

# Competitive business models for DTV operators

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## 1. Introduction

TV viewing is evolving from a lean-back to a lean-forward activity. The new TV services offer a higher degree of user participation than traditional TV viewing which is expected to influence users attitude towards TV and attract new subscribers. Future TV systems are expected to support any time, any place, any device consumption of a wide variety of services and content.

Traditionally, digital TV (DTV) operators have used digital video broadcast technology (DVB for cable, satellite and terrestrial systems) to offer free and pay-TV services. Deregulation of the telecom market have spurred telecom operators to enter the media business by providing TV over Internet Protocol (IP) networks. The IPTV initiative has triggered the broadcast DTV/DVB industry to come together to develop standards for DVB-IPTV and Hybrid Broadcast Broadband TV (HbbTV). IPTV, DVB-IPTV and HbbTV are all based on two-way communication which transforms TV viewing into an interactive experience under user control.

Early implementations of IPTV offer only broadcast TV and VoD services. IPTV version 2.0 will offer advanced IPTV services that bring extra value to the subscriber. The DTV industry is driven by demand expectations for innovative value-added services.

The fundamental question for the DTV industry is how to make DTV systems attractive for the subscribers and profitable for operators.

## 2. DTV business environment

### 2.1 Technological drivers

Designers of DTV systems aim designing services with sufficient Quality of Experience (QoE) at minimal cost.

Progress in system technology bring new possibilities for future TV services. Companies selling hardware and software for DTV systems naturally strive for products that improve the QoE and resource utilisation, as this will increase their sales revenue.

New content formats such as HDTV and 3DTV are bandwidth hungry and therefore benefit from improvements in video coding/compression techniques and resource management.

Cable TV operators, who are running DOCSIS 3.0, and some IPTV operators, who already have invested in optical access networks, can already today offer access rates of 100 Mbps or more. Economy of scale is expected to reduce the cost of Fiber-To-The-Home (FTTH) solutions such as GPON that has a very large transmission capacity.

Development of IMS technology will facilitate the access of multimedia and voice applications from wireless and wireline terminals, i.e. create a form of fixed-mobile convergence.

## **2.2 Market drivers and conditions**

### **2.2.1 Market demand**

Many new potential customers arrive on the DTV market as the date for change to digital coding of TV signals comes closer. In Europe, some countries have already made the transition (e.g. Sweden and Finland in 2007) and the remaining European countries will do so by 2012.

Pyramid Research predicts IPTV will be installed in more than 90 million households worldwide by the end of 2013. Pyramid forecasts that IPTV's share of the overall pay-TV subscriber base will grow from 3.6 percent in 2009 to 14 percent in 2013. This will largely be at the expense of the cable operators' share, which will decline from 76 percent to 61 percent over the same period.

In Europe, the IPTV market share is largest in France (30%), followed by Spain (18%) and Italy (15%). Sweden has 4.5 million TV subscribers in 2009 divided among analog TV (cable), broadcast DVB (cable, satellite, terrestrial) and IPTV (xDSL, LAN). The Swedish DTV market include 2.4 million subscribers in 2009 divided between different operator segments: cable operators (23%), satellite operators (35%), terrestrial operators (33%), and IPTV operators (9%).

The market for companies offering products and services for the IPTV, DVB-IPTV and HbbTV market will increase as standards evolve. The market is driven by openness of access channels and changing viewing behaviours.

### **2.2.2 Convergence of information, telecommunication and TV industries**

The convergence of network, services and applications bring economy of scale for the ICT industry. Operators offering Internet TV, mobile TV, IPTV, DVB-IPTV or HbbTV services use systems that have similar building blocks. A promising strategy is to apply multiple technologies and build hybrid solutions.

### **2.2.3 Competition**

The convergence of information, telecommunication and TV industries has intensified the competition among DTV operators.

From a customer point of view, the meaningful differences between alternative DTV offerings are functionality, quality and price. The **functionality** offered by the DTV operator is given by the service and content portfolio. The **quality** perceived by the users is expressed by Quality of Experience (QoE) metrics. The **price** for using the DTV service is given by the subscription and transaction tariffs, and rental charges for subscriber equipment.

