – making it so, will.

Any IDA decision granting SingTel's Exemption Request, particularly without evidence beyond the Hong Kong precedent, will undoubtedly undermine international perceptions of Singapore and raise questions concerning the application of the IDA's stated precepts of clarity, transparency and certainty in its approach to regulation. Such a decision will be seen by international telecommunications operators as enhancing SingTel's ability to engage in anti-competitive tactics. This creates disincentives for future telecommunications investment in Singapore, working contrary to the Singapore

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<sup>28</sup> See "Extension of the Directions Issued to Reach Networks Hong Kong Limited and PCCW-HKT Telephone Limited on 15 March 2002 and 1 June 2002 Respectively Pursuant to General Condition 44 of their Fixed Telecommunications Network Services Licences Regarding Declaration of Non-dominance in the Market for External Bandwidth Services: Statement of the Telecommunications Authority" <<http://www.ofta.gov.hk/tas/ftn/tas20030314.pdf>>.

Government's goal of further developing Singapore as a leading regional telecommunications and business hub.

### **MARKET SHARE ANALYSIS REQUIRED, INCLUDING SINGTEL SELF-SUPPLY**

REACH reiterates that once proper markets have been defined, SingTel must provide, and IDA must assess, market share and concentration data. This is required both under the Code and in accordance with regulatory best practice.

REACH also stresses that on the same basis, market share assessments must include SingTel self-supply of ICS in the same market as third party supply of ICS. We refer to our arguments in this regard in Part I, since the need to include SingTel self-supply is part of both market definition as well as the assessment of dominance. As we explained in that section, it is only by including self-supply that an accurate picture of market conditions can be obtained. Otherwise a non-dominant operator that focuses on third party supply may appear more dominant than an incumbent who supplies substantially more product but restricts this to its own retail operations. These concerns are expanded upon in the Expert Statement on Self-supply.

The IDA's requirement for market share data should not be static. SingTel should be required to prove not only low, but also decreasing, market share. The fact that SingTel's market share has not significantly decreased over the past few years confirms a conclusion that SingTel continues to be dominant in the supply of ICS.

Any data provided by SingTel should then be checked by IDA against data IDA must already have from its regular information reporting requirements on owned and leased capacity in Singapore.

The market share analysis must also proceed to include assessment of market concentration.

### **HIGH MARKET SHARE SHOULD LEAD TO PRESUMPTION OF DOMINANCE**

REACH maintains that SingTel's ICS market share is at least 75% of total activated capacity. REACH has calculated this SingTel market share based upon information available to it as a member of the consortium cable systems landing in Singapore plus estimates of activated capacity in the C2C, i2i, and TIS cable systems controlled by SingTel at the Singapore end.

Should SingTel counter this with the argument that market share is not the sole determinant of market power, REACH maintains that while this may be the case at lower levels of market share, when an incumbent operator has such a high market share as SingTel has in the ICS market then it is clearly dominant in that market. This position is supported by major regulatory authorities elsewhere in the world, for example, the European Commission, OFTA, and Oftel. We refer IDA to submissions by REACH and other licensees in relation to ITS markets, which detail best practice benchmarks on presuming dominance from market share.

For ease of reference, we repeat that in respect of market share thresholds for a presumption on dominant market power, the European Commission says in its

Guidelines on assessment of market power for electronic communications networks and services (“**EC Guidelines**”):<sup>29</sup>

*“According to established case-law, very large market shares – in excess of 50% - are in themselves, save in exceptional circumstances, evidence of a dominant position. An undertaking with a large market share may be presumed to have SMP<sup>30</sup>, that is, to be in a dominant position, if its market share has remained stable over time. The fact that an undertaking with a significant position on the market is gradually losing market share may well indicate that the market is becoming more competitive, but does not preclude a finding of significant market power.” (footnote added)*

This view has also been reflected by Ofel and OFTA in their dominance decisions. Ofel follows European competition law:<sup>31</sup>

*“The European Court has stated that dominance can be presumed in the absence of evidence to the contrary if an undertaking has a market share persistently above 50 per cent. The Director General considers it unlikely that an undertaking will be individually dominant if its market share is below 40 per cent, although dominance could be established below that figure if other relevant factors (such as the weak position of competitors in that market) provided strong evidence of dominance.”*

OFTA’s TA set out his thresholds for a presumption of dominance in the OFTA Competition Guidelines when he said that “a licensee with a greater than 75% market share will be presumed to be dominant”<sup>32</sup> and later reinforced it with the statement that:<sup>33</sup>

*“... the TA has considered that if a firm has a market share persistently above 50% it is likely that it is dominant. Therefore when looking at the other market conditions he needs to satisfy himself that these demonstrate that the market is competitive and/or contestable before he would classify a firm with above 50% as non-dominant.”*

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<sup>29</sup> See paragraph 75 of “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.

[http://europa.eu.int/information\\_society/topics/ecom/doc/useful\\_information/library/recomm\\_guidelines/significant\\_market\\_power/c\\_16520020711en00060031.pdf](http://europa.eu.int/information_society/topics/ecom/doc/useful_information/library/recomm_guidelines/significant_market_power/c_16520020711en00060031.pdf)

<sup>30</sup> Significant market power (**SMP**).

<sup>31</sup> See paragraph 4.5 of “Review of Fixed Narrowband Retail markets, a consultation document issued by the Director General of Telecommunications”, Published 17 March 2003, Ofel.  
[http://www.ofcom.org.uk/static/archive/ofel/publications/eu\\_directives/2003/eu\\_retail/retail0303.pdf](http://www.ofcom.org.uk/static/archive/ofel/publications/eu_directives/2003/eu_retail/retail0303.pdf)

<sup>32</sup> See paragraph 38 of “Guidelines to assist the interpretation and application of the competition provisions of the FTNS Licence”, OFTA, dated June 1995. <http://www.ofta.gov.hk/report-paper-guide/guidance-notes/in95f212.html>

<sup>33</sup> See paragraph 44 of “Application for a declaration of Non-Dominance in the International Call Services Market for Non-China routes by Cable & Wireless HKT Telephone Limited, Statement of the Telecommunications Authority, Hong Kong”, dated 4 August 1999.  
<http://www.ofta.gov.hk/tas/ftn/ta998042.pdf>

IDA has also recognised the value of presumptive market share figures in its Consolidation Guidelines. Clearly, there is more than adequate regulatory precedent and support for SingTel to be presumed dominant with a 75% share of the ICS market.

Furthermore, REACH considers that a review of the bottleneck control exercised by SingTel over essential inputs to the Wholesale ITS market shows that when factors other than market share are given due and proper consideration, SingTel is still dominant in this market.

## **BARRIERS TO ENTRY ARE HIGH WITH REGARD TO MARKET BOTTLENECKS**

### **Conditions in Hong Kong that reduce barriers are not replicated in Singapore**

REACH reiterates its comments earlier in this submission explaining the different conditions in Hong Kong that justified a finding that the incumbents were not dominant in the supply of ICS. A key difference was that the barriers to entry in Hong Kong were much lower than exist in Singapore.

Without repeating our comments here, we refer in particular to the data provided in our discussion of the need for a route-by-route geographic market.

### **Cable station access and connection services are wholesale market bottlenecks**

REACH has already discussed the bottleneck nature of cable station and connection services in Singapore above, a point that IDA must accept given the inclusion of these services under the RIO. In examining how these bottlenecks entrench SingTel's dominance, we urge IDA to take care in assessing how these bottlenecks affect competition at the appropriate functional levels. IDA should not simply dismiss these issues based on its ITS Decision.

