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# **IPTV – MARKET, REGULATORY TRENDS AND POLICY OPTIONS IN EUROPE**

**BACKGROUND MATERIAL**

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## **NOTE**

This paper has been prepared by James Thomson (Cullen International, Belgium, <james.thomson@cullen-international.com>) to be presented at the ITU-T IPTV Global Technical Workshop held on 12-13 October 2006 in Seoul, Republic of Korea. The views expressed in this paper are those of the author, and do not necessarily reflect those of the ITU or its membership.

This paper, together with the others materials relevant for policy debate on IPTV and prepared for the purposes of this meeting, can be found at <http://www.iptv-ws.com> or <http://www.itu.int/ITU-T/worksem/iptv/index.html>. More information on the activities of the ITU IPTV Focus Group can be found at <http://www.itu.int/ITU-T/IPTV/index.phtml>

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More information on Cullen International research can be found at [www.cullen-international.com](http://www.cullen-international.com)

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## ABSTRACT

This paper looks at IPTV commercial offers and regulation in the five largest EU Member States (France, Germany, Italy, Spain and the UK) and four smaller Member States with the highest broadband penetration rates ranging between 20%-25% (Belgium, Denmark, the Netherlands and Sweden).

IPTV is in its infancy in all of the markets surveyed. France has the largest number of IPTV subscribers so far. Alternative operator Free reported 1.26 million IPTV subscribers and France Télécom 300,000 subscribers as of end June 2006 (which should be seen in the context of 23.5 million households in France). In Italy, alternative operator FastWeb reported 870,000 subscribers as of end June 2006 (22 million households in Italy).

The paper discusses a number of regulatory issues related to IPTV: replicability of incumbent operators' IPTV offers, predatory pricing, bundling, cross-subsidy by alternative operators of their retail prices from fixed PSTN call termination revenues, must-carry obligations, and net neutrality. The paper also compares the authorisations or licences an IPTV provider would need from the broadcasting authority depending on the types of services provided.

## EXECUTIVE SUMMARY

This paper looks at the commercial IPTV offers available in the five largest EU Member States (France, Germany, Italy, Spain and the UK) and four smaller Member States with the highest broadband penetration rates ranging between 20%-25% (Belgium, Denmark, the Netherlands and Sweden).

IPTV services are viewed over a fixed broadband connection (DSL or fibre-to-the-home (FTTH)) with a standard television set. IPTV services are offered over closed content distribution networks and are different from video streaming over the public Internet viewed on a PC. This paper does not look at mobile TV services provided over wireless networks to handheld devices.

IPTV is in its infancy in all of the markets surveyed. France has the largest number of IPTV subscribers so far. Alternative operator Free reported 1.26 million IPTV subscribers and France Télécom 300,000 subscribers as of end June 2006 (which should be seen in the context of 23.5 million households in France). In Italy, alternative operator FastWeb reported 870,000 subscribers as of end June 2006 (22 million households in Italy).

IPTV services offer both live TV broadcasting and stored video on demand (VoD). Increasingly, the services also include a personal video recorder (either as a hard disk in the set-top box (STB) or on the network) allowing 'time-shifted' viewing of TV broadcasts, or 'catch-up' viewing if the viewer pauses a live broadcast programme. IPTV providers in some countries integrate a digital terrestrial TV tuner in the STB (France, Spain and the UK).

IPTV providers need to have access to attractive content to compete with existing cable and satellite pay TV platforms. Rights to broadcast live national premier league football matches on the IPTV platform differ across the nine countries. In Belgium, the incumbent telecoms operator has exclusive rights for the national premier league matches, which can only be viewed on its IPTV service Belgacom TV. In a number of the other countries, IPTV providers typically have a distribution agreement whereby they resell the sports channels of the pay TV satellite operator.

This paper discusses a number of issues that may be of concern to regulators related to multiple play offers in general, including IPTV. Where local loop unbundling (LLU) is available in practice on regulated terms alternative network operators (ANOs) have the basic building block to offer their own IPTV services. In this case replicability should probably not be a major concern to regulators. A greater concern might be that incumbents could engage in predatory pricing of their own multiple play offers.

Incumbent operators' retail broadband prices are not subject to ex ante regulation under the EU framework and so alleged cases of predatory pricing would be investigated under standard competition law. The European Commission fined Wanadoo, a subsidiary of FT, €10.35 million for predatory pricing of its retail ADSL services in July 2003. The Commission currently has an investigation open against Telefónica in Spain.

Both incumbents and ANOs are investing to build-out their fibre networks closer to end users in major metropolitan areas. Incumbents will not be required to offer unbundled access to their fibre loops since the obligations for LLU in Europe currently only apply to copper loops.

As ANOs build their own fibre-to-the-curb (FTTC) in order to install VDSL they will increasingly rely on sub-loop unbundling (SLU) from the incumbents. This will lead to increased regulatory scrutiny of the prices and other terms and conditions for SLU in the incumbent operators' reference offers.

Must-carry obligations under the EU framework only apply to broadcasting networks used by a "*significant number of end users as their principal means to receive TV and radio broadcasts*". Given the limited take-up of IPTV so far, it is surprising that must-carry obligations apply to IPTV providers in three countries (Belgium, France and Sweden).

The EU regulatory frameworks for both telecoms and broadcasting are currently under review, and new directives will come into force probably around 2009. There are no changes proposed to the telecoms framework that would significantly affect IPTV. The changes proposed to the broadcasting framework would bring together both traditional broadcasting (linear services) and on demand (non-linear services) under a common basic tier of rules, with a second tier of rules for linear services very similar to those today.

