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PRELIMINARY DECISION REGARDING THE REQUEST  
OF SINGAPORE TELECOMMUNICATIONS LTD  
FOR EXEMPTION FROM DOMINANT LICENSEE  
OBLIGATIONS WITH RESPECT TO THE  
INTERNATIONAL CAPACITY SERVICES (“ICS”) MARKET

Submission by the StarHub Group to the  
Info-communications Development Authority of Singapore

6 January 2005

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## EXECUTIVE SUMMARY

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- 1.1 StarHub welcomes the opportunity to comment on the Consultation Paper. As the Consultation Paper may well set precedents for future Dominance assessments, we believe that a careful and thorough analysis of the ICS market is required.
- 1.2 StarHub is supportive of the conclusions of the Consultation Paper in regard to the need to retain existing competitive safeguards on SingTel's provision of Backhaul and Terrestrial IPLC services. StarHub's analysis and market share information for these services matches that in the Consultation Paper.
- 1.3 However, StarHub would disagree with the Consultation Paper's analysis of the IMDS market, for five main reasons. First of all, based on IDA's own methodology, we do not believe that Frame Relay, ATM and IP-VPN services can all be considered part of a single market. Secondly, we are very doubtful of the statement made in the Consultation Paper that IMDS prices have fallen "*by more than 90 percent within the last one year period*" (as such a claim is at odds with StarHub's own analysis, and with SingTel's financial results). Thirdly, we do not believe that the number of operators in this market is an accurate indicator of competitiveness in this market. Fourthly, we believe that the Consultation Paper's sole focus on A-end revenues underestimates SingTel's Dominance (given SingTel's position in the B-end market). Finally, we believe that the analysis in the Consultation Paper underrates the importance of Local Leased Circuits in the provision of IMDS.
- 1.4 StarHub is also concerned by the Consultation Paper's conclusion that the IP Transit market is now competitive, despite SingTel's ability to: (i) set higher IP Transit charges than those in comparable regional hubs; and (ii) bundle IP Transit and data centre services. StarHub would also question the methodology used to derive market shares for the International IP Transit market.
- 1.5 In regard to the various satellite markets (leased satellite bandwidth, VSAT services, DVB-IP, and Satellite IPLCs), StarHub believes that the Consultation Paper has significantly over-estimated competition in these markets, and has overlooked the Dominance SingTel can exercise through its control of satellite earth stations and Local Leased Circuits. In the case of Satellite IPLCs (in particular) we are concerned by an assessment methodology that can conclude that SingTel is the only effective supplier in the market, with a market share of nearly 100%, and yet this market can be considered "effectively competitive".
- 1.6 StarHub notes that the Consultation Paper has failed to set out the methodology used to calculate changes in prices, or even the overall dimensions of the markets under review. We respectfully believe that the disclosure of this information is critical to the analysis of the statements made in the Consultation Paper.

## STATEMENT OF INTEREST

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- 2.1 StarHub Ltd (“StarHub”) is a Facilities-Based Operator (“FBO”) in Singapore, having been awarded a licence to provide public basic telecommunication services (“PBTS”) by the Telecommunications Authority of Singapore (“TAS”) (the predecessor to IDA) on 5 May 1998.
- 2.2 StarHub Mobile Pte Ltd is a wholly owned subsidiary of StarHub Ltd. StarHub Mobile Pte Ltd was issued a licence to provide public cellular mobile telephone services (“PCMTS”) by TAS on 5 May 1998. StarHub launched its commercial PBTS and PCMTS services on 1 April 2000.
- 2.3 StarHub acquired CyberWay Pte Ltd (now StarHub Internet Pte Ltd) for the provision of Public Internet Access Services in Singapore on 21 January 1999. In July 2002, StarHub completed a merger with Singapore Cable Vision Ltd to form StarHub Cable Vision Ltd (“SCV”). SCV holds a FBO licence and offers broadband and cable TV services.
- 2.4 This submission represents the views of the StarHub group of companies, namely, StarHub Ltd, StarHub Mobile Pte Ltd, StarHub Internet Pte Ltd and StarHub Cable Vision Ltd.