In its ITS Decision, when expanding on its definition of the relevant Retail ITS markets, the IDA identified access to cable landing stations as an input to the Retail ITS markets.<sup>34</sup> This is incorrect. Access to cable landing stations is an input to the Wholesale ITS market which then breaks down the high capacities supplied at the cable landing stations into smaller units (sometimes together with value added or capacity management features) for further sub-division and sale by other licensees (including vertically integrated operators) in the Retail ITS markets. The same analysis applies to ICS with access to cable landing being a bottleneck input at the wholesale level.

In relation to ITS, having incorrectly identified access to cable landing stations as an input to the Retail ITS markets, the IDA says:

*“Unlike most other providers of Retail ITS, SingTel retains significant market control for several “upstream” inputs that are essential to provide Retail ITS services such as direct access to End Users and access to cable landing stations.”<sup>35</sup>*

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<sup>34</sup> See paragraph 26 of ITS Decision.

<sup>35</sup> See paragraph 26 of ITS Decision.

With a correct market definition, the significant upstream market power retained by SingTel which the IDA refers to in relation to cable landing station access relates to the Wholesale ITS and ICS markets, not the retail markets. The IDA also comments in the same paragraph of its ITS Decision that “*there remains the potential for SingTel to leverage on its significant market power in other retail and “upstream” input markets to compete unfairly*”. If the correct market definition is applied, the potential identified by the IDA in the ITS Decision for SingTel to compete unfairly in retail markets applies equally well to the wholesale ICS market.

The IDA must not sweep aside these important barriers with a superficial analysis that the costs of switching suppliers is low at the retail level such that the whole market is competitive including for wholesale supply. Shortage of capacity and SingTel’s bottleneck control over cable landing station access facilities means that licensees have no alternative to SingTel for connectivity on certain high demand routes in the region (like India and Indonesia) and cannot switch to other service providers.

For example, most SMW3 submarine cable system capacity between Singapore and India is already utilised. Therefore SingTel now effectively controls virtually all available Singapore end capacity on the remaining significant directly routed cable system between the two places – the i2i submarine cable system. The situation is the same in respect of access to the i2i cable system cable station (noting that the i2i cable system cable station has yet to be included in the co-location and cable station connection service sections of SingTel’s RIO). Accordingly, SingTel has almost monopoly operator power in the market for available international capacity between Singapore and India. The apparent absence of IRU offerings by SingTel on the i2i (and TIS) cable system and the constraint this lack of qualifying IRU capacity imposes on competitive FBO licensees acquiring and operating cable station access and backhaul facilities demonstrates clearly that there are no realistic alternatives to SingTel.

It is also possible that, because of bottleneck control over access to certain submarine cable systems (and SingTel owns three of the four cable landing stations in Singapore, landing all but one of Singapore’s main cable systems), SingTel may offer attractive capacity packages including routes which are difficult for its competitors to access. Customers may, therefore be “locked in” to SingTel because of prices and packages for “scarce” capacity, and cannot easily switch suppliers. Other licensees in the wholesale market may also find themselves dependent upon SingTel for capacity to resell to their customers because of the same factors.

Further, on the supply side, as SingTel has for many years represented the telecommunications administration of Singapore, it has long established bilateral arrangements and agreements with overseas administrations. On some routes, particularly those with less liberalised telecommunications markets at the other end, the distant end administration may only deal with SingTel. If the distant end is also a monopoly, other licensees have no alternative distant end supplier with whom to contract, and have to enter into agreements with SingTel for capacity and minutes on direct routes to these places.

Licensees not only have no viable alternative source of supply to switch to on some routes, but SingTel has the ability to move the price either way – up or down to



manipulate the wholesale market for its purposes. If, because of a lower cost base arising from its control of essential facilities, SingTel prices to undercut its competitors, then downstream retail licensees will have no incentive to switch to other higher priced service providers, forcing wholesale competitors from the market.

In para 30 of the ITS Decision, the last on analysis of competition in the wholesale ITS market, the IDA opines:

*“Finally, SingTel’s ability to leverage on its significant market power in other retail and “upstream” input markets does not have a significant impact on its ability to compete in the Wholesale ITS market.”*

REACH has already commented quite extensively above that the IDA examined the wrong functional market boundaries when making its assessment of the competitiveness of the Wholesale ITS market – and that many of the sources of SingTel market power the IDA identified in relation to the Retail ITS market in fact relate to the Wholesale ITS market. REACH also commented extensively in the REACH Comments<sup>36</sup> on the ITS Consultation about SingTel’s bottleneck control of access by its competitors to key facilities, and how the market power arising from that bottleneck control is leveraged into downstream and upstream markets, including the Wholesale ITS market. The same assessment applies to ICS markets.

### **SingTel advantage from bottleneck control increased by customer move to IPLCs**

There is a clear trend toward buying bandwidth in its IPLC form as it gives purchasers more flexibility – in the case of the i2i and TIS cable systems, there would appear to be no choice as SingTel does not seem to offer IRUs. Purchasers are not tied into long-term arrangements where they must build/buy their own regional rings. IPLCs allow them to make short term purchases of bandwidth on the specific cable systems they want, where they want it and when they want it. REACH can provide material to IDA on this trend should IDA require.

This move towards buying IPLCs in favour of IRUs has unfortunately played into SingTel’s hands and increased the advantage it has from bottleneck control over cable station access and connection. This is because other FBOs cannot get cable station access and connection and so cannot provide backhaul where they or their customers only have IPLC capacity. SingTel requires at least an IRU if not direct ownership in a specific cable system to be able to get cable station access and provide backhaul.

### **Local tails are bottlenecks impacting competition in ICS markets**

It is clear that supply of local tails in Singapore is a major bottleneck constraining competitive carriers’ distribution of ICS domestically irrespective of which submarine cable system the international capacity is provided and whatever backhaul arrangements are in place. SingTel monopolises this market and REACH trusts that we do not need to argue this point further given IDA’s recent decision to include LLCs under

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<sup>36</sup> See paragraphs 2.11 to 2.13 and paragraphs 4.10 to 4.35 of the REACH Comments.

the RIO. Given that local tails are a key input to ICS, SingTel is able to leverage its market power into ICS markets.

This control is further “entrenched” by the fact that SingTel does not offer an alternative to itself for local circuit supply in its IPLC order form, as shown via the link in **Attachment 4** to this submission. Aside from creating a barrier to competition in ICS and LLCs, this ability to force a bundled product demonstrates SingTel’s dominance in the supply of IPLCs.

By comparison, at the time Reach Networks was made non-dominant, it had already been offering customers the choice of local circuit providers for many years in its gazetted IPLC terms and conditions:

- “4.1 The Customer may either obtain the Local Leased Circuit by:*
- (a) arranging for the provisioning of the Local Leased Circuit directly with the Local Operator; or*
  - (b) appointing the Company as the agent of the Customer to acquire the Local Leased Circuit from a Local Operator on the Customer’s behalf.*
- 4.2 If the Customer decides to acquire the Local Leased Circuit directly from a Local Operator it must ensure that:*
- (a) the Local Leased Circuit is installed, tested and made available by the proposed Service Commencement Date;*
  - (b) the interface between the Local Leased Circuit and the IPLC conforms to the Company’s technical standards and requirements for the Service; and*
  - (c) the Local Operator deals directly with and provides reasonable assistance to the Company in relation to the connection and the interworking of the Local Leased Circuit and the IPLC.”*

Reach Networks’ current IPLC order forms specifically offer customers a choice of local circuit providers.