The most contentious issue relates to who has “*editorial responsibility*” over audiovisual content. For example, would an IPTV provider be considered to have editorial control by selecting the TV channels offered in different subscription bouquets, or by compiling the catalogue of content offered by VoD? Another issue is how to deal with platforms, such as IPTV, offering both linear and non-linear services, and situations where the boundary between the two may be blurred. For example, a viewer may start by watching a live broadcast TV programme, but then pause, and re-start later by watching the programme recorded on a network personal video recorder.

## 1 INTRODUCTION

This paper is divided into the following sections:

- Section 2 – presents background data on broadband lines and penetration rates in the EU Member States and the recent growth trend.
- Section 3 – defines what is meant by IPTV and how it differs from video streaming over the public Internet.
- Section 4 – describes the commercial IPTV offers available in the five largest EU Member States (France, Germany, Italy, Spain and the UK) and four smaller Member States with the highest broadband penetration rates (Belgium, Denmark, the Netherlands and Sweden).
- Section 5 – looks at whether IPTV providers' packages include live national premier league football matches, as an example of the sort of attractive content needed to compete with existing cable and satellite pay TV platforms.
- Section 6 – provides background on the current and future EU regulatory frameworks for telecoms and broadcasting.
- Section 7 – discusses a number of regulatory issues related to IPTV: replicability of incumbent operators' IPTV offers, predatory pricing, bundling, cross-subsidy by alternative operators of their retail prices from fixed PSTN call termination revenues, must-carry obligations, and net neutrality. This section also compares the authorisations or licences an IPTV provider would need from the broadcasting authority depending on the types of services provided.

## 2 BROADBAND LINES, PENETRATION AND COVERAGE

This section presents background data on broadband lines and penetration rates in the EU Member States and the recent growth trend.

The data are taken from the European Commission working document "*Broadband access in the EU: situation at January 1, 2006*" presented to the Communications Committee on May 4, 2006 (COCOM06-12 Final).

Broadband is defined by the Commission as downstream capacity equal to or higher than 144 kbps. It should be kept in mind when reading the figures below that IPTV requires much higher downstream connections of at least 4 Mbps (based on ADSL2+, VDSL, or fibre-to-the-home).

As of January 1, 2006 there were 59 million broadband lines in the EU. Of these, 48 million were DSL lines (81.3% of the total) and 11 million (18.7%) were provided over other transmission means, mostly cable modem. There were 585,000 fibre-to-the-home lines, which were mostly in two countries (Sweden and Italy).

Figure 2.1 shows the distribution of broadband lines by country. Germany accounts for 18% of all broadband lines, followed by France and the UK with 17% each. These three countries represent almost 52% of all EU broadband connections. Italy, Spain and the Netherlands follow. The EU-10 new Member States (that joined the EU on May 1, 2004) contribute 3.3 million broadband lines, which represents just 5.5% of the total.

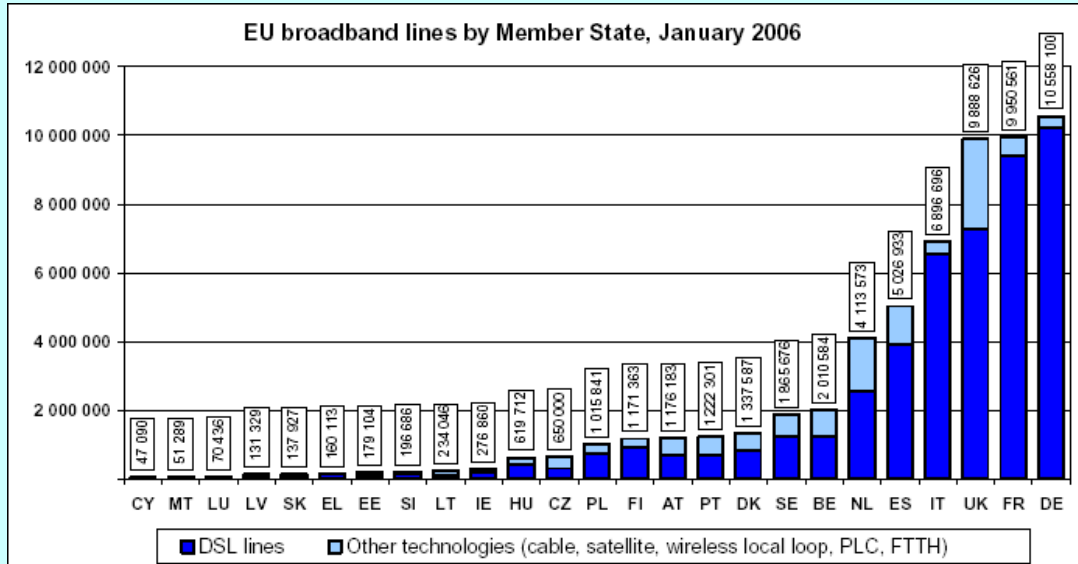
Figure 2.2 shows the penetration rate of broadband measured as the number of broadband lines per 100 population. The average penetration rate is 12.8% for the EU-25 Member States (rising from 8.6% in January 2005) and 14.5% for the EU-15 old Member States (up from 9.8% a year before).

The Netherlands and Denmark have reached the 25% penetration mark. Finland, Sweden and Belgium have reached 20% or above. These countries along with the UK, France and Luxembourg are above the EU-15 average penetration rate.

The lowest penetration rates ranging between 1%-7% are in Greece, Slovakia, Latvia, Hungary, Cyprus, Czech Republic, Ireland and Lithuania.