Traditional DVB operators dominates the DTV market and they have strong position as they upgrade to DVB-IPTV or HbbTV technology. Telco operators have a weaker market position as telephony customers switch to mobile operators. Service bundling such as triple play (fixed

telephony, Internet, IPTV) is a competitive strategy used by telco operators to maintain customers and build ARPU. Cable operators respond with their own triple play service offerings. Quadruple play (fixed telephony, Internet, IPTV, mobile telephony) can be feasible for some operators who thereby gain competitive advantage.

## **2.3 Regulation**

### **2.3.1 Audiovisual media services directive**

The Audiovisual media services directive covers all EU audiovisual media services (including on-demand services) in the digital age. It amends and renames the Television without Frontiers Directive, providing less detailed but more flexible regulation. And it modernises TV advertising rules to better finance audiovisual content. The directive was transposed into a national law in December 2009.

The new EU audiovisual rules make it easier for producers and providers of TV programmes to access financing from new forms of advertising such as split screen advertising or product placement, which is allowed in all programmes except news, documentaries and children's programmes. Broadcasters have more flexibility in programming with the removal of rules imposing a twenty minute period between advertising breaks. The new EU rules strengthen Europe's TV and audiovisual industry by reducing regulation and creating a level-playing field for audiovisual media services "without frontiers". They ensure that public interest rules, like the protection of minors and human dignity, apply to all audiovisual services, including on-demand, over fixed, mobile or satellite networks.

### **2.3.2 Access regulation**

Where local loop unbundling (LLU) is available in practice on regulated terms alternative network operators (ANOs) have the basic building blocks to offer their own IPTV services. Both incumbents and ANOs are investing to build-out their fibre networks closer to end users in major metropolitan areas. Incumbents will no be required to offer unbundled access to their fibre loops since the obligations for LLU in Europe currently only apply to copper loops.

## **3. DTV technology and standardisation**

### **3.1 Technology**

#### **3.1.1 IPTV system**

An IPTV network connects central and regional video servers (head ends) with subscriber sites (home ends). A head end contains VoD and broadcast servers. A home end comprises a modem and reception equipment including PCs and set top boxes (STBs) where content is displayed. Data centers in existing IPTV networks (SHE, VHO) typically encode video information by MPEG-2 or MPEG-4 AVC. IPTV flows are classified into two categories: stored video flow and live video flow.

IPTV middleware acts as the IPTV core platform and enables customer interaction with the service. It implements IPTV by providing TV-Portal/EPG, user management, interactive service, channel/package and program together with pay TV solutions. The middleware provides API interfaces to integrate with the other components and deliver IPTV services in a large scale and faster way. In addition, it integrates with VoD system, Headend, CA/DRM, STB and the network realizing automatic service deployment and user access control.

### **3.1.2 DVB-IPTV system**

DVB-IPTV systems provide distribution of DVB services within a large-scale IP network. It is based on MPEG2 transport streams carried over IPv4 networks as unicast or multicast in RTSP format. For audio and video the same codecs as in broadcast systems have been selected. Interactive content can be transported according to the DVB Multimedia Home Platform specification. Further DVB-IPTV will release a home network specification based on the DLNA/UPnP guidelines. Today operational DVB-IPTV systems can be found rarely as the standard is not yet fully developed. DVB-IPTV has a great potential as it could fully replace traditional television broadcast.

### **3.1.3 HbbTV system**

Hybrid broadcast broadband TV (HbbTV) deployments involve the combination of IPTV with an existing Digital Video Broadcasting (DVB) operation. HbbTV uses DVB-C/S/T on the downlink and Internet on the uplink.

Although IPTV and conventional broadcast TV distribution have been seen as complementary technologies, they are likely to be increasingly used together in hybrid IPTV networks that deliver the highest levels of performance and reliability.

## **3.2 Standardisation**

### **3.2.1 ETSI TISPAN**

TISPAN is open to all ETSI members and associate members. Members are usually European companies, while associate members can come from other countries (typically Asia or America). TISPAN membership is mainly composed of telecom vendors and operators.

