



**EXPLANATORY MEMORANDUM ON THE DECISION OF
THE INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY OF SINGAPORE ON
THE CONSOLIDATION INVOLVING
PACIFIC INTERNET LIMITED AND CONNECT HOLDINGS LIMITED**

30 MARCH 2007

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PART I: INTRODUCTION¹

- 1 On 12 January 2007, Connect Holdings Limited (“**CHL**”) announced, by way of a pre-conditional voluntary general offer², that it intends to make a general offer to acquire all issued ordinary shares in the capital of Pacific Internet Limited (“**PacNet**”), other than those already held by CHL and its related corporations. In particular, one of the pre-conditions to making the general offer is that the Info-Communications Development Authority of Singapore (“**IDA**”) must approve CHL’s proposal to acquire a Direct Ownership Interest in PacNet. IDA’s approval is required as the offer, if made and if it becomes unconditional, would result in CHL holding an Ownership Interest in PacNet of more than 30 percent³. Pursuant to Sub-sections 10.8.1 and 10.5.1 of the Telecom Competition Code 2005 (the “**Code**”), CHL and PacNet⁴ were required to file a Long Form Consolidation Application to obtain IDA’s approval for the proposed Consolidation involving PacNet and CHL.
- 2 On 26 January 2007, CHL and PacNet, including Connect International Limited (“**CIL**”), Ashmore Group Investment Funds (“**Ashmore**”) and Spinnaker Group

¹ Unless otherwise defined, all capitalised terms used in this Explanatory Memorandum shall have the same meaning ascribed to them in the Telecom Competition Code 2005 or the Telecom Consolidation Guidelines.

² Pursuant to Sub-section 10.8.1 of the Telecom Competition Code 2005 and the Tender Offer Guidelines.

³ On 12 January 2007, CHL and Vantage Corporation Limited (“**VCL**”) entered into a sale and purchase agreement pursuant to which CHL acquired 2,250,000 PacNet shares. As of 26 January 2007, CHL owned 29.84 percent of the total issued and paid-up share capital in PacNet. Concurrently, CHL also received on 12 January 2007 an irrevocable undertaking from VCL to tender the remaining 1,629,373 PacNet shares held by VCL and not already acquired by CHL, into the voluntary conditional general offer.

⁴ The requirement is also applicable to Pacific Internet Corporation Pte Ltd, a wholly owned subsidiary of PacNet and a Designated Telecom Licensee. Both PacNet and PIC are therefore subject to Section 10 of the Code on “Changes in Ownership and Consolidations Involving Designated Telecom Licensees”. In the context of this Explanatory Memorandum, the description “PacNet” refers to Pacific Internet Limited and Pacific Internet Corporation Pte Ltd.

Investment Funds (“**Spinnaker**”) (collectively referred to herein as the “**Applicants**”⁵) submitted a Long Form Consolidation Application (the “**Application**”). IDA conducted a preliminary review of the information submitted by the Applicants and determined the Consolidation Review Period to have commenced on 26 February 2007, i.e. the day on which CHL and PacNet first satisfied the requirements specified in Sub-sections 10.5.1.1 through 10.5.1.5 of the Code. IDA issued a consultation paper on 27 February 2007 to solicit comments regarding the Application. At the close of the public consultation, three parties – MediaRing Limited (“**MediaRing**”), Singapore Telecommunications Limited (“**SingTel**”) and StarHub Limited (“**StarHub**”) (collectively referred to herein as the “**Commenting Parties**”) – filed comments expressing concerns regarding the proposed Consolidation.

- 3 This paper provides a single document that describes: the Application; the comments received in response to IDA's consultation paper; the legal standards, procedures and analytical framework that IDA used to assess the Application; IDA's assessment of the Application; and IDA's final decision.

PART II: EXECUTIVE SUMMARY

- 4 Based on the evidence available, IDA has concluded that the proposed Consolidation is not likely to substantially lessen competition in any telecommunication market in Singapore or harm the public interest. IDA therefore approves the Application in full without Conditions.
- 5 PacNet provides four distinct categories of telecommunication services in Singapore: retail Internet access (including leased line Internet access) services; Managed Data Services (“**MDS**”); international IP transit services; and terrestrial International Private Leased Circuit (“**Terrestrial IPLC**”) services.
- 6 CHL is an investment holding company and does not provide any telecommunication service in Singapore. Asia Netcom Singapore Pte Ltd (“**ANC**”) is a wholly-owned Subsidiary of CHL. C2C Singapore Pte Ltd (“**C2C**”) is a “sibling” of CHL, arising from common ownership of C2C and CHL. Both ANC and C2C are Facilities-based Licensees in Singapore. Accordingly, in reviewing the proposed Consolidation, IDA has considered the telecommunication services provided by both ANC and C2C in Singapore, to assess the likely impact of the proposed Consolidation on competition in the Singapore telecommunication

⁵ CHL is a wholly-owned subsidiary of **CIL**, which is in turn owned by Ashmore (50.25 percent), Spinnaker (39.80 percent) and Clearwater Undersea Cable Investments, L.P. (9.95 percent) (“**Clearwater**”). CIL, Ashmore and Spinnaker will therefore each hold an Indirect Ownership Interest in PacNet of more than 30 percent.

markets. Both ANC and C2C provide three distinct categories of telecommunication services in Singapore: sale of submarine cable capacity, backhaul and Terrestrial IPLC services. ANC also provides MDS, leased line Internet access service and international IP transit service.