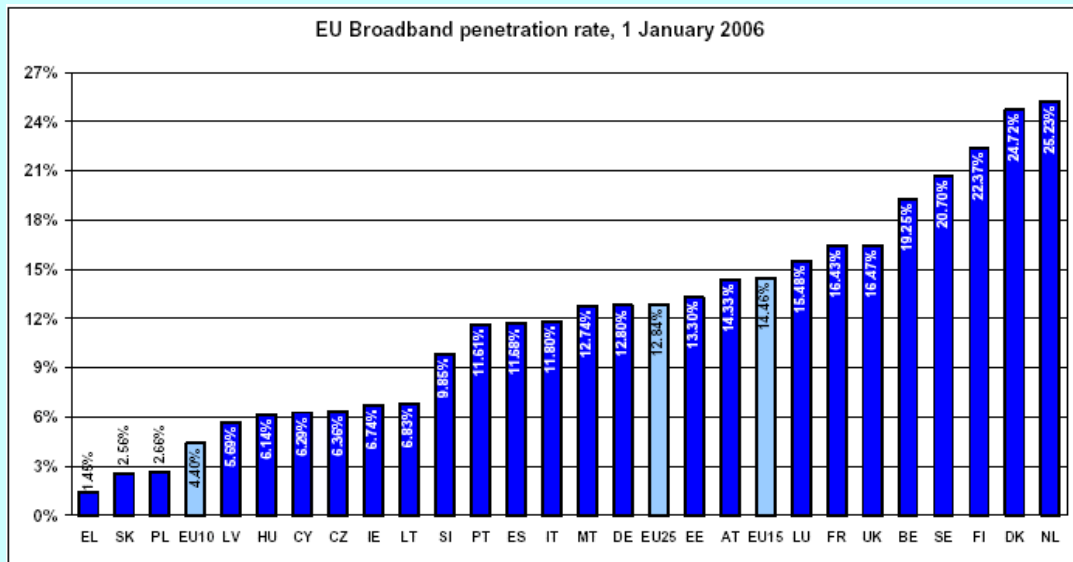
Slovenia, Portugal, Spain, Italy, Malta, Germany, Estonia and Austria have 10%-14% penetration rates. It is clear that with the exception of Estonia and Slovenia, the other EU-10 new Member States are lagging behind.

**Figure 2.1: EU countries by number of broadband lines**



Source: European Commission (2006), Broadband access in the EU: Situation at January 1, 2006

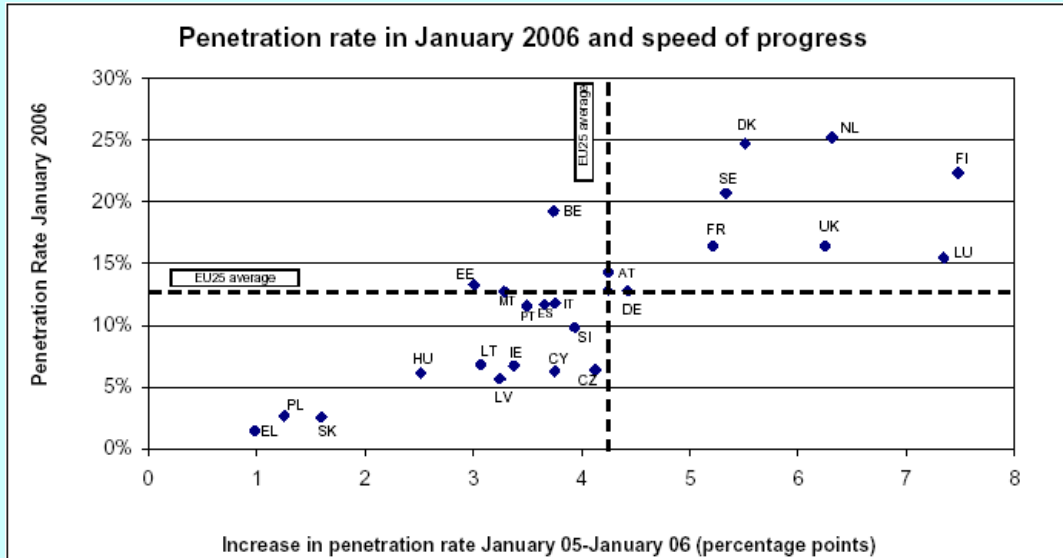
**Figure 2.2: Penetration rate. Lines per 100 population**



Source: European Commission (2006), Broadband access in the EU: Situation at January 1, 2006

Figure 2.3 below plots the broadband penetration rate in January 2006 against the increase in the penetration rate during the period between January 2005 and January 2006. Growth was highest in Finland and Luxembourg, followed by the Netherlands, UK, Denmark, Sweden and France.

Figure 2.3: Increase in penetration rate



Source: European Commission (2006), Broadband access in the EU: Situation at January 1, 2006

The above European Commission working document does not contain information on geographic coverage of broadband networks. The Commission published a communication on “*Bridging the broadband gap*” on March 20, 2006. The communication focuses on the territorial divide regarding broadband availability and take-up between urban and rural areas. However, the data contained in the communication refer to the EU-15 Member States only and show the situation in January 2005.

In the EU-15 in January 2005, DSL-enabled exchanges covered more than 90% of urban households and businesses, against 62% of households and businesses in rural areas (although this overestimates effective coverage as some households and businesses will be too far away from the local switches to use DSL). Only 8% of households in rural areas subscribed to broadband compared to 18% in urban areas. Rural areas also lagged behind urban areas in terms of connection speeds. Comparable data on the EU-10 new Member States were not available.

### 3 IPTV vs. INTERNET TV

This paper looks at IPTV services that are viewed over a fixed broadband connection (DSL or fibre-to-the-home (FTTH)) with a standard television set. The paper does not cover video streaming over the public Internet viewed on a PC (e.g. MySpace, YouTube, etc). Table 3.1 below shows the main differences between IPTV services provided by telecoms operators and video streaming over the public Internet.

