# Chapter 1

# Market overview

## Summary

IPTV continues to establish itself as a viable TV platform. In some markets it is now seen as being on an equal-footing with its long established rivals. In most countries independent services are competing with those of the former incumbent telecoms operators that were the initial driving force for IPTV.

The technology is now a recognized and accepted alternative in markets ranging from Hong Kong to France. Perhaps most significant, in raising its status, is its increasing presence in the US. Verizon's FiOS IPTV service looks on target to have a million subscribers by end-2007, and its success is starting to draw anxious looks from US cablers.

Strategies and policies vary from market-to-market, although it is no secret that many telcos are launching TV services in a defensive reaction against cable operators moving into the voice and broadband arenas. The telcos' TV services are not financially viable on their own in markets where the pay TV alternatives are strong. Telcos are using triple-play - or even quad-play – services as a strategy to retain customers. The result in some of the more competitive markets has been price wars and/or the use of bundled deals. In many cases, IPTV needs to be viewed in the context of the overall business of an operator rather than simply seen as a standalone product.

The rise of IPTV platforms is good news for content owners, as they provide an additional revenue source and can even result in bidding wars for exclusive content. Furthermore platforms that would ostensibly be seen as rivals are using IPTV networks to retransmit their packages. Cable operators can use IPTV networks outside their franchise areas to extend reach. DTH platforms can use IPTV to create two-way interactivity with their customers.

DTT programmers can also gain extra reach from hybrid services that tie-in their content with IPTV networks. The main advantage to telcos of this activity is that they do not have to negotiate their own carriage deals, though the downside is that their packages look similar to their rivals. Here lies the great dilemma for telcos, whether to go for a distinctive premium service to compete head-on with cable and satellite, or a lower-cost but less-attractive option.

The depth of the telcos' pockets is well-known, but it is notoriously difficult to make money in the pay TV sector. This is particularly so where consumer pay TV demand is already being adequately met by cable and satellite – so there is no unmet demand for IPTV to satisfy. In such circumstances to even attempt to enter the pay TV mainstream requires a great deal of commitment. First comes the expense of upgrading networks to ensure video-delivery service

quality is maintained. But thereafter there is a need to keep investing – to buy in compelling content. It is not yet certain how many telcos will have the stomach for such extensive and long-term investment, or indeed if many of them see it as desirable to go down that route.

A free-to-air (often hybrid DTT/IPTV) or low-cost pay option can benefit from digital switch-off. IPTV launches in many countries are being sensibly timed to take advantage of the need for users to choose a digital TV option, in anticipation of analogue switchover.

IPTV's on-demand capability is often put forward as its big advantage. But consumer usage patterns for IPTV-based (and other) on-demand services are difficult to pin down. Most platforms now offer free on-demand services or subscription VOD, which allows consumers to view a package of programmes for a fixed monthly fee. Viewing to these services skews on-demand usage upwards.

Some telcos see high-definition TV (HDTV) as equally important to IPTV services as VOD. Many operators are gearing up to launch high-definition services, based on MPEG-4 compression. Personal video recorders (PVRs) are also being offered by IPTV providers in several markets.

Telcos in territories with low digital TV penetration are looking to gain early market entry to steal a march on cable operators. However, some local regulators, most notably those in Asia and Latin America, have placed restrictions on the types of IPTV services telcos can offer, to allow cable operators enough time to gain some headway in digital transition.

## Business models

IPTV services are generally positioning their offer along the lines of the established cable and satellite sectors, i.e. a low cost entry point comprising several free-to-air channels, bolstered by a choice of premium channels and an on-demand option. Similar to many cable TV offers, on-demand programming is provided either on a pay-per-item basis or as part of a monthly subscription giving unlimited access to content.

