**COMMENTS OF SINGAPORE CABLE VISION LTD.
ON THE ACCOUNTING SEPARATION GUIDELINES**

SUBMITTED TO

**INFO-COMMUNICATIONS DEVELOPMENT AUTHORITY
REPUBLIC OF SINGAPORE**

ON

28 JUNE 2001

Prepared by:

Michael R.L. Hooton
David M. Levy
Terence M. Hynes
Christopher T. Shenk
SIDLEY AUSTIN BROWN & WOOD
6 Battery Road
Suite 38-01
Singapore 049909
65.230.3908

International Consultants for Singapore Cable Vision Ltd.

Before the
Info-Communications Development Authority
Republic of Singapore

REVIEW OF ACCOUNTING SEPARATION	**)**
FOR THE TELECOMMUNICATIONS SECTOR	**)**
IN SINGAPORE – CONSULTATIVE DOCUMENT	**)**

COMMENTS OF SINGAPORE CABLE VISION LTD.
ON CONSULTATIVE DOCUMENT ISSUED 23 MAY 2001

Singapore Cable Vision Ltd. ("SCV") respectfully submits these comments on the *Review of Accounting Separation for the Telecommunications Sector in Singapore – Consultative Document*, issued by the Info-Communications Development Authority ("IDA") on 23 May 2001 ("*Consultative Document*").

I. EXECUTIVE SUMMARY

The IDA proposes to adopt new accounting separation rules that would require all facilities-based operators ("FBOs") classified as "Dominant Licensees" under Section 2.2 of the COP (the "Code of Practice" under the Act) to comply with Detailed Segment Reporting ("DSR"), an elaborate regime for attribution and allocation of revenues, costs, assets and liabilities to individual segments and services. *Consultative Document* at 4 & 11-23. Non-dominant licensees would have a far less detailed and burdensome set of accounting separation rules ("Simplified Segment Reporting" or "SSR"). The stated purpose of the proposed rules is to enable IDA to monitor the competitive behavior of telecommunications carriers and their compliance with the IDA's rules for interconnection, unbundling, open access and pricing. *See Consultative Document* § 4.1.

(1)

Although these concerns very well may warrant implementation of DSR requirements for Singapore Telecommunications Ltd. (“SingTel”), the other carrier now classified as “dominant” by the IDA, SCV, should be subject only to the same SSR rules that the IDA has proposed for other licensees.

First, the DSR requirements are unnecessary for effective regulation of SCV’s network infrastructure. SCV currently has no obligation to give other carriers “open access” to its network; hence, the reasonableness of what prices SCV hypothetically might charge for such access is a moot point. If and when an open access requirement were imposed on the SCV network the pricing regime imposed by the IDA’s Code of Practice for Competition in the Provision of Telecommunications Services, coupled with the SSR requirements proposed by the IDA for other licencees, should constitute ample safeguards.

Second, DSR is also unnecessary for the individual services that SCV currently offers. SCV faces intense and effective competition for its two major existing lines of business—cable modem service and cable television service—as well as any telecommunications services it may offer in the future. Because SCV does not earn excessive profits in any line of business, the company has no source of revenue for cross-subsidizing any competitive service. For similar reasons, SCV lacks the market power needed to engage in predatory pricing and other forms of anticompetitive conduct.

Moreover, the detailed information generated by DSR is also unnecessary to enable the IDA to monitor industry and service trends. The IDA already has access to carriers’ income statements, internal transactions, fixed assets, and balance sheets, and will also gain the information required by its SSR rules.

In any event, the additional data generated by DSR would provide little if any additional protection against anticompetitive behavior. A high percentage of the costs of the SCV network are incurred jointly or in common among all of the services provided by SCV. As the IDA has recognized, any method of allocating these joint and common costs to individual services is unavoidably arbitrary. Hence these allocation rules play no role in efficient price setting.

There is also substantial precedent in other jurisdiction for exempting carriers like SCV – that have no incentive (or ability) to engage in anticompetitive conduct – from complex and costly accounting separation rules.

For these and other reasons, the IDA should determine now that the SCV will be subject only to the SSR requires that govern most other licensees.

(2)

The IDA should defer adoption of any requirement that FBOs migrate from an Historical Cost Accounting ("HCA") approach to some undefined Current Cost Accounting Approach ("CCA") unless further study and analysis demonstrates the feasibility of CCA in this context. The main difficulty with the CCA approach is that it requires firms to update the value of assets to reflect inflation and similar factors. However, these factors change over time at different rates across assets or across carriers. That is one reason why attempts to implement CCA for general purpose costing have met with little success in other advanced economies. Accordingly, the IDA should defer for further study the adoption of any rule requiring *all* FBOs to migrate to a CCA accounting standard until it is able to assess its practicality and cost-effectiveness for each carrier.

II. DESCRIPTION OF SCV

SCV operates a hybrid fiber cable ("HFC") network that can provide SCV's customers with television and broadband Internet services. In addition, SCV's network could provide voice-grade telephone service if certain upgrades were made to its network. SCV faces vigorous competition in all of these markets.

