

Telecoms Infotech Forum

Television Policy in an Era of Convergence

A TIF position paper

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Television Policy in an Era of Convergence

Just as the communications industries have been “coming together”, so too the various policy-makers have found themselves meeting at the crossroads of convergence. The problem which we seek to highlight through this document is that policy-makers need to forge a *new* path to address the agenda of convergence, and not simply head down one existing industry path at the expense of others. Where broadcast policy used to be determined by issues of content, it is our contention that Hong Kong’s new television policy—and by association its policy towards its audiovisual production industries—runs the risk of being determined by issues of technology, licensing and the means of conveyance.

In this paper we illuminate some of the government’s policy assumptions by focussing upon three aspects of the recent review process:

- (i) Facilities competition and industry dominance
- (ii) Vertical integration
- (iii) The role of Hong Kong as a regional hub.

The central issue underpinning each of these is the interplay between content and the means of conveying that content (the network). The position adopted herein is that in each case the importance of content creation has been subjugated to a telecommunication- (or infrastructure-) driven agenda.

Finally, it is our position that without reference to the content industries themselves and an analysis of the economics of the production industry, the Government’s view is, at best, naive—and potentially quite disruptive.

This paper resulted from the October 1998 meeting of the Telecoms Information Technology Forum, a quarterly forum which discusses telecommunications and information technology issues that affect Asia.

January 1999

Summary and contents

I. The crossroads of the convergence agenda

Hong Kong has arrived at a policy crossroads in the communications industries, with technological convergence bringing a range of divergent business interests to the same table. The Government's recent policy review for *both* the television and telecommunications sectors recognized the need to address issues of convergence. However, the focus given to *network* liberalization, and the absence of broadcasting content issues raised industry concerns and demonstrated a lop-sided view of convergence.

II. Hong Kong's broadcast industry

Hong Kong's broadcast industry, although serving a small market, has been a highly profitable and creative industry for several decades. However, the production industry has now been in decline for several years, and new services have yet to make their mark in the territory. With the entire broadcast industry under challenge because of convergence, policy-makers have the opportunity to foster pro-actively the industry into the digital era.

III. Reviewing policy: competition & dominance

Hong Kong's pro-competition policy agenda has been applied to the broadcast industry. Whether this effectively addresses—let alone challenges—issues of industry dominance is questioned. Whether a pro-competition policy platform promotes content production is questioned.

IV. Vertical integration: convergence or dominance?

Vertical integration in the broadcast industry has been identified by policy-makers as in need of dismantling. However, as in other information technology sectors, technological advance and digitalization have already challenged much of the existing industrial integration. What remains are policy restrictions and a dominant player. The Government believes that a multi-channel environment in a mature television market will promote independent production. But the economics of a small content creation industry may mitigate against this. We question whether the Government has identified this agenda correctly.

V. Hong Kong as a broadcast hub

While Hong Kong has most of the factors needed to be a broadcasting hub, the territory has recently lost significant ground to Singapore. This section points out that issues of quantity should not be confused with either quality or choice. It also examines possible obstacles to Hong Kong's hub aspirations, such as the deterioration of its domestic film industry, and that its dominant broadcaster produces programs in a language spoken only in pockets outside south China.

VI. A policy-maker's checklist

Key questions that need to be addressed by Hong Kong's policy-makers are raised in the light of the Government's review process.

I. The crossroads of the convergence agenda

Standing at the point
The road it cross you down
What is at your back?
Which way do you turn?

— Tracy Chapman, “Crossroads”

Increasingly, the broadcasting, telecommunications and information technology industries are converging towards each other's markets, at both the technical and service levels. The distinctions between telecommunications, broadcasting and computer networks are becoming artificial and unnecessary... In step with the developments we will review our current legislation and make necessary legislative arrangements.

— ITBB, Policy Objective Statement

Convergence means different things to different people. It also takes on different meanings in different contexts: ‘technological convergence’ and ‘business convergence’, for example, have significantly different drivers, even though the businesses and technologies under discussion may be from the same industry. And while convergence—in all its forms—usually connotes a ‘coming together’ of different technologies or industries, one recent analysis of the Hong Kong multimedia industry(s) even stated that “the image is a false one. Convergence is really a takeover of all forms of media by one technology: digital computers.”¹

This inherent ambiguity is not meant to excuse sloppy analysis or short-sighted policy-making. Just the opposite in fact: it demands that the *assumptions* behind a specific convergence agenda be identified and that *objectives* be clearly articulated. To this end we have focused our attention in this position paper on the Government’s recent Television policy review process.²

In the age of convergence, what is ‘broadcast’?

A healthy industry?

In spite of some very questionable policy decisions over the last decade, Hong Kong has managed to maintain a comparatively healthy media and a vibrant communications industry. However, as one Australian commentator noted recently in a review document entitled *The Death of Broadcasting?*,³ almost all of the defining aspects of broadcasting are now under challenge. Signals that used to be *cast* over the air are increasingly sent via cable; and what used to be *broadly* distributed (one-to-many) is

¹ Mueller, Milton 1997. *Telecom Policy and Digital Convergence*, Hong Kong: City University of Hong Kong Press, p.8.

² The 1998 Review of Television Policy.

³ Given, Jock 1998. *The Death of Broadcasting? Media’s digital future*. Sydney: University of New South Wales Press.

increasingly becoming interactive (one-to-one). What used to be analogue is increasingly digital; what used to be 'free' is increasingly subscription. Where people used to (understandably) ask: "what exactly is convergence?", they could now equally ask: "what exactly is *broadcast*?"

Just as the communications industries have been "coming together", so too the various policy-makers have found themselves meeting at the crossroads of convergence. The problem which we seek to highlight through this document is that policy-makers need to forge a *new* path to address the agenda of convergence, and not simply head down one existing industry path at the expense of others. Where broadcast policy used to be determined by issues of content, it is our contention that Hong Kong's new television policy—and by association its policy towards its audiovisual production industries—runs the risk of being determined by issues of technology, licensing and the means of conveyance.