## SPECIFIC COMMENTS

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StarHub makes this submission in response to the consultation paper issued by IDA on 25 November 2004 in regard to the preliminary decision on the request of Singapore Telecommunications Ltd ("SingTel") for exemption from dominant licensee obligations with respect to the International Capacity Services ("ICS") market ("Consultation Paper").

StarHub welcomes the opportunity to comment on IDA's preliminary assessment of the ICS market in Singapore. As an info-communications company providing a full range of information, communications and entertainment services over fixed, mobile and Internet platforms, StarHub is actively involved in the deployment of innovative telephony and data services that cater to varying degree of requirements from both corporate and residential users. Therefore such assessments have a direct impact on StarHub and its customers.

StarHub provides herein its specific response to IDA's preliminary assessment of the various service markets identified in the Consultation Paper.

### 3.1 *Backhaul Market*

StarHub supports the Consultation Paper's decision not to grant SingTel's request for exemption from Dominant Licensee obligations in respect of its services in the Backhaul market. Competition in this market is still limited, and we would note that IDA's introduction of Connection Services only took place in 2002.

### 3.2 *Terrestrial International Private Leased Circuit ("IPLC") Market*

StarHub agrees with the Consultation Paper's assessment that the Terrestrial IPLC market is not yet competitive, and that Dominant Licensee regulations should continue to apply for the services offered by SingTel in this market. StarHub's estimates suggest that SingTel's share of this market is significantly higher than 50%, and that a presumption of Dominance is therefore appropriate.

### 3.3 *International Managed Data Services ("IMDS") Market*

The Consultation Paper suggests that SingTel does not hold significant market power in the IMDS market, and that continued application of the Dominant Licensee regulation to services provided in this market is no longer necessary.

StarHub respectfully disagrees with the Consultation Paper's assessment of the IMDS market.

### Definition of the IMDS Market

StarHub would respectfully question the suggestion in the Consultation Paper that there is one IMDS market; and that buyers within that market regard Frame Relay, ATM, and IP-VPN services as interchangeable and substitutable. Such a definition does not correspond with the reality of the telecommunications market in Singapore, as StarHub observes it.

As IDA has correctly noted, Frame Relay, ATM, and IP-VPN services all have differing technical characteristics. These services are also used by different customer groups for different applications. Based on StarHub's experience in the market we do not believe that a significant number of customers would seriously contemplate moving from IP-VPN to ATM (for example), if there was a 5% increase in IP-VPN prices.

We are concerned that assessing IMDS as one single market will mask the competitive conditions that exist in each of the individual Frame Relay, ATM, and IP-VPN markets.

We believe that it is critically important for markets to be accurately defined in Dominance assessments, taking into account the realities of commercial conditions. On this basis, StarHub strongly believes that Frame Relay, ATM, and IP-VPN must all be considered as separate markets for the purposes of assessing SingTel's Dominance in ICS.

### Price Competitiveness

The Consultation Paper contains a statement that IMDS prices *"have fallen by more than 90 percent within the last one year period"*. No evidence is given in support of this statement, but the Consultation Paper appears to use the statement as evidence that the IMDS market is therefore competitive. StarHub respectfully believes that it is factually incorrect to state that IMDS prices have fallen by more than 90%; and that it is invalid to assess this market's competitiveness based on an assumption of 90% price reductions.

If there had been a 90% reduction in IMDS prices in the last one year period, it would be reasonable to expect to see a broadly similar reduction in SingTel's revenues from IMDS services (assuming conventional price elasticities). However, SingTel's most recent set of financial results suggests relatively stable revenues from ATM, Frame Relay, and Managed Services. The changes in SingTel's revenues do not support the suggestion of a 90% price reduction.

StarHub estimates that the average price decline for ATM, Frame Relay, IP-VPN and Managed Bandwidth services over the last one year period would be much less than the 90% stated in the Consultation Paper (See Confidential Annex). StarHub must therefore query the basis of the 90% IMDS price reduction quoted in the Consultation Paper.

### Market Participants

The Consultation Paper refers to the fact that there are several operators providing IMDS in Singapore, and suggests that this reduces SingTel's Dominance in the IMDS market. However, StarHub would note that a number of the operators listed by the Consultation Paper only have a small presence in Singapore; have a niche focus; and/or have a limited geographic reach. Rather than focusing on the number of operators in a market, StarHub believes that it would be more appropriate to assess the market concentration for IMDS, via a standard Herfindahl Hirschman Index. StarHub would note that such an approach does not appear to have been followed for IDA's consideration of the ICS market.