A. Cable Modem Services

SCV as a provider of broadband Internet services in Singapore already faces vigorous head-to-head competition from both narrowband and broadband service providers. First, Singapore is in the enviable position of having two competing broadband networks – the SingTel ADSL Network and the SCV HFC Network – each of which will reach nearly every household in Singapore. Every consumer in Singapore is the beneficiary of the head-to-head competition that exists between SingTel's DSL service and SCV's cable modem service. Most other advanced economies would consider the advent of this nationwide facilities-based competition in broadband a dream come true. DSL services are also offered by Davnet Singapore, Qala, Pacific Internet, 1-Net and Pacific Century Cyber Works.

The relevant product market in which SCV competes is broader than cable broadband. Several rival technologies are competing for acceptance in the broadband sector, and no clear leader has emerged yet. In Singapore, LMDS and digital terrestrial technologies are already being considered for commercial deployment. Approximately 45-60% of Singapore's business districts are projected to be within the coverage area of LMDS operators by end 2001; 20-30% of residential areas should be able to receive LMDS by 2003.[1] At least three broadband carriers have completed technical trials and are likely to enter in the near future both into

[1] *See* Infocomm Technology Roadmap (broadband access and mobile wireless) at 38 (released July 2000).

residential and commercial services (Keppel (LMDS), PacNet (LMDS) and 1-Net (LMDS)). SingTel has also launched a new ADSL broadband service (SingNet Broadband) aimed at attracting light users, which constitute a significant portion of the subscriber population, with a comparative low price (S$59.95 for 25 hours).[2] Further, as noted above, direct broadcast satellite ("DBS"), another broadband technology with a rapidly growing subscriber base in other jurisdictions, may become available in Singapore after June 2002. Fiber to the home and Singapore Power lines are also potential access mediums.

Last and hardly least, dial-up narrowband service will remain an effective constraint on broadband prices for the foreseeable future. Most subscribers are unwilling to pay a significant premium for broadband access,[3] and the penetration rate of broadband service is still low vis-à-vis the narrowband solutions. As of May 2001, only 56,566 households use cable modems. This number constitutes only about 5.8 percent of total households in Singapore.

B. Telephone Services

SCV has no telephone customers and therefore possesses a market share in the telephony market of zero. To offer telephone service over its cable network, SCV would have to equip the network with telephone capabilities and significantly increase SCV's staff of employees. Likewise, although SCV's forthcoming merger partner, StarHub, is an existing telephone carrier, it also lacks market power. StarHub's wireline telephone business is limited primarily to office buildings in the central business district; and its wireless telephone business services only a small fraction of the Singapore wireless market.

---

[2] Refer to website: <http://www.singnet.com.sg/product/broadband/flashmain.html>.

[3] *See* InteliAsia Consulting Group, 2000 Internet Study: Feedback for improving the performance and reliability of Internet services in Singapore.

Upon entering the telephone market, SCV will confront two well-entrenched incumbents: SingTel, the operator of a ubiquitous land-line network that reaches virtually every household in Singapore, and M1, a well-established provider of wireless telephone and paging services that already has a market share of 37 percent.[4] Other firms that have announced plans to enter the Singapore telecommunications market are large multinationals with vast resources and expertise in telephony. In short, SCV does not begin to have market power in the provision of telephone services.

C. Television Services

SCV's cable television services which come under the jurisdiction of Singapore Broadcasting Authority, also face vigorous competition, and thus is not in a position to subsidize other services.

The most obvious sources of competition are the eight free-to-air programming channels that SCV is currently delivering, free of charge, over its HFC network to nearly every household in Singapore. The competition for SCV's television subscription programming appears likely to intensify in the future. Direct broadcast satellite ("DBS") may become available in Singapore after June 2002, when the Government is scheduled to review the current ban on satellite dishes. *See Singapore LianHe Zaobao* (19 June 2001).

[4] *See*, M1 Press Release, available at <http://m1.com.sg/m1/cda/about_us/corporate_information/press_release_details/1,1414,6026,00.html> (dated 7 Feb 2001).

III. SIMPLIFIED SEGMENT REPORTING REQUIREMENTS, THE REGIME PROPOSED BY THE IDA FOR NEARLY EVERY OTHER LICENSEE IN SINGAPORE, ARE ALSO SUFFICIENT FOR SCV.

The IDA proposes to impose its Detailed Segment Reporting requirements on both SCV and SingTel, the two carriers nominally classified as Dominant Licensees under Section 2.2 of the Code of Practice. *Consultative Document* at 4 & 11-23. Firms subject to the DSR rules would be required to attribute or apportion their revenues, costs, assets and liabilities among highly disaggregated product and network segments. By contrast, the IDA proposes to subject the other telecommunications licensees in Singapore to a Simplified Segment Reporting requirement, a far less detailed and burdensome set of accounting separation rules.[5] SCV respectfully submits that it should be subject to SSR, not DSR.