Where countries have experienced a slow transition away from analogue cable, IPTV can demonstrate a clear advantage over its rival platforms. However, these territories present their own problems. In Belgium, for example, cable TV household penetration stands at 92% and cable operators are eagerly trying to convert subscribers to take a digital option. Informa Telecoms & Media forecasts that just 14% of cable TV households will have a digital subscription by the end of 2007. Although this suggests an open door for IPTV providers, Belgian cable subscribers have not made the switch to digital because they are satisfied with a basic analogue option.

The challenge for IPTV providers is to persuade cable subscribers to churn to a new platform, when the more logical move is for them to upgrade with their existing cable operator.

Bell already operates the ExpressVu satellite TV platform, but IPTV will allow the telco to offer triple-play more widely, reaching customers in urban apartment blocks where satellite cannot be installed.

## Chile

At end-2006 there were 954,143 broadband subscribers, an increase of 245,579 from end-2005. DSL remained the most popular form of broadband access. At end-2006 54.7% of broadband connections were DSL, with 43.4% cable-based.

Telefonica CTC and VTR are the dominant broadband suppliers. At end-2006 Telefonica had 494,500 broadband subscribers (51.8% of the total) and VTR had 413,800 (43.4% of the total). Telefonica launched its first Latin American IPTV service in Chile in June 2007.

**Broadband data (000s)**

| | 4Q05 | 1Q06 | 2Q06 | 3Q06 | 4Q06 |
|---|---|---|---|---|---|
| Cable broadband | 303,428 | 330,418 | 357,197 | 383,027 | 413,800 |
| DSL broadband | 379,918 | 431,333 | 481,783 | 530,783 | 521,878 |
| Other broadband | 25,218 | 23,286 | 21,351 | 19,904 | 18,465 |
| Total | 708,564 | 785,037 | 860,331 | 933,714 | 954,143 |

*Source: Informa Telecoms & Media.*

Chile has the most competitive and well-developed telecom sector in Latin America and is also one of the most advanced countries in terms of broadband policy and adoption rates. Early privatisation of the major telecoms operator, combined with economic and regulatory policies to foster competition, have nurtured strong take-up. With a population of 16 million, Chile will never be a massive broadband market compared to its neighbours, but it provides an important case study for broadband development.

The rapid growth in broadband subscriptions exhibited since 2000 is beginning to slow, with the cost of broadband connections remaining prohibitive for many Chileans. Much of the population is unfamiliar with information technology, so mass penetration will not come easily. Most broadband connections are at speeds of 256-512Kbps, but in 2005, the top two operators launched services at 4Mbps and 10Mbs respectively.

In November 2006 the antitrust regulator TDLC fined Telefonica CLP581 million (US$1 million) having ruled that the company had blocked Internet telephony service providers. The case was brought by Chilean VOIP service provider Voicenet after Telefonica blocked its users from accessing Voicenet's VOIP service because it was in competition with Telefonica's own telephone service.

looking for other programming partners. Meanwhile, Singapore-based VOD firm Anytime, partly owned by major US studios, is planning to launch VOD services in Australia, Singapore, New Zealand, South Korea and Taiwan during 2007 as part of its strategy to sell VOD content direct to subscribers via the internet.

Video/DVD rental chain Video Ezy launched a three-month digital download trial in November 2006, backed by content from four Hollywood studios. Subscribers visit a store, where they can download up to 40 films at a time to a digital storage device, such as an iPod. In addition, customers have to buy a Video Ezy-supplied 160GB home media centre settop box, which facilitates the transfer of the content in the home to a TV-compatible format. Uploading movies is free, and they are charged once they start viewing. Billing is carried out via and internet or mobile connection to the settop box. Video Ezy has invested A$1.5 million establishing the service. No pricing details are being revealed before commercial launch, which is expected before end-2007, although press reports suggest the settop will retail at A$350-400.

The commercial networks are also looking to get in on the act. In January 2007 Network Ten premiered the season two opening episode of the Warner Bros. series *Supernatural* as an online download five days before its traditional broadcast. It called the initiative "Australia's first free, first-run, full-length episode downloads from a major network series".

