

## **Hong Kong and Singapore: Two Models of Telecommunications Regulation?**

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### **Abstract**

This paper examines how telecommunications regulation in Hong Kong and Singapore has evolved since the 1970s and in particular, how the boundaries between the telecommunications and broadcasting sectors have been increasingly blurred as the two cities have responded to technical convergence. By analysing the telecommunications regulation development in Hong Kong and Singapore, this paper argues that technological convergence has not necessarily led to identical models of telecommunications regulation. Rather, the authors demonstrate the differences existing in the areas of sector-specific regulation, multiple regulators and competition law, in spite of the fact that in recent years, the government role has become increasingly similar in these two Asian cities.

Keywords: Telecommunications, regulation, Hong Kong, Singapore

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## 1. Introduction

Technological convergence, in the form of digitalization and integration of communications services, has increasingly emerged as a global phenomenon in the communication industries (Mueller, 1999). Although over the past decade it has been regarded as a buzzword lacking clear definition (OECD, 1992, Lind, 2004), technological convergence has, nevertheless, become one of the most important driving forces transforming the global communications landscape with an unprecedented speed and scale and, according to Western thinking, representing the crux of the information society. (Marsden & Verhulst, 1999)<sup>1</sup> Some scholars have defined technological convergence as an advancement of digital technologies which would eventually lead to the elimination of borders across industries and to various forms of market convergence (Fransman, 2000; Lind, 2004). Within the telecommunications sector, the perception of technological convergence has been equally diverse since many operators have used the concept to describe a variety of changes taking place in technology, service, industry structure and government policy without really understanding its exact meaning (Nystrom, 2007).

However, the OECD (1992) defined technological convergence as a continuing process which includes technological integration, content integration, the creation of new services, and subsequent organizational and 'cross-sectoral' convergence. These technological changes have resulted in the blurring, or even breakdown, of natural boundaries separating the telecommunications, broadcasting and internet industries.

Alongside these changes at the levels of technology and industry, scholars are also concerned with the implications for government policy and regulation. Some studies (Mueller, 1997; European Commission 1997) have predicted that a

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<sup>1</sup> See for example, Marsden, Chris & Verhulst, Stephaan (1999) *Convergence in European Digital Television Regulation*, UK: Blackstone Press Ltd., p.xxv and several discussion papers published by European Commission.

convergence of communications industries creates regulatory problems and policy conflicts because communications regulations in many countries are still under 'sector-specific' models in which telecommunications and broadcasting operators are regulated under different principles, policies and laws.

With this ongoing development on technological convergence, studies have envisaged that the developed countries will move towards a greater policy harmonization in the long run especially under the forces of international competition, globalization, regional integration and the deregulation of domestic economies on national structure (Ohmae, 1991, OECD, 1992, KPMG Report, 1996, Berger & Dore, 1996, European Commission, 1997, Drucker & Gumpert, 2000). Technological convergence has, therefore, acted as the 'push' factor while the promise of an information economy was the 'pull' factor which has encouraged the nation-states to take 'pro-active' steps to remove all regulatory barriers in order to facilitate a complete convergence of the communications industries (European Commission, 1997; OECD, 2001). Those people holding an optimistic view have argued that nation states will formulate similar policy objectives and responses when dealing with similar policy issues (Narula 1998:101; Presner 1991: 153). As Levy(1999:123) has pointed out, even developed jurisdictions count on the policy directives of the more powerful nations, that is, international best practices, and international cooperation, having foreseen that telecommunication liberalization will also extend to the wider communication sector.

However, Humphreys & Simpson (2005) argued that the nature and direction of regulatory change are only major 'dependent' variables that are subject to the influence of various 'independent' variables like the state policy towards liberalization, state responses towards international regulatory competition and the presence of 'intervening' variables such as strong regional institutions like the European Union

which actively promotes a ‘harmonized’ European regulatory response to the challenge of technological convergence.

This topic of regulatory harmonization is worthy of exploration because several questions are relevant: firstly, how did different places interpret and respond to the phenomenon technological of convergence? Secondly, has regulatory harmonization occurred in such Asian cities as Singapore and Hong Kong? Thirdly, what aspects of the regulatory regime of these two cities places have converged and what other aspects have remained separate?

In attempting to answer these questions, this paper compares and contrasts the policy responses of these two Asian cities in dealing with the regulatory issues arising from technological convergence. While certain issues of policy assimilation have arisen and the regulatory gap between the two places has become narrower than before, we argue that technological convergence has not led to an overall policy harmonization or an identical mode of regulatory paradigm. Rather, technological convergence needs to be negotiated with the special political, economic and social conditions of the two cities.

Hong Kong and Singapore invite comparison as both are free-trade centres with ‘pro-market’ characteristics in their economic systems. Having similar size and population, both are former British colonies, sharing an English tradition of law and public administration but with a predominantly Chinese population. Without any natural resources to count on, these two ‘Little Asian Tigers’ needed to integrate deeply with the world economic system and respond swiftly to the global market. Moreover, both cities were hard hit by the Asian Financial Crises of 1997 and 1998, during which they faced similar pressures to join the global bandwagon of information technology development in order to ‘revitalize’ their economies. The regulatory challenges posed by technological convergence were particularly relevant

here as both cities needed to revamp their regulatory regimes to promote the development of an information society (Burdon, 2006). They thus faced similar pressures of liberalization and de-regulation of local communications markets in order to remain competitive in the global economy.

However, these cities also represent two 'ideal' but different types of government-market relationship: one favors minimal government intervention and the other prefers high-handed government involvement because of different governance styles and political traditions. In other words, Hong Kong is executive led and enjoys access to a high degree of information, whereas Singapore is characterized by an authoritarian regime with a tight control of information flow (Rodan, 2004). As a result, it will be interesting to contrast their divergent responses in dealing with similar global techno-economic challenges.

Despite these differences, the two cities, as already indicated, are close to each other economically. They are both trading partners as well as regional competitors<sup>2</sup>. As the former Singapore's Consulate General in Hong Kong once stated, Singapore would see how Hong Kong dealt with governance problems, and, in turn, Hong Kong would keep a close eye on how Singapore tackled regulatory issues. Thus few significant policy and legislative changes took place without cross-reference being made (Metcalf, 1998).