In TISPAN, IPTV is not the primary focus of activities. To some extent IPTV can be seen as an application that is provided over a network and benefits from an existing ecosystem. IPTV is thus reusing the properties of TISPAN NGN, such as QoS, user and service profiles, authentication, charging, etc.

The TISPAN dedicated IPTV architecture was designed as an adaptation for NGN of the principles used in many existing IPTV systems and mainly DVB-IP. It is based on proven IETF protocols (HTTP, RTSP, IGMP) used in a straightforward way.

The TISPAN IMS-based IPTV architecture was designed to take advantage of the benefits of the 3GPP IMS, originally developed to support IP multimedia communication is mobile

networks. It relies on the core IMS and manages most interactions through SIP (session initiation protocol). As a result, it benefits from the popular IMS features: implicit authentication, roaming across IMS networks, and natural interfacing to NGN components providing functionality for traffic management and charging etc.

### **3.2.2 ATIS IIF**

The IPTV Interoperability Forum (IIF) enables the interoperability, interconnection, and implementation of IPTV systems/services by developing ATIS standards and facilitating related technical activities. The IIF is an open forum and all companies meeting the ATIS membership requirements are eligible to become IIF participating companies.

The IIF comprises North American companies including Verizon, Qwest, AT&T, Alcatel-Lucen, Nokia-Siemens Networks, Nortel, Cisco, Motorola, Intel, Microsoft and Sun Microsystems, among others.

The IIF is composed of five committees:

- Architecture
- IPTV security solutions
- Quality of Service metrics
- IIF Testing and Interoperability

### **3.2.3 ITU IPTV Focus Group and GSI**

The mission of IPTV FG is to coordinate and promote the development of global IPTV standards taking into account the existing work of the ITU study groups as well as Standard Developing Organizations, Fora and Consortia. The FG IPTV opens to ITU member states, sector members and associates, and it also opens to any individual from a country which is a member of ITU who wishes to contribute to the work. The FG IPTV consists of six working groups (WGs):

- Architecture
- QoE/QoS
- Security
- Network control
- End system
- Middleware and application

The FG IPTV ended in December 2007 and its documents were transferred to the study groups (SGs) of the Global Standards Initiative (IPTV-GSI). Achievements of ITU-T include definition of IPTV, IPTV domains, IPTV architectural approaches, IPTV functional architecture, Quality of Experience (QoE) dimensions.

### **3.2.4 Open IPTV Forum**

The Open IPTV Forum (OITF) is pan-industry initiative with the objective to specify a common and open end-to-end solution for supplying a variety of IPTV and internet multimedia services to retail based consumer equipment in the home. OITF is open to participation from the communications, entertainment and other relevant industries, will focus on the development of open standards that will help streamline and accelerate deployments of IPTV technologies, and maximise the benefits of IPTV for consumers, network operators, content providers, service providers, consumer electronics manufactures and home and network infrastructure providers.

OITF was founded in 2007 by Ericsson, France Telecom, Nokia Siemens Networks, Panasonic, Philips, Samsung, Sony and Telecom Italia. In 2010 OITF has more than 90 companies as members. New members include Alcatel-Lucent, BT, BBC, Cisco, Huawei, Motorola, Intel, LG Electronics, Sun Microsystems, Sharp, Sony, Telefonica, Toshiba, ZTE, UTStarcom, PCCW, Verimatrix.

The Solution working group has six activities:

- protocols
- metadata
- content & service protection
- audio/video codecs
- procedural application environment
- declarative application environment

### **3.2.5 IPTV standard development at DVB project**

The DVB-IPTV standard was originally introduced in the year 2001 by the DVB project, an alliance of about 300 worldwide companies. Traditionally, DVB services are delivered over broadcasting networks, i.e. a one-to-many uni-directional architecture. The advent of high-speed bi-directional consumer broadband networks means that there is an increasing demand to offer DVB services over IP networks. The DVB-IPTV project help define and develop standards for delivery of DVB services over bi-directional IP networks, and to provide means for integrating them with other broadband services, whilst maintaining maximum interoperability with existing DVB broadcast standards. DVB has also defined IPTV profiles for its interactive middleware specifications, DVB-MHP and GEM. IPTV continues to be a very active and evolving activity in DVB with many stakeholders involved both in the technical and commercial groups.

