



Hong Kong: IPTV

Fanny Chau
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Summary

Television is a substantial market in Hong Kong, with an estimated subscriber base of almost 2.23 million households (100%). There are hundreds of TV channels broadcasting in a range of languages, including Free-to-Air commercial channels, pay TV channels and a variety of Free-to-Air satellite channels. Broadband IPTV technology is being widely adopted by licensed TV operators because Hong Kong has one of the world's best telecommunication infrastructures, which makes Broadband IP network available at a very reasonable price. More importantly, the Hong Kong Government's digital policy, which aims at enhancing Hong Kong's position as a regional technology and broadcasting hub is also a major driving force for IPTV. Currently, there are 878,000 IPTV subscribers, representing a household penetration rate of nearly 40%, surpassing the number of traditional CableTV subscribers. Spending on IPTV (revenue from service subscribers, hardware and equipment investment by operators) in Hong Kong is estimated at US\$ 78 million in 2007. Local industry players foresee that IPTV subscribers will continue to grow in the next few years, as the IPTV technology become more mature and the price drop.

Market Demand

Hong Kong TV Market Overview

With more than 2.23 million households (100%) tuning in to television broadcasts on a regular basis, television is a significant feature of life for people in Hong Kong. There are over hundreds of domestic and regional TV channels broadcasting in a range of languages, including Free-to-Air commercial channels, pay TV channels and a variety of Free-to-Air satellite channels. Under the Hong Kong Broadcasting Ordinance, there are 4 categories of television program services:

- **Domestic Free TV Program Services:** domestic free television program services are intended or available for reception by more than 5,000 domestic premises free of charge in Hong Kong and primarily target Hong Kong.
- **Domestic Pay TV Program Services:** refers to television program services, which are intended or available for reception by more than 5,000 domestic households or hotel rooms in Hong Kong on payment of a subscription and primarily target Hong Kong.
- **Non-Domestic TV Program Services:** Non-domestic television program services do not primarily target Hong Kong.
- **Other Licensable Television Program Services:** refers to television program services targeting an audience of not more than 5,000 domestic households or hotel rooms.

Licensed TV Services Companies in Hong Kong

TV Services	Company	# of Channels	Transmission Technology
Domestic Free Programs	(1) Asia Television Limited (ATV)	2	UHF Broadcasting
	(2) Television Broadcasts Limited (TVB)	2	UHF Broadcasting
Domestic Pay Program	(1) Hong Kong Cable Television Limited	100	Hybrid fibre-coaxial & Broadband IP Broadband IP Satellite & Broadband IP Broadband IP
	(2) PCCW Media Limited	115	
	(3) TVB Pay Vision Limited	46	
	(4) Hong Kong Broadband Network Limited (HKBN)*	87	
Non-domestic Services	(1) Starbucks (Hong Kong) Limited	1	Satellite
	(2) Turner International Asia Pacific Limited	1	
	(3) China Entertainment Television Broadcast Limited	1	
	(4) i-CABLE Satellite Television Limited	2	
	(5) Pacific Century Matrix (HK) Limited	10	
	(6) Skywave TV Company Limited	24	
	(7) Auspicious Colour Limited	1	
	(8) Phoenix Satellite Television Company Limited	2	
Services For Reception Outside Hong Kong Only	(1) Starvision Hong Kong Limited	25	Satellite
	(2) TVB Pay Vision Limited	36	
	(3) Turner International Asia Pacific Limited	4	
	(4) APT Satellite TV Development Limited	31	
	(5) Pacific Century Matrix (HK) Limited	2	
	(6) Sun Television Cybernetworks Enterprise Limited	1	
	(7) Skywave TV Company Limited	11	
	(8) MATV Limited	1	
	(9) Phoenix Satellite Television Company Limited	1	

Source: Hong Kong Broadcasting Authority

Remark: * Hong Kong Broadband Network is not listed as a Domestic Pay Program Services provider under Hong Kong Broadcasting Authority's statistics because the company does not operate under a broadcasting license.

There are two licensees under the domestic free TV program services, namely TVB and ATV, each broadcasts 2 free-to-air channels. Currently, these free-to-air channels currently are using analogue UHF broadcasting but the two broadcasters are required by the Hong Kong Government to launch Digital Terrestrial Television (DTT) by 2007.