Thus, the development of telecommunications regulation in Hong Kong and Singapore in the convergent era can be analyzed under four headings: the role of government, multiple regulators, sector-specific regulation, and general competition law since all these four dimensions are under strong pressure of reform. As argued by the globalisation theorists, liberalization and de-regulation along these dimensions,

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<sup>2</sup> For example, the fight for the ownership control of the previous incumbent telecom operator, Hong Kong Telecom was one remarkable open rivalry between these two cities. See The Editorial (2000) *Hong Kong Economic Journal*, 8<sup>th</sup> March, p.1(in Chinese)

are regarded as ‘international best practice’ by the ‘pro-active’ regional institutions like the already quoted European Commission (1997) when dealing with technologies and market convergence. Therefore, jurisdictions concerning international competitiveness in the telecommunication industries will embrace similar degrees of regulatory harmonization. We will therefore use these four areas in a comparative analysis of the regulatory reforms undertaken in these two Asian cities.

## **2. Comparison of telecommunications regulation in Hong Kong and Singapore**

### **2.1 Background**

In order to enhance international competitiveness in the early 90s, the Hong Kong government started to introduce regulatory reforms to its telecommunications sector. However, these reforms were very piecemeal and lacked a long-term vision so at this stage, no comprehensive regulatory reform of technological convergence was undertaken. This could be attributed partly to the lack of commitment on the part of the colonial government in planning for the ‘post-1997’ development. As a result, changes only took place after the handover to the new Hong Kong Special Administrative Government who realized that the city lagged behind other Asian cities. A series of reforms was then promulgated to deal with technological convergence. Like its Singaporean counterpart, the major regulatory problems faced by the Hong Kong telecommunications sector were the abolition of monopolies, the promotion of competition and the enhancement of international competitiveness.

In contrast, the Singapore government had followed a more long-term plan in developing IT and telecommunications industries by closely observing international development trends in information technologies. Described by some as the ‘nanny state’, the Singapore government is always conscious of its long-term

economic development because of its lack of natural resources. Having identified the business opportunities arising from technological convergence, they, therefore, actively combined the IT and telecommunication sectors, and yet maintained tight control over its broadcasting sector. As early as the 1990s, the Singapore government had already initiated a project to build up a National Information Infrastructure (NII), in order to turn the country into an 'Intelligent Island' which would maintain its competitive edge and enable the integration of IT investments in telecommunications, broadcast capacities and computerization.<sup>3</sup> As a result, the telecommunication sector in Singapore has entered the 'express-lane'<sup>4</sup> of market liberalization.

#### 2.2.1. The Changing role of the Hong Kong Government

According to Burdon (2006), government plays a very important role in formulating appropriate policies to facilitate genuine media and market convergence. However, the question arises as to whether national governments are willing to relinquish their control over communications regulation in the process of harmonizing with the global information economy (McChesney et al 1998:12-20; Mueller, 1997:5). In the case of Hong Kong, the development of telecommunications regulation represents a classic case of a government changing from a 'passive' approach to an active role. Up to 1990, paraphrasing Curran's term, the Hong Kong government adopted, a 'strategy of having no strategy' (quoted in Collins & Morina, 1996). Its telecommunications policy at that time exhibited four characteristics: 'act after problems arise', 'look for reference from abroad', 'wait for suggestions from private sectors' and 'trust the work to ad-hoc working parties' (Lee, 1992). All these

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<sup>3</sup> Lim, K (1992) 'Computer Links for All in 15 Years.' *Strait Times Weekly*, Overseas Edition, April 4, p.1.

<sup>4</sup> Refer to the IDA 1000. p.25.

characteristics reflected the prevailing 'positive non-interventionist' philosophy (Lethbridge, 1984).

The first encounter the Hong Kong government had with technological convergence came in 1985 when it undertook a comprehensive review of the local broadcasting industry. The Broadcasting Review Board (BRB) eventually recommended the introduction of subscribed cable television services on the top of the existing free-to-air terrestrial television services. The BRB also recommended that this new cable television network should carry a telephony service (Broadcasting Review Board Report, 1986). In effect, this meant that the introduction of an alternative telecommunications carrier would break up the monopoly of the local public-switched telephone network (PSTN) of the Hong Kong Telephone Company (HKTC), a subsidiary of Hong Kong Telecom (HKT).

This BRB recommendation immediately found favour with the Hong Kong government. According to John Ure (2000), the idea of using technological convergence to kill two birds with one stone – competitive entry into both the broadcasting and telecommunications markets – was appealing. The Government therefore commissioned a report on its workability by the Consultants Booz Allen and Hamilton (BAH). The report was completed in 1988, and it recommended the breaking up of the existing telecommunications network monopoly. (BAH: 1988)

However, this early attempt to introduce competition in the telecommunications industry through technological convergence was not without its critics. For example, Wise (1993) argued that the introduction of competition into the existing telephone network would be wasteful, causing unnecessary disruption, and would eventually lead to higher tariffs.

In spite of such opposition, the Hong Kong government pushed ahead with the licensing of the cable television services. Originally, there were two bidders:

Hutchvision, a leading bidder headed by property tycoon Li Ka Shing and Hong Kong Cable Communication (HKCC) consortium, headed by Sir Y K Pao, a shipping magnate in the territory. Hutchvision finally withdrew its bid at the later stage of the competition for a variety of reasons: there was a last minute disagreement with the Government over the terms of the licence; there was already a shift of interest from cable television to satellite television and probably the June 4 Tiananmen incident was a factor.

Eventually, the remaining player, HKCC, was granted 15-year licences for both Cable Programme and Cable Network in August 1989. Under the two Licences, HKCC was required to build a cable distribution network. However, eight months later the government granted another satellite TV licence to Hutchison, which also announced the beaming of programmes to Hong Kong. HKCC cried foul and lobbied the government to ban satellite services but failed to do so. The consortium finally abandoned its plan to set up cable TV with a second telecommunications network in the late 1990.<sup>5</sup> This ended the first unsuccessful convergence episode initiated by the Hong Kong government.

Why did it fail? What the episode demonstrates was the lack of a clear policy goal within the government itself and its inability to balance the interests between competing consortiums in pursuit of new media technologies. At that time, their primary concern was to enhance market efficiency by creating a new cable network in order to create competition artificially. This lack of clear vision and understanding by the Government of the overall development of communications strategy led to indecision in policy making and resulted, as Wise (1993:5) points out, in a lost opportunity to promote network convergence. This indecision also reflected

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<sup>5</sup> Refer to Yu, L (1990) 'Pao cancels cable TV for Hong Kong after satellite shock.' *The Times*. November 17, 1990.

the strong lobbying forces of vested interests, further compounded by the lack of official research into the experience of telecommunications technology and precedents in other countries notwithstanding the apparent enthusiasm of government for network convergence.