In Hong Kong, OFTA assessed whether PCCW-HKTC’s market power over the local tail bottleneck was creating a barrier in the ICS market by way of cross-market leverage. The key test for OFTA was whether customers were free to choose local connectivity from any operator.<sup>37</sup> Applying this test to SingTel and Singapore, customers are not free to choose local connectivity. SingTel’s dominance over local tails is therefore being leveraged into ICS markets, creating barriers to entry. OFTA also had regard to the effect of structural and ownership separation between local and international operators. In Singapore, SingTel is vertically integrated, increasing the barriers to entry.

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<sup>37</sup> OFTA Statement, para 127.

### **SingTel has demonstrated obstructive conduct**

The IDA is also well aware of the cable landing station co-location, connection service, lead time, and backhaul issues and bottlenecks created by SingTel because REACH has been lodging complaints with the IDA on these matters for almost 18 months now – matters which are largely still unresolved by the IDA. One example of these complaints demonstrates clearly that SingTel has the power to impede and frustrate competitive efforts, and that SingTel has no reservations about exercising that power. We have already alluded to this matter but detail it further here.

Subsequent to obtaining an FBO licence, REACH acquired its own backhaul facility between the SingTel Tuas cable landing station where the SMW3 submarine cable system lands and REACH's Point-of-Presence (**PoP**) at New Tech Park. This enabled REACH to backhaul its own SMW3 international traffic capacity to its own PoP for distribution to its customers independently of SingTel. It was planned by REACH that this backhaul facility would, as well, be used for capacity on the i2i submarine cable system which also lands at the Tuas cable landing station. Although REACH has equipment co-located at the Tuas cable landing station for the SMW3 cable system, and has SMW3 connection service there, the conditions which SingTel has imposed on access to cable landing stations mean that REACH cannot co-locate equipment for the i2i cable systems, obtain connectivity service, or use its own backhaul to connect i2i cable system capacity to its PoP.

Instead, REACH has to pay SingTel to bring this capacity to one of SingTel's PoPs, and then arrange for SingTel connectivity from the SingTel PoP to the REACH PoP. Not only does this increase REACH's operating costs (and, ultimately, end user retail prices) but, as REACH cannot use its own backhaul for this capacity, a large proportion of REACH's investment in this backhaul is stranded. This is a very large disincentive for REACH, and potentially others, to make further investment in telecommunications infrastructure in Singapore – an outcome which is at odds with the Singapore Government's stated policy of encouraging such investment and development of Singapore as a regional telecommunications hub.

The above is an example of bottleneck control by SingTel over essential input facilities from the upstream facilities market into the wholesale ICS market. SingTel also exercises bottleneck control over critical access facilities for output from the wholesale ICS market to downstream markets. These include issues associated with access to SingTel manholes and the prices which SingTel charges Wholesale ICS operators for local leased circuits to distribute their services to their customers. Manhole access issues include the tactic which SingTel appears to employ to delay service provision by its competitors. It takes the maximum time available to it under its RIO before rejecting applications for access to manholes, even though it is probably aware of the space availability status at the manhole almost immediately (and official rejections by SingTel are necessary before some alternative access means can be applied for). The RIO has also proved to be a vehicle for SingTel to maximise the time it takes to publish prices and other terms for co-location and connection services at its cable landing stations.

REACH has commented on the above practices in its reply comments to the IDA's consultation paper on SingTel's RIO and in other correspondence with the IDA.<sup>38</sup>

The issues surrounding the lack of a SingTel wholesale local leased line product are well known to the IDA. Although the IDA has recently mandated that SingTel offer a wholesale local leased circuit service, this decision has been stayed for the moment pending the outcome of a SingTel appeal to the Minister against this decision. While a mandated SingTel wholesale local circuit service is welcomed by REACH, SingTel will still hold an advantage in this area until the price for this service become truly cost-based. Again, REACH has commented at length on this matter in response to the IDA's consultation paper on the subject.<sup>39</sup>

### **Other comments on SingTel claims re barriers to entry**

REACH submits that sunk cost is a barrier to entry in Singapore because the SingTel RIO stops new entrants from using the assets they invest in. We refer to the example above that REACH is unable to use its own backhaul for i2i. These conditions create reluctance on the part of new entrants to invest in IRUs rather than IPLCs. Therefore, the sunk cost in assets which players cannot use is a disincentive to investment. Also, in contrast to when OFTA considered this matter in Hong Kong, there are no longer projections of high levels of higher priced demand growth for cable which counteract the significant costs involved in constructing cables.

We also dispute the SingTel suggestion that there are low economic barriers to entry evidenced by capacity transactions on a regional rather than route specific basis (refer para 5.7 of the Exemption Request). SingTel quotes TeleGeography in 2001 that purchasers buy on regional basis rather than on specific routes. Time and markets have moved on, and purchasers very much buy of a route specific basis. We refer to the more recent comments of TeleGeography in 2004 quoted above.

The Exemption Request also talks about advantages of incumbency being negated by competitors able to target and establish a customer base but it does not say how. SingTel later says that competitors who are overseas incumbents have advantages over SingTel at the distant end – either there are or there aren't advantages of incumbency, but they can't exist in one paragraph but not in the next.

SingTel argues competitors employ "strategic operational measures" to "attract and maintain high-revenue customers". Again, these are not detailed nor does SingTel explain whether this has any relevance at all in controlling its dominance. SingTel itself is a big user of "strategic operational measures" to lure customers, using discounts and other targeting methods. We note in any event that, while new entrants can challenge on price and service criteria, they can only do so on some routes.

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<sup>38</sup> "Reach Ltd. Submission in Response to IDA's Consultation Paper regarding Review of Singapore Telecommunications Limited's Reference Interconnection Offer", dated 15 July 2003. < <http://www.ida.gov.sg/idaweb/doc/download/I2434/Reach.pdf>

<sup>39</sup> "Reach Ltd. Submission in Response to IDA's Consultation Paper regarding Designation of Singapore Telecommunications Limited's Local Leased Circuits as Mandatory Wholesale Service", dated 30 June 2003. < <http://www.ida.gov.sg/idaweb/doc/download/I2372/Reach-Ltd.pdf>

## **SINGTEL VERTICAL INTEGRATION IS CRITICAL TO DOMINANCE ASSESSMENT**

### **SingTel can leverage its domestic dominance into international service markets**

REACH refers to its comments throughout this submission in relation to SingTel's ability to leverage its dominance in domestic markets, and particularly its control over domestic network segments, into international service markets, including for ICS.

SingTel's vertical integration from international to domestic, and also wholesale to retail markets provides SingTel with a tremendous advantage over its competitors through end-to-end ownership of the facilities and services which support and feed into ICS markets. This end-to-end ownership also enables seamless integration of planning and operation of all services and unmatched economies of scale.

SingTel has flexibility and discretion to price elements of its end-to-end facilities such that it maximises profits from those elements which are least open to competition – elements which are often necessary inputs to its competitors' international operations. SingTel's vertical integration also provides it with a cost advantage over many of its competitors who operate only in the international markets. For example, SingTel can recover costs of equipment, etc, across both local and international services.

SingTel also obtains informational advantages from its access to end-to-end customer information.

SingTel's vertical integration means that it is very difficult for the IDA to ensure that abuses not occur, despite prohibitions in the Code. Vertical integration also makes it even more difficult to prove anti-competitive conduct based on ex post prohibitions. Even with all good intentions, the degree of SingTel's vertical integration does not provide the necessary transparency.

### **Key differentiator from structurally separate Hong Kong market**

In reviewing the Hong Kong ICS precedent for itself, IDA must bear in mind the absolutely fundamental difference between Hong Kong and Singapore telecommunications competition: in Hong Kong, there is full structural separation of the incumbent domestic and international operators and also different ownership interests whereas in Singapore the domestic and international network are not even split between different SingTel subsidiaries. Different ownership in REACH in the form of Telstra means that there is a check on all behaviour as Telstra would not allow conduct that diluted its interests in favour of PCCW.