A policy agenda

The policy *agenda* of convergence has, however, been explicitly recognized by Hong Kong's policy-makers. In April 1998 a new bureau encompassing the relevant industries was established with the formation of the Information Technology and Broadcasting Bureau (ITBB). This was followed in September with the simultaneous release of the 1998 Review of Television Policy⁴ and the 1998 Review of Fixed Telecommunication Policy.⁵ With so much at stake for Hong Kong, the public review process was in itself a positive step. However, the four-week public consultation period allowed by the Government was far too short to allow the necessary debates to play out.

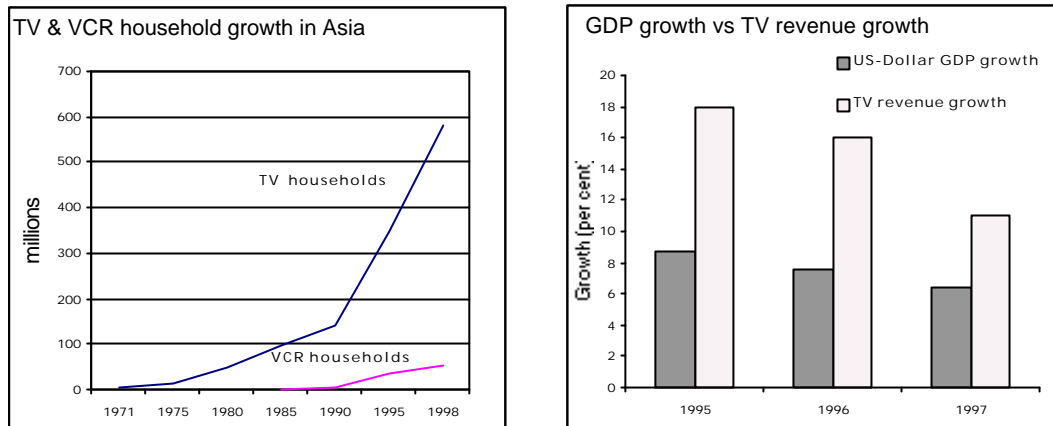
What is at stake?

Hong Kong has done remarkably well in developing its broadcast and audiovisual markets, and now sits on a potential goldmine. The number of households across Asia with a television set increased 245 per cent between 1984 and 1994. Over the next four years this number increased from just over 400 million to almost 600 million (Figure 1, left hand side). This exponentially growing audience has meant that the large multinationals see the region as a market of enormous future opportunity, and have begun to move in—providing employment opportunities, transferring technology and expertise, and driving production levels and demand. And as demand for these services has grown, advertising, marketing and promotion have followed in their wake. Growth in the *value* of the television markets has continued to outstrip general economic growth over recent years (Figure 1, right hand side)—although there is still very little known as to the income elasticity of demand for broadcasting services.

⁴ A full list of the changes can be found at www.info.gov.hk/itbb/new/index.htm

⁵ Op cit.

Figure 1: Asian TV market growth



Source: Screen Digest.

Technology has cut the cost of distribution, allowing new market entrants

Through the same period, new telecommunications technologies have facilitated these trends. Communications satellites and fiber optic cables have lowered the cost of distributing programs. Satellites have become particularly important because of the ease with which signals may be sent direct to the home. Digital transmission (when it arrives) will rapidly further increase the number of channels available. As a result, the benefits to be had are large, and the number of players vying for a share of this largesse is similarly growing.

As the media multinationals move into the region, the Government has identified that it wants Hong Kong to be a regional broadcast hub. But liberally throwing open the gates to international competition risks undermining the local production strengths that have been developed. Most strong broadcast production markets around the world have had—and continue to maintain—local content requirements. Becoming a regional broadcast hub *could* mean attracting foreign distributors, or it could mean building a strong content base for distribution elsewhere. The two do not always exist comfortably together. (Hollywood, because of its size, is the exception rather than the rule.)

In this paper we illuminate some of the government's policy assumptions by focussing upon three aspects of the recent review process:

- (iv) Facilities competition and industry dominance
- (v) Vertical integration
- (vi) The role of Hong Kong as a regional hub.

The central issue underpinning each of these is the interplay between content and the means of conveying that content (the network). The position adopted herein is that in each case the importance of content creation has been subjugated to a telecommunication- (or infrastructure-) driven agenda.

The television review's central proposals

- Open up the pay-TV and video-on-demand markets to competition.
- Allow Wharf Cable and other networks to provide telecommunications.
- Require Wharf Cable to open its network to all other providers.
- Allow telephone licensees to convey and provide TV programs.
- Mandate interconnection between telecommunications and broadcasting networks.
- Begin trials of digital terrestrial television (DTT) and high definition TV (HDTV).
- Encourage broadcasters to apply digital technology.
- Abolish subscription and advertising royalties for TV and radio.
- Encompass the Television Ordinance, Telecommunication Ordinance and Broadcasting Authority Ordinance in an omnibus 'Broadcasting Bill'.

The television review's key objectives

- To promote expansion and common use of the broadcasting and telecommunications networks;
- To create a fair, flexible, pro-competition and technology-neutral regulatory environment that would encourage and stimulate investment, technology transfer, diversification and innovation;
- To maximize consumer benefits in choice, service quality, affordability and accessibility;
- To facilitate the overall development of information technology and bring Hong Kong to the forefront of the Information Age;
- To promote Hong Kong as a pre-eminent regional broadcasting, information technology and telecommunications hub.

Source: 1998 Review of Television Policy

II. Hong Kong's broadcast industry

Television licensees in Hong Kong

Licensees	Launch date	HHs passed (mill.)	HHs passed ¹ (%)	TV HHs (mill.)	TV HHs (%)
<i>Terrestrial TV</i>					
TVB	1967	1.9	99	1.9 ²	99
ATV	1973	1.9	99	1.9 ²	99
<i>Subscription TV</i>					
Hong Kong Cable TV	1993	1.6	79	0.4	21
<i>Satellite TV</i>					
HutchVision (STARTV)	1991	N.A.	NA	0.5 ³	27
Galaxy	1998	NA	NA	NA	NA
<i>Interactive multimedia service</i>					
HKTVOOD	1998	0.9	45	0.05	2.6

Source: 1998 Review of Television Policy.