Even after such a failure, the Hong Kong government still pursued the introduction of new communications technology as well as competition into the local telecommunication and broadcasting markets. They commissioned the same consultant firm, Booz Allen & Hamilton, to prepare a second report. This time, the government regressed to a separate licensing model by issuing one Subscription Television Broadcasting Licence to Wharf Cables in 1993, and three new Fixed Telecommunications Network Services (FTNS) licences to Hutchison Global Communications Limited, New World Telecommunications Limited and Wharf T& T Limited in 1995. As Mueller (1997:94) asserts, the government reaction to dealing with the emerging communications technologies was to draw arbitrary lines along the markets in order to protect existing operators' interest. So instead of facilitating the convergence of communications technologies, the government merely adopted the role of a market mediator. Schoenfeld (1993:1) attributed this early failure to inadequate expert knowledge, the lack of long-term vision of colonial policymakers and, as already indicated, the incumbent operator's intensive lobbying in the government-initiated regulatory reforms. She therefore supported Wise's view that despite technical viability, the final separation between the cable television and the second telecommunications network reflected the Hong Kong government's compromise with political and economic interests and showed that the market was playing a more crucial role in shaping government policy direction, for the latter was 'indecisive and opaque'.

However, with the advent of convergent communications technologies and

global competition in the telecommunications sector, the government realized the urgency for a 'pro-active approach' to end the monopoly of Hong Kong Telecom. Thus, under the FTNS licences issued in 1995, there was no clear restriction on the provision of switching services or use of other technology, but they restricted the licensees from providing telecommunication services which were the subject of an exclusive licence. In this regard, as far back as the early 1980s, the government had granted a licence to give Hong Kong Telecom the exclusive right to operate such telecommunications services as international gateway facilities and a real-time voice public switched telephone service ('HKTI Licence'). As a result, this HKTI Licence impacted on the range of services allowed under the FTNS Licenses because legal uncertainties arose as to what telecommunications services provided by the FTNS Licensees would, or would not, be in breach of the HKTI Licence. With a view to clarifying such legal ambiguities, the Telecommunications Authority issued a statement in April 1996 entitled 'The Interpretation of the Exclusivities of the Hong Kong Telecom International' in order to make clear that the interpretation of language in the HKTI Licence would not be expanded to embrace new technologies and service concepts. Consequently, new telecommunications technologies and services could be developed legally in Hong Kong without breaching the licence, thereby paving the way for the erosion of the monopoly of Hong Kong Telecom. The government subsequently negotiated with Hong Kong Telecom for an early termination of the HKTI Licence before its legal expiration in 2006. Eventually, it was terminated in March 1998 with the government paying HK\$6.7 billion as compensation. This, then, marked the end of Hong Kong Telecom's monopoly of local telecommunications industry.

The change of sovereignty and the subsequent Asian Financial Crisis in the 1990s heightened the Hong Kong government's awareness of its role in promoting the

information economy. So rather than adhering to a ‘market-driven’ approach, the government started actively to provide a favourable business environment and regulatory conditions actively to attract foreign investment. Shortly after the change of sovereignty, Mr. Tung Chee Hwa, the first Chief Executive of the Hong Kong Special Administrative Region proclaimed his vision to make Hong Kong a leader, and not a follower, in the information world of tomorrow. In 1998, he further emphasized the importance of using information technology to help Hong Kong retain its competitive edge and to drive its overall economic expansion. To this end, in April 1998, the Hong Kong government therefore set up a new Information Technology and Broadcasting Bureau (ITBB) which was headed by the Chief Secretary of the Hong Kong Special Administration, a top civil servant, to lead and co-ordinate the development of telecommunications, broadcasting and information technology. Four months later, to assist the work of the ITBB, the government established an Information Infrastructure Advisory Committee. In November of the same year, the government also released a comprehensive policy paper called Digital 21 Strategy. Since then, the Digital 21 Strategy has become the blueprint for the development of information technology in Hong Kong, and it is revised and updated on a regular and ongoing basis. In October 2006, the government released a Consultation Paper on the further revision of the Digital 21 Strategy (Hong Kong SAR Government, 2006b). In this latest Consultation Paper, the government advocated the establishment of a unifying regulator for the converging communications sectors and the consolidation of the existing telecommunications and broadcasting regulations into a single piece of communications regulation. These ‘pro-active’ measures exemplified the Hong Kong government’s desire to follow the best international trends and practices and develop a convergent information infrastructure covering broadcasting, telecommunication and information technologies. Clearly, therefore, the government is prepared to

replace the existing regime of communications regulation with an entirely new regulatory model in order to promote the development of the communications industries.

### 2.2.2. The controlling role of Singapore Government

Unlike the Hong Kong government which traditionally relied on market initiatives in the development of its communication industries, the Singapore government has been consistently innovative in reforming its information and telecommunication industries. The government has long adopted both a 'pro-active' approach and a 'long-term' strategy to develop telecommunication infrastructure and technologies, making it one of the earliest countries to turn information technologies into a national project (Sussman and Lent, 1991). In fact, during the 1980s, Singapore devoted much of its efforts to developing its telecommunication infrastructure.

In 1986, the Singapore government launched a national information technology (IT) plan to develop a strong export-oriented IT industry for the purpose of improving the 'productivity and competitiveness in all sectors of the economy' (Singapore Economic Bulletin, 1987). The top priority of this plan was a continuing upgrade of the telecommunication infrastructure (Singapore Straits Times, 1987). Since then, Singapore has consistently continued to place high priority on developing a 'hi-tech' telecommunication infrastructure: for example, Singapore's national and international telephone networks were planned to be fully digitalized by 1994 (Corey, 1993).

In late 1989, Singapore became the first country in the world to have a nationwide state-of-the-art Integrated Service Digital Network (ISDN) (Tan and Soh, 1994). This was an important information infrastructure for the provision of convergent services because it possessed the capacity to carry voice, video and data

communication. In addition, Singapore also formulated plans to develop a broadband ISDN service, a high power convergent network capable of providing a bundle of value-added services.

The speed and scale of technological convergence was then further accelerated during the 1990s as the government launched the project of National Information Infrastructure (NII). This project aimed to maintain Singapore's competitive edge and enhance the integration of IT investments in telecommunications, broadcasting capacities and computerization (Lim, 1992). In addition, the National Computer Board of Singapore initiated the IT2000 plan, with the objective, as indicated earlier, of turning Singapore into an Intelligent Island (Tay, 1990).

Therefore, the idea of technological convergence has gone through several stages. In the early stage, it addressed some innovative ideas or value added services developed by the computing or the telecommunications industries or a combination of the two. For example, when the *Televue* Service, an advanced photo-video system (Singapore Strait Times, 1990), which had been tested for nine years and combined the television and telecommunication technologies, finally reached commercial application in Singapore, it was regarded as one of the most important achievements of technological convergence in the late 1980s.