*Comparison of Structural Separation of SingTel and Reach Networks*

<b>Structural Factor</b>	<b>SingTel</b>	<b>PCCW<sup>40</sup>/Reach Networks</b>
Separate local and international networks	No	Yes
Ownership separation	No	Yes
Wholesale and retail in separate companies	No	Yes
Separate management and personnel – CEO down	No	Yes
Separate Boards of Directors	No	Yes
Separate Marketing staff	No	Yes
Physical separation of operations	No	Yes

This structural separation was significant in finding that the ICS markets were competitive in Hong Kong. Even with structural separation in Hong Kong, OFTA still saw fit to impose conditions on the incumbent further ensuring separation of activities. The complete lack of structural separation in Singapore should be equally significant in finding that SingTel still dominates ICS markets here and should not be granted any exemption. Even an exemption on conditions of separate reporting is not merited and would be impossible for IDA to enforce properly given SingTel’s vertical integration.

<sup>40</sup> PCCW-HKT owns 50% of Reach Ltd., which owns 100% of Reach Networks. The remaining 50% of Reach Ltd is owned by Telstra Corporation Limited of Australia.

## **PART IV COMMENTS ON SPECIFIC EXEMPTIONS SOUGHT**

### **EXEMPTING SINGTEL FROM DOMINANCE SAFEGUARDS WOULD CAUSE HARM**

#### **Ex ante regulation needed until market is effectively competitive**

It is well-recognised that regulation is only a surrogate for competition. However, competition in a market must be sufficiently mature before market forces can take over from regulation. That is why in Singapore IDA has developed sound rules of the road in the form of the Code. Unfortunately, SingTel continues to be able to, and does, engage in off-road activities. It is therefore too early in the Singapore context to remove ex ante regulation.

In a previously monopolised market such as ICS, there is a presumption that regulation will be necessary until such time as there is effective competition. This approach underpins IDA's designation of dominant licensees under the Code. SingTel misrepresents this presumption in the Exemption Request in alleging that "*Most regulators conclude that market forces should be relied upon unless there is a market failure*" with no source for this opinion. REACH submits that the typical approach is rather that competitive market forces can and should be relied upon only when these forces are sufficiently developed.

As REACH has explained above, there is no effective competition in Singapore ICS markets. IDA should therefore dismiss SingTel complaints that Dominant Licensee obligations are inappropriate in a competitive market and that there are no signs of market failure. REACH suggests there are in fact clear signs of market failure. The Hong Kong ICS market was liberalised on 1 January 2000, and in the two year period to 31 December 2001, Reach Networks' market share fell to less than 20%. Competition in the Singapore ICS market commenced in April 2000, and after four years, SingTel's market share is still above 75% - a loss of less than 25%. Such minimal market share erosion over such a long period of time is a very strong indication that there has in fact been a fundamental market failure in Singapore.

#### **Each dominance provision is critical to preventing end user/competitor harm**

REACH maintains that SingTel's market share of over 75% demonstrates SingTel is dominant in ICS markets. SingTel does not shrink from the exercise of that dominant market power to the fullest extent. REACH has already outlined this type of Dominant Licensee behaviour by SingTel in denying REACH access to REACH's own backhaul for i2i cable system capacity. REACH believes that this is only a foretaste of what is to come if SingTel is relieved of the above Dominant Licensee obligations. As a result, REACH strongly submits that SingTel should not be exempted from any of the obligations as to allow this would result in harm to end users and to competitors.

SingTel, with its bottleneck control over access to cable landing stations for high demand cable system capacity and backhaul is perfectly placed to engage in price squeezes. SingTel can set and maintain high wholesale access prices for cable landing station connectivity without fear of competition, and lower its Retail ICS tariffs to price at or marginally above its wholesale prices (as it did with its local leased circuit pricing). While

SingTel may then be satisfied to take its profits from the Wholesale ICS market, both its wholesale and retail competitors struggle as there is little or no margin left for them to supply either the Retail ICS operators or for those operators, in turn, to see a margin in the prices they must charge end-customers to compete with SingTel. Elimination of these competitive service providers will restrict consumer choice at retail levels, and it can be expected that retail prices will subsequently rise in the absence of competition.

Conversely, SingTel will be unconstrained in its ability to engage in predatory pricing and can embark on a programme of sustained below cost pricing to eliminate its competitors. The aggressiveness of SingTel's past market behaviour provides little comfort that SingTel will not engage in such activities again or act even more aggressively. The absence of any sound explanation by SingTel as to why it is seeking exemptions allowing it to engage in predatory pricing suggests that such plans may well be all too possible.

Additionally, SingTel will be allowed to cross-subsidise and discriminate in favour of its associated companies. Some of these associated companies are not subject to dominant carrier regulation and have unfettered pricing flexibility in their own markets, having the potential to price alternative competitive operators out of business, taking new and innovative ideas out with them. SingTel will also be in a position, by developing unique or proprietary network features without regard to the cost this will impose on interconnected Licensees, to make interconnection by other licensees so expensive as to effectively drive them from the market, again, with a detrimental results for consumers.

The exemption from the requirement for prior IDA approval of SingTel's prices in both Wholesale and Retail ICS markets (subsections 3.3.4 and 5.8.3 of the Code) removes any effective control over SingTel engaging in the pricing practices described above. Further, freedom from subsection 5.8.3 also removes the obligation for SingTel to offer Wholesale ICS services. Therefore, SingTel can choose which Retail ICS operators it wishes to supply, favouring or discriminating against particular licensees to distort the Retail ICS market to SingTel's benefit.

REACH commented at length in the REACH Comments on the ITS Consultation on the potential competitive harm that granting the ITS Decision would give rise to. Other competitive licensees, notably Macquarie, also commented extensively on the very real and serious harm that the Exemption Request posed.<sup>41</sup> We urge the IDA to refer back to these documents as the same harm is likely in relation to ICS. As REACH has already commented to IDA, it is difficult to see how anything but harm could come from SingTel's request to be allowed to:

- refuse services to end users on just and reasonable terms;
- discriminate against end users without justification;
- set prices without regulatory oversight such that they need not be best practice;

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<sup>41</sup> See Annex B – Adverse Impact of Each exemption Sought - of the Macquarie Corporation Telecommunication Pte Ltd's comments.  
<<http://www.ida.gov.sg/idaweb/doc/download/12241/Macquarie.pdf>>



- force a bundle of products on customers;
- refuse to supply resellers to the detriment of wholesale competition;
- engage in price and non-price predation.

The ICS markets are neither competitive nor mature enough for the existing *ex ante* or specific Dominant Licensee *ex post* regulations to be removed and replaced by general operator *ex post* rules. While the IDA has other regulatory powers, REACH does not believe that these are a sufficient deterrent to constrain SingTel in its behaviour, and there is no fall back of a general competition law in Singapore. SingTel's past Dominant Licensee behaviour (including some "strategic operational measures") suggests that, at best, SingTel would only apologise for any market abuses and amend its behaviour after the event, when the damage has already been done to the competitive process, end-customers are harmed, and competition is unlikely to recover.

REACH is particularly concerned that serious harm will result from exempting SingTel from dominance obligations where there is no back up of strong *ex post* dominance controls. Elsewhere, the removal of *ex ante* measures still leaves competitors with the ability to challenge the incumbent for abuses. SingTel misleadingly refers to section 7.4 of the Code as providing this safeguard in Singapore. However, as IDA well knows, this section is more concerned with misleading rather than anti-competitive conduct of the kind usually dealt with in broad competition laws. And, there is also the suggestion in the IDA's consultation on review of the Code that the section 7.4 protections will in any event be removed from the Code.