### Classification of the IMDS Market

The IMDS market, comprising of ATM, Frame Relay, and IP-VPN, enables data connectivity among multiple customer sites, some of which are located outside of Singapore. StarHub estimates that 70% to 80% of the purchasing decisions for this connectivity are made outside of Singapore - that is 70% percent of the IMDS market come from B-end sales.

Given that customers have the choice of purchasing their connectivity either in Singapore or from the distant end, we believe that it would be appropriate to include within the IMDS market the revenues received from B-end sales. In focusing only on A-end sales, StarHub believes that the Consultation Paper's analysis of the IMDS market is incomplete. Given SingTel's position of incumbency, we believe that SingTel's share of the B-end market would be higher than its share of the A-end market.<sup>1</sup>

### Impact of LLC Cost Component

The Consultation Paper concludes that SingTel is not able to use its Dominance in the Local Leased Circuit ("LLC") market to impede competition in the IMDS market. StarHub would respectfully disagree with this conclusion.

In contrast to the Consultation Paper's findings on the perceived distinction between an LLC-IMDS package and the LLC-IPLC package, the cost component for LLCs in IMDS is considerable and comparable to that of IPLC services. StarHub submits that the Consultation Paper should therefore not simply disregard SingTel's Dominance in the LLC market in its deliberation on competitiveness of the IMDS market. Please refer to the Confidential Annex of this submission for details on the cost components.

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<sup>1</sup> In paragraph 85, the Consultation Paper includes the comment that SingTel is not a significant provider of services to MNCs in Singapore. This conclusion appears to overlooks that fact that SingTel is a significant provider of the B-ends circuits used to provide these services.

StarHub would also question the assumption in the Consultation Paper that IMDS include “significant” value added features, which would reduce the impact of LLCs on an IMDS “package”. StarHub would respectfully suggest that high margins reflecting “value added features” are no longer a significant component of the ICS market.

Therefore, in view of SingTel’s continued Dominance, its control over critical access facilities such as LLCs, and the other considerations presented in this submission, StarHub would request that IDA reviews the Consultation Paper’s preliminary decision in regard to the IMDS market, and retain the existing Dominant Licensee regulations associated with SingTel’s services in this market.

### 3.4 *International IP Transit Market*

The Consultation Paper has determined, on a preliminary basis, that the market for International IP Transit is effectively competitive and therefore continued application of Dominant Licensee regulations to SingTel’s services in this market is no longer necessary. StarHub would respectfully disagree with this assessment.

#### Strong Market Position in the Data Centre Services Market

StarHub submits that IDA should not, in its assessment on the competitiveness of the International IP Transit market, disregard SingTel’s strong market position in the Data Centre Services market.

To date, SingTel remains a dominant player in the provision of Data Centre Services as a result of its long-held incumbency and monopoly rights. Due to its market entry advantage, SingTel has built up a strong portfolio of customers for its Data Centre Services. In the course of conducting its business for International IP Transit services, SingTel competes by leveraging on its ability to grant direct access to content and application providers who are co-located at its data centres, while denying other Internet Exchange (“IX”) service providers similar access to its co-location customers.

We believe that this is an important factor in assessing the competitiveness of the International IP Transit market, and that it should not be overlooked in the Consultation Paper’s analysis.

#### Market Share

The Consultation Paper estimated SingTel’s market share for International IP Transit to be less than 30%. StarHub must query such a finding. StarHub believes that SingTel holds a larger share of the International IP Transit market than the sub-30% estimated by the Consultation Paper.



There are currently only two significant players in the market (STIX and SHIX), with STIX holding the larger market share. StarHub is therefore surprised by the estimation on SingTel's market share of less than 30%, and would request clarification of the calculation methodology used by the Consultation Paper for this market.

### Pricing

The Consultation Paper correctly notes that SingTel's prices for IP Transit Services are higher than those in comparable regional hubs. The Consultation Paper concludes (incorrectly, in StarHub's view), that the premium in SingTel's IP Transit charges is attributable to Singapore's small size and geographic distance from the United States.