- 7 Both PacNet and ANC also offer “co-location” services in Singapore, which, IDA understands, refer to data centres and facilities management services. IDA does not license the provision of data centres and facilities management services and does not believe that it needs to conduct a substantial review of the likely impact of the proposed Consolidation on competition in the market for the provision of such services in Singapore.
- 8 From the perspective of the Singapore telecommunication markets, the proposed transaction has both horizontal and non-horizontal aspects. IDA has carefully considered whether the horizontal effects arising from the proposed Consolidation are likely to substantially lessen competition in any Singapore telecommunication market or harm public interest. IDA has also given much consideration to whether ANC's and C2C's control of upstream submarine cable capacity might have a substantial impact on competition in the downstream markets that ANC, C2C and PacNet compete in.
- 9 Based on its review, IDA has concluded that it is unlikely that the proposed Consolidation will substantially lessen competition in any of the markets that PacNet, ANC and C2C compete in.

PART III: BACKGROUND OF THE APPLICANTS

- 10 A brief description of the Applicants is as follows:
 - (a) *PacNet*. PacNet is a NASDAQ-listed company incorporated in Singapore. As at 18 January 2007, the three largest shareholders of PacNet are CHL, MediaRing and Vantage Corporation Limited, holding a 29.84 percent, 29.37 percent and 11.8 percent Direct Ownership Interest respectively in PacNet. The telecommunication services that PacNet provides in Singapore are:
 - (i) Retail Internet access service via residential dial-up, corporate dial-up, residential broadband, corporate broadband, global roaming and leased line;
 - (ii) MDS such as Asynchronous Transfer Mode (“**ATM**”) and IP-Virtual Private Network (“**IP-VPN**”);
 - (iii) International IP transit service; and

- (iv) Terrestrial IPLC service.
- (b) *CHL*. CHL is an investment holding company and does not provide any telecommunication service in Singapore.
- (i) CHL is wholly owned by CIL. The owners of CIL are an investor group led by Ashmore, Spinnaker and Clearwater Undersea Cable Investments, L.P. (collectively referred to herein as the “**Investors**”). The Investors manage investment funds and are not directly concerned with the provision of telecommunication services. CIL, Ashmore and Spinnaker will each hold an Indirect Ownership Interest in PacNet of more than 30 percent, and they are therefore Applicants to the proposed Consolidation.
 - (ii) Through a separate investment vehicle, C2C Group Limited, various funds of the Investors had previously acquired a 100 percent Indirect Ownership Interest in C2C Pte Ltd. C2C Pte Ltd wholly owns C2C – a Facilities-based Licensee. The Investors therefore have common ownership of C2C and CHL. C2C owns a submarine cable system – C2C, which serves the Asia Pacific region east of Singapore.
 - (iii) CHL wholly owns the Asia Netcom group of companies. This gives CHL a 100 percent Indirect Ownership Interest in ANC – a Facilities-based Licensee. ANC owns a submarine cable system – East Asia Crossing (“**EAC**”), which also serves the Asia Pacific region east of Singapore.
 - (iv) The telecommunication services that both ANC and C2C provide in Singapore are: sale of submarine cable capacity, backhaul and Terrestrial IPLC services. ANC also provides MDS such as Frame Relay and IP-VPN; leased line Internet access; and international IP transit services.
- 11 Please refer to **Annex 1** for the existing shareholding structure of the Applicants and proposed shareholding structure of the Post-Consolidation Entity.

PART IV: THE APPLICATION

- 12 As discussed below, Sub-section 10.4 of the Code provides that “[e]very Licensee and Acquiring Party must seek IDA’s approval in connection with any transaction that results in a Consolidation with [a] Licensee.” In order to obtain

IDA's approval, the Applicants must file a Long Form Consolidation Application pursuant to Sub-section 10.5.1 of the Code.

- 13 In their submission, the Applicants acknowledged that the proposed transaction would constitute a Consolidation, as defined in Sub-section 10.1.2(d) of the Code, because it would result in CHL obtaining an Ownership Interest of 100 percent in PacNet (specifically, a Direct Ownership Interest of 100 percent in Pacific Internet Limited and an Indirect Ownership Interest of 100 percent in Pacific Internet Corporation Pte Ltd). Since CHL has a market share in excess of 25 percent in certain Singapore telecommunication markets, the Applicants submitted a Long Form Consolidation Application.
- 14 The Applicants stated that they participate in the following relevant markets in Singapore, which they referred to as:

Upstream Wholesale Markets:

- Supply of international cable capacity; and
- Supply of backhaul.