**Table 3.1: IPTV vs. Internet TV**

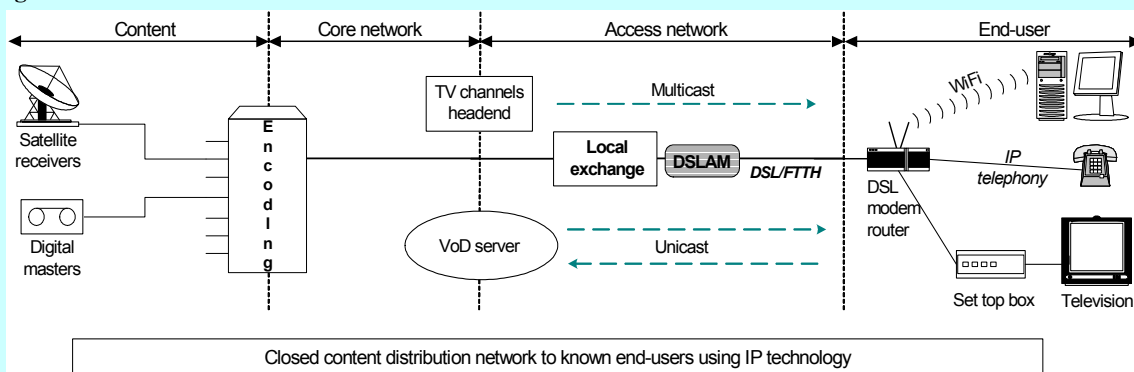
	<b>IPTV</b>	<b>Internet video streaming</b>
<b>Footprint</b>	Local (limited operator coverage)	Potentially supranational or worldwide
<b>Users</b>	Known customers with known IP addresses and known locations	Any users (generally unknown)
<b>Video Quality</b>	Controlled QoS Broadcast TV quality	Best effort quality, QoS not guaranteed
<b>Connection bandwidth</b>	At least 4 Mbps	
<b>Video format</b>	MPEG-2 MPEG-4 Part 2 MPEG-4 Part 10 (AVC) Microsoft VC1	Windows Media RealNetworks QuickTime Flash, and others
<b>Receiver device</b>	Set-top box with a television display	PC
<b>Resolution</b>	Full TV display	QCIF/CIF
<b>Reliability</b>	Stable	Subject to contention
<b>Security</b>	Users are authenticated and protected	Unsafe
<b>Copyright</b>	Content is protected	Often unprotected
<b>Other services</b>	Electronic Programme Guide (EPG), PVR (local or network)	
<b>Customer relationship</b>	Yes, onsite installation and customer support	Generally no
<b>Complementarity with cable, terrestrial and satellite broadcasting</b>	Potentially common STB, complementary coverage	

*Note: Adapted from EBU Technical Review April 2005 "Will Broadband TV shape the future of broadcasting?".*

IPTV services are offered over closed content distribution networks where the network operator controls the technical parameters of the transmission path end-to-end as shown in Figure 3.1 below.

IPTV covers both live TV (multicasting) as well as stored video on demand (unicasting). Video content is typically an MPEG-2 or increasingly MPEG-4 transport stream delivered via IP Multicast in case of live TV or via IP Unicast in case of video on demand (VoD).

**Figure 3.1: IPTV Network**



Source: Cullen International

This paper does not look at mobile TV services provided over wireless networks to handheld devices. The term mobile TV is broad and covers both:

- digital broadcasting to mobile devices based on standards such as Digital Video Broadcast Handheld (DVB-H), Digital Multimedia Broadcasting (DMB), and MediaFLO; or
- on-demand unicast video streaming via 2.5G GPRS and 3G mobile networks.

## 4 IPTV COMMERCIAL OFFERS IN EUROPE

The countries covered in this paper are the five largest EU Member States (France, Germany, Italy, Spain and the UK) and four smaller Member States with the highest broadband penetration rates ranging between 20%-25% (Belgium, Denmark, the Netherlands and Sweden). The commercial IPTV offers in these nine countries are shown in Annex I (Table 7.1).

The following trends can be seen.

- Incumbent telecoms operators in all nine countries have launched (or will shortly launch in the case of BT in the UK) commercial IPTV services. As the fixed voice telephony market continues to decline as mobile and IP-based fixed services replace traditional fixed PSTN services, incumbent operators are looking to multiple play strategies, including selling media content through IPTV services, for new streams of revenue. Providing multiple play bundles of services is also expected to reduce customer churn towards competitor operators.
- Alternative network operators (ANOs) have launched IPTV services in all of the countries except Belgium. These services are based mostly on full unbundled access to copper local loops rented from the incumbent operator. ANOs use their own FTTH infrastructure in a few cases, or a combination of FTTH and LLU in other areas in order to extend the geographic coverage of their service.
- IPTV is in its infancy in all of the markets surveyed. There is limited data available from operators' websites on the number of IPTV subscribers. From the data available, France has the largest number of IPTV subscribers so far. Alternative operator Free reported 1.26 million IPTV subscribers and France Télécom (FT) 300,000 IPTV subscribers as of end June 2006 (which should be seen in the context of 23.5 million households in France). Free says that 273,000 subscribers pay for extra channels and/or pay-per-view on top of the basic TV service. In Italy, alternative operator FastWeb reported 870,000 IPTV subscribers as of end June 2006 (22 million households in Italy).
- The geographic coverage of incumbent operators' IPTV services varies. Some claim national coverage (with of course the limitation that the end user must be located within a certain distance from the local exchange). Other incumbents offer their service in major metropolitan areas only. ANOs offer their services in the largest cities only and some on a regional basis. This can be explained by the fact that ANOs tend to go for LLU only at MDF sites where they can reach a high number of subscriber lines which will be in urban areas.
- The IPTV offers look pretty similar between incumbent operator and ANOs in each country, and between countries. The offers typically comprise: a basic package of 30-60 TV channels, extra channels on subscription, plus VoD on pay-per-view basis (PPV). Premium sports are either available on subscription channels or PPV. The availability of live broadcasts of national premier league football matches over IPTV platforms is discussed below.
- IPTV services are typically sold by both incumbent operators and ANOs in a bundle together with broadband Internet access and IP telephony (often with a WiFi handset) using a DSL "router" modem connected between the telephone socket and the set-top box (STB). Incumbent operators typically require the end user to keep the basic PSTN line subscription. However, this is not sold as part of the multiple play bundle (although both are charged on the same bill to the end user).