StarHub believes that the International IP Transit charges in Hongkong are significantly lower than those SingTel is currently able to levy. Please see the Confidential Annex on this point.

However, given the significant number of submarine cable networks already deployed or in the process of deployment in the region, and the extensive reach of these networks, there is little basis to the argument that proximity (i.e. distance) to particular Internet destinations is a determining factor for prices for International IP Transit services.

StarHub would conclude that SingTel's high charges for International IP Transit services are not due to Singapore's geographic distance and small size. We would instead conclude that SingTel's prices reflect market power SingTel has in Singapore in the International IP Transit market.

Clearly, SingTel's ability to keep its prices for International IP Transit services high relative to prices in other regional hubs is evident of the fact that it still retains significant market power and is therefore Dominant in the market. We do not believe that it can be attributed to the factors cited in the Consultation Paper. Accordingly, StarHub would strongly urge IDA to review the assessment of this market's competitiveness, and to retain the existing competitive safeguards in regard to SingTel's provision of IP Transit services.

### 3.5 *Leased Satellite Bandwidth Market*

StarHub agrees with IDA's assessment on the competitiveness of the Leased Satellite Bandwidth market, on the basis that this is a market for "space segment" capacity.

StarHub would, however, caution against such an attempt by IDA to consider the Leased Satellite Bandwidth in isolation from other critical service components, such as satellite earth stations and local access, both of which are under SingTel's dominant control. In this regard, please also refer to the comments provided in

sections 3.7 and 3.9, on “DVB-IP Service Market” and “Satellite IPLC Market”, respectively.

### 3.6 *VSAT Service Market*

StarHub disagrees with the Consultation Paper’s conclusion that the market for VSAT service is effectively competitive. VSAT service caters to the “thin-route” market, where Terrestrial IPLCS are not an effective alternative, typically with bandwidth requirement of less than 2 Mbps.

The Consultation Paper states that there are “*numerous providers*” of VSAT services, but fails to note that these operators are niche focused, and provide only limited competition to SingTel. In addition, for the large majority of VSAT customers, the self-provision of terrestrial satellite dishes and use of ground-based central controller is not a viable option (due to cost, technical sophistication, local authority approvals, and consent needed from building/facilities owners). StarHub must therefore respectfully question the assumption in the Consultation Paper that the VSAT market is a regional market, and that VSAT services can be provided by “*any provider that has capacity on a satellite that can be accessed from Singapore*”.

We believe that the number of end-users in Singapore, who have chosen to self-provide VSAT connectivity, continues to be small due to the extensive amount of provisioning work required for VSAT service. Given that SingTel continues to dominate in the local VSAT market, we believe that there is no clear basis for IDA to relieve SingTel from any Dominant Licensee obligations in respect of the services that it offers in this market.

### 3.7 *DVB-IP Service Market*

The Consultation Paper suggests that SingTel could not use its control over local access to impede competition in the DVB-IP market. The Consultation Paper concludes that, if SingTel were to do so, Singapore-based providers of DVB-IP services could switch to an alternative DVB-IP hub in another country, through sending the traffic via existing international IP transit connections. Therefore, according to the Consultation Paper, the affected parties would be able to bypass SingTel’s local access network and relieve themselves of the latter’s dominant control of the DVB-IP market in Singapore.

StarHub must, respectfully, disagree with this conclusion.

The methodology adopted in the Consultation Paper overlooks the fundamental question on why SingTel has been able to sustain its high prices despite the perceived competition from overseas service providers. StarHub would highlight that SingTel controls all but one of the satellite earth stations in Singapore. ST

Teleport, the party that owns the remaining satellite earth station, is mainly in the broadcast business, rather than a direct competitor to SingTel in its offerings of satellite-based services.

StarHub continues to encounter difficulties in accessing SingTel's satellite earth stations, particularly in regard to providing backhaul and transit services to customers who are using the SingTel satellite facilities. We would refer IDA to StarHub's response to the First Public Consultation on the exemption request from SingTel, for details of the issue (refer to paragraphs 22 to 25, under the section "SingTel's Control of Bottleneck Facilities (Satellite)").