Downstream Retail Markets:

- Residential dial-up Internet access services;
- Corporate dial-up Internet access services;
- Residential broadband Internet access services;
- Corporate broadband Internet access services;
- Global Internet access roaming services;
- Domestic MDS;
- International MDS;
- Leased line Internet access services;
- Co-location services;
- International IP transit services; and
- IPLC services.

- 15 The Applicants stated that horizontal anti-competitive effects associated with the proposed Consolidation are most unlikely because in all relevant markets, one or more of the following applies:
- The proposed transaction would not result in any horizontal market aggregation; and/or
 - The proposed transaction would result in minimal market aggregation; and/or
 - There is entrenched competition (i.e. there are a number of established and sophisticated competitors currently supplying the market that would

- continue to compete vigorously irrespective of the proposed transaction); and/or
- Barriers to entry and expansion are relatively low or otherwise surmountable.
- 16 The Applicants further stated that they did not believe that the proposed Consolidation would likely give rise to adverse vertical competitive effects, i.e. an increased ability or incentive to engage in anti-competitive conduct arising from its enhanced vertical integration. The Applicants submitted that the Post Consolidation Entity would not have the ability and/or incentive to increase upstream prices or withhold capacity, due to: (a) the number of firms supplying international cable capacity; (b) the extent of excess cable capacity currently in the market; and (c) the contestability of downstream markets.

Upstream Wholesale Markets

- 17 *International cable capacity.* The Applicants stated that ANC and C2C own the EAC and C2C submarine cable systems respectively. PacNet, on the other hand, does not participate in this market. The Applicants noted that its economic consultant (CRA International) had previously estimated the market share of the EAC and C2C submarine cable systems to be 13.61 percent based on “operational capacity” (defined by the Applicants as capacity owned by the parties to the extent that they have not alienated operational control by selling Indefeasible Rights of Use (“IRUs”) or leasing the capacity out). The Applicants also observed that IDA had previously estimated, in its decision in August 2006 on the change in ownership in ANC (referred to as “**IDA’s Decision on Change in ANC’s Ownership**”) that, ANC and C2C have a combined market share of above 40 percent of the lit submarine cable capacity from Singapore to the Asia-Pacific region. Regardless of the market share data used, the Applicants submitted that the proposed Consolidation would not give rise to any horizontal market aggregation in the wholesale market for international cable capacity in Singapore and, therefore, would have no adverse horizontal competitive effects in this market.
- 18 *Backhaul.* The Applicants had referred to IDA’s definition of the backhaul market, previously defined in IDA’s final decision on SingTel’s request for exemption from Dominant Licensee obligations with respect to the “International Capacity Services” market (referred to as “**IDA’s ICS Decision**”), which had defined the backhaul market to consist of: “... *services that use fibre optic links to enable a Licensee that has capacity on an international submarine cable system to transport that capacity from a cable landing station in Singapore to the Licensee’s international gateway or point-of-presence (“POP”) in Singapore. The Backhaul market includes both self-provided backhaul (i.e., the provision of*

*backhaul, by a Licensee, to itself) and third-party backhaul (i.e., the provision of wholesale backhaul, by a Licensee, to another Licensee)."*⁶ Adopting the market definition of the backhaul market, the Applicants stated that ANC and C2C have, through ownership/IRUs, operational control of some backhaul services in Singapore. PacNet does not provide backhaul services in Singapore. The Applicants noted that IDA had determined in IDA's ICS Decision that SingTel continued to have Significant Market Power ("**SMP**") and a market share of around 50 percent in the backhaul market. The Applicants further quoted IDA in its ICS Decision that there were other operators (such as Reach and StarHub) that have entered the market.⁷ The Applicants therefore claimed that the proposed Consolidation would not give rise to any horizontal market aggregation in the wholesale market for backhaul services in Singapore; and would not have adverse horizontal competitive effects in the backhaul market.

Downstream Retail Markets

- 19 *Residential dial-up Internet access services; Corporate dial-up Internet access services; Residential broadband Internet access services; Corporate broadband Internet access services; and Global Internet access roaming services:* The Applicants segregated the market for the provision of Internet access services into dial-up (residential and corporate), broadband (residential and corporate) and global roaming services. The Applicants submitted that ANC and C2C do not participate in any of the markets. The Applicants also submitted that PacNet does not have SMP in the provision of dial-up (residential and corporate) and broadband (residential and corporate) Internet access services; and that PacNet does not have a large global Internet access roaming customer base. The Applicants therefore claimed that the proposed Consolidation would not result in horizontal market aggregation in any of the markets for the provision of Internet access services, and horizontal competition concerns would not arise with respect to the markets.
- 20 *MDS.* The Applicants defined the MDS market as one for the supply of packet-based services (e.g. ATM, Frame Relay, IP-VPN). While the Applicants submitted that the provision of MDS could be separated into two markets, namely, domestic MDS market and international MDS market; the Applicants did

⁶ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, para 49.