- Some IPTV services integrate a digital terrestrial TV (DTT) tuner in the STB, so that DTT channels are delivered to the end user over the air, while the fixed broadband connection is used for extra channels and VoD. This approach is followed by Free in France, Telefónica in Spain and BT in the UK (IPTV service still to launch). Not surprisingly, these three countries are amongst the most advanced in Europe in the switchover to digital terrestrial broadcasting. The European Commission has proposed a deadline of early 2012 for Member States to complete the switch off of analogue TV broadcasting.
- IPTV offers increasingly include a personal video recorder (either as a hard disk in the STB or on the network) allowing ‘time-shifted’ viewing of broadcasts, or ‘catch-up’ viewing if viewer pauses a live broadcast programme.

## 5 FOOTBALL RIGHTS

This section looks at whether IPTV providers’ packages include live or “near live” national premier league football matches, as an example of the sort of attractive content needed to compete with existing cable and satellite pay TV platforms.

The subject of rights to broadcast football matches is rather complex. The starting point in most countries is that the national football league manages the broadcasting rights collectively on behalf of the league clubs. These rights may then be sold exclusively or may be sold separately for different platforms. Further, the rights may be sold directly to broadcasters or to an intermediary agent that then sells on the rights to broadcasters.

The European Commission has taken action to stop the sale of exclusive rights by the English Football Association Premier League (FAPL). In March 2006 the Commission approved commitments from FAPL to create packages of matches to ensure that no single broadcaster would be allowed to buy all the packages as from 2007.

The FAPL committed that live TV rights would be sold in six packages with no bidder allowed to buy more than five packages. This meant that British Sky Broadcasting (BSkyB), the satellite TV group, would no longer have a monopoly in a market seen as crucial for the development of other pay TV platforms.

The decision closed a long-lasting dispute which started in December 2002. According to the Commission, the joint selling of media rights on an exclusive basis by FAPL on behalf of the league clubs restricted competition because it deprived media operators and football fans of choice, led to higher prices and reduced innovation.

Table 5.1 below shows who holds the broadcasting rights auctioned by FAPL for the current three-season period and, following the above commitments, for the next period starting in 2007. (The table covers UK rights only, overseas rights are sold separately.)

**Table 5.1: English football premier league broadcasting rights**

Current			Future		
2004/05 to 2006/07 seasons (3 years)			2007/08 to 2009/10 seasons (3 years)		
Live TV	BSkyB	£1.024bn	Live TV	BSkyB (4 packages)	£1.3bn
				Setanta (2 packages)	£392m
	BBC (highlights)	?		BBC (highlights)	£171.6m
Online	BSkyB	£100m bid for combined internet and mobile rights by	Online	BT and BSkyB (242 "near live" matches each season)	£84.3m
Mobile	3 and Vodafone	BSkyB, 3 and Vodafone	Mobile	BSkyB	Under £10m
TOTAL		Approx. £1.1bn (€1.6bn)	TOTAL		Approx. £2bn (€3bn)

Source: Cullen International

In practice, despite the European Commission action, BSkyB has still been able to snap up parts of all three types of rights (TV, online and mobile) auctioned by FAPL for the next period starting in 2007:

- Live TV - Setanta (an Irish broadcaster partly owned by private equity firms) which acquired the rights for two of the six packages of matches has already negotiated a deal to sell access to those packages to BSkyB.
- Mobile - FAPL had originally hoped that the five UK mobile network operators (MNOs) would bid against each other for the exclusive rights to show match highlights on mobile handsets. But the five MNOs chose to bid together in a consortium that would have given each operator equal access to the matches. BSkyB outbid this consortium. The MNOs will now need to negotiate individual deals with BSkyB. Interestingly, the price paid by BSkyB would suggest that the rights to show highlights on mobile handsets is not a particularly valuable commodity! This can perhaps be explained by the existence of other types of mobile data services, such as news alerts and club-specific services. Also, Sky Sports News is available as a streamed TV channel from some MNOs.
- Online – BT together with BSkyB have won the rights to carry 242 “near live” Premier League football matches each season. BT Vision will sell matches on a pay per view basis from 10pm on the match day for a window of up to 50 hours after the match. The sum paid by BT and BSkyB for the VoD rights is tiny compared to that paid for the live TV rights, and about half the amount paid by the BBC for the right to broadcast highlights on the terrestrial TV platform!

So what are the implications for IPTV providers? Today in the UK the Sky Sports channels, including live Premier League matches, are available on a subscription basis on different pay TV platforms: satellite (Sky), cable, and IPTV (Homechoice, the only IPTV provider launched so far, in the London area only).

It is likely that, given the ownership of rights for the 2007/08 to 2009/10 seasons, this model will continue. Other IPTV providers will therefore most likely negotiate with BSkyB to resell the Sky Sports channels.

Regarding “near live” matches on demand, these will be available from incumbent operator BT. It is not clear how BSkyB will use its online rights.