## China

China is the largest Asia Pacific broadband market. Total broadband subscriptions increased by 28.6% to 57.7 million in the 12 months to end-March 2007. DSL is by far the most popular broadband technology, accounting for 41.2 million connections, equivalent to 71.5% of the total.

**China broadband subscriber details**

| Company | 3Q05 | 4Q05 | 1Q06 | 2Q06 | 3Q06 | 1Q07 |
|---|---|---|---|---|---|---|
| China Netcom (DSL) | 8,489,000 | 10,518,730 | 11,105,000 | 11,237,000 | 10,782,000 | 14,138,000 |
| China Netcom (FTTx+Lan Ethernet) | 3,440,000 | 3,570,000 | 3,612,000 | 3,620,000 | 3,507,000 | 5,290,000 |
| Total China Netcom | 11,929,000 | 14,088,730 | 14,717,000 | 14,857,000 | 14,289,000 | 19,428,000 |
| China Telecom (DSL) | 15,010,000 | 16,215,600 | 18,020,000 | 18,789,300 | 19,621,000 | 23,950,000 |
| China Telecom (FTTx+Lan Ethernet) | 5,489,000 | 5,687,860 | 5,860,000 | 7,730,800 | 7,641,000 | 8,810,000 |
| Total China Telecom | 20,499,000 | 21,903,460 | 23,880,000 | 26,520,100 | 27,262,000 | 32,760,000 |
| China Telecom Corp (DSL/FTT+LAN) | 19,170,000 | 21,000,000 | 23,200,000 | 25,260,000 | 27,350,000 | 30,500,000 |
| Total cable | 819,133 | 837,157 | 842,451 | 845,000 | 1,014,000 | 1,410,000 |
| Total DSL | 23,499,000 | 26,734,330 | 29,125,000 | 30,026,300 | 34,932,000 | 41,220,000 |
| Total FTTx+Lan Ethernet | 10,692,000 | 11,049,513 | 11,275,000 | 13,161,800 | 12,630,000 | 15,040,000 |
| Total broadband | 35,010,133 | 38,621,000 | 41,242,451 | 48,001,100 | 48,576,000 | 57,670,000 |

*Source: Informa Telecoms & Media*

Beijing Netcom, had been running trials in ten Beijing neighbourhoods. But Netcom was forced to stop people from applying for the service.

Local sources speculated that SARFT ordered the shutdown after Beijing Netcom began delivering content to TV sets for the first time, having distributed settop boxes to its IPTV subscribers from August 2006. The decision to launch services to TV sets seems to have provoked SARFT to close the service, to protect the operations of the local cable operators.

Regulation of IPTV has become clearer following the recommendation by the State Development and Reform Commission (SDRC) that SARFT, rather than telecoms regulator the Ministry of Information Industries (MII), become the sole regulator for IPTV services. The greater expertise in content control persuaded the SDRC that it should solely regulate the IPTV sector, despite strong claims from the MII that IPTV was within its domain because the service is delivered over telecoms technology rather than broadcast networks.

# Hong Kong

The high level of broadband penetration means subscriber growth has slowed. By the end of March 2007 total subscriber numbers stood at 1.8 million, equivalent to a year-on-year increase of 8.3%. DSL is the dominant platform, accounting for 57.1% of total subscriptions.

**Hong Kong broadband subscribers**

| | 3Q05 | 4Q05 | 1Q06 | 2Q06 | 3Q06 | 1Q07 |
|---|---|---|---|---|---|---|
| PCCW retail (DSL) | 821,000 | 886,000 | 894,000 | 934,000 | 951,000 | 958,000 |
| PCCW wholesale (DSL) | 64,000 | 67,000 | 70,000 | 64,000 | 65,000 | 67,000 |
| PCCW (DSL) | 885,000 | 953,000 | 964,000 | 998,000 | 1,016,000 | 1,025,000 |
| City Telecom (Ethernet/LAN) | 233,000 | 227,800 | 226,700 | 224,000 | 218,000 | 230,000 |
| Total cable | 306,000 | 320,000 | 320,500 | 321,000 | 325,000 | 331,000 |
| Total DSL | 885,000 | 953,000 | 964,000 | 998,000 | 1,016,000 | 1,025,000 |
| Other | 421,592 | 375,409 | 374,598 | 365,770 | 373,667 | 440,240 |
| Total broadband | 1,612,592 | 1,648,409 | 1,659,098 | 1,684,770 | 1,714,667 | 1,796,240 |
| Quarterly increase (%) | 2.7 | 2.2 | 0.6 | 1.5 | 1.8 | 2.9 |