⁷ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, paras 87 and 88.

not analyse the markets separately in assessing the horizontal anti-competitive effects associated with the proposed Consolidation. The Applicants submitted that the proposed Consolidation would not result in any aggregation in the provision of MDS; and that ANC and PacNet do not have large numbers of customers in the supply of MDS. The Applicants further submitted that there were already a large number of competitors in the MDS markets as noted in IDA's ICS Decision⁸; and that the International MDS market is competitive⁹. The Applicants, therefore, claimed that the proposed Consolidation is unlikely to pose any competition concerns in the supply of domestic or international MDS.

- 21 *Leased line Internet access services.* The Applicants defined leased line Internet access services as services that provide business customers with a dedicated, always-on, high-speed connection to the Internet. The Applicants also claimed that such services differ from retail broadband Internet access in connecting the customer directly to the provider's IP backbone infrastructure; and noted that leased line Internet access products may be provided at a range of bandwidths and with differing service quality parameters. The Applicants submitted that any aggregation in supply of leased line Internet access arising from the proposed Consolidation is likely to be slight, notwithstanding that ANC and PacNet both supply leased line Internet access services. Furthermore, the Applicants claimed that the Post Consolidation Entity would continue to face competitive constraints across the range of leased line Internet access services arising from:
- (a) *Entrenched competition in the market:* Presence of large telecommunication carriers that are able to offer a range of leased line services;
 - (b) *Price of standard Internet access products:* Particularly at the low bandwidth stratum of the market, insofar as quality is not a main concern;
 - (c) *Low entry barriers for supply of low bandwidth:* At the low bandwidth stratum, leased line Internet access services can be supplied over the

⁸ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, para 102.

⁹ IDA, *Explanatory Memorandum on the Decision of the Info-Communications Development Authority of Singapore Regarding: (A) Request by AT&T Corp, AT&T Worldwide Telecommunications Services Singapore Pte Ltd and SBC Communications Inc for Exemption from the Requirement to File a Long Form Consolidation Application; and (B) Short Form Consolidation Application in Relation to the Proposed Change in Ownership in AT&T Worldwide Telecommunications Services Singapore Pte Ltd*, para. 40(a).

twisted-pair copper network, for which access to SingTel's network is already facilitated by access regulation under the Code;

- (d) *Low entry barriers for supply of high bandwidth:* At the high bandwidth stratum, leased line Internet access services are typically supplied over fibre optic and/or coaxial cables, where access to the latter (i.e., StarHub's network) is already regulated by IDA; and
- (e) *Competitiveness of supplying large corporate customers:* Particularly with respect to the supply of high bandwidth leased line Internet services, due to the revenues from supplying large corporate customers and the process by which these customers procure telecommunication services.

The Applicants therefore believed that there are unlikely to be competition concerns in the supply of leased line Internet services arising from the proposed Consolidation.

- 22 *“Co-location” or data centres/facilities management services.* The Applicants defined co-location services as services that provide customers with a secure and environmentally controlled location to house their network equipment. IDA understands that this refers to data centres and facilities management services, offered by both PacNet and ANC in Singapore. The Applicants submitted that the proposed Consolidation is highly unlikely to pose any competition concerns in the retail market for the supply of such services in Singapore, for these reasons: (a) such services are provided by many established competitors; and (b) presence of relatively low barriers to entry and expansion.

- 23 *International IP transit services.* The Applicants adopted IDA's market definition for the provision of International IP transit services in IDA's ICS Decision¹⁰, which defined the market as consisting of:

“ ... the provision of a service, for compensation, in which one operator terminates international Internet traffic on its network or transits the Internet traffic for termination on a third operator's network. This service does not include the provision of domestic access facilities, such as LLCs....”

Both PacNet and ANC offer International IP transit services in Singapore. The Applicants submitted that the proposed Consolidation is unlikely to pose any

¹⁰ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the “International Capacity Services” Market*, 12 April 2005, para 64.

competition concerns in the International IP transit services market, as there are numerous competitors in the market and low barriers to entry and expansion. The Applicants also noted that IDA had determined in its ICS Decision that the market for International IP transit is effectively competitive¹¹.

- 24 *IPLC services.* The Applicants adopted IDA's market definition of the Terrestrial IPLC market in IDA's ICS Decision¹², which defined the market to consist of:

"... services, provided over submarine cables, that offer customers the exclusive use of a point-to-point, dedicated transparent transmission path for voice, data or video between a location in Singapore and a location outside of Singapore."

The Applicants stated that ANC, C2C and PacNet provide Terrestrial IPLC services in Singapore. The Applicants also submitted that the proposed Consolidation would unlikely have anti-competitive effects in the Terrestrial IPLC market in Singapore, as: (a) total customer base of the Post Consolidation Entity is likely to be small relative to the size of the overall market; (b) SingTel has more than 60 percent market share as previously determined by IDA in its ICS Decision¹³; and (c) there are many other players in the market who are likely to have customer bases significantly larger than ANC, C2C and PacNet. The Applicants further stated that ANC provide Satellite IPLC services in Singapore. The Applicants however submitted that there will be no market aggregation in this market given ANC's very small customer base.