Annex II (Table 7.2) shows whether IPTV providers have rights to live broadcast of national premier league football matches in the other countries covered in this paper. The situation varies considerably between the countries:

- In Belgium, incumbent operator Belgacom has bought exclusive rights to broadcast the national premier league matches, which can only be viewed on its IPTV service Belgacom TV and not on any

other TV platform. (Belgacom, however, has an agreement with the two public broadcasters, VRT and RTBF, to show one match live per week on cable and terrestrial platforms).

- In the Netherlands, alternative operator Tele2 has exclusive rights for the national premier league matches, but has reached a distribution agreement with the incumbent operator KPN, so that KPN can broadcast Tele2's football package on KPN's IPTV and digital terrestrial TV platforms. The Dutch premier league matches are not available on cable or satellite platforms.
- In Germany, incumbent operator Deutsche Telekom (DT) has bought exclusive rights for IPTV broadcasting directly from the German Football League. The rights for other cable and satellite pay TV platforms are sold to another entity.
- In the other countries (Denmark, France, Italy, Spain and Sweden) IPTV providers typically have a distribution agreement whereby they resell the sports channels of the pay TV satellite operator (Viasat, Canal+, Sky, Sogecable) which are also available on both cable and satellite platforms.

## **6 REGULATORY BACKGROUND**

### **6.1 Telecoms regulation**

EU Member States were required to implement into national law the 2003 regulatory framework for electronic communications by July 25, 2003 (the 10 new Member States were required to have implemented the framework by the date of their accession to the EU on May 1, 2004). Despite some delays the framework is now implemented in all Member States, although the European Commission still has over 30 infringement proceedings open against individual countries for areas of incorrect implementation of the framework.

The centrepiece of the framework is a system of market analyses for the imposition of ex ante economic regulation on operators found to have significant market power (SMP) in markets defined and analysed following competition law principles. The European Commission published in 2003 a recommendation on relevant markets listing 18 retail and wholesale markets which national regulatory authorities (NRAs) must analyse and regulate where they find one or more operators to have SMP. Further, NRAs must only regulate retail markets where regulatory obligations on the upstream wholesale markets, and carrier selection/pre-selection obligations, are insufficient.

The list of retail markets includes only narrowband fixed PSTN telephony and leased lines. Retail broadband services, including multiple play services and IPTV, are therefore outside of the scope of ex ante regulation under the EU framework. At the wholesale level, local loop unbundling, the basic building block for provision of IPTV by alternative operators, is regulated for access to copper loops but not fibre loops.

If an NRA wants to regulate a market outside of the 18 listed it must prove to the Commission that three cumulative criteria are met:

- high and non-transitory barriers to market entry;
- the market displays characteristics such that it will not tend towards effective competition over time; and
- ex post application of competition law by itself is insufficient to regulate the market.

The framework also provides that newly emerging markets should not be subject to ex ante regulation. Emerging markets are markets that are so new that it is not possible to determine whether or not the three criteria test for ex ante regulation is met.

The 2003 framework is currently under review. The Commission will propose changes to the directives making up the framework to the European Parliament and Council at the start of 2007. The revised directives are not likely to be adopted until 2007-08 and enter into force in the Member States before 2009. Until then, the current framework applies.

In parallel, the Commission will publish a revised recommendation on relevant markets at the end of 2006. The list of markets for ex ante regulation will be shorter (basically retail fixed PSTN calls and leased lines will be removed). No new markets relevant to the provision of IPTV are proposed in the revised list.

## 6.2 Broadcasting regulation

### 6.2.1 Current regime

The IPTV commercial offers in the nine Western European countries described above combine packages of live TV channels and VoD.

At present in the EU, television broadcasting and VoD are subject to different regulatory regimes.

Television broadcasting is regulated by the Television Without Frontiers Directive 1997 (TWF). Television broadcasting is defined as:

*“the initial transmission by wire or over the air, including satellite, in unencoded or encoded form, of television programmes intended for the reception by the public. It includes the communication of programmes between undertakings with a view to them being relayed to the public. It does not include communication services providing items of information and other messages on individual demand such as telecopying, electronic data banks and other similar services”.*

The directive therefore covers traditional TV, pay-per-view and near-video-on-demand (where programmes are broadcast on repeat loops). The directive does not cover VoD.

TWF contains the following provisions:

- Country of origin principle. Television broadcasters only need to comply with the legislation of the Member State in which they are established. Member States cannot restrict the reception and retransmission on their territory of television broadcasts from other Member States (except in limited cases to related to protection of minors or incitement to hatred).
- Events of major importance. Member States must list events of major importance for society and take measures so that a substantial proportion of its public is not deprived from watching the events listed via live or deferred coverage on free TV. These typically include the final rounds of certain sporting competitions (such as the national football cup).
- Quotas for European works (majority of a broadcaster’s transmission time) and for independent producers (at least 10% of broadcaster’s transmission time or budget).
- Limits on advertising time and teleshopping.
- Protection of minors.

TWF is a so-called minimum harmonisation directive, which means that Member States can impose obligations on broadcasters licensed in their territory that go beyond the directive.

VoD, on the other hand, are classified as information society services under the Electronic Commerce Directive 2000. Information society services are defined as:

*“any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services”.*

VoD are subject to a light regulatory regime. VoD also benefit from the country of origin principle, but are not subject to any of the other obligations in the TWF listed above, for the moment...

### 6.2.2 Future regime

In December 2005 the European Commission submitted a proposal to the European Parliament and Council for a directive on audiovisual media services (AMS) amending the TWF.

The AMS directive is not likely to be adopted before the end of 2007 and enter into force in the Member States before 2009. Until then, the current framework applies.