Under the Pay TV Program Services License, all four existing licensees are using Internet Protocol Television (IPTV) delivered by broadband connection. Broadband IP network is being widely adopted by licensed operators because Hong Kong's telecommunication infrastructure is among the world's best, which makes it cost effective to adopt the IPTV technology. More importantly, the Hong Kong Government's digital policy, which aims at enhancing Hong Kong's position as a regional technology and broadcasting hub is also a major driving force for the take off of IPTV.

Driving Force for the Growth of IPTV

In an effort to promote Hong Kong as a regional technology and broadcasting hub, the Hong Kong Government issued a new Broadcasting Bill in January 2000 to provide a licensing and regulatory framework for the liberalized TV industry and convergence technologies. A key issue was the separation of “transmission” and “provision” of TV program services. The bill has removed investment restrictions so that a television program service provider may hire any transmission network operators to transmit its service instead of investing heavily in transmission infrastructure itself. For instance, one of the Pay TV operators, TVB Pay Vision distributes its programs through Hutchison Global Communications, which is a broadband IP network service provider. This arrangement has facilitated market entry and healthy competition. It has also encouraged converging technologies, which have changed the landscape of the Hong Kong TV market.

Prior to the liberalization of the Pay TV market in 1999, there was only one licensed Pay TV operator in Hong Kong, Hong Kong Cable Television (HKCTV). The Pay TV market was officially opened for bid in 2000, leading to its expeditious development and increasingly fierce competitions for market share. To maintain its competitiveness, operators are constantly looking into ways to improve their program contents, as well as adopting technologies that will improve the service quality of their services while lower the operating cost at the same time. IPTV, has become one of the broadcasting technologies that has been well adopted by TV operators because it offers a cost effective and timely solution as Hong Kong’s telecommunication infrastructure is readily available at a very reasonable price.

There are currently 179 Internet Service Providers (ISPs) licensed to provide broadband services. Broadband Internet access services are readily available in all commercial buildings and households at a very reasonable price. According to the latest statistics, there are over 1.74 million households registered with broadband internet accounts in Hong Kong, representing a penetration rate of 78%. This offers a great platform for the launching of IPTV services. Currently, there are 878,000 IPTV subscribers, representing a penetration rate of nearly 40%.

Market Data

Estimated No. of Registered Broadband Internet Access Customer Accounts

End of Year	Households	Offices	Others	Total
2007 May	1,657,675	146,871	10,648	1,815,194
2006 Dec	1,594,690	139,339	10,391	1,744,420
2005 Dec	1,507,176	129,918	11,315	1,648,409
2004 Dec	1,370,056	108,371	6,059	1,484,486
2003 Dec	1,134,041	90,611	5,955	1,230,607
2002 Dec	915,517	70,623	2,975	989,115
2001 Dec	--	--	--	623,302

Source: The Office of the Telecommunications Authority Hong Kong

Note : Broadband Internet access refers to services with downloading speed of 1 Mbps or above using cable modem, ATM (asynchronous transfer mode), ADSL (asymmetric digital subscriber line), DSL (digital subscriber line) or other technologies.

Broadband, Pay TV & IPTV Statistics (End of December 2006)

No. of Households	2,233,800
No. of Broadband Subscribers	1,744,420
Broadband Penetration Rate	78.1%
No. of PayTV Subscribers	1,684,000
PayTV Penetration Rate	75.4%
IPTV Subscribers	878,000
IPTV Penetration Rate	39.3%

Source: The Office of the Telecommunications Authority Hong Kong

Broadband & PayTV Subscribers of Major Telcos at Dec 2006

Company	Broadband Subscribers	PayTV		
		Subscribers	APRU/month	Usage of IP
HKBN	227,000	120,000	US\$19.23-	All IP
iCable	328,000	786,000	US\$26.00-	Partial IP
PCCW	1,117,000	758,000	US\$17.95-	All IP
Satellite	N/A	20,000	--	Non-IP
Others	72,420	--	--	N/A
Total	1,744,420	1,684,000		

Source: The Office of the Telecommunications Authority Hong Kong

Remark: APRU = Average revenue per user

Best Prospects

The best prospects for IPTV market in Hong Kong are:

- 1) System & Application Infrastructure
- 2) Set-Top Box & Technology
- 3) Middleware
- 4) Testing & Monitoring Equipment
- 5) Content Providers

Key Suppliers

Company	Products/Services	Origin	Website
Amdocs	Billing System	US	http://www.amdocs.com
Amino Communications Ltd.	Set Top Box	UK	http://www.aminocom.com
Araneo Ltd.	Set Top Box	Israel	http://www.araneo.com
Backspace Communications	System, Software, Middleware, Set Top Box	US	http://www.backspace.tv
Beijing Digital Transvideo Technology	System, Software, Set Top Box	China	http://www.transvideo.com.cn
Broadstream Communications, Inc.	System, Software, Middleware, Infrastructure	US	http://www.broadstream.com
Calis Inc	System, Software, Middleware, Infrastructure	US	http://www.calis.com
CASCADE Limited	System, Software, Middleware, Infrastructure	Hong Kong	http://www.cascade-limited.com/
Celrun Co. Limited	Set Top Box	South Korea	http://www.celrun.com
Cisco Inc	System, Software, Middleware, Infrastructure	US	http://www.cisco.com
Complete Media Systems	Set Top Box	UK	http://www.completemediasystems.com
Comverse Technology, Inc.	Billing System	US	http://www.comverse.com/
Eagle Broadband, Inc	Set Top Box	US	http://www.eaglebroadband.com
Envivio Inc.	Set Top Box	US	http://www.envivio.com/
Go2Sports Inc.	Content Provider	US	http://www.go2sports.tv
Harris Corporation	System, Software, Infrastructure; Testing	US	http://www.broadcast.harris.com/television/iptv/
Homechoice	Content Provider	UK	http://www.homechoice.net
Humax Inc.	Set Top Box	South Korea	http://www.humaxdigital.com
InfoEQ Co., Ltd.	Set Top Box	South Korea	http://www.infoeq.com
JumpTV Inc.	Content Provider	US	http://www.jump.tv
MatrixStream Technologies Inc.	System, Software, Middleware, Set Top Box	US	http://www.matrixstream.com
Netgem	Set Top Box	French	http://www.netgem.com
Pace Micro Technology Plc.	Set Top Box	UK	http://www.pacemicro.com
Seachange International	System, Software, Middleware, Infrastructure	US	http://www.schange.com
StreamTel Group	System, Set Top Box	Italy	http://www.streamtel.com
SysMaster Corporation	Billing System	US	http://www.sysmaster.com/
TANBERG Television	System, Software, Middleware, Infrastructure	US	http://www.tandbergtv.com
Tektronix	Testing Equipment	US	http://www.tek.com
Telechemy Inc	Testing Equipment	US	http://www.telchemy.com/
Tilgin AB	Set Top Box, Home Gateway	Sweden	http://www.tilgin.com
UTStarcom, Inc.	System, Software, Infrastructure	US	http://www.utstar.com/Solutions/Broadband/IPTV/
Video/Imaging DesignLine	Set Top Box Technology	US	http://www.videsignline.com
ViDeOnline Inc.	System, Software, Middleware		http://www.videonline.com
Visioneering Corporation	Set Top Box	US	http://www.visioneeringcorp.com
Wegener Communications Inc	System, Set Top Box	US	http://www.wegener.com
Wisembed	Set Top Box, Home Gateway	South Korea	http://www.wisembed.com

Prospective Buyers

The prospective buyers for IPTV technology and content in Hong Kong are:

1) Wireline Fixed Telecommunication Network Services

Wireline Fixed Telecommunication Network Services Operators are early adopter of the IPTV technology. The IPTV technology provide an additional revenue streams for them as their operating costs will be significant lower than operators who does not have their own infrastructure and has to lease it from a service provider. Currently, four out of the top five Wireline Fixed Telecommunication Network Services Operators that account for more than 90% of Fixed Network market in Hong Kong already provide some kind of IPTV or PayTV services to the public. A list of Wireless Fixed Telecommunication Network Services Operators is attached below.