The traditional broadcasters: TVB and ATV

Hong Kong has two commercial television stations, Television Broadcasters Limited (TVB) and Asia Television Limited (ATV). Each provides one Chinese and one English language channel. On average they transmit more than 550 hours of programming weekly, covering almost all of Hong Kong's population of 6.5 million people, or approximately, 1.9 million households.

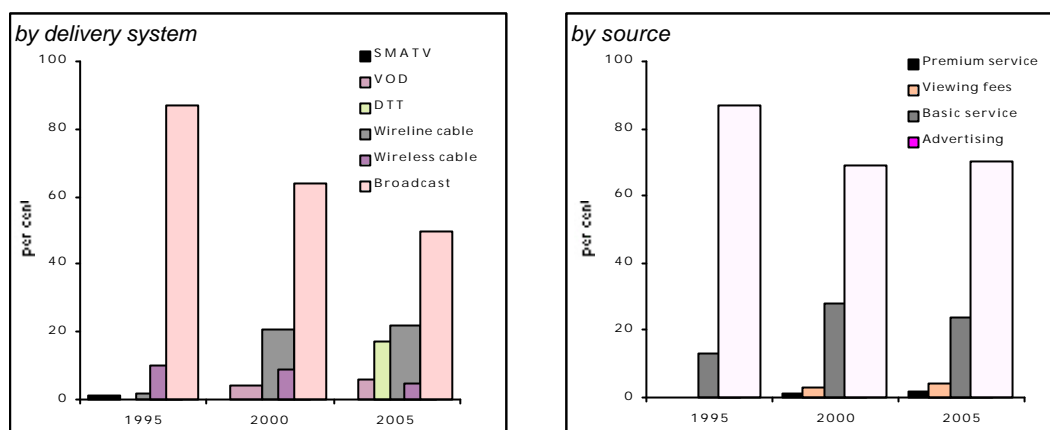
TVB has 80% of all Hong Kong's broadcasting revenue

TVB comprehensively dominates this aspect of the Hong Kong broadcast market. Not only does the station regularly capture anywhere from 75-90 per cent of viewership, but this translates into upwards of 80 per cent of broadcast advertising revenue—with advertising making up more than 85 per cent of total television commercial revenues (Figure 2). Over the last five years, however, ATV has steadily increased its share of viewers to about 25 per cent of the market.

Competition? Tilt the playing field

Upfront therefore, two factors need to be borne in mind about the Hong Kong broadcast industry. First, as within any dominance paradigm, policy change will be framed with the weak competitor—in this case ATV—in mind. However, change does not need to be concessionary—it can work in favour of the dominant player. Second, there will need to be a tilting of the playing field if competition from *new* services is to be encouraged. The fact that dominance has not been successfully challenged in the past underpins much of the dissatisfaction amongst players within the industry.

Figure 2: Hong Kong Commercial TV revenues, 1995-2005



Source: Salomon Smith Barney.

The new service providers: Hong Kong Cable and STAR

Given the existing paradigm of market dominance, it is interesting to recognise the extent to which both Hong Kong Cable TV (cable television services) and STAR TV (satellite television services) have been subject to restrictions. Those restrictions, which were designed to safeguard the advertising revenues of TVB, resulted in a regulatory regime which caused many international media companies to look elsewhere for their base in Asia (see the following section).

Wharf stops building

Hong Kong Cable (formerly known as Wharf Cable), which began subscription TV services in October 1993, was originally restricted from selling advertising time. (This restriction was lifted in July 1997.) The company now offers 37 channels, including pay-per-view and near-video on demand (N-VOD). Cable initially launched its service using a multipoint microwave distribution system (MMDS) to allow for a fast start-up, and had passed 1.6 million households by May 1998. However, Cable's license conditions committed it to replace the initial MMDS system with a genuine cable network. By June 1998 therefore, fiber optic cable passed 600,000 homes—being the company's target commitment to Government. Unsurprisingly, Hong Kong Cable TV then promptly announced a halt to further expansion for "economic reasons". This has left over half of its audience dependent on MMDS, which could become problematic as the Government has now suggested that it wishes to reclaim microwave frequencies in the 2-12 GHz range ("so as to remove interference to satellite services and for allocation to other users as appropriate"⁶).

Many observers have found Hong Kong Cable's performance to be disappointing. By mid-1998, the company claimed to have around 400,000 connected subscribers paying HK\$200 per

⁶ 1998 Review of Television Policy, p.18.

month for the basic service. The company's breakeven subscription base is estimated at 450,000 subscribers.

**STAR's reach—
around half a
million Hong
Kong homes**

STAR TV, the first Hong Kong-based satellite TV licensee, started broadcasting in 1991. Like Hong Kong Cable TV, it has been subject to regulatory restrictions, notably on the uplinking and downlinking of signals (clashing with Hongkong Telecom's exclusivity on international telecommunications services); broadcasting in Cantonese (subsequently permitted); and carrying Hong Kong-focused advertising. The network transmits more than 45 programming services in seven languages and is able to reach more than 260 million households in 53 countries. It provides both subscription and free-to-air services, with four free-to-air channels available in Hong Kong. These channels are available to around 550,000 households through 1,600 Satellite Master Antenna TeleVision systems.

Uplink base

Another 13 international satellite broadcasters use Hong Kong as a base to uplink their signals (although they are required to use the facilities of Hong Kong Telecom International (HKTI)), including CNN International, TNT/Cartoon Network, Reuters Asia Ltd, China Entertainment Television Ltd and Chinese Television Network. However, many international media companies, including ESPN, the Disney Channel, the Discovery Channel, CNBC, and National Geographic, have relocated to Singapore, lured by tax incentives and a more lenient regulatory environment (see section IV below).

**HKT IMS—new
technology, new
service?**

The other major player in the broadcast market is the video-on-demand service provided by IMS, a subsidiary of Hongkong Telecom. IMS represents an important strategic development in that it is the first of the new interactive television (*iTV*) systems, and thus it brings technological convergence to the commercial world. *iTV* was launched as the world's first commercial VOD service at the beginning of 1998. By mid-1998, the company had managed to attract approximately 50,000 subscribers, but was witnessing churn rates of about 30-40 per cent.

Quantity or quality?