The proposal would apply to all audiovisual media services whether scheduled television broadcasting (linear) or on-demand (non-linear). Audiovisual services would be defined as:

*“a service ... the principal purpose of which is the provision of moving images with or without sound, in order to inform, entertain or educate, to the general public by electronic communications networks...”.*

The obligations foreseen in the proposal would be imposed on media service providers that:

- have editorial responsibility for the choice of the audiovisual content; and

- determine the manner in which the audiovisual content is organised.

The country of origin principle would be carried over from the current TWF and Electronic Commerce directives. A basic tier of rules would apply to all audiovisual media services, whether linear or non linear, and an additional tier would apply only to linear services.

The first tier of rules would include:

- protection of minors;
- prohibition of content that would incite hatred;
- promotion of European works (although this would not include transmission quotas, the wording is broad and would allow Member States, for instance, to impose quotas on the percentage of European works in VoD catalogues); and
- rules on advertising (but not time limits) and product placement.

The second tier of rules for broadcasting (linear) services would basically carry over the rules on events of major importance and quotas for European and independent production from the TWF. The current rules on time limits for advertising would be lightened. There would also be a new right of access for broadcasters to events of high interest to the public for short news reporting purposes, such as sports events.

Two of the major questions under discussion in the first reading of the proposal in the European Parliament are:

- the definition of editorial responsibility over audiovisual content and when distribution platforms, including IPTV providers, can be considered to exercise editorial control. For example, would this include selection of the TV channels offered in different subscription bouquets, or the compilation of the catalogue of content offered by VoD; and
- how to deal with hybrid audiovisual platforms offering both linear and non-linear services, especially the situation where the viewer moves from the linear to non-linear environment, for example, by starting to watch a broadcast TV programme (linear) but then pausing and restarting later by watching the programme recorded on a network PVR (non-linear).

## **7 REGULATORY ISSUES**

This paper identifies the following issues that may be of concern to regulators related to multiple play offers in general, including IPTV:

- replicability (i.e. in terms of telecoms infrastructure, are alternative network operators able to match the offers of the incumbent operators?);
- predatory pricing by incumbents;
- bundling by incumbents of multiple play offers with the basic PSTN subscription;
- cross-subsidy by alternative operators of their retail prices from fixed PSTN call termination revenues;
- must-carry obligations; and
- net neutrality.

Finally, the paper also compares the authorisations or licences an IPTV provider would need from the broadcasting authority, in addition to the authorisation from the telecoms regulator to operate an electronic communications network, in order to provide different types of IPTV services (broadcasting and VoD).

### **7.1 Replicability**

Replicability should probably not be a major concern to regulators, at least in Western Europe. LLU - the essential building block for multiple play offers – is available in practice in most countries in the EU (with some exceptions in the new CEE Member States). Reference unbundling offers and the procedures for

associated facilities, such as collocation, are in place. Prices are set on cost-oriented terms and have been approved by the NRAs.

The latest European Competitive Telecommunications Association (ECTA) broadband scorecard shows that there were approximately 11 million full unbundled and shared access loops in Europe as of end March 2006 (although, this should perhaps been seen in the context of 188 million incumbent lines in total).

Wholesale DSL services (so-called bitstream access) are not suited to the provision of IPTV since, as shown above, IPTV services are provided over closed content distribution networks where the operator needs to control the technical parameters of the transmission path end-to-end.

Incumbent operators and ANOs are in many cases investing to build-out their fibre networks closer to end users in major metropolitan areas, either all the way to the home (FTTH) or more commonly to the street cabinet (fibre-to-the-curb, FTTC) in combination with VDSL.

This raises two questions:

- Will incumbent operators be required to offer unbundled access to their FTTH local loops? Answer: No, there is no immediate prospect of unbundling obligations being extended to cover fibre loops. Longer term the question may come up in future reviews of the Commission's recommendation on relevant markets.
- Do ANOs have access to sub-loop unbundling in order to be able to install their own VDSL services? Answer: Yes, but not much practical implementation so far.

The obligations in Europe for local loop unbundling apply only to copper local loops. Market 11 in the European Commission recommendation on relevant markets is defined as the *“market for wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services”*.

No NRA has proposed to extend the scope of LLU to cover fibre loops. To do so, an NRA would need to either to:

- prove that fibre loops are substitutes to copper loops and should be included within the scope of market 11. This is very unlikely. Fibre loops are not a substitute to copper loops in most cases because of their current limited geographic availability, and their much higher price and technical characteristics; or
- define a new market for wholesale unbundled access to fibre loops outside of the Commission recommendation. Again, this very unlikely since it would require the NRA to prove that the three cumulative criteria for ex ante regulation are met (high and non-transitory barriers to market entry, the market displays characteristics such that it will not tend towards effective competition over time, and competition law itself is not sufficient). Finally, it could even be argued that investment in fibre loops is an emerging market where it is too early to reach any conclusions on whether the three criteria test is met or not.

Therefore, it is very unlikely that incumbents will be required to give unbundled access to their fibre loops in the short term. Longer term, it is difficult at this stage to say how extensively fibre will be deployed in the local access network and what other technologies will also be widely used by that time, such as WiMAX. So, it is hard to predict what the market definition of the access network will look like in the long term, and what regulation might be imposed.

On the second question regarding sub-loop unbundling (SLU), although incumbents are required to give access to copper sub-loops and this is included in their reference unbundling offers, in practice there has been limited commercial demand for SLU in Europe so far. It's been a big enough task for ANOs to build out their own infrastructure to the local exchanges, let alone to build beyond that. But as ANOs build out their own fibre closer to end users in order to be able to install VDSL, there will be increased regulatory scrutiny of the prices and other terms and conditions for SLU in the incumbent operators reference offers. For example, Cullen International has not so far been asked by our clients to benchmark the prices for SLU across Europe, a good indication of the level of interest in SLU at present!