The purpose of the new reporting requirements is to enable IDA to monitor the competitive behavior of telecommunications carriers and to ensure that they comply with the IDA's interconnection, unbundling, open access and pricing rules. *See Consultative Document* § 4.1. These goals are legitimate, and may very well justify imposing DSR requirements on a truly dominant carrier such as SingTel. The same is not true of SCV, however. First, the DSR requirements are unnecessary for the regulation of SCV's network infrastructure. Second, the competition facing SCV precludes it from engaging in the types of potential anticompetitive conduct that concerns the IDA. Third, even if competitive misconduct by SCV were a legitimate concern, the IDA has implemented additional safeguards, that in combination with SSR requirements, are capable of deterring and detecting that activity. Fourth, requiring SCV to

[5] Two carriers are classified as dominant: SingTel and SCV. All other carriers are classified as non-dominant, including MobileOne, StarHub, and the Singapore Technologies Group (ST SunPage, ST MobileData, ST Teleport, and DNA Communications).

maintain and submit DSR-compliant accounts would inflict unnecessary costs on SCV. Each of these points is discussed in turn.

A. Detailed Segment Reporting Is Unnecessary To Protect Against Competitive Abuse Of SCV's Network Infrastructure.

DSR for SCV's network infrastructure is unnecessary for two reasons. First, SCV currently has no obligation to provide other carriers with open access to its network; hence, the reasonableness of any prices SCV might charge for such access is a nonexistent issue. Second, if and when SCV becomes subject to an open access requirement, the pricing regime prescribed by the IDA's Code of Practice for Competition, coupled with the SSR requirements proposed by the IDA for other licensees, should provide ample safeguards for competitive pricing.

The central purpose of the DSR requirements is to prevent a carrier that is subjected to the IDA's open access rules from undermining their competitive purpose by charging predatory, excessive or otherwise anticompetitive prices for this access. These concerns are currently irrelevant for SCV given that SCV is not currently subjected to the "open access" requirements. *See* Order No. 2535, Telecommunications Act of 1999, Code of Practice for Competition in the Provision of Telecommunication Services, Designation of Dominant Licensees § 2 (2000) (stating that sub-section 3.3.5 (of the COP) "shall not be construed to require [SCV] to offer unbundling of cable modem (broadband transport) service for the provision of Internet access service"). Until SCV is required to provide open access, the IDA need not worry about how SCV would price it. Because other carriers have competitive alternatives for all of the services that SCV can feasibly offer, SCV cannot force any other carrier to accept interconnection prices that the carrier regards as excessive or unfair.

Moreover, DSR for the SCV network infrastructure would remain unnecessary even if mandatory open access to SCV's network someday become feasible and competitively justified. In that case, SCV would probably be subjected to COP pricing for open access to its HFC networks. The basis for access prices under the COP would then be transparent because they are set in arms-length negotiations or in arbitration proceedings, and must be imputed to the servient carrier itself when it determines its own prices to end-users. *See* COP §§ 5.1-5.3. Hence, DSR reporting is unnecessary to achieve transparent and pro-competitive prices for open access to SCV's network infrastructure.

B. Detailed Segment Reporting Is Also Unnecessary For Individual Services.

As noted above, the purpose of DSR rules is to prevent dominant carriers from engaging in cost shifting, cross subsidization and other competitive abuses, or charging excessive prices for interconnection services and unbundled network elements offered to competing carriers. *See Consultative Document* § 4.1. Although these competitive concerns are very real for a dominant carrier such as SingTel, they apply no more to SCV than to any of the carriers that the IDA proposes to subject only to Simplified Segment Reporting. Unlike SingTel, SCV has no market power over any service that could be used to threaten competition and innovation in any telecommunications market. Thus, SCV raises none of the competitive concerns that prompted the IDA to propose the DSR rules for SingTel.

1. SCV does not earn excessive profits in any line of business, and thus is not in a position to cross-subsidize any of its competitive services.

To engage in an anticompetitive cross-subsidy of a competitive line of business, a firm must have at least one other line of business that is capable of generating excess profits; otherwise, the subsidy is merely a gratuitous gift from the company's shareholders to consumers, harmful to no one except the shareholders themselves.[6] SCV has no line of business that could serve as a source of funding for cross-subsidy, for there is no product market in which SCV has the necessary dominance.

SCV's ***cable modem service*** cannot be a source of subsidy. As explained above, the business of providing broadband Internet service is in its infancy. There are various technologies which are being explored or developed for the provisioning of broadband Internet services in the world today and the verdict is still out as to which technology (if any) will emerge as the clear leader. In Singapore, alternative facilities-based broadband platforms are already being explored. Both SCV and SingTel already have the capacity to provide broadband services to every household; fixed wireless broadband providers are also expanding rapidly; and direct broadcast satellite (another broadband technology with a rapidly growing subscriber base in other jurisdictions) may become available in Singapore sometime this year. Moreover, narrowband Internet service remains an effective constraint on broadband Internet pricing. With broadband Internet service market penetration being so low today, no firm in the broadband Internet industry can exercise market power. Even as broadband subscribership grows in the future, no broadband provider is likely to gain sufficient market power so that excess economic profits could be earned.