Please also refer to the Confidential Annex of this submission on the entry barriers to installation and operation of satellite earth stations, and therefore SingTel's ability to keep out competition and retain significant control of satellite-based services in Singapore.

Given such evidence of SingTel's dominant control of critical satellite facilities, StarHub submits the Consultation paper's preliminary decision to relieve SingTel from its Dominant Licensee obligations in respect of the DVB-IP market is premature.

StarHub must also question the Consultation Paper's assessment that DVB-IP hubs in other countries are a feasible alternative to local service providers. The Consultation Paper has concluded elsewhere that the geographic markets for Satellite TV Uplink/Downlink and Satellite IPLC services are national, rather than regional). StarHub therefore finds the Consultation Paper's treatment of the DVB-IP market to be inconsistent with its treatment of the other markets considered (even though the markets in comparison are similar and entail the transmission of video and/or data traffic via satellites).

Accordingly, StarHub believes that IDA should also regard the geographic market for the DVB-IP market as national, and that the existing Dominant Licensee regulations in respect of the services offered by SingTel, in this market should be retained.

### 3.8 *Satellite Television Uplink and Downlink Markets*

StarHub agrees with the preliminary conclusion by IDA in regard to Satellite TV Uplink and Downlink markets.

### 3.9 *Satellite IPLC Market*

StarHub must strongly disagree with the conclusion in the Consultation Paper in regard to Satellite IPLC services.

StarHub would note that:

- The Consultation Paper correctly concludes that SingTel has near to 100% of the Satellite IPLC market.
- SingTel is, effectively, the only Satellite IPLC provider in Singapore today.
- In order to provide Satellite IPLC services, it is necessary to have access to a satellite earth station.
- SingTel controls access to 3 of the 4 satellite earth stations in Singapore.
- In order to provide Satellite IPLC services it is necessary to have access to LLCs.
- IDA has already concluded that SingTel is Dominant in the provision of LLC services.
- The ability of new operators to enter the market for Satellite IPLC services is extremely limited (and may simply be impractical). StarHub has calculated the cost of building a new satellite earth station in Singapore. This cost is set out in the Confidential Annex.

StarHub must also question the statement in the Consultation Paper that SingTel's ability to exercise market power in the Satellite IPLC market is somehow constrained by potential activity in the Terrestrial IPLC market. The Consultation Paper has already identified that Terrestrial IPLCs and Satellite IPLCs belong in separate markets, which would suggest (by definition) that Terrestrial IPLCs and Satellite IPLCs cannot be considered interchangeable or substitutes.

The Consultation Paper also includes a suggestion that the Satellite IPLC market is made competitive by "the competitiveness of the Satellite bandwidth market". As noted above, such a statement fails to take into account that, in order to provide Satellite IPLC services, it is necessary to have access to satellite earth stations and LLCs.

Given the lack of competition in this market, SingTel's near-100% market share, SingTel's control of earth stations and LLCs, and the other factors set out above, we believe that there is clearly a need for the existing Dominant Licensee regulations on the services provided by SingTel in the Satellite IPLC market.

### 3.10 *Miscellaneous Services*

StarHub agrees with IDA's preliminary decision to maintain the Dominant Licensee regulations in respect of SingTel's Telecast Local Access and Occasional Telecast Video/Audio Switching (Teleswitch) services.

### 3.11 *Confidentiality of Information*

StarHub recognizes the need for certain information, disclosed as part of IDA's investigation, to be kept confidential. However, StarHub is concerned by the statements in Consultation Paper that:

- (i) IMDS Prices have fallen by 90% in the last 12 month period, when StarHub's figures suggest a much less dramatic reduction; and
- (ii) SingTel has less than 30% of the International IP Transit market, when it would appear that there are only two major players in the market.

StarHub would respectfully suggest that it might be appropriate for IDA to disclose a greater degree of information as part of its review of the ICS market. For example, IDA could disclose the overall size of each of the various sub-markets (such as VSAT, IP Transit, etc). IDA could also disclose the detailed methodology it has followed in assessing price reductions in the markets considered. Such disclosures, whilst limiting the amount of confidential information that has to be made public, would give greater credence to the statements made in the Consultation Paper, and would increase the value of the comments parties could make on the Consultation Paper.