- 25 Overall, the Applicants submitted that the proposed Consolidation is unlikely to substantially lessen competition in any telecommunication markets in Singapore. On the contrary, it has the potential to give rise to pro-competitive benefits, due to vertical efficiencies, and increased competition in the relevant telecommunication markets with the advent of a new vertically integrated operator to compete with SingTel and StarHub.

¹¹ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, para 108.

¹² IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, para 53.

¹³ IDA, *Explanatory Memorandum to the Decision of the Info-Communications Development Authority of Singapore on the Request by Singapore Telecommunications Limited for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market*, 12 April 2005, para 93(a).

PART V: COMMENTS RECEIVED ON IDA'S CONSULTATION PAPER

- 26 On 27 February 2007, IDA issued a consultation paper, which sought comments on the Application. Three parties – MediaRing, SingTel and StarHub – submitted comments. IDA's consultation paper (along with the Application) and the Commenting Parties' views are posted on the IDA website (www.ida.gov.sg) under "Policies and Regulation - Consultation Papers and Decisions". The comments made by the Commenting Parties are summarised below.
- 27 The Commenting Parties noted that CHL has control over the EAC and C2C submarine cable systems, i.e. two out of three major submarine cable systems connecting Singapore to the Asia-Pacific region. Specifically, the parties expressed concerns with the ability of CHL (post-Consolidation) to discriminate in favour of PacNet by providing more favourable terms of access to the capacity on the EAC and C2C submarine cable systems. The parties were concerned that this would give rise to significant potential for the proposed Consolidation to restrict competition in downstream markets. For instance, PacNet could obtain cable capacity at much lower prices than other Internet Service Providers ("ISPs"), making it more difficult for other ISPs to compete with PacNet. Alternatively, the Post Consolidation Entity could reduce the Quality of Service for PacNet's competitors by prioritising traffic. One of the Commenting Parties also claimed that the proposed Consolidation could result in behaviour aimed at restricting access to ANC's cable landing station, given CHL's vested interest (post-Consolidation) in downstream markets in Singapore.
- 28 The Commenting Parties proposed that IDA impose Conditions on the Applicants. The proposed Conditions include:
- (a) requiring CHL to comply with Section 8 of the Code which prohibits the following three types of unilateral conduct by a Licensee (i.e., conduct that the Licensee engages in independently): (i) action by a Dominant Licensee that unreasonably restricts, or is likely to unreasonably restrict, competition (Sub-section 8.2 of the Code); (ii) the receipt of an anti-competitive preference by a Licensee that is affiliated with an entity that has SMP (Sub-section 8.3 of the Code); and (iii) action by a Licensee that constitutes an unfair method of competition (Sub-section 8.4 of the Code);
 - (b) requiring CHL to provide access to ANC's cable landing station on the same terms as SingTel is required to provide access to similar infrastructure under SingTel's Reference Interconnection Offer ("**RIO**"); and

- (c) Conditions designed to reduce any anti-competitive harm or effect, including structural conditions and behavioural safeguards under Sub-sections 10.7.3.1, 10.7.3.2 and 10.7.3.3 of the Code.
- 29 IDA thanks all Commenting Parties for their participation throughout this proceeding. The comments that were provided facilitated IDA in assessing the Application.

PART VI: IDA'S ANALYTICAL FRAMEWORK

Requirements under the Code and the Consolidation Guidelines

- 30 Pursuant to Section 32A(1) of the Telecommunications Act (the "**Act**"), IDA has designated all Facilities-based Operators as Designated Telecommunication Licensees ("**DTLs**")¹⁴. PacNet has also been designated as a DTL pursuant to Section 32A(1) of the Act.¹⁵ DTLs and parties acquiring Ownership Interests in DTLs ("**Acquiring Parties**") are required to comply with various provisions relating to changes in ownership and Consolidations. Specifically, pursuant to Sub-section 10.4 of the Code, every DTL and Acquiring Party must seek IDA's approval in connection with any transaction that results in a Consolidation with the DTL. Under Sub-section 10.1.2(d) of the Code, a Consolidation is a merger, asset acquisition or other transaction that results in previously separate economic entities becoming a single economic entity and this may occur where an Acquiring Party obtains Effective Control over a DTL. Sub-section 10.1.2(f) of the Code further provides, *inter alia*, IDA will presume that an Acquiring Party has the ability to exercise Effective Control over a DTL if the Acquiring Party holds an Ownership Interest of at least 30 percent in the DTL.
- 31 Under Sub-section 10.5.1 of the Code, the DTL and Acquiring Party must submit a Long Form Consolidation Application unless Sub-section 10.5.2 applies.