Likewise, ***telephony*** cannot be a source of subsidy for SCV. As explained above, SCV currently has no telephone customers and therefore possesses a market share of zero. SCV's merger with StarHub will not change that fact: StarHub has no residential wireline

---

[6] *See, e.g.,* Larson, Alexander; Calvin, Monon; Nobles, Patricia, "Competitive Necessity and Pricing in Telecommunications Regulation," 42 Federal Communications Journal 1, 18 (Dec. 1989) ("cross subsidization requires that some products . . . be priced at less than what it costs to supply them. The source of . . . subsidies is the revenue from products that are priced high enough to cover their own costs, and yield additional revenue for the subsidies").

network, and its facilities for business customers are concentrated in the central business district of downtown Singapore. Thus, neither SCV nor the combined SCV-StarHub entities have (or would have post-merger) market power in Singapore's local telephone markets.

Finally, ***cable television service*** is not a "telecommunications service" under the Act and therefore is not subject to the proposed DSR reporting requirements. In any event, SCV's MaxTV operations have yet to earn an economic profit (*i.e.*, an after-tax return that exceeds SCV's weighted average cost of capital), and thus obviously cannot serve as a source of subsidy. In short, the proposed accounting separation requirements are unnecessary to protect against the possibility that SCV might use cable television revenues to subsidize its other services.

The bottom line is that the proposed DSR requirements are not necessary to monitor whether SCV is engaging in cross-subsidization, because SCV provides no services that earn above-market returns that could fund such subsidies. If SCV were to provide any service at a price below cost, the resulting losses would be borne by SCV's shareholders, not by SCV's customers.

2. SCV lacks the market power needed to engage in predatory pricing and other forms of anticompetitive conduct.

The IDA also justifies imposing costly DSR requirements on dominant carriers because those reporting requirements would allow IDA to monitor potential anti-competitive behavior, such as predatory pricing. *See Consultative Document* § 4.1. For reasons similar to those discussed above, this concern is inapplicable to SCV.

Basic economic theory dictates that SCV, because it lacks market power in any product market, could not successfully engage in anticompetitive pricing behavior. A firm without market power that tries to force customers to pay above-market rates – and hence collect revenues to finance anticompetitive conduct – will lose those customers to its competitors.[7]

The opportunity for SCV to engage in predatory pricing is especially minute. Competing carriers face virtually no barriers to entering the market for Internet services. SingTel operates a local telephone network that is always capable of providing DSL services to virtually every user in Singapore; and five other competing providers of broadband service—DavNet Singapore, Pacific Century Cyber Works, Pacific Internet, Qala and 1-Net—have also entered the market.

Without significant barriers to entry into the broadband Internet market, SCV could not successfully carry out a predatory pricing strategy. A successful predatory pricing scheme requires two elements: (1) the ability to lower prices sufficiently below the costs of competitors that those competitors are driven out of the market and (2) the ability to subsequently raise prices sufficiently above costs in order to recover earlier losses (from charging below cost rates) and to earn future monopoly profits.[8] However, even if SCV could reduce its prices so low that its competitors cease supplying their competing services, SCV would never be able to recover the losses that it would incur from that strategy. Competitors like SingTel – which owns a network that is always capable if providing DSL services – would

[7] *See generally,* Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics,* Chapters 10 & 11 (Macmillan Publishing Company 1989).

[8] *See, e.g., Brooke Group, Ltd.* v. *Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222-24 (1993) (noting that there are "two prerequisites" to proof of an unlawful predatory pricing scheme: (1) prices that are "below an appropriate measure of its rival's costs" and (2) a dangerous probability that the firm will recoup its investment in those low prices).

simply re-enter the market for broadband Internet services the instant that SCV tried to raise its broadband Internet prices above competitive levels.[9]

In short, there is no risk that SCV – a firm that operates only in competitive markets – could engage in predatory pricing behavior and there is no need for the IDA to collect DSR information from SCV to monitor such behavior.

3. The SSR requirements are sufficient to monitor industry and service trends.

The IDA likewise does not need to collect the detailed information outlined in its DSR requirements to monitor industry and service trends. The IDA already has access to carriers' income statements, internal transactions, fixed assets, and balance sheets. *See Consultative Document* § 2.2.4. The IDA also has access to all publicly available information provided by industry experts and analysts. Finally, the IDA would have all of the information that it collects through its SSR requirements. All of this information should be sufficient for the IDA to monitor industry and service trends.

C. The Additional Data Generated By DSR Would Provide Little, If Any, Additional Protection Against Anticompetitive Behavior.

The primary difference between the DSR and SSR requirements is that the DSR rules require carriers to allocate common network costs among individual services. *See*

[9] *See, e.g.*, *Rebel Oil Co.* v. *Atlantic Richfield Co.*, 51 F.3d 1421, 1439-40 (9th Cir. 1995) ("A mere showing of substantial or even dominant market share alone cannot establish market power sufficient to carry out a predatory scheme. The plaintiff must show that new rivals are barred from entering the market and show that existing competitors lack the capacity to expand their output to challenge the predator's high price"). *See also* Easterbrook, "The Limits of Antitrust," 63 Texas Law Review 1, 26-27 (1984) ("[The] losses [from sub-competitive pricing] could be made up only by very high [supra-competitive] prices for the indefinite future. (The losses are like investments, which must be recovered with compound interest.) If the defendants should try to raise prices to such a level, they would attract new competition. . . . [that] competition would come from resurgent [competing] firms").