When Singapore developed the nationwide ISDN network, the world's first digital communication network, the understanding of technological convergence changed. The optical fibre network was considered a milestone in Singapore's telecommunications history (Straits Times, 1989). Here, technological convergence was narrowly defined as a project for national development, that is, an information infrastructure network (NII) that was no different from other public utilities. The narrow band ISDN showed the technical capability of merging voice and non-voice

information services, enabling Singapore to stay abreast of advanced communication technology.

In the late 1990s, the meaning of technological convergence changed again as different kinds of information technologies demonstrated similar convergent functions. The connotation of technological convergence was embedded in two important national projects, the Singapore ONE and the Infocomm 21 respectively. Singapore ONE (One Network for Everyone) was a continuation of the IT2000's vision to develop a nationwide information infrastructure to meet the challenges of the forthcoming information-based economy. In Fang's terms (1999), it was a high-speed, high-capacity, interactive, multimedia connection to homes and offices for the delivery of multiple services such as video-on-demand and e-commerce activities (as quoted in Loh et al., 2000). In contrast, the Infocomm 21 embraced the ambitious vision of turning the whole nation into an information society.

This change from convergent technologies to convergent network and subsequently to an information society reflects Singapore's changing perceptions of the economic value and scope of technological convergence, as well as the urgency of developing such an infrastructure. Of course, such changes in conception were not made by Singapore alone, but during the second half of the 1990s, they coincided with the global change in 'market and state' relationship in other developed countries.

It was following the Asian Financial Crisis in 1997 and 1998, when the economy was hard hit by economic recession, that Singapore accelerated the regulatory reforms for its information economy which caused a relaxation of media and information control (Roydan 2004). Subsequently, in January 2000, Singapore suddenly announced that it would proceed to full liberalization of its telecommunications sector on 1 April, two years earlier than scheduled (IDA, 2000). Identifying the need to lure foreign investment, Singapore at the same time lifted all

restrictions on foreign ownership in public telecommunications services and agreed to compensate the two fixed line licensees, Starhub and Singapore Telecomm. This was widely known as the 'Big Bang' in the Singapore telecommunications sector. As one can see, it was a policy measure similar to that adopted by Hong Kong in more or less the same period.

Therefore, in spite of financial crisis, the Singapore government demonstrated their role as a 'pro-active' initiator in the information economy and it has proceeded apace, characterised over the years, by efforts to strike a balance between opening up its network and infrastructure and maintaining a tight control over its broadcasting and media content. In the process, its regulatory approach to the telecommunication sector has changed from one of 'protectionism' to the other end of 'liberalization'. This is obviously a result of technological pull (technologies change, shift of market interest, 'inter-sectoral' competition and so on) and globalization push (pressure from international bodies like the WTO, the presence of foreign investment, and the opportunities of information economy etc). In addition, in order to remain competitive in the international economy, the Singaporean government has developed long-term plans to strengthen its telecommunication sector so as to turn the country into a telecommunications hub (Joyce, 2001).

In summary, the Singapore government over a long period of time has consistently played an active role in reforming its telecommunications sector in response to technological convergence. In contrast, it was only after the handover of sovereignty from the United Kingdom to the People's Republic of China that the Hong Kong government took a 'pro-active' approach.

### 2.3 Multiple regulators

The communications industries in both Hong Kong and Singapore have

adopted the British traditions of multiple regulators as their model. These regulators were a common practice in government regulation when industries were divided according to technological or institutional categories. However, in a convergent era, this model may not be sufficiently flexible to cater for further convergence and consequent market integration. It may also cause difficulties in promoting competition (UK, 1998). Indeed, some advanced countries like the United Kingdom have revamped their regulatory model into a single regulator which can take a broader view of the converging sectors and which can also respond flexibly to the emerging new services and provide a consistent regulatory approach to different communications industries.

### 2.3.1 Hong Kong's multiple regulator model

In Hong Kong, the regulator in the telecommunications sector is the Telecommunications Authority, while the Broadcasting Authority is the regulator for the broadcasting sector, inherited, as indicated above, from the U.K. when Hong Kong was still a British colony. After the handover of sovereignty in 1997, the Hong Kong government reformed the regulatory framework and in 1998 established one new policy bureau for communications, namely, the Information Technology and Broadcasting Bureau. Since then, the new bureau has overseen and co-ordinated the activities of the two existing communications regulators, the Broadcasting Authority and the Telecommunications Authority. However, these have remained separate regulators under the new structure (Figures 1 and 2 below).

Figure 1: Original regulatory framework of communications industries in Hong Kong

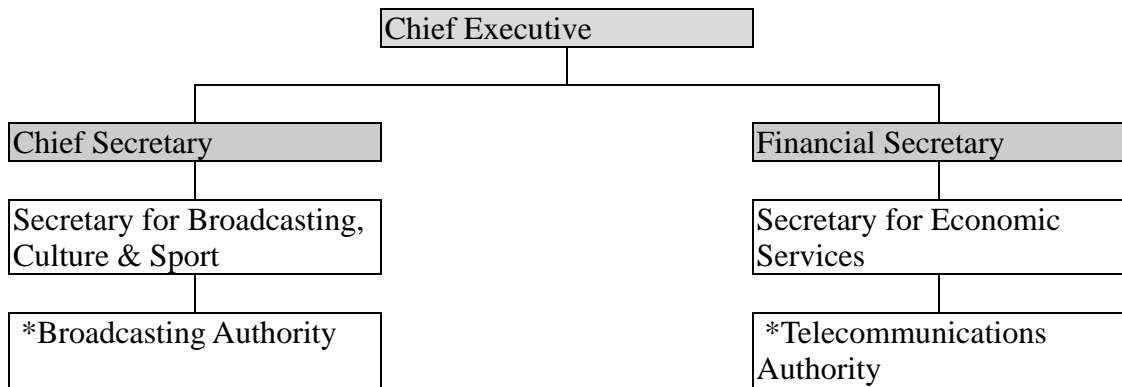
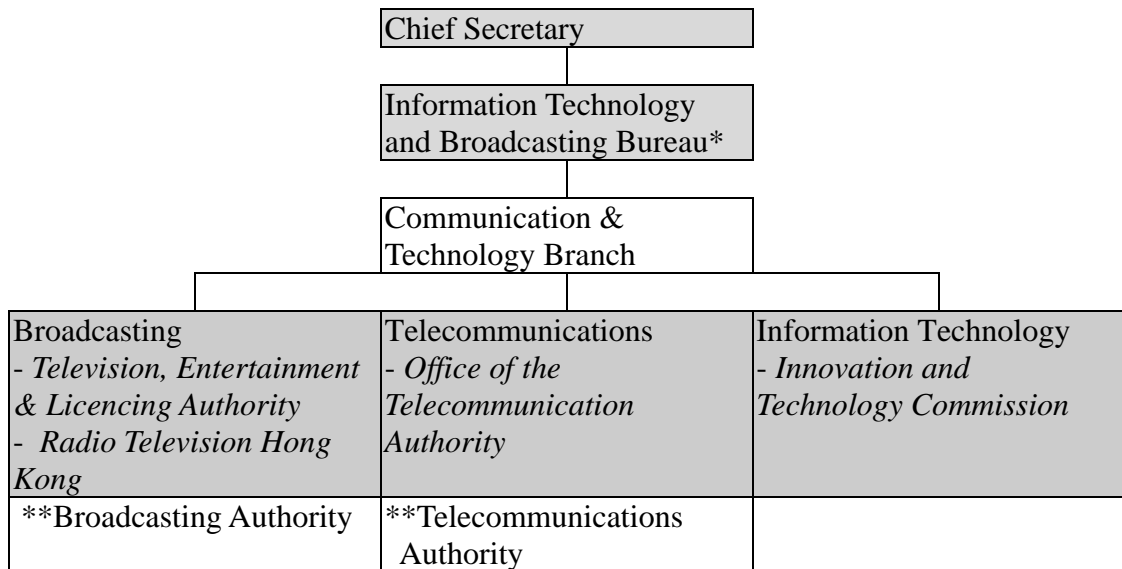