### **3.2.6 Hybrid Broadcast Broadband TV**

Hybrid Broadcast Broadband TV (HbbTV) is a major new pan-European initiative working towards harmonisation of the broadcast and broadband delivery of TV entertainment to end consumers. The objective is to establish a standard for the delivery of broadcast TV and broadband TV to a television in the home, through a single user interface, creating an open platform as an alternative to proprietary technologies. The HbbTV specification is based on elements of existing standards including Open IPTV Forum, CEA, DVB and W3C.

HbbTV has a wide range of supporters from across the broadcasters and CE industries. The consortium consists of more than 30 companies including Cisco, Espial Group, LG Electronics, Lrdeto, Philips, Sony Corporation.

## 4. DTV business model design

IPTV does not have an instantaneous return-on-investment, and companies investing in IPTV need to take a long term view. Many analysts believe "that the business case for IPTV is a high risk option". However, these pessimistic business cases often don't take into account factors such as legacy networks, platform sharing, churn reduction, the economies of scale associated with a triple-play or quadruple play offering. Also, as IPTV promise significant revenue from advertising as it becomes mass market.

Competition in the DTV market is intense and company strategists planning new business models and strategies need be innovative. Business planning is based on careful evaluation of the current business situation and improvement of the business model and strategies. Successful business planning calls for new market models, new subscription models, new service models, new content models, new technology, new revenue models, new advertising models, new pricing models, new organisation models.

### 4.1 Service domain

#### 4.1.1 Market segment

For the short- and mid-term future, the TV industry will be marked by a bimodality among customers: those who are mainly passive viewers and those who demand a more interactive media experience. This future state is described as the "Generation Chasm" because there is rough correlation between a consumer's age and whether that person is more likely to be a passive or active viewer of content. Today, the Massive Passives far outnumber the influential, fashion-forward, early adopters personified by the Gadgetiers and the Kool Kids.

Massive passives are generally content with their traditional TV experiences and uninspired to change viewing habits drastically the next five years. These devices followers are expected to keep the TV as the media centerpiece for the near term and watch scheduled programming, with growing time-shifting.

By contrast, the Gadgetiers and Kool Kids seek more experimental interactive video experiences, with heightened control of aggregation, content sources, space-shifting (choosing *where* the video content is viewed), time-shifting, user contribution of content and device interoperability. These early adopters are leading the way toward open distribution models.

#### 4.1.2 Value model

##### 4.1.2.1 Value proposition

**Value proposition** includes a description of all relevant value elements and drivers identified as important for the business model under study.

The intrinsic value proposition for the customers includes the following value-generating attributes:

- Flexible service offerings (service and content portfolio, pricing)

- Control of experience of televised content (time, place, storage)
- Personalized graphical user interface (ease of use)
- System quality (fidelity of information, low response time after commands, reliability and availability)
- Content quality (large mix of broadcast channels and VoD titles)
- Access to a niche content (cognitive need)
- Catch-up watching of favorite programs (home and network PVR, Time-shifted TV, VoD)
- Sharing of user-created content
- Sharing of watching experience (social TV)
- Social networking
- Intelligent/adaptive value-added services with high utility
- EPG-aware Internet search
- User authentication and video source protection (security)

#### **4.1.2.2 Value configuration**

A **value configuration** is basically a formation including/depicting the actors that contribute to the value creation, distribution, consume, and their relationships. Value creation logic is best represented by a **value network**, where the actors are tightly related to each other.