In the past ten years, the number of television channels available in Hong Kong has increased ten-fold (from four to more than 40) following the introduction of satellite television in 1991 and subscription television in 1993. That number is now set to multiply much further.

According to the Government's calculations "the last drop coaxial cable entering each of the residential premises in multi-storey buildings" has the capacity *now* to be carrying 81 television channels—hence the Government's perceived need to free up this resource.⁷ Requiring Hong Kong Cable to allow other players access to its network, along with the provision to allow the current telephone network licensees to provide television services, means Hong Kong can expect more channels to be transmitted through the existing infrastructure.

⁷ 1998 Review of Television Policy, p.24.

Content and diversity

In addition, the four broadcasting satellite service (BSS) frequencies (otherwise known as Direct-to-Home (DTH)) offered up by the Government could each deliver six channels, thus adding 24 new channels to the menu. And the introduction of digital terrestrial television (DTT), when it happens, is expected to deliver in excess of 20 further channels.

The problem with this scenario is that while the Government will have created the *potential* for diversity through its infrastructure-driven initiative, little has been put in place to stimulate the necessary *content*. In the words of Bruce Springsteen, Hong Kong faces “57 channels and nothing on”.

Film output

A content industry?

Ironically, Hong Kong *should* be in a strong position. It is a major film and audiovisual production center and exporter (Figure 3, left hand side). In 1997, Hong Kong produced 110 films which earned 60 per cent of their revenue from overseas, with Asia accounting for 70 per cent of that share.⁸ However, as Figure 3 (right hand side) shows, the output of the Hong Kong production industry has been declining over recent years.

The forthcoming explosion of channel capacity identified above should be providing the industry with opportunity. And yet the economics of the content industry may well drive developments in the other direction, with mass production and large back catalogues, rather than quality production, in demand. With more demand there will be more space to fill and therefore more ‘filler’ material required. As many in the industry are wont to point out, the *same* TV revenue will now be distributed between a far greater array of providers, leading to a decline in quality and an explosion of ubiquitous mass-produced fodder.⁹ This argument is almost certainly oversold. First, a growth in the number of channels provided will ‘grow the pie’, although by how much remains to be seen. Second, one of the main points of contention in the Government’s television policy initiative has been to address the dominance of TVB — even with the proliferation of channels that has occurred in Hong Kong over the last 10 years, TVB has continued to garner the lion’s share of the audience and of the generated revenue.

"Thirty years ago there was one broadcaster in Hong Kong that had close to 100% market share; 20 years ago there was the same broadcaster in Hong Kong that had about 80% market share; 7 years ago a fourth television operator entered the market as the third competitor at that same time, to offer satellite television and 2 years later (that is 5 years ago) the fourth current operator, namely Wharf Cable, entered the market. Still, as of today, the same broadcaster that had close to 100% market share 30 years ago, about 80% market share 20 years ago, today still has 80% market share."

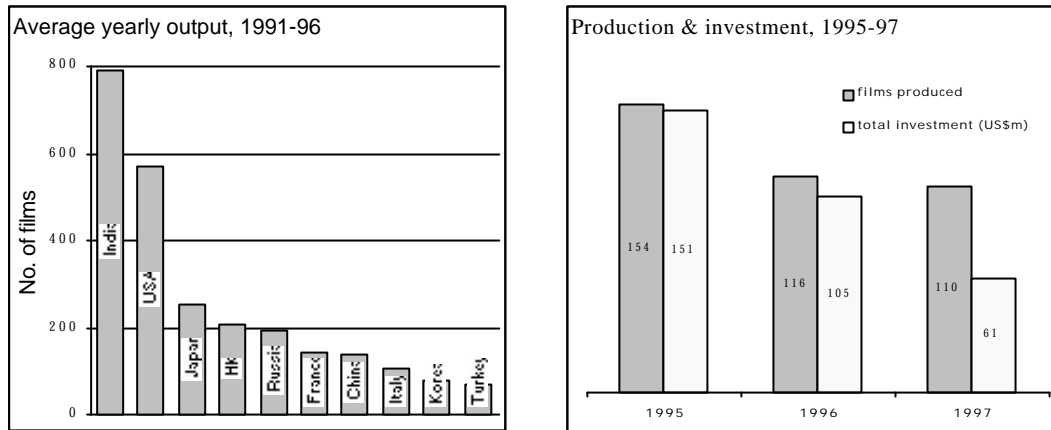
– Stephen Ng, Managing Director, Wharf Cable TV

⁸ This figure was actually comprised of 94 local productions and 16 joint ventures.

⁹ Spain, Eric 1998. “Television Policy: ‘Breadth of choice’, ‘affordability’ and social values – A personal response of a viewer to the consultation paper: The 1998 Review of Television Policy”.

In that period, both its output and its production quality have increased dramatically.

Figure 3: The film production industry: the world's most prolific production territories and Hong Kong's declining production schedule



Source: Screen Digest.

Who's talking?

The point to be made is simply that the lack of reference to the content side of the broadcast industry in the Government's recent policy review represented a glaring omission. Equally remiss was the absence of any discussion of the role of Radio Television Hong Kong (RTHK) or to the role of public service broadcasting, or even to any alternative means of promoting program diversity and customer choice.

What the Government *did* discuss and target for policy intervention was the vertical integration already existent in the market; specifically, that TVB's control of the production market—from actors and artistes through to facilities and distribution—is seen to have given it a stranglehold over the industry. The Government appears to believe that by promoting facilities competition, this form of vertical integration can be undermined. By stimulating alternative areas of distribution, the Government believes that the economics of the industry will change and the terrestrial stations will be unable to continue to "virtually monopolise the television production in Hong Kong".¹⁰ At the same time, the oligopoly enjoyed by the two free-to-air broadcasters is the one aspect of industry that remains free from challenge.

It is our position that without reference to the content industries themselves and an analysis of the economics of the production industry, the Government's view is, at best, naive—and potentially quite disruptive. In the following two sections we examine the assumptions behind the hypotheses of dominance

¹⁰ The 1998 Review of Television Policy, p.19.

and vertical integration. We also posit that the Government may be incorrect in its belief that convergence is leading away from vertical integration.