Figure 2 'Restructured' regulatory framework



\* This was renamed Commerce, Industry and Technology Bureau in 2004

\*\* Statutory regulatory bodies

However, starting from March 2004, the Hong Kong government reviewed the appropriate regulatory arrangement for its communications sectors in the era of convergence. As referred to earlier in Section 2.2.1, in March 2006, the government released a Consultation Paper giving the reasons for the establishment of a unified regulator to be called the Communications Authority. The call for this authority came as a result of technological and market developments in the communications sectors

which created a need for fair competition in a converging market. This could provide ‘one-stop-shopping’ and regulatory consistency leading to operational synergy and efficiency. In addition, the Paper defined the public mission of the new authority as the promotion of consumer interests, fair competition, and innovation and investment in the industry. Another key mission was to uphold the freedom of speech with core values as ‘open and transparent, fair and consistent, and engaging and supportive’. Overall, the ultimate objective was to ‘maintain a vibrant communications sector to enhance Hong Kong’s competitive advantage as a communications hub in the region’.

Once the legislation for establishing the Communications Authority will be tabled before the local Legislative Council, Hong Kong will join the United Kingdom, its former sovereign power, in establishing a unified regulator for the entire communications sector akin to the OFCOM.

### 2.3.2 Singapore’s multiple regulator model

Like Hong Kong, Singapore had also adopted a model of multiple regulators for its communications sectors. Starting in the late 1990s, however, technological convergence forced Singapore to rethink a more holistic approach towards regulating its communications sectors. In March 1999, the Finance Minister made an initial announcement of the likely merger of the National Computer Board of Singapore (‘NCB’) and Telecommunications Authority of Singapore (‘TAS’) due to the overlap of functions and duties between these two authorities. Two months later, the Cabinet resolved to proceed with the merger proposal. The Ministry of Communications was renamed the Ministry of Communications and Information Technology (MCIT) and a new office, the Infocomm Development Authority (IDA) was established in December, 1999, only half a year from the initial announcement.

The speedy merger of NCB and TAS was the Singapore Government’s swift

policy response aimed at maintaining an effective regulatory structure for developing the communications industries. The establishment of the IDA symbolized the country's aspirations to develop fully the telecommunications and other industries. The first project announced by IDA was the 'Infocomm 21', which, as indicated previously, was to be a step towards making the country the leading 'infocomm' capital for the global economy. One major goal of 'Infocomm' was the promotion of an Interactive Broadband Multimedia (IBBMM) industry, that is, another technological convergence project to develop lower access costs, new IBBMM and new media services, as well as promoting broadband usage to high-rise commercial and industrial buildings (Joyce, 2001:233-4).

In a way, the structural integration between NCB and TAS was no different from the establishment of Information Technology and Broadcasting Bureau in Hong Kong. However, in the case of Singapore, the new IDA was both a regulator and promoter of its communications industries. Traditionally, a regulator should keep a distance from the industry in order to uphold fair play or arbitration between different competitors. By staying too close to the industry, it may be easily lured away from maintaining objective judgment. On the other hand, a promoter needs to collaborate intensively with the players in order to involve them both locally and abroad. *Prima facie*, such dual functions should bring intrinsic conflicts but the newly established IDA found these two roles to be complementary rather than clashing with each other. This was understandable because historically both the NCB and TAS performed a role that was more promotional than regulatory. In any event, the combination of regulatory and promotional roles in the IDA was unique; no similar institution or agency existed in Hong Kong.

#### 2.4. 'Sector-specific' regulatory regime

Just as with their multiple regulator models, both Hong Kong and Singapore also inherited from the U.K. a 'sector-specific' regulatory regime for its communications sectors. In Hong Kong, the telecommunications sector was regulated by the Telecommunication Ordinance, while the Television Ordinance governed the broadcasting sector up to 2000. In that year, the government substantially revised the telecommunication regulation and introduced a new Telecommunications Ordinance. In the same year, the Television Ordinance was repealed and replaced by a new Broadcasting Ordinance.

The emergence of satellite television in the telecommunications market in the 1990s first exposed the weakness of such a 'sector-specific' regulatory regime. As Mueller (1997) pointed out, the 'sector-specific' regulatory system, based on analogue technology, found itself increasingly ineffective in the wake of rapid technological development. In 1988, the first regional Asia satellite consortium was formed in Hong Kong. At that time, satellites were mainly in the realm of telecommunications sector and governed by telecommunications regulation. On 26<sup>th</sup> June 1990, Hutchison, a major telecommunication operator, formally announced its launch of a regional satellite television service (Lee, 2001:237) and asked the Hong Kong government to grant an appropriate licence. However, the government discovered that it has no such legal power either under the telecommunications or the broadcasting regulations. As a result, the Hong Kong government had to revise its broadcasting regulation to cater for satellite television services but in the meantime, it issued a 'Satellite Television Uplink and Downlink Licence' to Hutchison under the telecommunications regulation as a matter of administrative expediency. This incident aptly demonstrated the ineffectiveness of the 'sector-specific' regulatory regime in dealing with new communications services such as satellite television services.