Not only would exempting SingTel from current obligations cause competitive harm in the ICS markets, it has the potential to perpetuate and spread this harm throughout other telecommunications markets in Singapore. If the Exemption Request is granted, then it is certain that it will be used as a precedent by SingTel in future exemption requests. SingTel's intention to force IDA down the path of removing *ex ante* obligation across the board is clear from the speed with which it has lodged the ICS Exemption Request after the ITS Decision. This creeping approach to removal of dominance obligations creates a risk of obscuring SingTel's overall industry domination i.e. 'not seeing the woods for the trees'.

REACH is also of a view that SingTel is, at least in part, currently refraining from more overt potentially anti-competitive behaviour while it tries to push through a series of non-dominance applications – to avoid the ICS and future applications being denied because of its behaviour in markets where Dominant Licensee obligations have already been removed. However, once these regulatory obligations have been substantially removed, REACH expects SingTel to unleash itself.

This harm to end users and to competition far outweighs any potential administrative benefits that could possibly arise from lifting the obligations from SingTel.

## **CONCLUDING COMMENTS**

We trust that IDA will be left with no doubt after reviewing industry submissions that it should reject the Exemption Request outright as non-compliant with the Code. If IDA decides nevertheless to proceed with the ICS Consultation, it should force SingTel to provide a compliant request setting out verifiable data on its market position. IDA should then ensure that there are further rounds of consultation allowing competitors to comment on SingTel's arguments: REACH proposes that there should be three rounds.

If IDA does consider the Exemption Request, it should be rigorous in its market definition. It should define the market to include SingTel self-supply of ICS and reject the "addressable market" concept. Having done so, it should proceed to find markets for dedicated, point-to-point, international cable bandwidth, which are route and cable specific out of Singapore.

In assessing dominance in these markets, IDA must require SingTel to provide verifiable data of its market share and concentration. Given REACH's estimate that SingTel has over 75% of total activated capacity in ICS markets, it should be presumed dominant. IDA must also require SingTel to provide verifiable data if it argues that other factors counter this presumption. REACH submits that SingTel will struggle to do so as there are high barriers to entry, particularly in wholesale ICS markets, SingTel has demonstrated that it will act anti-competitively, and it has significant advantages from its vertical integration and control over bottleneck facilities.

IDA must also question why SingTel seeks to be exempted from the various dominant licensee obligations if it does not intend to act anti-competitively. IDA should rely on regulation to ensure that SingTel cannot act in such a way pending the market maturing to a point of effective competition that similarly ensures SingTel is unable to act anti-competitively. To grant the Exemption Request at this stage would be relying on SingTel's good nature to do so given the lack of competitive constraint on it.

REACH trusts that the above provides some useful feedback on the ICS Consultation, which IDA will give due consideration to. We remain ready to discuss ICS markets and SingTel's dominance generally with the IDA as and when required. REACH trusts that there will be further opportunity for dialogue and formal consultation on such an important review exercise.

**Expert Statement on Self-supply****The treatment of self-supply in market definition and market analysis**

Martin Cave<sup>42</sup>

I am a Professor and Director of the Centre for Management under Regulation at Warwick Business School, University of Warwick. I hold the degrees of BA in Philosophy, Politics and Economics and BPhil and DPhil in Economics from Oxford University. For two decades I have worked as an economist studying regulation, especially of the telecommunications industry. I am the co-author of Understanding Regulation (Oxford University Press, 1999) and co-editor of the Handbook of Telecommunications Economics (Elsevier, 2002). In 2002 I prepared an independent Review of Spectrum Management for the Department of Trade & Industry and HM Treasury. I have written many articles in academic and professional journals. Since 1990 I have been an adviser to the Office of Telecommunications the UK regulatory agency and since 2003 to Ofcom. I have also advised and prepared reports on telecommunications matters for the Organisation for Economic Co-operation and Development and for the European Commission. From 1996-2002 I was a member of the UK Competition Commission.

I have been asked by Reach Ltd. to comment on certain aspects of the public consultation on the request by SingTel for exemption from dominant licensee obligations with respect to the international capacity services market, issued on 4 March 2004. The following paragraphs contain observations on the treatment of self-supply in market definition:

In industries like telecommunications which combine high levels of vertical integration with interconnection or mandated access by one operator to another's network, it is common for a dominant operator both to supply retail customers directly and to sell wholesale services to a competitor active in the same retail market. Non-dominant competitors may also sell on the wholesale market or may be fully vertically integrated – by not supplying any other firm at wholesale and reserving their total output to themselves.

These practices raise the question of how to treat self-supplied wholesale inputs in the course of market definition and analysis. The question arises whether to define the market as including only services which are subject to transactions between firms (sometimes called an 'addressable market') or to include both the addressable market and output of the wholesale service which is retained within the firm for ultimate sale to end-users. In a recent market analysis, the IDA has chosen to include in the market definition and analysis only the addressable market. However this approach yields

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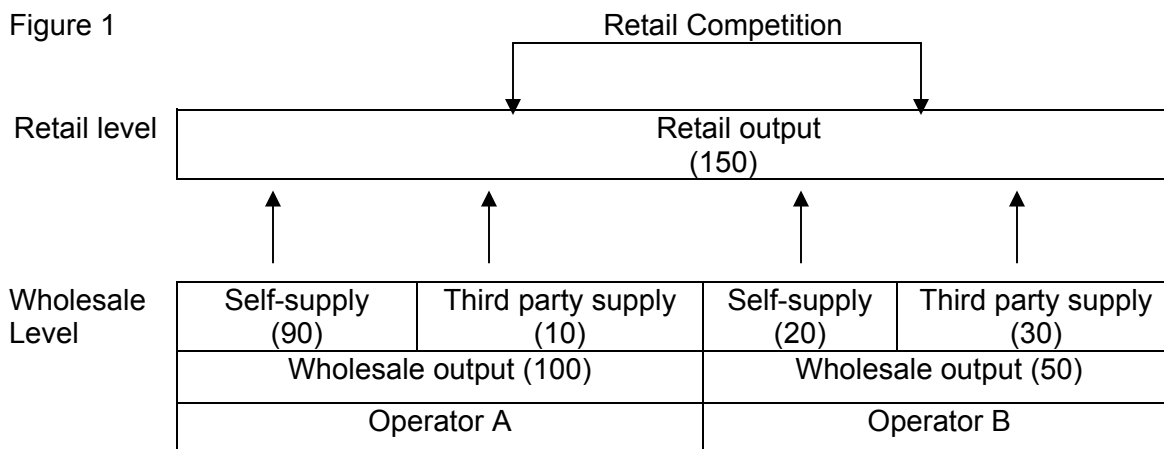
<sup>42</sup> Professor, Warwick Business School, United Kingdom, [Martin.Cave@wbs.ac.uk](mailto:Martin.Cave@wbs.ac.uk)

wrong conclusions in general, and does so in particular when applied to international capacity services.

Addressing the problem first from an economic rather than a legal perspective, the situation in respect of a wholesale service used to produce a retail service can be represented as in figure 1. Clearly the market in question cannot be SingTel's alleged market for international capacity, which, as we will see, is a number of markets. Accordingly, to demonstrate the point, the wholesale and retail market will be taken to be, respectively call minutes of a particular type, offered at wholesale to another operator or at retail to an end user.