Consultative Document § 5.4.1. As the IDA has correctly recognized, DSR accounts for a carrier, like SCV, with disproportionately high shared and common costs, are unlikely to provide much useful information that would not be available from the SSR reports. *See Consultative Document* § 5.5.2 ("the assignment of . . . shared and common costs to services on a cost basis is, to a large extent arbitrary").

The reason that SCV's costs contain disproportionately high shared and common costs stems from the cost structure of its HFC network. The vast majority of the costs of SCV's network are fixed (i.e., would be unavoidable if SCV reduced its output to anything above zero),[10] and "joint" or "common" (i.e., would be unavoidable if SCV eliminated some kinds of services, but not others).[11] A moment's thought about SCV's physical infrastructure should make this point obvious. Every service that SCV now offers, or is likely to offer, share the use of SCV's common network. If SCV were to discontinue providing television programming, and limit its network to broadband Internet traffic (or *vice versa*), SCV would still need most of its existing network to provide the newly limited range of outputs.

Under these circumstances, a large proportion of SCV's total costs cannot be causally attributed to any particular service provided by SCV, or any particular subset of its total output. While there are certainly any number of accounting formulas for allocating these fixed and joint costs to individual services or outputs, the resulting cost allocations, from the standpoint of cost causation, are all – as pointed out by IDA – arbitrary. *See Consultative*

---

[10] *See id.* at 204 ("the fixed cost . . . is borne by the firm whatever level of output it produces").

[11] Robert S. Sexton, *Microeconomics* at 243 (Prentice Hall 1995) ("common costs . . .[are] those which are incurred for the production of two or more products [or services], no one of which is responsible for any particular cost. The cost of maintenance of a railroad line . . . is a common cost for freight and passenger traffic").

Document, p. 36 ("in economic terms, after direct incremental costs are assigned to services on the basis of direct cost causation, the assignment of the remaining shared and common costs to services on a cost basis is, to a large extent, arbitrary").[12]

Hence, these allocation rules play no role in efficient price setting. In competitive markets, "costs that are joint and common between two services are borne more heavily by the service that is less price sensitive (more price inelastic)."[13] Likewise, regulators often attempt to replicate the performance of competitive markets by permitting (or requiring) dominant carriers to base their prices on inverse elasticity principles (or, more precisely, Ramsey pricing).[14]

For the above reasons, the generally accepted tests for cross-subsidy, predatory pricing, and other forms of anticompetitive behavior make little or no use of such cost assignments or allocations. The IDA appears to recognize that the additional DSR requirements would provide little, if any, additional insight into the competitive behavior of a firm like SCV. *See Consultative Document* § 5.5.1 (an "organization's operations for accounting separation must reflect the objectives for the use of the information produced"). Instead, the IDA has

---

[12] *Accord*, *Jurisdictional Separations Reform and Referral to the Federal-State Joint Board*, 12 [United States] FCC Record 22120, 22133 n. 52 (1997) (when a shared facility or operation can provide at least one additional service at no additional cost, no individual facility is causally responsible for the costs). For this reason, the admonition that "apportionment of costs should be done on the basis of *causation*, and all of a Licensee's costs, including corporate overheads, should be apportioned among the services and products, i.e., fully distributed" (*Consultative Document* at 36) is unavoidably self-contradictory. *No* method of fully-distributed cost allocation reflects "causation": the very essence of joint costs is their lack of any causal nexus with individual outputs.

[13] *Jurisdictional Separations Reform and Referral to the Federal-State Joint Board*, 12 FCC Record 22120, 22134 ¶ 27 (1997).

[14] *Coal Rate Guidelines—Nationwide*, 1 I.C.C.2d 520, 536-37 (1985), *affirmed*, *Consolidated Rail Corp. v. United States*, 812 F.2d 1444 (1987).

chosen to rely on alternative safeguards, such as the requirement that interconnection prices be based on COP pricing, as well as SSR. *See, e.g.*, COP App. 1 (requiring owners of bottleneck facilities to provide interconnection at rates equal to the bottleneck carriers incremental costs).[15]

In sum, for some kinds of business, particularly traditional wireline telephone companies, accounting separations have been a widely used tool. For a multi-service cable network like SCV, however, the potential regulatory usefulness of DSR accounting would be limited at best, even if SCV somehow acquired sufficient market power to warrant increased regulatory oversight in the future. SSR accounting should be ample to protect against SCV's abuse of power when marketing its services.

D. Compliance With The DSR Rules Would Impose Needless Burdens And Costs On SCV.

The potential public benefits of imposing DSR requirements on SCV would be *de minimis*, making the imposition of DSR requirements on SCV unnecessary. Indeed, the proposed regulations would impose a disproportionately high burden (in terms of new compliance costs) on SCV.[16] This fact further demonstrates that SCV should be required to comply only with the less burdensome SSR requirements.

[15] Appendix A, attached, reviews the generally accepted cost benchmarks for cross-subsidy, predatory pricing, and other forms of anticompetitive pricing behavior and further demonstrates that subjecting SCV to the DSR requirements rather than to the SSR requirements would produce little additional information that would be useful to the IDA in monitoring such behavior.