The second incident demonstrating the inadequacy of the 'sector-specific' regulatory regime was the introduction of video-on-demand services in Hong Kong. As early as the 1980s, the Hong Kong Telephone Company ('HKT'), the then incumbent telecommunications operator, started to secure its foothold in the second network. It formed a cable television consortium and pressed the government to permit its expansion into cable television. By the early 1990s, the HKT had started to explore a new service called the Video-On-Demand (VOD), which is a digital technology providing an interactive television programme through the telephone network and combining the characteristics of both telecommunications and broadcasting services. Since it was the first of its kind in the world, there was a hot debate in the local communications industries as to whether such a hybrid technology should be regarded as broadcasting or telecommunications services and whether the VOD services should be regulated by the telecommunications or broadcasting regulator. What is more, Wharf Cable Limited ('Wharf'), a local company providing a cable television service, and a competitor of HKT, regarded the VOD service as a threat to its business. Thus, when the government granted its approval to HKT to conduct a commercial trial of the VOD service, Wharf took the matter to court and the case of *Wharf Cable Limited v The Attorney General and Hong Kong Telephone Company Limited* (High Court Action No.1493 of 1995) became a landmark decision in Hong Kong telecommunication regulation.

In that case, Wharf argued that the VOD service was within the ambit of the definition of 'broadcasting' under the broadcasting law and therefore needed a licence under the legislation. Wharf also asserted that the VOD service should not be exempt from licensing as a 'subscription television broadcasting service' under the law, as it was not a transmission of television programmes made available only 'on a point-to-point basis'. However, the Hong Kong court rejected both arguments.

On the first issue, the court held that the fundamental difference between television and the VOD service was that in the former, television programmes were transmitted simultaneously. As the VOD service was not transmitted 'simultaneously to the general public', the court held that it did not fall within the definition of 'broadcasting'. On the second issue, the court held that the words 'point-to-point basis' simply meant 'from one point to another, in contrast to one point to multi-point', and therefore the exemption regarding a 'subscription television broadcasting licence' in the broadcasting law was applicable to the VOD service.

The *Wharf* decision in effect meant that VOD services did not fit into the existing categories of broadcasting services stipulated under law and therefore did not need a broadcasting licence. The Hong Kong government found such a situation unacceptable, and so it acted swiftly to salvage the 'sector-specific' regime by amending the law and introducing a new category of broadcasting services called 'programme service', which covered 'point-to-point transmission', such as VOD services. Thus, although the *Wharf* decision rendered the VOD service virtually unregulated by the broadcasting law, the legal uncertainty was eventually resolved by legislative amendments.

The VOD case thus exposed the problems of the Hong Kong 'sector-specific' regulatory regime. In fact, many new communications services, such as the VOD service, do not fit into the traditional categorization of communications services. Rather, they straddle the telecommunications and broadcasting sectors and cannot be regulated effectively by a 'sector-specific' regime. Moreover, a 'sector-specific' regulatory regime creates unintended market distortions by failing to treat new communication services on the same footing as existing communications services of a similar nature.

As discussed earlier, by March 2006, the government consultation paper had proposed the establishment of the Communications Authority, a unified regulator for the communications industries. The Paper also proposed a review of the existing 'sector-specific' regulatory regime legislation and its subsequent consolidation into a unified communications regulation. The government also promised to 'harmonize' the existing competition regimes in the 'sector-specific' telecommunication and broadcasting regulations to create a single regime that would be applicable to the entire communications sector. Clearly, Hong Kong was now moving away from a 'sector-specific' regulatory regime to a converging regulatory regime, a trend appearing in such overseas jurisdictions as the European Union and the United Kingdom.

Similar to Hong Kong, the Singapore communications sectors were governed by 'sector-specific' regulations. The telecommunications sector used to be regulated by the Telecommunication Authority of Singapore Act 1992, which was repealed in 1999. Instead, Singapore adopted two new pieces of legislation: the Information Development Authority Act 1999 (IDA, 1999) and the Telecommunications Act 1999. The IDA Act 1999 established the IDA, while the Telecommunications Act became the new telecommunications regulation in Singapore. The broadcasting sector was regulated by the Media Development Authority (MDA) which was set up in January 2003 in response to the increasingly convergent media environment by merging three existing organisations - the Singapore Broadcasting Authority, the Films and Publications Department, and the Singapore Film Commission under the parent ministry, Ministry of Information and Arts (MITA). However, the structural dichotomy between telecommunications and broadcasting sectors remained in the regulatory regime.

Notwithstanding such regulatory dichotomy, Lee (2000) observed that the

telecommunications and broadcasting regulators co-operated closely to avoid any regulatory gaps arising from the 'sector-specific' regulatory regimes. For example, the cable television provider in Singapore is required to hold both a broadcasting and telecommunications licence as an 'infrastructure operator'. As a result, the competition rules which regulate the telecommunications licences under the Telecommunications Act become applicable to the cable television provider. In a similar vein, video-on-demand has been classified as a 'licensable broadcasting service'.

Therefore, while Hong Kong is moving towards a consolidation of the telecommunications and broadcasting regulations into one unified communications regulation for the communications sectors, Singapore has not made similar moves to reform its 'sector-specific' regulatory regime. It remains to be seen whether the country will follow Hong Kong in adopting a unified regime.

## 2.5. Competition policy and law

While the former Secretary for Information Technology and Broadcasting, K. C. Kwong (2000) said competition was a key policy issue for the Hong Kong government in dealing with the challenges of convergence, the government resisted the introduction of a general competition law throughout the 1990s, despite the calls from the local Consumer Council and overseas governments. However, in 2000, the government was prepared to enact a 'sector-specific' competition regulation in the form of the Telecommunications Ordinance, which incorporated many competition law concepts such as 'anti-competitive practices', 'abuse of position', and 'misleading or deceptive conduct' to regulate the local telecommunications sector. But, the legislation proved ineffective in regulating 'anti-competitive' conduct caused by

companies which were not telecommunications operators, and so not regulated by the 'sector-specific' Telecommunications Ordinance.

As Wu and Leung (2000) argued, a general competition law should be introduced in Hong Kong for two reasons. Firstly, as the process of technological convergence continues, cross-media acquisitions and mergers would intensify the development of media conglomerates in Hong Kong. The problem of unfair competition would continue to rise as it would be increasingly difficult for small players in the communications industries to compete because the conglomerates, with their cross-media networks and huge financial resources, were able to use many 'anti-competitive' practices to squeeze out small players from the markets. Such problems of unfair competition therefore could only be dealt with by a general competition law. Secondly, such a law will promote a better regulatory environment for the communications industries because the law will be applied to all operators on a 'non-sector-specific' basis.

In his first policy speech on October 2005, Mr. Donald Tsang, the second Chief Executive of Hong Kong, promised to review competition policy and in particular, to consider the adoption of a general competition law in Hong Kong, which indicated that the government was more receptive to the idea. Since then, the government has conducted a public consultation on the subject which ended in February 2007. In March, 2007, the government released the results of its consultation. These indicated that the majority of views favoured the introduction of a general competition law (Wen Wei Po, 2007), which therefore makes it likely that Hong Kong will proceed to adopt one similar to that of other developed countries.