IDA's Assessment Framework

- 32 Paragraph 2.3.1 of the Consolidation Guidelines makes clear that IDA will only prevent the consummation of a proposed Consolidation if:

¹⁴ Telecommunications (Designated Telecommunication Licensees – Facilities-Based Operators) Notification 2005, S 86/2005.

¹⁵ Telecommunications (Designated Telecommunication Licensees – Services-Based Operator) Notification 2005, S 233/2005.

- (a) the transaction would be likely to substantially lessen competition in any Singapore telecommunication market; and
 - (b) the anti-competitive harm cannot be adequately remedied through the imposition of narrowly tailored structural or behavioural conditions.
- 33 IDA recognises that Horizontal Consolidations raise the most serious competitive concerns. By definition, Horizontal Consolidations result in the elimination of direct competitors. This may result in the creation of a market participant with SMP. Such Consolidations may also result in a concentrated market in which the remaining participants are able to undertake anti-competitive concerted actions, such as price fixing, more easily.
- 34 By contrast, Non-horizontal Consolidations generally do not raise significant competitive concerns. Indeed, they may often facilitate competition by creating a more efficient market participant. However, Non-horizontal Consolidations can raise competitive concerns where they eliminate the possibility that a party that currently does not participate in a specific telecommunication market will enter the market. Non-horizontal Consolidations also raise competitive concerns when they involve two firms in a “vertical relationship” (i.e., an “upstream” supplier of an essential input and a “downstream” service provider) and the “upstream” supplier has SMP in the market for the input. In such cases, a Consolidation may substantially lessen competition in a Singapore telecommunication market by enabling the input provider to limit the ability of downstream competitors to access the input or provide the input to the downstream competitor on discriminatory terms. The problem may be especially acute if the input provider is a foreign operator that is not subject to IDA’s jurisdiction and is not subject to effective regulation in its home market.

PART VII: IDA’S ASSESSMENT

Scope of IDA’s Review

- 35 IDA’s authority to review the proposed Consolidation is based on its right to approve changes in the ownership of the operators that it has licensed. IDA’s concern when reviewing a proposed Consolidation is whether the proposed change in Ownership Interest in a Licensee is likely to substantially lessen competition in any telecommunication market in Singapore or harm the public interest.
- 36 With regard to the proposed Consolidation involving PacNet and CHL, IDA notes that the transaction has both Horizontal and Non-horizontal aspects. In

considering the Application, the relevant issue for IDA’s consideration is whether the proposed Consolidation is likely to allow CHL or PacNet to substantially lessen competition in any telecommunication market in Singapore. In particular, IDA will consider whether the proposed Consolidation is likely to:

- (a) result in the creation of a market participant with SMP in the relevant telecommunication markets that ANC, C2C and PacNet participate in; or
- (b) enable the Post Consolidation Entity to use its “vertical relationship” (i.e. ANC’s and C2C’s provision of upstream inputs, as well as ANC’s, C2C’s and PacNet’s provision of downstream services) to substantially lessen competition in any Singapore telecommunication market by limiting the ability of downstream competitors to access submarine cable capacity on the EAC and C2C submarine cable systems.

Horizontal Effects

37 IDA notes that ANC, C2C and PacNet are current competitors in several downstream retail services markets. Table 1 provides an overview of the downstream markets that ANC, C2C and PacNet compete in.

Table 1: Overview of Downstream Retail Markets that ANC, C2C & PacNet Participate in

Downstream Retail Markets	ANC	C2C	PacNet
Internet Access Services including: residential dial-up, corporate dial-up, residential broadband, corporate broadband and global roaming.	No	No	Yes
Leased Line Internet Access Services	Yes	No	Yes
MDS (including Domestic MDS and International MDS)	Yes	No	Yes
International IP Transit Services	Yes	No	Yes
Terrestrial IPLC Services	Yes	Yes	Yes

Internet Access Services and Leased Line Internet Access Services

38 PacNet provides Internet access services (via various access means such as dial-up, broadband, global roaming and leased line) to residential and corporate customers in Singapore. ANC also provides Internet access services, but via leased lines only. IDA has not previously determined the relevant markets in which Internet access services are provided, but does not believe that it is necessary to do so for this proceeding. Based on evidence available, both PacNet and ANC are not major providers of Internet access services in Singapore. They are also subject to competition from numerous operators offering Internet access services to residential and corporate customers in Singapore. Other major participants include SingNet and StarHub. Even if IDA were to define the narrowest possible market to include only leased line Internet

access services, IDA estimates that the combined market share of PacNet and ANC in Singapore is less than 25 percent. In this respect, IDA believes that the proposed Consolidation is unlikely to substantially lessen competition in the Internet access services market. IDA also notes that none of the Commenting Parties raised any concerns about aggregation effects in this market.