#### **4.1.2.3 Business value drivers**

- Growth potential
  - IPTV's share of the overall pay-TV subscriber base will grow from 3.6 percent in 2009 to 14 percent in 2013.
- Churn reduction is essential
  - Differentiation and loyalty is created through services, content and control
- Innovative services will fuel new revenues
  - Personalization – personal control over content and services
  - Converged communications – personal control over messaging and access
  - Better consumer ARPU is captured through bundled services



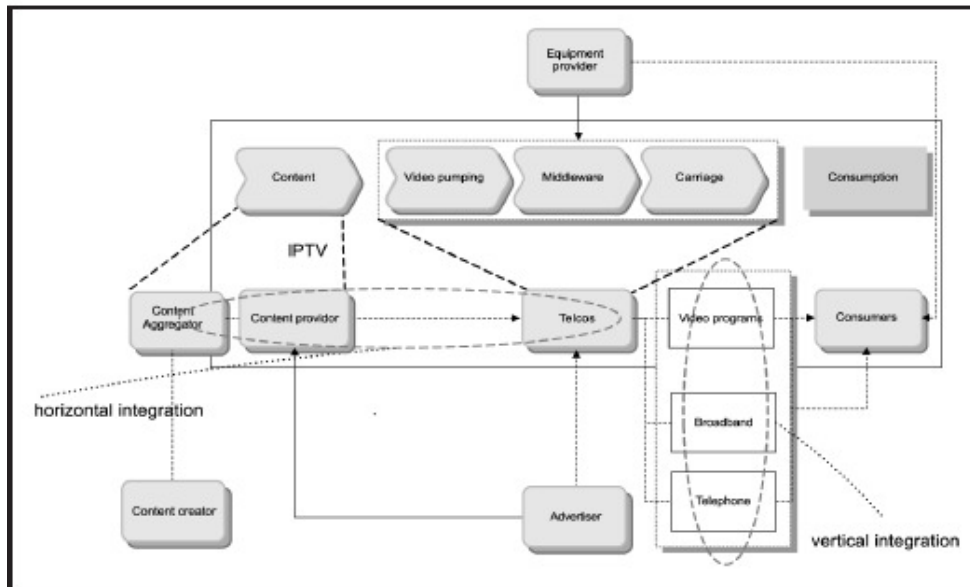


Figure 1. Value network of IPTV (Bouwman, 2008).

### 4.1.3 Service portfolio

#### 4.1.3.1 Consumer needs

According to a global research study conducted by Microsoft Corp. and research firm Screen Digest, more than 60 percent of consumers in seven benchmark developed countries would consider switching TV service to obtain the features and content they want, at current market price or higher.

Consumers were also allowed to create their "ideal TV" service from a number of different features. Consumers created and are willing to pay for lifestyle-based packages, rather than simply price and channels. Those lifestyle packages range from basic TV control and management, to family-oriented packages, to packages that enable communications, commerce and connections between TV, PC and mobile devices. Over 50 percent of consumers willing to pay for new TV services in developed countries expressed interest in advanced capabilities beyond basic TV control and management.

#### 4.1.3.2 Standard and premium services

Broadcast TV and Video on Demand (VoD) are standard DTV services. Pioneering value-added services may be needed to differentiate a DTV operator on the market.

Premium services are those services that can command additional revenue from the subscriber. These include additional Premium channels (Sports, Movies, Adult, etc.), Time-shifted TV, VoD, Music, Games, and other interactive services.

Catch-up TV is an important differentiator for IPTV service providers, it cannot be replicated through FTA, satellite or cable services. In addition in some countries catch-up TV is offered ad-free. The value of never missing a favourite TV programme or avoid the interruption of

adverts cannot be underestimated. Catch-up TV can be implemented by home and network PVR, Time-shifted TV and VoD.

#### **4.1.4 Content portfolio**

Demand for broadcast TV and VoD content is likely to be long-tailed. Popular content can subsidise less popular content. Today the largest IPTV operators offer 300 BTV channels and 10,000 VoD titles. One of the key ways of driving up VoD usage is to ensure a steady flow of newly released films.

A growing number of consumers are buying increasingly affordable HD-ready or full HD TVs, and soon realise that they will not realise the full benefit of their investment if they do not have access to a large selection of HD programming. Consequently, DTV operators now have a window of opportunity within which to monetise HD content before it becomes more widely available through FTA services and loses some of its 'premium' status. In more-sophisticated markets, some operators are already looking beyond HD and are intending to deliver 3DTV to their subscribers.