The Film Development Fund

In his policy address (7 October 1998) the Chief Executive, Tung Chee-Hwa, announced the setting up of a HK\$100 million Film Development Fund in 1999 to facilitate the development of the local film industry and to enhance its competitiveness.

The reasons given by the Government at the time were based upon the "highly competitive global film entertainment business" and "the challenges faced by the local industry in recent years". These include, the intense competition from "high quality mega movies from Hollywood", the more sophisticated taste of audiences and keen competition from high quality videos, laser discs and other home entertainment options. Box office receipts of local films reached an all-time low of \$540 million in 1997, less than half of its peak of \$1,240 million in 1992. For the first time in the history of the Hong Kong film industry, the market share of foreign films (at 53 per cent) had surpassed that of local films in 1997; the figure further increased to 58 per cent during January to September 1998. By way of comparison, at its peak in 1992 local films captured 80 per cent of the market.

On top of this, the Asian market as a whole "will be the focal point for attention in the global film entertainment business" according to the Government. There are therefore opportunities for growth in the film and audiovisual industries. The earlier successes of the local industry have shown that Hong Kong film makers are capable of tapping the lucrative Asian market, but "we need to produce high quality films to capture a larger share of the market".

To maintain the competitiveness of the local film industry, the industry needs to upgrade itself in terms of technological, script writing, shooting, production and other professional capabilities, as well as special skills. To this end, the Film Development Fund is seen as a means to enhance the local film industry's capabilities in pre-production, production and post-production, encouraging more creative productions and stimulating investment.

The Fund will provide funding support to projects which can achieve the following goals:

- to enhance the professional and technological capabilities of the local film industry;
- to improve the professional skills of the industry's workforce;
- to encourage the production of more creative and diversified films;
- to facilitate the industry in the mastering and application of advanced technology so as to enhance the audio and visual effects of films;
- to stimulate further improvement in the quality of local film production and services; and
- to improve the production and operating environment of the industry.

The Government will commit HK\$100 million over five years, from 1999-2000 to 2003-2004, with the actual provision for each year depending upon the number of applications received and the actual expenditure incurred by the approved projects. The Fund will be administered by the Film Services Office (FSO) of the Television and Entertainment Licensing Authority (TELA).

III. Reviewing policy: competition & dominance

Quality the imperative

According to the Government, Hong Kong's long-standing policy towards television broadcasting has been "to widen viewers' choice of quality programming, to ensure television programs meet the diverse needs of society and do not offend public taste and decency, and to enhance Hong Kong's position as a pre-eminent regional broadcasting hub".¹¹

Fair trading

Diversity, as we have seen, is to be achieved through facilities competition; in other words, through the opening up of the telecommunication and broadcasting networks to greater competition. To some extent this makes sense, given that we are entering the 'age of convergence'. But focusing upon the means of transmission to promote change requires that the industry links be thought through and addressed very carefully. From the content side, it is not immediately clear that a pro-competition policy in a market as small as Hong Kong will lead to advanced development. It is even less clear that content development will be promoted by facilities competition. (Technological innovation *may* be promoted; and services costs *may* be lowered; but content *creation* certainly requires additional factors.)

To promote its competition agenda, the Government has gone to great lengths to stress that "the general fair trading rules should apply to all while more stringent rules should apply to the dominant operators".¹² Unfortunately, there are two problems with the Government's position (and hence with its overall strategic objectives). First, there is almost no elaboration on what dominance is or how it be defined. Second, while apparently opening the sector to greater competition, the Government has kept the free-to-air broadcast sector tightly restricted and free from direct competition.

Hong Kong's 'free' channels

Taking the latter of these two points first: we run into another of the Government's unstated assumptions: that the two free-to-air broadcast stations are, in fact, 'free'. As has been noted elsewhere, "the cost of supporting these channels comes from advertising which is paid for by the consumer as a cost on top of goods purchased".¹³ While this is an overly simplistic rendition of the economics of both the advertising and broadcast industries, the point itself is valid.

'Free' TV implies some degree of community services or benefit. Previously this could have been seen to be applicable: the Government collected royalties from the commercial stations which were used (in part) to subsidize the production of RTHK. In

¹¹ The 1998 Review of Television Policy, p.1.

¹² The 1998 Review of Television Policy, p.19.

¹³ Spain, Eric 1998. "Television Policy: 'Breadth of choice', 'affordability' and social values – A personal response of a viewer to the consultation paper: The 1998 Review of Television Policy", p.4.

other words, there was an explicit policy of content creation and quality (as opposed to quantity). However, those royalty requirements have now been removed. Moreover, there has been no discussion in the Government's policy review of the role of RTHK or of independent production.

This in itself is problematic as broadcasting—and broadcasting policy—is about program material. Throughout its history the idea that broadcasting *matters* has been a pervasive and durable one. Hong Kong risks losing sight of the *idea* that broadcasting should serve some notion of the public interest, and not simply be a question of access.

Dominance

The restrictions on the 'free-to-air' segment mean that the factors that have sustained TVB's dominance can be expected to continue to work in TVB's favour as the Hong Kong television market expands: TVB not only collects easily the biggest slice of the HK\$3 billion a year in local TV advertising, it has a vast library of programs, which is increasing by 6,000 hours each year, and which it will be able to rent to other programmers. As one observer has wryly commented, "it appears likely that TVB Jade (TVB's Cantonese-language station) in 2008 might look very similar to TVB Jade in 1998",¹⁴ despite the introduction of facilities-based competition.

As a result of the Government's network focus, market issues have instead arisen in regard to whether and how Hong Kong Cable TV's network should be opened to interconnection on commercial terms. The model apparently being employed is the Office of Telecommunication Authority's (OFTA) success in opening Hongkong Telecom's PSTN and broadband networks to equal access.

In the telecommunication sector, the government's strategy has been to liberalize the industry, regulate against anti-competitive behavior (through a licensing regime, with all licenses carrying anti-competitive clauses), and wait for the market to do the rest. But again, there are two problems. The first is that dominance remains an undefined term. In the telecommunication sector this was less of a problem as the regulator came in with a clear objective to tackle the market dominance of the monopoly supplier and introduce competition.¹⁵ What we have then is a television sector where dominance regulation is focused upon a player, Hong Kong Cable, with five per cent market share, rather than the player with 80 per cent market share.