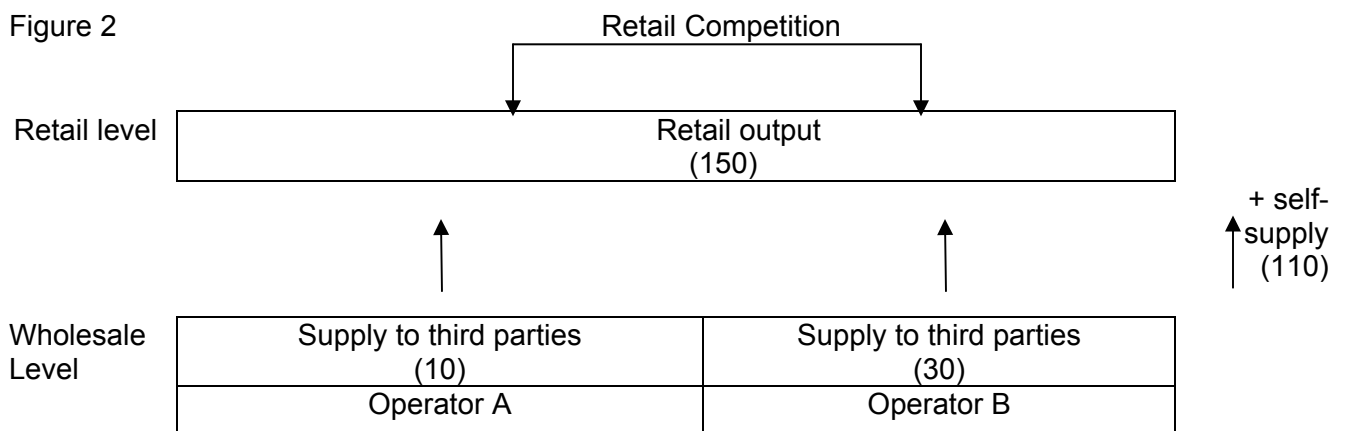
To illustrate the issue, suppose that two operators, A and B, provide a wholesale output, using it partly for self-supply, partly for sale to third parties. The figures in the boxes illustrate the volumes in question, on the basis that there is a one-to-one relationship between, for example, wholesale call minutes and retail call minutes.

Figure 1



The issue to be faced is whether the self-supplied wholesale output should be included in the retail market, or whether, for market definition and analysis purposes, the situation is better represented as in figure 2, where self-supply at wholesale is excluded.

Figure 2



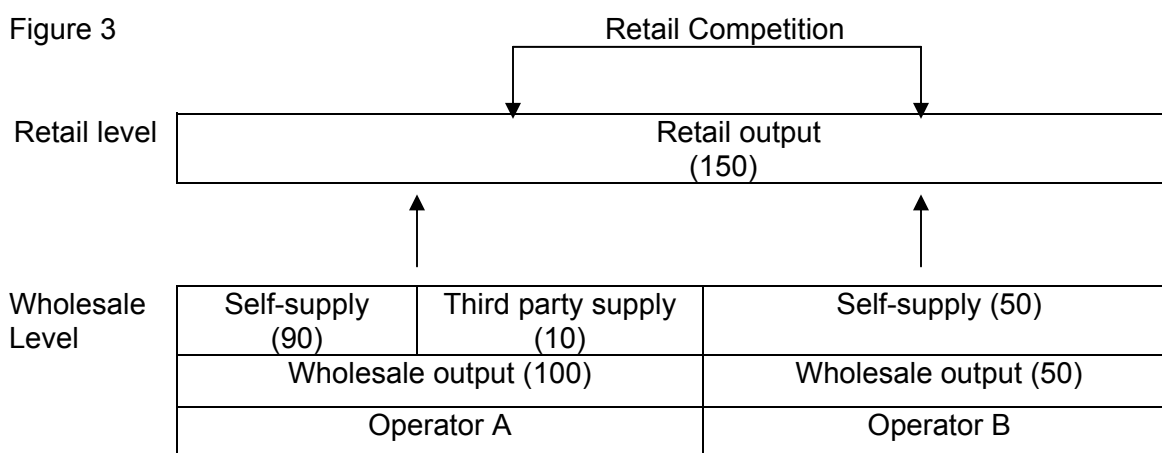
Does figure 1 or figure 2 better capture the situation? The question can be answered first by reference to the objective of market definition, which is to identify the set of services which are sufficiently close substitutes that they act as a constraint on one another's prices, notably because if the price of one rises, customers will switch to another.

A current supplier of the wholesale service to third parties will clearly have little difficulty in switching from self-supply to third party supply or back again. Available capacity can be used for either purpose. On that basis, the supplies will be in the same market.

Equally, if the two operators are competing for the same customers of their wholesale products, those products will fall in the same market. This shows that, in figure 1, all four elements at the wholesale level (operator A's self-supply and third-party supply and operator B's self-supply and third-party supply) fall in the same market.

There is also another link between operator A's and operator B's wholesale services. Both operators compete in the same retail market. Now suppose operator B entirely self supplies its wholesale product, selling none to third parties, as shown in figure 3. Does its wholesale output represent a constraint on the price which operator A can charge for its wholesale sales? Clearly, if A raised the price of its wholesale service, it would raise an input price for the wholesale customers whom it supplied; as a result they would be unable to compete at the retail level with operator B's retail product. By this reasoning, B's wholesale self-supply constrains A's wholesale price. This pressure, exerted via the retail market, places B's self-supply and A's third party supply (as well as A's self supply) in the same market.

Figure 3



In a recent communication<sup>43</sup>, the IDA has explained its reasons for excluding particular forms of self-supply, in relation to the supply of wholesale services used to supply international telephone services, or ITS. The passage in question states:

<sup>43</sup> Letter to telecommunications executives, April 12, 2004.

“IDA also considered SingTel’s current practice of supplying all its retail ITS using its own raw capacity, despite the fact that SingTel could technically obtain wholesale minutes from third parties and despite the low wholesale ITS prices in the market. This suggests that in-house supply of raw capacity to provide retail minutes is not being influenced by the price of wholesale minutes supplied by third parties. Therefore, SingTel’s self-supply via its own raw capacity should not be included in the definition of the wholesale ITS market. It is reasonable to consider whether the types of supply are subject to a common pricing constraint before including them in a single market, in this case SingTel’s “in-house” supplies and “third party” supplies. ... ..”

As a result, the IDA omitted capacity self-provided by facilities-based licensees from its definition of wholesale market for ITS.

It is worth noting, first, that this reason is hard to distinguish from the ‘addressable market’ approach, in which some part of overall demand is distinguished on the ground of being reserved for particular suppliers (in this case, self-suppliers), while the remainder forms a separate market open to competition.

To justify this separation, the analyst must show that there is no common pricing constraint applying across the total volume of services produced. In other words, it has to be shown that a hypothetical monopolist in the ‘non-reserved’ market can raise its price above the competitive level without causing its customers to switch to another source of supply, or without attracting entry from outside the market. The arguments I have set out above suggests that neither is true. A higher wholesale price will discourage retail sales from buyers of the expensive wholesale product, in favour of vertically integrated retailers. And firms undertaking self-supply will (more) offer sales at wholesale to third parties.

The reverse question is whether a hypothetical monopolist of the self-supplied input could profitably raise its implicit wholesale ‘transfer’ price without attracting demand- or supply-side substitution. This is what the IDA appears to have in mind when it speaks of SingTel continuing to self-supply ‘despite low wholesale ITS prices in the market’. But wholesale prices, low as they may be, may still exceed the short run marginal cost of self-supply by a large operator with excess capacity and enjoying economies of scale.<sup>44</sup> In other words, the IDA appears implicitly and without any evidence to have assumed that current ITS wholesale prices are below the competitive level, without this sparking off substitution from self-supply, prices may in fact be above short run marginal cost.