Content categories for broadcast TV and VoD include:

- Traditional style TV
- Specialized content for niche audiences
- Global aggregation of nationally thin audiences
- Watching of regular TV from other countries
- User generated content
- Download of movies

#### **4.1.5 Competitive strategy**

DTV operators compete for customers through the consumer surplus, i.e. the difference between consumer value and service price. Hence, by improving the consumer value or reducing the price, the consumer surplus and the competitive advantage can be increased. Consumer value is driven by a set of value-generating attributes that bring special functionality and quality. The DTV operator needs an effective competitive strategy based on service differentiation, cost minimisation or price discrimination.

The IPTV, DVB-IPTV and HbbTV market is expected to spur the development of competitive DTV service offerings, innovative valued-added services, flexible pricing strategies and cost-efficient resource utilisation.

### **4.2 Technology domain**

#### **4.2.1 Technology model**

The main advantage of telecom operators is the two-way communication and the support for triple-play services (telephony, Internet, IPTV) and the possibility to offer interactive and social DTV services. The strategic response of the broadcast DTV operators is to develop a

hybrid DVB-IPTV and HbbTV technology that in principle remove the technological advantage of the telecom operators.

Important design issues include choice of technology for implementing the core network, metro networks, access networks, home networks, system configuration, dimensioning of capacity and redundancy, schedule for capacity expansion, middleware capability, content security, Electronic Program Guide (EPG), video coding/compression, Resource Management (RM), Operations, Administration and Maintenance (OAM).

Design of RM involves a trade off between effectiveness and simplicity/complexity, for the chosen solution. The RM solution should provide a good balance between the potential for large revenue (measured by effectiveness) against the expected costs (measured by complexity).

### ***4.3 Organisation domain***

#### **4.3.1 Players, roles and relationships model**

IPTV players include telecommunication operators (telcos), equipment providers, and content providers. Telco operators are expected to directly provide IPTV service to subscribers, in which the operator takes the role of a service provider. Telco operators are either an incumbent operator or an Alternative Network Operator (ANO). A third-party service provider may have many DTV operators as customers resulting in economy of scale and reduced service prices. Operators may indirectly support IPTV services by through the provision of network services over common data networks, in which case the operator takes the role of a network provider. Equipment providers include manufactures of IPTV network devices, and IPTV terminal devices. Content providers include both major media producers, such as motion picture studios, as well as other professional and amateur content originators, such as participants in peer-to-peer content sharing.

### ***4.4 Financial domain***

#### **4.4.1 Revenue model**

Revenue models for DTV operators can involve revenue and cost sharing with content providers and third-party service providers. The subscription model for content and STB equipment is also included in the revenue model.

DTV operators buy STBs in bulk and are able eventually to recoup their costs through subscriptions, they can offer new customers subsidised, or in some cases free, STBs. Operators can also offer STBs to their subscribers on a rental basis, allowing the consumer to spread the cost of the equipment

New forms of advertising are expected to have the largest impact on the revenue models. By allowing advertisers to intervene in the content provisioning, new revenue streams become possible. The IPTV, DVB-IPTV and HbbTV systems supports targeted, interactive and personalized advertising which is likely to gradually change how consumers perceive commercials and advertising.

### 4.4.2 Cost model

CapEx and OpEx do not increase linearly with subscriber growth, and increasing subscriber numbers decrease the cost per subscriber for most IPTV components. The exception to this is for the STB and Residential Gateway, which must be deployed on a per household basis, and may need to be heavily subsidised to appear competitive.

The cost for expansion of the portfolio includes direct and shared costs for upgrading head ends, middleware and subscriber equipment.

Open standards is expected to reduce the CapEx costs but also OpEx costs.

### 4.4.3 Pricing strategy

Factors to consider the design of pricing scheme include technology risks, availability of resources, competition, supplier and consumer behaviour, price discrimination and regulation.