[16] The IDA itself has recognized that the proposed "[r]egulatory accounting requirements can require the creation of complex systems, which are costly to establish and maintain." *Consultative Document* § 4.3.

E. International Precedent Supports Exemption of SCV from DSR Rules.

There is also substantial precedent in other jurisdictions for exempting carriers like SCV – which have no incentive (or ability) to engage in anticompetitive conduct – from complex and costly accounting separation rules.

In the United States, the Telecommunications Act of 1996 (the "1996 Act") seeks to protect against the possibility that carriers that own bottleneck facilities – *i.e.*, facilities to which competitors require access in order to compete in telecommunications markets – will use their ownership of those facilities to gain advantages in other markets. *See* 47 U.S.C. §§ 254, 260, 271-76. Acting under this authority, the FCC has imposed detailed accounting separation requirements on incumbent local exchange carriers. *See* 47 C.F.R. Parts 32 & 36.

Those accounting safeguard requirements, however, do not generally apply to cable companies. The reason for this exclusion is simple: cable companies do not own or operate facilities that are necessary to provide telecommunications services. To the contrary, cable companies are just beginning to learn how to provide voice-grade telephone and broadband services with their facilities. To saddle cable companies with onerous accounting reporting requirements would only divert investment away from continued research and deployment of new technologies that could eventually allow cable companies to provide consumers with an additional choice for telecommunications services.[17]

[17] By contrast, where a large local telephone company purchases a cable company, the FCC ensures that the telephone company will not use its market power over local telephone services to gain an unfair advantage in the market for cable services. *See* Order and Authorization, Application for Authority to Construct and Operate Through an Affiliate Cable Television Facilities in its Telephone Service Area, 11 FCC Record 2739, 2 (1995) ("We condition this authorization of BellSouth's adherence to strict accounting safeguards, so that any risk regarding the cable venture will not be borne by its telephone ratepayers").

Likewise, regulators in the United Kingdom have also long recognized that the purpose of imposing onerous accounting separation requirements on carriers is to "ensure the effective operation of rules to prevent . . . *market power* from being leveraged into [other markets]."[18] Applying this standard in Singapore would clearly demand that SCV – a carrier without significant market power in any of its markets – be exempt from the onerous DSR requirements.

F. The IDA Should Determine Now, Rather Than In a Separate Proceeding That SCV Should Be Subject Only To The SSR Requirements.

The proposed accounting separation rules contain a provision pursuant to which a carrier might *apply* for an exemption or a variation from these rules. Such an application *may* be granted by the IDA where "information about the Licensee's business provided in accordance with these Guidelines is likely to be of limited value to the [IDA] in meeting the objectives set out in Section 1 of the these Guidelines." *Draft ASG* §2.4(c)(ii). However, this discretionary application process introduces unnecessary costs and uncertainty that could easily be avoided by adding, at this time, a provision that specifically exempts SCV from the proposed DSR requirements.[19]

[18] *Oftel Submission to the Office of Fair Trading Review of BskyB's position in Pay TV Markets*, available at <http://www.oftel.gov.uk/publications/broadcasting/oftr0500.htm>. Oftel is the telecommunications regulatory body in the U.K.

[19] However, the IDA should also retain the current discretionary exemption to ensure that other "Dominant License" carriers can also obtain exemptions from the DSR requirements in the future in appropriate circumstances.

IV. THE IDA SHOULD DEFER ADOPTION OF CURRENT COST ACCOUNTING UNTIL ITS PRACTICALITY AND COST-EFFECTIVENESS HAS BEEN ESTABLISHED.

The *Consultative Document* proposes that, for all facilities-based operators, the "accounting separation [requirements] should initially be based on historical cost accounting ["HCA"], but should move to current cost accounting ["CCA"] over a 2-3 year time frame."[20] *See Consulting Document* § 5.3. The IDA should not adopt this proposal unless further study demonstrates its practicality. The basic difficulty with the CCA approach is that it requires firms to update the value of assets to reflect inflation and similar factors. However, these factors do not change over time at uniform rates across assets or across carriers.

Several factors contribute to the differences in cost changes across assets and across carriers. First, the unit costs of real estate, cable, electronic equipment such as switches and routers, capital and other major inputs can escalate at rates that diverge greatly from the overall rate of inflation, depending, among other things, on the rates of economic growth and unemployment, the current spot market in commodities such as copper and fiber optic cable, the state of the national money supply, the business cycle and the availability of funds in international capital markets, and the rate of technological progress in electronic equipment. Second, the current cost of a firm's outputs depends not only on the unit of its inputs, but also on the productivity with which the firm uses those inputs. Measurement of industry-specific

[20] In particular, IDA proposes two alternative CCA methodologies: (1) a "financial capital maintenance convention [where] assets are restated to reflect their value to the business which is usually equivalent to their current replacement cost" or (2) an "operating capital maintenance method [that] requires the company to have as much productive capacity at the beginning of the period as at the end [which differs from financial capital maintenance] "in that it only takes into consideration specific price changes and does not therefore consider general inflation." *See Consultative Document* § 5.3.2.

productivity trends is a difficult and contentious process.[21] Third, the current costs of an output may include not only the firm's out-of-pocket expenses, but also the opportunity costs of the forgone alternative uses of the same productive capacity.[22] These opportunity costs vary not only from firm to firm, but also can fluctuate greatly within the same firm over even a relatively short period.[23] For these and other reasons, attempts to implement CCA for general purpose costing have met with little success in other advanced economies.[24]

---

[21] For instance, a straight-forward attempt by railroad regulators in the United States to tie to inflation the reasonable rates that bottleneck railroads may charge to shippers has resulted in seemingly endless disputes relating to the appropriate inflation index and the rates to which those indices should be tied. *See, e.g.*, *Western Coal Traffic v. United States*, 677 F.2d 915 (D.C. Cir. 1982); *Edison Electric Institute v. Interstate Commerce Commission,* 969 F.2d 1221 (D.C. Cir. 1992).