Wireline Fixed Telecommunication Network Services Operators	Broadband	PayTV
PCCW-HKT Telephone Limited	Y	Y
Hutchison Global Communications Limited	Y	Y
Wharf T&T Limited / Hong Kong Cable Television Limited	Y	Y
New World Telecommunications Limited	Y	N
Hong Kong Broadband Network Limited	Y	Y
Towngas Telecommunications Fixed Network Limited	N	N
CM TEL (HK) Limited	N	N
TraxComm Limited	N	N
HKC Network Limited	N	N

2) 3G Mobile Network Services

3G Operators in Hong Kong are providing MobileTV services to their subscribers. They are potential user of IPTV technology in their MobileTV application infrastructure.

3G Mobile Services Operators
Hong Kong CSL Limited
Hutchison Telephone Company Limited
SmarTone 3G Limited
PCCW Mobile HK Limited

3) Licensed TV Services Companies

Licensed TV Services Companies are usually technology neutral and are willing to use all various technologies including IPTV technology to extend their services coverage. For list of Licensed TV Services Companies, please refer to table under section B (Market Demand).

Market Entry

U.S. IPTV technology and content providers who are interested in capturing the market opportunities in Hong Kong can either work directly with local TV operators or through local agents or distributors. Working with agents and distributors in Hong Kong is very much like working with an agent in the United States. Hong Kong has no special legislation regarding agents and distributors. Virtually anything that both sides can agree to and can put into a written contract is acceptable and enforceable, including restrictions on territory and a

grace period for termination of the agreement.

Accessing the China market through a Hong Kong agent/distributor with a sound track record in China trade can help U.S. firms, particularly small and medium enterprises (SMEs) succeed in China. After trading with the PRC for over 50 years, many Hong Kong firms have developed a particular expertise in selling to China and have set up offices in key cities such as Beijing, Shanghai, and Guangzhou. Many Hong Kong firms also cover the Macau market.

Market Issues and Obstacles

The Hong Kong Government's policy is neutral to any technology. TV companies can choose any technologies they see fit to provide TV and IPTV services.

Trade Events

2007, May 21-22
IPTV World Congress and Exhibition 2007
<http://www.zr-international.com>
Shanghai Ever Bright Exhibition Centre

2007, June 19-22
CommunicAsia 2007/BroadcastAsia2007
<http://www.communicasia.com>
<http://www.broadcast-asia.com/>
Singapore Expo

2007, September 10
IPTV Evolution 2007
<http://www.iptvevolution.com>
Los Angeles Convention Center, CA, USA

2007, October 4-6
IP Comm Asia 2007
<http://www.ipcommasia.com>
Taipei World Trade Centre Exhibition Hall 2

2007, November 28-30
Interactive Local Media 2007 (ILM:07)
<http://www.kelseygroup.com/ilm2007>
Hyatt Century Plaza Hotel
Los Angeles, California

2007, December 5-7
IPTV World Forum Asia
<http://www.iptv-asia.net>
Suntec Hotel, Singapore

2008, March 12-14
IPTV World Forum 2008
<http://www.iptv-forum.com>

Olympia, London
2008, March 17-20
FILMART (Hong Kong International TV & Film Market)
<http://www.hkfilmart.com/>
Hong Kong Convention & Exhibition Centre

2008, March 17- April 6
Hong Kong International Film Festival (HKIFF)
<http://www.hkiff.org.hk/>
Hong Kong Convention & Exhibition Centre

2008, May 20-22
IPTV Expo, CeBIT Australia 2008
<http://www.iptvexpo.com.au/>
Sydney Convention & Exhibition Centre,
Darling Harbor, Sydney, Australia

Resources & Contacts

Commerce and Economic Development Bureau of Hong Kong SAR
<http://www.cedb.gov.hk/ctb/eng/new/index.htm>

Hong Kong Broadcast Authority of Hong Kong SAR
<http://www.hkba.hk/en/index.html>

The Office of the Telecommunications Authority (OFTA) of the Hong Kong SAR
<http://www.ofta.gov.hk/en/index.html>

Invest Hong Kong of Hong Kong SAR
<http://www.investhk.gov.hk>

Film Services Office (FSO)
<http://www.fso-tela.gov.hk>

Television and Entertainment Licensing Authority
<http://www.tela.gov.hk>

For More Information

The U.S. Commercial Service in Hong Kong can be contacted via e-mail at: fanny.chau@mail.doc.gov; Phone: (852) 2521-1467; Fax: (852) 2845-9800; or visit our website: www.buyusa.gov/hongkong

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