The second problem with this approach is that the market may not be able to 'do the rest' simply because it is too small. One possible interpretation of the Government's simultaneous review

¹⁴ Gren Manuel (*South China Morning Post*, 25th August 1998)

¹⁵ Hong Kong Telephone Co's (HKTC) services are regulated more strictly than Hong Kong's other fixed networks because HKTC is classified as dominant—it controls so much of the market it can set prices and terms of service free of effective competition. Because of its dominant status, HKTC has special obligations to interconnect with its competitors and must submit its prices to OFTA for approval.

process in September 1998, is that convergence has emerged as a way to foster greater competition and investment in the local network by opening cable TV to telecommunications, and telecommunications to TV.¹⁶

The irony of this policy position is that it not only promotes horizontal integration, it also effectively promotes vertical integration. Although the Government claims to be avoiding vertical integration, its policy platform—*encouraging* the coming together of the infrastructure providers and the service providers—pushes industrial development in precisely this direction. Then again, this may not be so different from the trends that are emerging elsewhere. It is this question upon which we focus in the following section.

¹⁶ Ure, John 1998. "Convergence in Hong Kong" in M.Hukill, R.Ono and C.Vallath eds. *Electronic Communication Convergence: Policy Challenges in Asia*, Sage Publications, New Delhi (forthcoming)

Hong Kong Consumer Council: Competition Advocacy

To be able to address issues of market dominance in a consistent and coherent manner, the Hong Kong Consumer Council has consistently advocated the introduction of a general competition law, along with a competition authority.¹⁷ However, for the immediate future no such body of law is ready to emerge and thus the Government will have to look to specific solutions for specific industries. Consequently, industry regulators such as the Broadcasting Authority will continue to be obliged to act as competition authorities.

As the ambiguity surrounding dominance demonstrates, this is problematic as it requires the Authority to have a vast and broad industrial expertise. The Consumer Council advocates that such responsibilities should be “built into the Authority’s structures and procedures”, and not simply treated as some sort of additional “bolted-on” task. In an industry such as broadcasting, where many issues relate to industries whose scope extends beyond broadcasting itself, such as sports, audio production or equipment provision, the regulatory complexity will expand quite rapidly.

In this light, the Hong Kong Consumer Council has produced a list of four requirements a competition authority—whether general or sector specific—should satisfy:

- Officials responsible for advising on decisions should be sufficient in number and possessed of sufficient experience to gain the confidence of industry;
- The decision making process must be open and transparent and allow complainants and those complained against a fair opportunity to put their case;
- The authority should issue clear guidance to industry to prevent inadvertent breaches of competition regulations;
- The authority should be able to start enquiries on its own initiative and not be limited to acting on complaints lodged by others.

Source: Hong Kong Consumer Council

¹⁷ In November 1996 the HKCC issued a widely discussed report calling for the drafting of a comprehensive competition law, and the establishment of a Competition Authority. Hong Kong’s telecommunications companies were uniformly against the HKCC proposals. Their responses to the report suggested that they preferred *sector-specific* regulation to a general law and authority.

IV. Vertical integration: convergence or dominance?

“An independent television production industry which supports a multi-channel environment in the television advanced countries is absent in Hong Kong. If the present situation where production, programming and transmission are vertically integrated in one single entity were to continue, the development and growth of the convergent industries would be impeded to the detriment of the program producers, program providers, facility service investors, artistes and viewers.”¹⁸

Coming together

Convergence, as we have seen, is the “coming together” of telecommunications, computing, broadcasting and other industries which can deliver goods in a digital form. Convergence can be seen in the way in which the multimedia value chain is changing. As the illustration below shows, previously separate sectors appear more readily able to vertically integrate while simultaneously, converging horizontally.

The business implications of digital convergence are profound, and the mergers and acquisitions process that have played out over the last few years have been breathtaking. They have, however, been anything but conclusive. Twenty years ago, the expectation—and fear—was that digitalization would lead to the emergence of a handful of vertically integrated monoliths that dominated all aspects of the industry.¹⁹ Not only has this *not* happened but, as the above chart demonstrates, the opportunities have been created for specialization as much as they have been created for vertical integration.

With almost all aspects of the traditional broadcast model under challenge, digitalization can, in fact, be seen to have significantly undermined vertical integration. Previously, most of the core aspects of the communications value chain were vertically integrated around specific media. As Mueller has noted, a typical broadcaster “produced most of its own content, assembled outsourced content into a service package, and owned and operated its radio transmitter. Although vertical integration did not extend all the way to the end user’s receiving equipment, this gap was filled by rigid government regulations confining transmissions to specific frequency bands and locations and controlling the characteristics of broadcast terminals.”²⁰

A four-tier framework

Even so, the Hong Kong Government’s policy platform attempts to promote the breaking up of the vertical integration between

¹⁸ The 1998 Review of Television Policy, p.15.

¹⁹ See, for example, Wicklein John 1980. *Electronic Nightmare: the New Communications and Freedom*. New York: Viking Press; Pool, Ithiel de sola 1983. *Technologies of Freedom*. Cambridge: Harvard University Press. For an overview of this issue, see Mueller, Milton 1998. *Telecom Policy and Digital Convergence*. Hong Kong: City University of Hong Kong Press.

²⁰ Mueller, Milton 1998. *Telecom Policy and Digital Convergence*. Hong Kong: City University of Hong Kong Press, p.21.

program service provision and network carriage through a four-tier regulation framework, with different degrees of regulatory oversight applied to each.

At the same time, however, the Government has effectively proposed to *allow* vertical integration between service provision and program supply by removing program suppliers from the category of ‘disqualified persons’ (under the Television Ordinance of controlling a television and VOD program service licensee).²¹ As participants in the consultation process pointed out, this somewhat contradictory stance encourages rather than discourages integration—albeit in a different configuration to previously.

²¹ The government will remove program suppliers and companies transmitting sound and television material from the list of disqualified persons. Previously they were restricted to owning less than 15 per cent of the voting shares of a television company.