In comparison with the experience in Hong Kong, Singapore adopted a general Competition Act in 2004, taking effect in 2006. However, the process towards

this had begun back in 2000, when Singapore introduced a ‘sector-specific’ competition regulation for its telecommunications sector in the form of a Telecommunications Competition Code. The latter was substantially revised in 2005, putting more emphasis on market forces and industry self-regulation as the means of regulating competition in the telecommunications sector. For example, the telecommunications operators were encouraged to resolve their disputes through negotiations or alternative means of dispute resolution. However, IDA still played an important role in monitoring those market segments with limited competition. For example, IDA would ensure the accessibility of those ‘essential facilities’ for competition to competing players while striving for a balanced facilities-based competition. In addition, the definition of ‘dominant licensee’ was revised to reflect control over telecommunications facilities that are costly or difficult to replicate, or that have the ability to restrict output or raise prices above competitive levels (Tan, 2005).

### **3. Comparing Telecommunications Regulation in Hong Kong and Singapore: Some Observations**

In attempting to compare the different policy responses to technological convergence and regulatory issues in the telecommunications sector adopted by the governments of Singapore and Hong Kong, our central hypothesis has been that national telecommunication policy decisions reflect the political, economic and social priorities of different jurisdictions. Thus, the imperative of technological convergence will not necessarily lead to regulatory convergence, i.e., identical regulatory mode and paradigms, as evidenced by the regulatory experiences of the two places. The interaction of technology and policy change can have multiple configurations, depending on the balance between the market and the national interests, socio-cultural norms and the political process, telecommunication and media players’ profitability

and so on (Burdon, 2006).

A brief comparison on the policy responses of these two Asian cities also demonstrates that regulators are conscious of and responsible to the worldwide technological trend. Though their policy approaches cannot be viewed as 'radical', both of them have made substantial changes in their policy directions, reflecting their eagerness to cope with a new competition environment in the global information economy. Hong Kong and Singapore represent two ideal types of government-market relationship: one favors minimal government intervention and the other prefers high-handed government involvement. Although both of them recognize the need to adopt a 'pro-active' approach in promoting information economy, these two governments give different interpretations on technological convergence: Hong Kong chooses to eliminate all the barriers between broadcasting, telecommunications and information technology while Singapore deliberately merges the telecommunications and information technology sector, while leaving out the broadcasting sector from such integration. In the regulatory structure, both of them have modified the multiple regulator model by developing new unified regulators amongst different sectors. Concerning the 'sector-specific' regulatory regime, Hong Kong will take a more radical approach by attempting to replace the regime with a unified communications legislation. The discrepancies between Hong Kong and Singapore in the adoption of a general competition law also exemplify a different degree of policy harmonization. Although both cities integrate closely with the global economy, their divergent policy outcomes reflect the fact that in Singapore government intervention and policy autonomy are particularly obvious in the political sensitive areas, i.e., the broadcasting and the content media.

It is also worth mentioning here the 'four-phase' convergence continuum model developed by Burdon (2006) to conceptualize the varying degrees of impact of

digital convergence on policy and regulation of different Asian jurisdictions. Under Burdon's model, Singapore was classified in the second phase of 'duopoly competition' while Hong Kong was categorized in the fourth phase of 'convergence competition'. Consequently, in Burdon's scheme, Hong Kong is more advanced than Singapore in terms of converging communications services and regulation.

In a nutshell, Hong Kong's regulatory experience represents a close proximity to complete convergence in platform, services, devices and industries after proactively removing all regulatory barriers to facilitate convergent network. In contrast, Singapore moved to telecommunication liberalization with caution and restriction in order to protect the incumbent players in which the Singaporean Government has direct investment interests. Her heavy regulation in media content and deliberate exclusion of the broadcasting sector from the convergent network also suggests that there is no 'one-size, best-practice' regulatory model that can be universally applied (Burdon, 2006), particularly under divergent governance ideologies.

#### **4. Conclusions**

There is no doubt that technological convergence has caused significant changes in government policy and regulation of the telecommunication sector in the past decade. However, in technically advanced Asian cities like Hong Kong and Singapore, it has not necessarily led to an identical model of telecommunication regulation as predicted by the 'global' theorists discussed at the beginning of this article.

Despite the fact that both places will compete with each other to turn into a regional telecommunications hub, they remain different in their approaches and attitudes towards 'sector-specific' regulatory regime, multiple regulators and general

competition law. Singapore is more progressive in the area of competition law as it has introduced both a general Competition Act and a 'sector-specific' Telecommunication Competition Code, while only a 'sector-specific' Telecommunications Ordinance exists in Hong Kong. On the other hand, Hong Kong is moving faster than Singapore towards the adoption of a single regulator and unified regulation for both the telecommunications and broadcasting sectors. However, as the two governments are both adopting a 'pro-active' role, it is likely that they will increasingly resemble each other in their model of telecommunications regulation in the long term convergence process. The experiences in Hong Kong and Singapore demonstrate that few jurisdictions integrating into the global economy could be immune from the impact of technological convergence and global competition on the information economy. Even governments with different ideologies would need a certain degree of policy harmonization. This phenomenon could be best explained by such 'new institutionalism' concepts like isomorphism (Orru et al 1991:361), which predicts that institutions may become more similar by copying from each other when faced with increasing competition dynamics (DiMaggio & Powell, 1991:66). Both Hong Kong and Singapore respond to trends predicted by isomorphism, as evidenced by their increased harmonization of regulatory policies in competing to become the regional satellite broadcasting hub, info-communication centre and telecommunications synergy. Nevertheless, both countries still respond in their own way to technological convergence as witnessed in the case of Singapore, who has proactively joined the convergent bandwagon without sacrificing control, especially over the political function of broadcasting media.