Managed Data Services

- 39 IDA had previously concluded in IDA's ICS Decision, that the International MDS market consists of packet-based services – such as ATM, Frame Relay, and IP-VPN – that provide managed connectivity among multiple customer sites, at least one of which is located outside of Singapore. IDA had also concluded that the International MDS market is competitive. IDA has not previously determined the relevant market in which Domestic MDS are provided, but does not believe that it is necessary to do so for this proceeding.
- 40 Both ANC and PacNet participate in the markets for the provision of International and Domestic MDS in Singapore. ANC and PacNet face competition from many participants in these markets, which include SingTel, AT&T, BT, Cable & Wireless, Equant, MCI, Infonet, Sprint and StarHub. Based on the evidence available, ANC and PacNet do not have large customer bases in the supply of Domestic and International MDS. Furthermore, IDA estimates that the Post Consolidation Entity would only have a combined market share of less than 10 percent in the International MDS market. IDA believes that there is little risk that the proposed Consolidation will result in a substantial lessening of competition in the International and Domestic MDS markets. IDA also notes that none of the Commenting Parties raised any concerns about aggregation effects in this market.

International IP Transit Services

- 41 ANC and PacNet both participate in the market for provision of International IP transit services in Singapore. In IDA's ICS Decision, IDA had concluded that this market consists of the provision of a service, for compensation, in which one operator terminates international Internet traffic on its network or transits the Internet traffic for termination on a third operator's network. IDA had concluded that the Singapore International IP transit market is an effectively competitive market, with numerous participants, including SingTel, Equant, Verizon, Reach, Sprint and StarHub. Based on the evidence available, PacNet does not have a large customer base; and IDA estimates that ANC's and PacNet's individual shares of this market are below 20 percent. The Post Consolidation Entity will have a combined market share of less than 40 percent. There is little reason to believe that the proposed Consolidation will result in a substantial lessening of

competition in the International IP transit services market. IDA also notes that none of the Commenting Parties raised any concerns about aggregation effects in this market.

Terrestrial IPLC Services

- 42 ANC, C2C and PacNet all participate in the Terrestrial IPLC service market in Singapore. In IDA's ICS Decision, IDA had determined that the Terrestrial IPLC market consists of services, provided over submarine cables, which offer customers exclusive use of a point-to-point, dedicated transparent transmission path for voice, data or video between a location in Singapore and a location outside of Singapore.
- 43 Based on the evidence available, PacNet does not have a large customer base in the Singapore IPLC market. IDA estimates that PacNet has less than 10 percent share of the market, and that the Post Consolidation Entity will have a combined share in the Terrestrial IPLC market of less than 40 percent. There are numerous providers in the Terrestrial IPLC market and competition has been growing. There is little reason to believe that the proposed Consolidation will result in a substantial lessening of competition in the IPLC services market. IDA also notes that none of the Commenting Parties raised any concerns about aggregation effects in this market.

"Co-location" or Data Centres/Facilities Management Services

- 44 Finally, ANC and PacNet also provide "co-location" services, which, IDA understands, refer to data centres and facilities management services. IDA does not license or regulate such services, and therefore does not consider it necessary to consider the effect of the proposed Consolidation on this market.

Non-horizontal Effects

- 45 As noted earlier, ANC and C2C participate in the markets for the provision of upstream inputs, i.e. submarine cable capacity (on the EAC and C2C submarine cable systems) and backhaul. PacNet does not participate in these markets. However, ANC, C2C and PacNet participate in certain downstream retail services markets (MDS, Internet access, International IP transit and IPLC), which may require the upstream inputs that ANC and C2C provide. Given the importance of the EAC and C2C submarine cable systems, the Commenting Parties have expressed concerns that ANC and C2C may discriminate in favour of PacNet by providing more favourable terms of access to the capacity on the EAC and C2C submarine cable systems, resulting in distortion of competition in the downstream markets.

- 46 IDA has carefully considered the concerns highlighted by the Commenting Parties. IDA believes that the relevant Non-horizontal issues for IDA to consider with respect to the proposed Consolidation are whether: (a) it will preclude the future entry of an effective competitor; or (b) it will restrict the ability of competitors to obtain or access an upstream essential input or a downstream facility necessary to deliver a telecommunication service to end users.

Elimination of Potential Competitor

- 47 IDA notes in the first instance that PacNet does not compete in the markets for the provision of submarine cable capacity and backhaul, and has no intention of entering these markets. IDA therefore believes that the proposed Consolidation will not result in the elimination of a potential competitor. The proposed Consolidation is unlikely to affect the level of competition in these two markets.