The IDA’s claim that SingTel’s buying behaviour is proof of the separation of self-supply is thus entirely unproven. It is also extremely implausible, as it implies that SingTel

- a) is price discriminating against itself, by paying a higher implicit wholesale price for its self-supplied output than the price at which it sells the identical service to third parties and

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<sup>44</sup> The evidence of these economies of scale bears on the dominance question as well.

- b) is unconcerned about competition in the wholesale market reflected from the retail market, in other words about the loss of retail sales it will experience in consequence of the high implicit price of its self-supplied whole-sale service.

I thus conclude firstly, that the IDA did, in its ITS review, in practice adopt the 'addressable market' approach: to argue otherwise is to make a distinction without a difference; and secondly that the evidence provided to support the claim that SingTel's "in-house" supplies and "third party" supplies, or those of other facilities-based licensees, are not subject to a common pricing constraint is unconvincing, while the arguments set out above in favour of a single market are much more compelling.

There are equally cogent reasons at the stage of market analysis. For the purposes of assessment of dominance, a number of indicators are used, including market share, wholesale size and the presence or absence of economies of scale, and the degree of vertical integration.

Figure 1 shows A to have a market share of 67% at wholesale (producing 100 out of 150 units) while figure 2 –without self-supply – shows a share of 25% (10 out of 40 units). The relative size of the two operators is thus reversed, and while under the first approach there would be a presumption of dominance, under the second there is no evidence, based on market share, for a finding of dominance. Yet operator A, through its ability to switch from self-supply to supply to third parties, or to expand its sale to third parties through a relatively small proportionate increase in its total output, would naturally be seen as having a larger presence in the market than operator B.

Market shares are suggestive but not conclusive. Equally important are the indicators of dominance which identify the sources of market power. Two of these are the absolute size of the enterprise, which confers benefits in the market place because of the large quantity of resources which a large firm has at its disposal, and the existence of economies of scale. In each case, the omission of self-supplied output gives a misleading picture of market power. This is particularly true in the case of economies of scale, which are a major feature of telecommunications networks. If the second approach is adopted, it appears that operator B, with an apparent 75% market share, enjoys greater economies of scale; yet its actual output level is only half that of operator A.

A further potential source of dominance is vertical integration, shown in this case by a presence in both wholesale and retail markets. Here again, the omission of self-supply for the purposes of market definition and analysis at the wholesale level creates a misleading impression of the parties' relative levels of vertical integration.

In summary, there are good reasons, based on economic analysis, for including self supply in a market definition and analysis at a wholesale level, especially when, as in this case, all or most of the producers of wholesale products both supply to themselves and sell to others.

This is increasingly recognised by the competition authorities and the Courts. In Europe, the legal and administrative precedents over the treatment of self-supply have been

mixed, with some decisions favouring the exclusion of self-supply, while in others the Commission has determined that the characteristics of particular markets are such that self-supply could exert competitive pressure on sales to third parties.

In the Court of First Instance's more recent judgment in *Schneider*<sup>45</sup>, the Court criticised the Commission for failure to take into account, when computing the market shares of the proposed merged entity, of supplies of the intermediate product which integrated producers made available in the downstream market (i.e. of self-supplied inputs).

“282. It cannot be denied that, in the context of such competitive procedures, ABB and Siemens, as integrated producers, compete with their non-integrated counterparts such as Schneider, either directly where the non-integrated manufacturers agree with switchboard assemblers or installation engineers to submit their bids or indirectly where those manufacturers sell panel-board components to a switchboard assembler whose bid has been accepted. In both cases, the prices of the non-integrated manufacturers are subject directly to competitive pressure from the parallel bids made by ABB and Siemens in response to the same invitation to tender.”

In the recent Draft Commission Notice, containing *Guidelines on the application of Article 81 to technology transfer agreements*, it is explicitly stated that market shares are calculated on the basis of all sales of products incorporating the licensed technology in the downstream market, including technologies that are only being used in-house (i.e. entirely self-supplied). It is noted that this departs from the approach taken in the Commission *Guidelines on Vertical Restraints*. One reason for this is that ‘If the downstream product market is competitive, competition at this level may constrain the licensor. An increase in royalties upstream affects the costs of the licensee, making him less competitive, causing him to lose sales.’ (p.10)

The departure from the *Guidelines on Vertical Restraints* is, however not clear. While para 98 states that

“(98) In-house production, that is production of an intermediate product for own use, may be very important in a competition analysis as one of the competitive constraints or to accentuate the market position of a company. However, for the purpose of market definition and the calculation of market share for intermediate goods and services, in-house production will not be taken into account,”

this is followed by an important qualification

“(99) However, in the case of dual distribution of final goods, i.e. where a producer of final goods also acts as a distributor on the market, the market definition and market share calculation need to include the goods

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<sup>45</sup> *Schneider Electric SA vs. CEC* [2002] ECR II, 4201.



sold by the producer and competing producers, integrated distributors and agents.”

In summary, both economic analysis and recent jurisprudence in Europe clearly endorse the inclusion of self-supply in market definition and analysis for upstream products, particularly in cases where such products are sold by firms to independent third parties as well as self-supplied. This is clearly the case in the various retail and wholesale markets for international capacity services. The IDA would therefore make a misleading market analysis if it omitted self-supply. It would place itself in danger of reaching a mistaken conclusion based on faulty analysis.

April 2004

**Expert Statement on Market Definition****SingTel's approach to market definition is manifestly inadequate**

Martin Cave<sup>46</sup>

I am a Professor and Director of the Centre for Management under Regulation at Warwick Business School, University of Warwick. I hold the degrees of BA in Philosophy, Politics and Economics and BPhil and DPhil in Economics from Oxford University. For two decades I have worked as an economist studying regulation, especially of the telecommunications industry. I am the co-author of Understanding Regulation (Oxford University Press, 1999) and co-editor of the Handbook of Telecommunications Economics (Elsevier, 2002). In 2002 I prepared an independent Review of Spectrum Management for the Department of Trade & Industry and HM Treasury. I have written many articles in academic and professional journals. Since 1990 I have been an adviser to the Office of Telecommunications the UK regulatory agency and since 2003 to Ofcom. I have also advised and prepared reports on telecommunications matters for the Organisation for Economic Co-operation and Development and for the European Commission. From 1996-2002 I was a member of the UK Competition Commission.

I have been asked by Reach Ltd. to comment on certain aspects of the public consultation on the request by SingTel for exemption from dominant licensee obligations with respect to the international capacity services market, issued on 4 March 2004. The following paragraphs contain observations on SingTel's approach to market definition. Market definition is a necessary prelude to market analysis because it identifies the class of services which are close enough substitutes in supply or demand to represent a major constraint on one another's prices. Other products outside the defined market can have a limited constraining effect, but products within the market are by definition closer substitutes.

Competition and regulatory authorities throughout the world have found it helpful to think about market definition in the context of the hypothetical monopolist test.<sup>47</sup> This defines a market as the set of products with the characteristic that if a firm were the sole supplier of that set of products it would be able to raise their prices above the competitive level by 5-10% for a period of about a year, and thereby increase profits. Clearly if consumers switched to other products in large numbers, profits would go down. The test thus ensures that close substitutes in demand are in the same market. Equally, if the higher price attracted new firms into the market in the relevant time frame, raising the price

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<sup>47</sup> The test is recommended by competition and regulatory authorities in the USA, the European Union, Australia and many other countries.

would lead to an unprofitable loss of market share. The hypothetical monopolist test thus identifies products which compete closely with one another.

In claiming that the broad range of services listed in para 1.2 of SingTel's request for exemption, SingTel is, in effect, claiming that the services in question are close substitutes for one another, to the extent that if the price of one rises, consumers will switch to another. Thus, for example, if SingTel increased the price of 'domestic backhaul', customers would switch to another service in the list. The most cursory inspection of the list reveals that there is no other service which to any degree represents a realistic substitute for domestic backhaul. It follows from this that SingTel's definition of the 'International Capacity Services' market is, as well as being largely unargued, clearly wrong.