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**Reference:**

- Berger, Suzanne & Dore, Ronald (Eds.)1996. *National Diversity and Global Capitalism*. Ithaca and London: Cornell University Press.
- Booz, A. H., 1988. *Telecommunications Development in Hong Kong: A Report for the Hong Kong Government* (February)
- Burdon, Steve (2006) 'The convergence continuum model: a framework for analysing regulatory reform in Asia Pacific.' In Richards, E, Foster, R and Kiedrowski, T. (eds.) *Communications the Next Decade*. UK: Ofcom(Office of Communication).
- Collins, R., Murrioni, C., 1996. *New Media, New Policy*. Cambridge: Polity Press.
- Corey, K., 1993. Using Telecommunications and Information Technology in Planning an Information-Age City: Singapore. In Bakis, H., Abler, R. and Roche, E. (Eds.) *Corporate Networks, International Telecommunications and Interdependence*, London: Belhaven Press, pp. 49-76.
- European Commission. 1997. *Green Paper on the convergence of the telecommunications, media and information technology sectors, and the implications for regulation*. Brussels: Com (97)623.
- Fransman, M., 2000: Convergence, the Internet and Multimedia: Implications for the Evolution of Industries and Technologies. In Bohlin, E., Lundgren, A. & Thorngren, B., (Eds.) *Convergence in Communications and Beyond*, North Holland, Amsterdam.
- Hon, S. S., 1972. *Singapore: Economic Pattern in the Seventies*, Ministry of Culture, Singapore, p.23.
- Hong Kong Broadcasting Review Board, 1985. *Report of the Broadcasting Review Board*. Hong Kong: Government Printer

- Hong Kong Chief Executive, 2005. *Policy Address 2005*. Hong Kong: Government Printer.
- Hong Kong SAR Government, 2006a. *Public Consultation on the Establishment of the Communications Authority*. Hong Kong: Government Printer.
- Hong Kong SAR Government, 2006b. *Public Consultation on Digital 21 Strategy*. Hong Kong: Government Printer
- Humphreys, Peter and Simpson, Seamus, 2005. *Globalisation, Convergence and European Telecommunications Regulation*. Cheltenham, UK. Northampton, MA, USA: Edward Elgar.
- IDA, 2000. Full Liberalization of Telecommunications Market. In *Policy Digest*, Issue 04/00.
- Joyce, M., 2001. Singapore. In Cunningham, R., (Ed.) *The Deacons' Guide to Telecommunications in Asia*. Hong Kong: Asia Law & Practice, a division of Euromoney Publications (Jersey) Ltd.
- Jussawalla, M., Cheah, C. W., 1983. Towards an information economy: the case of Singapore. In *Information Economics and Policy* 1, 161-176.
- KPMG, 1996. *Public Issues Arising From Telecommunication and Audiovisual Convergence, Summary Report*. Available at:  
< <http://www.ispo.cec.be/infosoc/promo/pubs/exesum.html> >
- Kwong, K. C., 2000. 'The Convergence of Telecommunications and Broadcasting. A speech was made in January 11, 2000. Available at  
< [www.info.gov.hk/itbb/english/speecj/pr11012000a.ht](http://www.info.gov.hk/itbb/english/speecj/pr11012000a.ht) >
- Lee, C. C., 2001. Beyond Orientalist Discourses: Media and Democracy in Asia. *The Public* 8 (2), 7-20.
- Lee, P., 1992. Regulatory Issues in the Communication Policy of Hong Kong. In Lofstrom, M.D., Wedmeyer, D.J., Eds. Proceedings of the 14<sup>th</sup> Annual Conference of Pacific Telecommunications Council. Hawaii, Honolulu: Pacific Telecommunication Council, 696-704.
- Lethbridge, D. G., 1984. *The Business Environment of Hong Kong*. Hong Kong: Oxford University Press
- Lim, K., 1992, April 4. Computer links for all in 15 years. *Strait Times Weekly*, Overseas Edition, p.1
- Lind, J., 2004 Convergence, History of Term Usage and Lesson for Firm Strategies in *Proceedings of 15<sup>th</sup> Biennial ITS Conference*, Berlin.

- Loh, C. M., Ang, P. H., Hukill, M., 2000. Singapore's Digital Environment. In Hukill, M., Ono, R., Vallath, C., (Eds.) *Electronic Communication Convergence: Policy Challenges in Asia*. New Delhi, Thousand Oaks, London: Sage Publications.
- Metcalf, T., 1998, August 9. Friendly Rivals on Mission to Rejuvenate Asia. In the *South China Morning Post*, p.8.
- Mueller, M. L., 1997. *Telecom Policy and Digital Convergence*. The Hong Kong Economic Policy Series. Hong Kong: City University of Hong Kong Press
- Nystrom, A., 2007: What is Convergence? Perceptions from the Finnish telecommunications Sector, in *proceedings of the 18<sup>th</sup> European Regional ITS Conference*, Turkey.
- OECD, 1992. *Telecommunications and Broadcasting: Convergence or Collision*. Information Computer, and Communications Policy Series #29, Paris: OECD
- Rodan, Garry, 2004 *Transparency and Authoritarian Rule in Southeast Asia*. London and New York: RoutledgeCurzon.
- Schoenfeld, S., 1993. Liberalization in Hong Kong's telecommunications policy – opportunities for international investment. A speech delivered at the IIR Conference on Telecommunication De-regulation in Hong Kong, 29<sup>th</sup>-30<sup>th</sup> April 1993. Hong Kong: Institute for International Research.
- Siew, A., 2006, June 21. Multi-billion dollar IT plan unveiled: 80,000 new jobs, PCs in all homes among its aims. *The Straits Times* (Singapore).
- Sussman, G., Lent, J., 1991 (Eds.) *Transnational Communications: Wiring the Third World*. Newbury Park, London & New Delhi: Sage Publications
- Tan, A., 2005, February 15. IDA changes rules to boost competition; the regulator will strengthen its role in segments with limited rivalry. *The Business Time* Singapore.
- Tan, Y. S., Soh, Y. P., 1994. *The Development of Singapore's Modern Media Industry*. Singapore: Times Academic Press.
- Tay, E. S., 1990. Opening Speech of Singapore Infomatics '90, National Computer Board, Singapore, p.4
- UK Department of Trade and Industry and UK Department of Culture, Media and Sport. 1998. *Regulating communications: Approaching Convergence in the information age*. London: HMSO, CM 4022.

- UK Department of Trade and Industry and UK Department of Culture, Media and Sport. 2000. *A new future for communications*. Available at: <http://www.communicationswhitepaper.gov.uk>.
- Ure, J., 2000. Convergence in Hong Kong. In Hukill, M., Ono, R., Vallath, C., (Eds.) *Electronic Communication Convergence: Policy Challenges in Asia*, Chapter 6, pp.148-176.
- Wen Wei Po, 2007, March 20. *Wide consensus on a general competition law* at p.A12.
- Wise, H., 1993. How are developments in national telecommunications policy affecting Hong Kong – future policy and regulatory change. A speech delivered at the IIR Conference on Telecommunication De-regulation in Hong Kong, 29<sup>th</sup>-30<sup>th</sup> April 1993. Hong Kong: Institute for International Research.
- Wu, R., Leung, G. 2000. Media Policy and Regulation in the Age of Convergence – the Hong Kong experience. *Hong Kong Law Journal*(30), 454-475.