[22] *See, e.g.*, Joseph E. Stiglitz, Economics at 44 (1993) ("when rational firms and individuals make decisions – whether to undertake one investment project rather than another, whether to buy one product rather than another – they take into account all of the costs, the full opportunity costs, not just the direct expenditures.") (emphasis in original); David L. Kaserman & John W. Mayo, Government and Business: The Economics of Antitrust and Regulation at 32 (1995) ("[E]conomic costs include both implicit and explicit costs, while accounting costs incorporate only explicit costs. Implicit costs are defined as the opportunity cost of owned resources, where the term opportunity cost, in turn, is defined as the value of a resource in its best alternative use."); Armen A. Alchian, Cost, in 3 International Encyclopedia of the Social Sciences 404, 404 (David L. Sills ed., 1968) ("In economics, the cost of an event is the highest-valued opportunity necessarily forsaken").

[23] *See id*.

[24] In the United States, for example, the Financial Accounting Standards Board ("FASB") attempted to implement a current cost accounting standard. *See* Financial Accounting Standards Board, *Statement of Financial Accounting Standards No. 89: Financial Reporting and Changing Prices* (issued December 1986). However, in part due to the "complex nature" of those rules, they were still "not widely used" even after those rules had been in effect for five years. *Id.* ¶ 4. Accordingly, the FASB finally abandoned those CCA requirements in 1986, just seven years after they were initially adopted. *See id.* ("the Board has completed [its review of the CCA rules] and has concluded that further [mandatory use of those rules is] not required"). Accountants and regulators in other countries have reached the same result. For instance, in the United Kingdom an accounting standard (SSAP 16, 1980) required supplementary CCA disclosures by large companies. But the inability of those companies to fully implement and comply with that CCA approach led to the total abandonment of those rules by 1988. *See* Geoffrey Whittington, *Current Cost Accounting: Its Role in Regulated Utilities*, Fiscal Studies, Vol. 15, no. 4, at 88 (1994).

In sum, the IDA should defer for further study the adoption of any rule requiring *all* FBOs to migrate to a CCA accounting standard until its practicality and cost-effectiveness has been established for each carrier.

CONCLUSION

For the reasons stated above, the IDA should subject SCV only to the SSR requirements. In addition, the IDA should not introduce CCA methods until the practicality of such a proposal has been established in a separate proceeding.

Respectfully submitted,

Singapore Cable Vision Ltd.

Prepared by:

Michael R.L. Hooton
David M. Levy
Terence M. Hynes
Christopher T. Shenk
SIDLEY AUSTIN BROWN & WOOD
6 Battery Road
Suite 38-01
Singapore 049909
65.230.3908

International Consultants for
Singapore Cable Vision Ltd.

28 June 2001

Appendix A

Generally Accepted Economic Tests For Cross-Subsidy, Predatory Pricing and Other Forms of Anticompetitive Pricing Behavior

The consensus of current economic literature recognizes two cost benchmarks for cross-subsidy. First, do the allegedly subsidized prices equal or exceed the relevant measure of marginal or incremental cost?[25] Second, do the services that allegedly fund the cross-subsidy generate revenues in excess of the stand-alone costs of those services – the costs an efficient firm would incur today to provide just those services, under the hypothetical assumption that barriers to entry were absent?[26] If a firm's prices all exceed the relevant incremental costs, and do not exceed stand-alone costs, there is no cross subsidy.[27] Notably, none of these cost benchmarks – marginal cost, variable cost, or stand-alone cost – relies on the allocation of fixed and common costs to individual services or outputs.[28]

---

[25] *See Jurisdictional Separations Reform and Referral to the Federal-State Joint Board*, 12 FCC Record 22120, 22134 ¶ 27 (1997). *See also* Alexander Larson, Calvin Monson & Patricia Nobles, *Competitive Necessity and Pricing in Telecommunications Regulation*, 42 Federal Communications Law Journal 1, 11 (Dec. 1989) ("a cross-subsidy exists when the revenues from one service are used to price another service below its *incremental costs*") (emphasis added); *Areeda & Turner,* Predatory Pricing and Related Practices Under Section 2 of the Sherman Act, 88 Harvard Law Review 697 (1975).

[26] *Jurisdictional Separations Reform,* 12 FCC Record at 22134 ¶ 27. *See also* Larson, Monson & Nobles at 11 ("A service subsidizes others if the revenue from its sales exceeds the cost of supplying the service in isolation, *i.e.,* without supplying any other service"); Faulhaber, *Cross-Subsidization: Pricing in Public Enterprises,* 65 American Economic Review 966 (1975).