IPTV operators today tend to use simple pricing models for BTV and VoD services. For example, TeliaSonera use a flat rate pricing scheme for the BTV service and a popularity-based pricing scheme for the VoD service.

Advanced prices strategies may be based on network usage, time-of-day, device profile, user profile and service bundling/discounts.

In a strong FTA or Cable market IPTV operators must clearly understand the differentiation in their market, and be able to attach a premium to it. Trying to compete directly with FTA, Cable or satellite operators with a large installed base will lead to a price war, and in the long run that benefits no one. If price is the only differentiator an IPTV service provider can offer then it is best not to launch the service and invest elsewhere.

Pricing and pricing sensitivity vary greatly between regions and countries. It is important that nascent IPTV service providers carry out sufficient market research into pricing, and pay special attention to the emotive value-add of specific programmes. While it is important to not be overpriced on market entry, it is even more important that the offer isn't underpriced.

Premium services must be priced in accordance with comparable services and the willingness to pay. Sport channels are hugely popular because TV service providers try to obtain exclusive deals to show content, meaning that certain events are only available through certain channels. Exclusivity adds considerable value to a Premium service.

## Appendix A: European IPTV statistics

**Table 8: Europe\*\* Telecom Markets for IPTV, 2009**

Market	IPTV/Video subscriber lines, 000	Market	IPTV/Video subscriber lines per-population, %
France	7,325	France	11.8%

Italy	1,065	Belgium	4.7%
Germany	973	Portugal	2.9%
UK	554	Switzerland	2.8%
*Russia	526	Netherlands	2.5%
Belgium	497	*Czech Republic	2.1%
Spain	469	Italy	1.8%
Netherlands	414	Germany	1.2%
Portugal	308	Austria	1.1%
Switzerland	214	Spain	1.0%
*Czech Republic	212	*Slovakia	1.0%
*Poland	140	UK	0.9%
Austria	89	*Hungary	0.6%
*Hungary	63	*Russia	0.4%
*Slovakia	54	*Poland	0.4%
*Ukraine	31	*Bulgaria	0.3%
*Bulgaria	25	*Ukraine	0.1%
*Romania	13	*Romania	0.1%

\*\*Europe in this article is limited to those countries listed in the Markets, Services & Definitions page. In particular, the Nordic Region (Denmark, Faeroes, Finland, Iceland, Norway and Sweden) is omitted.

Source: Pyramid Research / *Light Reading*, 2009

## Appedix B: IPTV operators

Service providers around the world have been deploying IPTV services over the last two years. In total 600 commercial IPTV launches existed in 2009. The growth and speed of deployment has varied, but most incumbents in developed countries have deployed some kind of pay-TV product. Initial forays came from smaller providers in Europe and North America and a handful of major providers, such as Spain's Telefónica, France's Free, Hong Kong's PCCW, and Italy's FastWeb. Their success in driving broadband growth by bundling video into a triple-play package has driven increasing interest from others. Now most incumbents in Western Europe – such as Belgacom, Deutsche Telekom, France Telecom, KPN, Swisscom, Telecom Italia, and TeliaSonera – offer IPTV, along with Verizon and AT&T in the U.S.

Asia/Pacific providers have also gotten into the act, as China Netcom and China Telecom have found ways around regulatory hurdles to move forward with IPTV. Others in Taiwan, India, and Japan have also rolled out IPTV. Even Latin American providers, long restricted by regulation, have begun to deploy some form of TV services, though in their case it's often a hybrid solution.

Not all deployments are proving successful: Tiscali in Italy and Volny in the Czech Republic

both scrapped their IPTV services in 2008. Still, the worldwide IPTV subscriber base crossed the 20 million mark in 2008 – impressive growth, given the short deployment timeframe. Most IPTV deployments are barely three years old, and even pioneer PCCW only recently celebrated its five-year anniversary.

The dominant DTV operators in Sweden are:

- Cable TV : Com Hem, Canal Digital and Tele2,
- Satellite TV: Canal Digital, Viasat,
- Terrestrial TV: Boxer,
- IPTV: TeliaSonera, Bredbandbolaget/Viasat, Canal Digital, and FastTV.

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