The four tiers

- Domestic free television program services. These will remain subject to the heaviest content regulation, and licensing will remain with the Chief Executive in Council because these services “are the most pervasive and universally accessible and exert the greatest influence in society”.
- Domestic pay television program services. Licensing will remain with the Chief Executive in Council and parental locking systems will be required, but given “that subscription is voluntary and is by choice, protection of minors and public morality is more the responsibility of parents than the Government”.
- Non-domestic television program services. Licensing will be devolved to the Broadcasting Authority and subject to much lighter control than free and pay television because “these programs do not primarily target Hong Kong”.
- Other licensable television services. Licensing will be devolved to the Broadcasting Authority, with parental locking systems required for services which “cover small scale, niche or localized TV program services targeting specific viewer groups,” such as hotel guests, foreign nationals living or working in Hong Kong, small residential communities.

In the US (and to a more limited degree, other mature television markets), this process of vertical re-integration has been taken further as the larger multi-system operators (MSOs) have begun investing in content provision (the so-called, program packagers), or content creation. In other words, while content is important, the relative importance of the distribution networks has increased as a result of digitalization and convergence. And with the money lying in the access (networks) the network companies have begun integrating ‘backwards’ to secure the content that they require.

This would appear to suggest that, while the industrial structure of the broadcast system should be as competitive as possible, the Government’s policy approach is focused on an ‘old’ problem (that of technology limitations), and is missing the problems associated with the emerging agenda of convergence.

In fostering the competition necessary to undermine vertical integration, a related problem is the limited production capability that Hong Kong possesses across almost all facets of the information technology (IT) sector. In both absolute and relative terms, Hong Kong a very small IT sector in electronics, telecommunications and broadcast equipment and components. Hong Kong is primarily a user of IT and a consumer of IT services, not a producer. It is in these terms that the debate about convergence will continue to take place in Hong Kong. And this raises problems in developing broadcast network and applications policies into a holistic policy approach. Hong Kong, unlike other economies, has no industrial policy in these national information infrastructure (NII) areas. It is to this development that we now turn.

V. Hong Kong as a broadcast hub

“To promote Hong Kong as a pre-eminent regional broadcasting, information technology and telecommunications hub.”²²

Hong Kong loses its gloss

Hong Kong’s role as Asia’s pre-eminent business and financial hub has suffered in recent years. It has become one of the most expensive cities in the world and, as a result, firms have relocated part or all of their operations to other Asia-Pacific cities in a bid to reduce costs. In the information industries there have been additional concerns relating to the resumption of Chinese sovereignty. In the media industries there has been the further impediment of tight regulatory restrictions. So, can Hong Kong regain its role as a media and broadcasting hub?

Hubbing can be defined as the act of being the transfer point for international traffic between countries or regions. In the information industries this is becoming increasingly important. Apart from traffic-handling arrangements between operators, hubbing can also refer to the development of multinational companies basing their regional or global centres in a country, linked either to headquarters or to regional sub-offices. Hubbing, therefore, is important not only for the development of the specific industry, but also for related industries because of the externalities that accrue. In the case of a strong local broadcast industry, positive benefits accrue to the media production, post-production, film, advertising, financial and information-service industries.

In competition with Singapore

In the Asia-Pacific region, Hong Kong and Singapore are the major regional services cities. They compete in the regional services markets such as banking and finance, and freight and passenger transportation, and much of their recent economic success is based on having attracted the regional headquarters of major multinational firms operating in the region. Rivalry between the two entrepôts has expanded in recent years into the information-based industries, such as communications satellite uplinking, film and video production and regional telecommunications hubs for large firms. This competition is being further intensified as other countries such as Australia, Malaysia, Taiwan and Thailand have begun emerging as competitors in various sectors.

Hong Kong and Singapore have adopted very different industrial approaches. Whereas Singapore is led by government-intervention, Hong Kong has traditionally championed a market-driven approach.

Hong Kong’s regional competitive strength has been that it is the traditional hub of offshore business in East Asia and has regionally-oriented banking and finance, telecommunications and transport industries. Close economic and cultural links with southern China have given its economy a major boost.

²² The 1998 Review of Television Policy, p.14.

Strong foundations

In the broadcast industry, Hong Kong's infrastructure should position it well. It was the world's first city to have a fully digitized local telephone network, and was home to the world's first commercially-available interactive television system. In addition, Hong Kong's media industry has well-developed export markets for Chinese language-films and television series throughout Southeast Asia, and one of the most productive media markets in the world.

Despite these pluses, organizations such as the Cable and Satellite Broadcasting Association of Asia (CASBAA) have been vociferous in their criticism of Hong Kong's restrictive broadcasting policies, arguing that this has worked to Singapore's advantage as the rival regional broadcast hub.

Singapore's proactive policies

The Singaporean government has attempted to attract foreign multinational media firms on the basis of two complementary policy directions. First, the government aims to develop an innovative multimedia market. It plans to build a fibre optic cable infrastructure throughout Singapore by the year 2000 and to promote the adoption of information technologies in schools, colleges and government offices as a part of its Information Technology Plan. To achieve its objective the government is encouraging foreign firms to locate in Singapore so as to help design and provide the software necessary for this infrastructure. Singapore's strengths are its well-developed *business* infrastructure, excellent transport and communications networks, and the pro-business attitude of government. As a 1997 ITU report noted, "Singapore has a considerable head start over its regional rival, Hongkong ... [because of] a difference in government attitude."

The second and complementary part of the Singapore government's strategy is to encourage foreign multimedia firms, in particular satellite program-distributors and post-production facilities, to use Singapore as the regional headquarters for their expansion in Southeast Asian multimedia markets. Singapore's attraction for these HQs is its overall efficient business operations. In particular, the government has been attempting to lure regional headquarters with a combination of tax and investment incentives, a lenient regulatory environment and a simple application and business registration process. As a result, Singapore has emerged as the pre-eminent location for satellite uplinking, media financing and post-production.