[27] *Jurisdictional Separations Reform*, 12 FCC Record at 22134 ¶ 27; *See also* Larson, Monson & Nobles at 11; Faulhaber, *Cross-Subsidization: Pricing in Public Enterprises,* 65 American Economic Review 966 (1975).

[28] Moreover, all of these cost benchmarks are species of forward-looking, or current costs, which the historical or embedded cost data on company books will equal only by coincidence. *See, e.g., Antitrust Law Developments (Fourth)* at 255 (American Bar Association 1997) ("Properly defined economic costs will often differ from costs as shown on the defendant's books, which are governed by accounting principles rather than economic rules.").

The same is true of predatory pricing. The generally accepted cost test for predatory pricing is whether the allegedly predatory price fails to cover the relevant measure of marginal or incremental cost.[29] The kinds of fully allocated joint and common cost data generated by the DSR, although sometimes used in the past as a price floor for predatory pricing, are largely irrelevant to this analysis.[30]

Likewise, allocated joint and common costs, unlike incremental costs, are generally poor safeguards against imputed price squeezes.[31] An imputed price squeeze may occur where one competitor owns a bottleneck facility and a competitive facility, both of which are necessary to supply a service to end-users. In that situation, the owner of the bottleneck facility can charge a single price to the end-user of the full service (bottleneck service + competitive service). The imputed price of the bottleneck portion of that service would be the difference between the full end-user price for the full service and the market price for the competitive portion of that service.[32] Where the actual cost of providing the bottleneck portion of the service exceed the imputed costs, competitors cannot compete against the owner of the

---

[29] *See Antitrust Law Developments (Fourth)* at 255 (American Bar Association 1997) ("modern analysis of [predatory pricing finds predatory pricing where] . . . prices [are] below reasonably anticipated marginal costs.").

[30] *See id.* at 256.

[31] *See, e.g.*, William J. Baumol, Janusz A. Ordover & Robert D. Willig, *Parity Pricing and Its Critics: A Necessary Condition for Efficiency in the Provision of Bottleneck Services to* Competitors, 14 Yale Journal on Regulation 144 (1994).

[32] For example, assume that a firm owns both local telephone facilities (a bottleneck facility) and long distance lines (a competitive facility). If the competitive price of the long-distance facility is S$0.10 and the price that the firm charges for end-to-end long distance service (local + long distance) is S$0.50, then the imputed price of the bottleneck portion of that service (local service) is S$0.40.

bottleneck facility.[33] This situation is referred to in legal and economic literature as an imputed price squeeze.[34]

To ensure that an owner of a bottleneck facility cannot engage in an imputed price squeeze, regulators should "require the bottleneck owner to charge itself for the bottleneck input exactly the same price it charges all rival final-product providers."[35] The relevant information that is required to identify and forestall imputed price squeezes is the "direct costs incurred in supplying [the bottleneck facility to competitors], plus any opportunity cost[s] incurred as a result of that transaction."[36] The allocated joint and common costs play little if any role in this analysis.[37]

Detailed joint and common cost allocations also play only a peripheral role in determining whether a firm's *overall* earnings are excessive. The issue here, by definition, is whether the company's overall revenues exceed a competitive rate of return on the company's overall net investment. For the reasons stated above, such an exercise does not require the allocation of costs and revenues to subsets of the company's systems or outputs.

Of course, there are legitimate uses for accounting separations as a regulatory tool. For instance, allocations of shared and common costs are a component of TELRIC and

---

[33] *See, e.g.,* William J. Baumol, Janusz A. Ordover & Robert D. Willig, *Parity Pricing and Its Critics: A Necessary Condition for Efficiency in the Provision of Bottleneck Services to* Competitors, 14 Yale Journal on Regulation 144 (1994).

[34] *See id.*

[35] *See id.* at 149.

[36] *Id.*

[37] *See id.* at 150-154.

TSLRIC, the cost standards used by regulators in the United States and several European countries to set prices for unbundled network elements and basic services offered by dominant local telephone carriers.[38] Because the increments of output to which these cost standards apply are large and highly aggregated—*e.g.,* all of the local loop supplied by a local carrier in its service area, or all of the basic telephone service—the costs incurred jointly or in common with other outputs are small. In the United States, for example, state regulators have generally found that a markup of 10 percent or so about TELRIC is sufficient to cover all costs that are joint, common or shared with other outputs of the carrier.[39]

[38] "TELRIC" is an acronym for "Total Element Long Run Incremental Cost" and "TSLRIC" is and acronym for "Total Service Long Run Incremental Cost. *See* First Report and Order, *Implementation of the Telecommunications Act of 1996 [USA]*, CC Docket Nos.96-98 & 95-185 ¶¶ 630, 672 (August 1996).

[39] *See* Evaluation of the United States Department of Justice, *Application of Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Missouri*, CC Docket No. 01-88 at 17 (May 9, 2001) ("pointing out that the common cost factor in the state of Kansas is 10 percent and that in the state of Texas is about 13 percent).