*Source: Informa Telecoms & Media*

## IPTV

Hong Kong was one of the earliest proponents of IPTV. The telecoms operator PCCW rolled out a pay TV service over its broadband network in September 2003. Branded NOW, in line with its high-speed internet service, subscriber growth has been strong, driven by an expanding channel line-up and flexible, competitively-priced subscriber packages. PCCW reached 785,000 TV users at March 2007, making it the largest TV over broadband deployment in the world.

PCCW signed a five-year carriage agreement with Galaxy Satellite Broadcasting in February 2006, adding Galaxy's Supersun package to the NOW platform. Supersun adds additional Cantonese content to NOW.

## Neuf Cegetel

Neuf Cegetel was established by the merger of Neuf Telecom and Cegetel in August 2005. By the end of March 2007, it had 2.3 million subscribers to its DSL service, up from 1.3 million in 1Q06. This year-on-year increase of 80% was largely due to the acquisition of AOL's French operations, which was initiated in 3Q06. The deal was completed in October 2006, following approval from the antitrust authorities. Neuf paid €288 million and gained AOL's 505,000 subscribers.

The acquisition of AOL was one of several significant deals completed by Neuf in 2006-2007. In 2Q07, it bought Club Internet from Deutsche Telekom for around €460 million, gaining 570,000 ADSL subscribers. It also gained another 10,000 subscribers and access to an additional 55,000 homes through the acquisition of Paris-based fibre network operator, Erenis, in 1Q07. The company also tried to buy Tele2, to whom it supplies unbundled lines, in 2006. However, it was unsuccessful, losing out to mobile operator, SFR. Neuf's broadband acquisitions will make it the second largest ISP, displacing Illiad's Free.

Neuf Telecom launched its IPTV service, Neuf TV, in late-2004. Cegetel subscribers have been able to access Neuf TV since June 2006. The platform had around 600,000 subscribers in June 2007, up from 60,000 at end-2005. The basic service provides access to 73 channels, including the DTT channels, international channels and some thematic channels, such as MTV. Three premium tiers are available; Canal+ Le Bouquet, CanalSat and TPS.

The operator launched a VOD service, Neuf VOD PC, with its partner, Glowria, in June-2007. This followed an agreement made with TF1 Vision, a subsidiary of commercial broadcaster, TF1, in December 2006 to provide HD VOD and catch-up TV services. The launch came after the introduction of an Internet TV service of 21 channels in April 2007.

The acquisition of Erenis enabled Neuf Cegetel to launch its FTTH service in April 2007. The 50Mbps service was introduced at a cost of €29.90 per month. It includes 69 TV channels and unlimited fixed domestic calls. A 100Mbps offer including a DVR, multi-room and HDTV was to be available in the near future, the company said in March 2007.

Neuf Cegetel aims to pass one million homes with fibre by 2009, with a target of 250,000 fibre-to-the-premises customers. The company has said it will invest about €300 million in the project over the next three years. Neuf has estimated that its subscriber acquisition cost, including capex, will be about €1,200 per customer. The company will serve customers with a mix of fibre-to-the-home and fibre-to-the-building using existing copper cables and T-plugs in apartment blocks and houses.

Neuf Cegetel launched Easy Neuf in 3Q06 in a bid to attract the 50% of French households that do not have PCs and the 60% without broadband access. The package bundles a stripped-down PC with an 8Mbps DSL service.