Restricting the Ability of Competitors to Obtain or Access an Upstream Essential Input

- 48 In theory, the proposed Consolidation might enable the Post Consolidation Entity to restrict or distort competition on the downstream markets in Singapore in at least three different ways.
- (a) First, the Post Consolidation Entity might refuse to provide submarine cable capacity and backhaul to its competitors in the downstream markets, thereby foreclosing them from providing downstream services that require the upstream inputs.
 - (b) Second, PacNet might obtain submarine cable capacity and backhaul on prices, terms or conditions that are more favourable than those that the Post Consolidation Entity provides to other competing Singapore operators that seek to provide downstream services.
 - (c) Third, even absent discrimination, PacNet might pay the Post Consolidation Entity above-cost prices for submarine cable capacity and backhaul, thereby subjecting downstream competitors that must use these upstream inputs to provide downstream services to a price squeeze.
- 49 IDA agrees with the Applicants that the Post Consolidation Entity would have the ability and/or incentive to increase upstream prices or withhold capacity only if: (a) there is a lack of alternative sources of supply for submarine cable capacity; and (b) the Post Consolidation Entity has the ability to successfully drive the competitors from the downstream markets and exclude them from the markets. IDA notes that, even though the routes from Singapore going east to the Asia Pacific region are heavily utilised, overall, there is no lack of alternative sources

of supply for submarine cable capacity in Singapore. IDA also does not believe that the Post Consolidation Entity would have the ability to drive the competitors from the downstream markets and exclude them from the markets.

- 50 Nonetheless, IDA notes the Commenting Parties' concern in relation to CHL's common ownership in two (i.e. the EAC and C2C submarine cable systems) of the three major cables (the third one being APCN2) to the Asia Pacific region. In fact, the same concerns were raised when IDA reviewed the Consolidation between CHL and ANC in August 2006. IDA understood then that most operators in Singapore need to rely on at least two of the three submarine cable systems to the Asia Pacific region, to ensure diversity and to provide for redundancy for downstream telecommunication services. IDA also understood that there was a shortage of capacity supply on those routes. Given the common ownership of the EAC and C2C submarine cable systems, there was a concern regarding the Post Consolidation Entity's ability to restrict competition in Singapore by reducing the ability of other operators to obtain capacity on the EAC and/or C2C submarine cable systems.
- 51 IDA had already addressed this concern in IDA's Decision on Change in ANC's Ownership. In reviewing CHL's previous acquisition of a 100 percent Ownership Interests in ANC, IDA had considered whether there was potential for CHL and ANC to restrict access to upstream inputs or downstream facilities necessary to provide or deliver a telecommunication service to End Users in Singapore, thereby creating market foreclosure concerns. While IDA had concluded that the concerns were not sufficiently serious to warrant a denial of the Consolidation involving CHL and ANC, IDA had imposed a Condition to address the potential competition concerns. The Condition required CHL and ANC to allow non-discriminatory access to capacity on the EAC and C2C submarine cable systems by interested operators, to help mitigate the potential impact, in the short term, on competition in the sale of submarine cable capacity and other downstream markets, at least until new cable systems come on board.
- 52 Specifically, IDA imposed the following Condition on CHL and ANC:

"The Applicants shall ensure that ANC and C2C Singapore must allow similarly-situated licensed operators in Singapore to acquire and access capacity on their respective submarine cable systems (i.e., EAC and C2C), whether via acquisition of Indefeasible Rights of Use ("IRUs") or long or short term leases, on a non-discriminatory basis. This Condition shall be reviewed by IDA 2 years from the date hereof to determine whether it is still relevant and necessary in order to address competition concerns in the market for submarine cable capacity. For the avoidance of doubt, this Condition does not require ANC or C2C Singapore

to make IRUs or long/short term leases available if it has decided not to sell or lease capacity to any operator.”

IDA's Decision on Change in ANC's Ownership is posted on the IDA website (www.ida.gov.sg) under “Policies and Regulation – Regulatory Policies & Frameworks”.

- 53 Given the above, IDA believes that the Non-horizontal competition concerns posed by the Commenting Parties have been addressed in IDA's Decision on Change in ANC Ownership.

Access to ANC's Submarine Cable Landing Station

- 54 IDA also notes the Commenting Parties' request to impose a Condition to require CHL to provide access to ANC's cable landing station on the same terms as SingTel under SingTel's RIO. IDA recognises that backhaul and access to cable landing stations are essential for operators to access international capacity in the submarine cables. IDA also notes ANC's restrictions on access to its cable landing station. IDA notes however that this situation exists even in the absence of the proposed Consolidation. IDA does not believe that the proposed Consolidation exacerbates the situation. Therefore, this issue should be examined separately (should the need arise) to determine whether reasonable access to ANC's cable landing station is required to enhance competition.

Conclusion

- 55 Based on the evidence and assessment above, IDA concludes that, while the proposed Consolidation raises some Horizontal and Non-horizontal competition concerns, it is not likely to substantially lessen competition in any Singapore telecommunication market. IDA agrees with the Applicants that there could be potential pro-competitive effects, in particular by making PacNet potentially a stronger competitor in the relevant telecommunication markets.

PART VIII: IDA'S DECISION

- 56 Based on the above findings, IDA hereby approves in full the Application pursuant to Sub-section 10.7.1 of the Code, without Conditions. For the avoidance of doubt, the Condition imposed on CHL and ANC (as stipulated in paragraph 52) will continue to apply and be in force.