More particularly, the proposed market ignores the following basic principles of market definition, which flow from the hypothetical monopoly test:

- i) services offered at different speeds are not necessarily in the same market, especially if different speeds involve use of different technologies. Suppose two technologies are capable of providing a service (say, international transmission), but one is better adopted for low speeds, the other for high speeds. Are they in the same market? This depends on the difference in the costs of the two technologies in providing services of a given speed. If demand is for two speeds only (slow and fast) and technology A can provide the slow speed service for \$10 and the fast speed service for \$15, while technology B can provide the slow speed service for \$5 and the fast speed service for \$25, then the two technologies are not really competitors in the same market: A does not constrain B's price for the slow service, nor does B constrain A's price for the fast service. An exception would occur if both technologies could provide a medium speed service for \$12, in which case there might be a 'continuous chain of substitution' across all services, making them fall in the same market.
- ii) in relation to services employed at different stages in the value chain, for example, international transmission and backhaul, it is clear that they are not substitutes in demand but complements, and hence would normally fall in different markets – for the obvious reason that a monopolist in backhaul would not be prevented from raising its prices by competition from a provider of international transmission. More generally, service products at different functional levels do not generally fall in the same market. From a demand-side point of view they are not substitutes. Convincing evidence of supply substitution would be required to justify their inclusion in a single market.
- iii) the SingTel definition commits the obvious error of including in the same market both retail services sold to end users and wholesale services sold (generally) to SingTel's competitors. Both the functional attributes of the services and the competitive conditions in which they are supplied will

inevitably differ considerably: putting them in the same market suggests that SingTel has not seriously addressed the question of market definition.

- iv) the argument that a range of disparate services such as those brought together by SingTel in its alleged ICS 'market' is a cluster is wholly mistaken. Cluster markets may be defined in relation to services which are substitutes neither in demand nor in supply provided that customers buy the services from the same supplier, to economise on transactions costs. Thus it may be sensible to regard mobile retail access and calls as a single market because, in practice, customers purchase these services as a single package. The same is not true, however, for fixed line services in many countries, because customer pre-select enables subscribers to buy access from one supplier and calls from another.

These two examples are of retail services. Clusters at wholesale are less frequently encountered, because wholesale customers are usually buying large volumes, and are willing to incur the transaction costs of 'shopping around' for each service. In the case at issue, the services are made available by a range of different suppliers, offering different combinations. Different customers buy different selections. The basis for defining a cluster market is lacking.

Finally, many international capacity services cover alternative routes, and these routes are not fully, or not at all, substitutable. Clearly they are not a cluster, as operators can (and do) buy from different providers. The IDA thus has to determine whether in relation to each service market identified, substitution across operators and across routes is enough to justify the exemption. It is difficult to see how this can be tackled without a full route-by-route analysis.

These remarks have clear implications for how the IDA should proceed, in order to carry out a proper market analysis.

In relation to market definition it will want to

- (i) address the 'geographical' question raised above, by examining substitution possibilities across individual routes
- (ii) distinguish between markets for wholesale and retail services
- (iii) in order to establish appropriate service markets, it will want to start with a narrow service, and –using the hypothetical monopolist test as a conceptual basis- establish the degree to which that service's price is constrained by the availability of a related service. This process will clearly distinguish international from domestic services, such as backhaul. But other distinctions will also have to be tested on the facts – between dedicated and switched services, and between cable-based and other services, where their characteristics differ. The submission by REACH which this statement accompanies provides more detailed pointers as to how this task should be

accomplished. It is, regrettably, clear that SingTel's submission has not attempted to undertake this task in any serious or systematic way.

April 2004

**Hong Kong vs Singapore Cable Systems****Hong Kong**

Leaving aside very old and small cables systems, the following cable systems land (with cable station, system owner, and landing party) in Hong Kong:

1. APCN – Lantau – Consortium - REACH
2. SMW3 – Deep Water Bay – Consortium - REACH
3. APCN2 – Lantau – Consortium - REACH
4. FLAG/RNAL – Tong Fuk – FLAG/REACH - REACH
5. FLAG Europe-Asia – Lantau – FLAG - REACH
6. East Asia Crossing (EAC) - Teung Kwan O – Asia Netcom - EAC
7. C2C – Chom Hom Kok – SingTel – C2C

- Of these seven systems, REACH has an interest in four of them. APCN, SMW3, and APCN2 are all consortium cable systems and capacity is available from any consortium member. FLAG/RNAL is a private cable system, but FLAG offers competitive access to this system in addition to REACH.
- The other three cable systems are private cable systems and REACH has no interest in them.
- The REACH cable station at Lantau has specially built virtual co-location buildings which house the other three original external FTNS licensees. Facilities are available for co-location and connection services for other FTNS licensees.
- The other FTNS licensees at the Lantau cable station each have their own backhaul facilities.
- There are no restrictions on these licensees providing IRU or IPLC backhaul services.
- At least one other FTNS licensee with an interest in SMW3 is co-located at the Deep Water Bay cable station, and has its own backhaul facilities.
- FLAG has co-location facilities at the Tong Fuk cable station and has backhaul arrangements with an FTNS licensee other than REACH.

## Singapore

Again, leaving aside the very old and small cables systems, the following cable systems land in Singapore:

1. APCN – Changi – Consortium – SingTel
2. SMW3 – Tuas – Consortium – SingTel
3. APCN2 – Katong – Consortium – SingTel
4. C2C – Changi – SingTel – SingTel
5. i2i – Tuas – SingTel – SingTel
6. East Asia Crossing – Changi North – Asia Netcom - StarHub
7. TIS – Changi – SingTel/CAT/PTT – SingTel

- Of these seven systems landing in Singapore, SingTel has an interest in six. Three of them are consortium cable systems which, unlike when the REACH market assessment was undertaken, are approaching or have reached equipped capacity on key routes.
- The remaining three of the SingTel related cable systems are private ones, and SingTel controls the Singapore ends.
- As bandwidth usage for certain routes reaches capacity on certain routes on the older cable systems, the only viable alternative capacity available is on the private cable systems which SingTel controls, exercising monopoly operator power. For example, virtually the only available capacity into India at the moment from Singapore is via the i2i cable system. Alternatives like transiting other regional hubs are not practical because, not only do the distances involved add cost and technical complexity, but the bottleneck is still the last link into India itself - and the i2i cable system is the best means to access India. The same is true for certain other locations. This is why from a supply-side perspective the geographic market for this ICS market dominance assessment must be on a route-by-route, even cable system-by-cable system, basis.
- SingTel controls cable station co-location, connectivity service and backhaul to all six cable systems, either because of private ownership (co-location and connection service terms and conditions for access to the i2i cable system have still not been incorporated in the SingTel RIO over 15 months after the i2i system went live), or because of the access conditions it sets out in its RIO.
- StarHub may have gained co-location, but REACH is not aware at what price.
- Self provision of backhaul by FBO licensees is not allowed unless they have ownership or an IRU interest in the specific cable system.

#### Attachment 4

##### SingTel IPLC Order Form

The SingTel IPLC order form accessible through the link < [http://business.singtel.com/upload\\_hub/mnc/IPLC\\_Order\\_Form\\_with\\_SLG.pdf](http://business.singtel.com/upload_hub/mnc/IPLC_Order_Form_with_SLG.pdf) > demonstrates that SingTel requires parties to use its LLCs when acquiring IPLCs. This is an example of SingTel's bottleneck control and how this distorts competition in the ICS market.