Hong Kong vs. Singapore

A tale of two cities	Hong Kong	Singapore
Population	6 million	2.9 million
Gross National Product	US\$142 billion	US\$71.2 billion
GNP per capita	US\$23,650	US\$24,380
Number of households	1.81 million	751,000
Number of "free" channels	4	4
TV Density (per 100 inhabitants)	35.9	36.2
Cable TV subscribers	39,000	110,000
Average pay TV basic monthly rate (US\$)	28.45	23.47
Main telephone lines	3,435,312	1,460,000
Teledensity	57.3%	49.6%
Int'l leased circuits capacity (Mbps)	382.0	NA
Minutes of int'l telephone traffic (outgoing)	1,691,800,000	773,000,000

Singapore's broadband backbone

In January 1998, the Singapore Government announced that 14 key technology players, including IBM, Microsoft, Hewlett-Packard, Oracle, Andersen Consulting and Electronic Arts, were to invest S\$100million (US\$62 million) in a project intended as an island-wide broadband backbone operated by 1-Net Singapore. As noted above, Singapore has successfully striven to become a regional hub for satellite production and broadcasting services. Nine foreign satellite broadcasters are based in Singapore and 11 satellite channels uplink from the island. These operators are not subject to Singaporean restrictions on content or foreign ownership—an ironic, but nevertheless pragmatic, position for a country that does not permit its citizens to receive television signals by satellite.

Hong Kong, by contrast, may be a major center for multinational companies—some 3,500 international companies have a network presence in Hong Kong; with more than 500 of these locating their telecoms hub in the city—but it does not seek to encourage their presence and participation with the same pro-activeness of Singapore.

In terms of convergence, however, Hong Kong's most significant problem has been the inability of Hong Kong policy-makers to take a holistic policy approach to a convergence agenda. This has been best illustrated in Hong Kong's grappling with an NII platform in contrast to Singapore's early adoption of its Information Technology Plan.

VI. A policy-maker's checklist

Central issues for regulations and policy

As has been illustrated throughout this paper, certain development objectives will be mutually incompatible—at least in the short-term. What this means is that, *where* specific objectives are to be met, choices need to be made.

As was pointed out at the beginning of this document, the opportunity to take decisions and implement policy proactively—rather than having to move *reactively*—is something to be seized upon, not shied away from.

Below we provide a checklist of some of the choices and questions which have emerged from the review documents and the subsequent consultation process.

Convergence

Technological convergence

- Is Hong Kong's primary broadcast development focus to be the medium or the message—i.e., the networks or the content?
- How many networks are to be built—one or more? (Network economics and market economics do not necessarily converge at the same time.)
- Do policy-makers wish to promote facilities-based competition or services-based competition?

Business synergies

- Who are policy-makers looking to promote: "national" champions or start-ups?
- Who are policy-makers looking to promote: foreigners or locals? (Does convergence challenge cross-ownership restrictions?)
- Where does the next phase of development lie: market opportunity or market consolidation?

Economic fundamentals

- Where will economic growth and development come from—i.e., are these objectives industry-specific (the broadcast industry) or are they economy-wide (NII benefits)?
- Which industry indicators are being targeted?
- Who will benefit if review objectives are achieved—i.e., higher corporate revenues or lower consumer prices?
- What are the measurement criteria for the broadcast industry: quantity or quality?

Regulatory oversight

- The framework to be employed will champion competition or strategic development?
- Regulatory restrictions will be focused upon information networks or the information itself (i.e., networks or content)?
- Are Hong Kong policy-makers looking to promote 'open' systems (or is there the assumption of a rapid development of network interfaces)?
- What are the timeframes accompanying regulatory restrictions e.g., licenses?

Government role**Content issues**

- Is there a role (or responsibility) for government in providing or funding certain content services (public service broadcasting; community broadcasting)?
- Is the government emphasis on quality or program diversity?
- Are there other, less-tangible benefits to be considered— e.g., cultural development?

Long-term outlook**Industry development**

- What should Hong Kong's long-term strategic orientation be: an NII-focus or pro-competition?
- Is the principal developmental focus economic or technological?
- Should the "free"-to-air broadcast market be opened up to competition?

Incentives**Hong Kong as a media hub**

- What kinds of companies is Hong Kong trying to attract? (Therefore, do what do these companies need?)
- Specifically what incentives are to be offered: tax breaks; world-class facilities; ease of business set-up; a welcoming administration?
- Are policy-makers looking to offer broadly-based economic development (i.e., agglomeration economies) or offshore information hubbing?
- Is the focus to be a "Greater China" hub or an Asia hub?

Overspill to other industries and education**Related industries**

- What impact will vertical integration have on the content and the content production industries in Hong Kong?
- What consideration needs to be given to education in specific industry sectors?
- Which industries benefit from a strong local broadcast industry (e.g., production, post-production, advertising)?
- Which industries aid in the development of the broadcast industry?

Glossary

ATV	Asia Television Ltd.
Broadband	A transmission medium capable of supporting a wide range of frequencies, typically from audio up to video frequencies. It can carry multiple signals by dividing the total capacity of the medium into multiple, independent bandwidth channels, where each channel operates only on a specific range of frequencies.
Broadcast	Point-to multipoint transmission.
BSS	Broadcast Satellite Services, see also DTH
CASBAA	Cable and Satellite Broadcasting Association of Asia
DTH	Direct to Home (satellite services), see also BSS
DTT	Digital Terrestrial Television
HDTV	High Definition Television
HKCC	Hong Kong Consumer Council
ITBB	Information Technology and Broadcasting Bureau
IT	Information Technology
iTV	Inter-active television. A broadband (high-capacity) point-to-point transmission system that provides a subscriber with an upstream link to request a service, such as VOD, and a downstream link to transmit the service.
MMDS	Multipoint Microwave Distribution System
MSO	Multi-System Operator
Narrowband	A channel of radio frequencies below the level of a voice circuit 300Hz to 3,000Hz, typically using transmission speeds up to 100-200 Kbps.
NII	National Information Infrastructure
NVOD	Near Video-on-Demand. A narrowcast service which enables a subscriber to call-up a video for downloading at times set by the service provider (typically every 15 minutes, so a video lasting three hours will require 12 channels).
OFTA	the Office of the Telecommunication Authority
PSTN	Public Switched Telephone Network
RTHK	Radio Television Hong Kong
SMATV	Satellite Master Antenna Television
STAR TV	Satellite Television Asian Region
TVB	Television Broadcasters Ltd
VOD	Video-on-Demand. An interactive service which enables a subscriber to call-up a video of choice from a menu to be downloaded at any time.

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