## 7.2 Predatory pricing

A greater concern to regulators than replicability might be that incumbent operators could engage in predatory pricing of their multiple play offers in order to deter competitive entry from ANOs.

Retail broadband markets are not included in the Commission list of relevant markets for regulation under the EU framework, and NRAs do not regulate ex ante incumbent operators' retail broadband tariffs, including for multiple play packages such as IPTV.

This differs from the regime in place for PSTN telephony where in most Member States the incumbent operator is still required to give the NRA advance notice of its proposed retail tariffs, which then are either formally or tacitly approved by the NRA (tacit approval means that the notified prices are approved if there is no response by the regulator within a specified time). The methodology used by the NRA to approve the proposed retail prices typically involves a price squeeze test comparing the proposed prices to the incumbent operator's own costs and/or to the costs of an efficient alternative operator.

In order to impose similar ex ante controls on retail broadband tariffs, an NRA would need to:

- define a new relevant market for retail broadband services outside of the Commission recommendation showing that the three criteria test is met;
- find that the incumbent operator has SMP on the retail market; and finally
- show that regulation at the wholesale level (LLU and bitstream access) is insufficient.

This is very unlikely to be the case.

However, in some countries where NRAs have analysed the wholesale market for broadband access (market 12) they have imposed an obligation on the incumbent operator to set the prices of its bitstream access services based on the 'retail minus' methodology. Incumbent operators are then required to notify in advance to the NRA any changes to their retail broadband tariffs so that changes to the corresponding wholesale tariffs to ANOs can be made and the retail minus margin can be checked by the NRA. So, in some instances, obligations on incumbent operators to notify their retail broadband tariffs to NRAs have been imposed "via the back door" of wholesale regulatory obligations.

However, the trend in Member States is moving away from retail minus pricing of wholesale DSL services towards cost orientation obligations. The reason is the growing number and complexity of retail ADSL offers and bundles, which makes applying the retail minus approach to each one a real nightmare. Both Italy and Spain have recently moved away from retail minus to cost orientation.

In the absence of ex ante regulation of retail broadband tariffs, alleged cases of predatory pricing of retail broadband prices will be investigated under standard competition law by national or European competition authorities. For example, in July 2003 the European Commission imposed a €10.35 million on Wanadoo, a subsidiary of FT for abuse of a dominant position in the form of predatory pricing of ADSL-based Internet access services for the general public (the case has been appealed to the Court of First Instance and the court's judgement is still pending).

In February 2006 the Commission sent a statement of objections to Telefónica, alleging an abuse of a dominant position. The Commission claims that Telefónica has imposed a margin squeeze in the Spanish broadband market since 2001.

## 7.3 Bundling

As part of their analyses of the retail fixed PSTN access and calls markets (markets 1-6), NRAs in many Member States have imposed obligations on the incumbent operator not to unreasonably bundle access with calls (i.e. a bundled package of line rental and inclusive call allowance). Usually these obligations state that the end user must be able to purchase the services separately and the proposed prices for the bundled package must not be predatory.

However, it does not appear that NRAs have always specified whether these prohibitions on bundling would also cover the bundling of the incumbent operator's basic PSTN service with their multiple play offers. In practice it can be observed that today incumbent operators sell bundles of ADSL internet access, IPTV and

flat rate PSTN- or IP-based calls, but this is not sold together with the basic PSTN line subscription (although both are charged on the same bill).

#### **7.4 ANOs' fixed call termination rates**

Incumbent operators sometimes claim that in Member States where fixed ANOs are allowed to charge higher rates to terminate PSTN calls on their networks than the incumbent operator charges to terminate calls on its network, this provides a source of revenues which ANOs can use to cross-subsidise the retail prices of services, including multiple play packages.

The approach of NRAs to the regulation of ANOs' termination rates has differed both in the past and at present across the EU. NRAs in some Member States (for example, France) have in the past set "delayed reciprocity" regimes for fixed PSTN call termination on ANOs' networks. These delayed reciprocity models typically provided for gradual reductions in ANOs' rates to come into line with the incumbent's fixed termination rates after a number of years (5 years in the case of France).

Subsequently, with the introduction of the EU 2003 electronic communications regulatory framework, NRAs were required to analyse the wholesale market for fixed call termination on individual networks (market 9). The choice of obligations imposed on ANOs varies considerably between Member States. Some have imposed delayed reciprocity models where ANOs' and the incumbent's rates will converge over time (the Netherlands, Italy), others have set strict reciprocity between the incumbent and ANOs' rates (Sweden, the UK), whereas others allow ANOs to set "reasonable" termination rates that may exceed the incumbent's without any convergence to reciprocity over time (Denmark, Germany, Spain).

Therefore, the opportunity for cross-subsidisation by ANOs from call termination to retail prices will be an issue in some Member States, but not in others.

#### **7.5 Must-carry obligations**

Article 31 of the Universal Service Directive states:

*"Member States may impose reasonable "must carry" obligations, for the transmission of specified radio and television broadcast channels and services, on undertakings under their jurisdiction providing electronic communications services used for the distribution of radio or television broadcasts to the public where a significant number of end-users of such networks use them as their principal means to receive radio and television broadcasts. Such obligations shall only be imposed where they are necessary to meet clearly defined general interest objectives and shall be proportionate and transparent. The obligations shall be subject to periodical review."* (underlining is ours – CI).

Given the limited take-up of IPTV commercial offers in most of the nine countries surveyed, it would be expected that must-carry obligations would not apply to IPTV providers.

However, Annex III (Table 7.3) shows that must-carry obligations are applicable to fixed IPTV providers in three countries: Belgium (French speaking community only), France and Sweden. In Sweden, the must-carry obligation applies only to FTTH networks and not to ADSL. In all three countries the national public channels must be carried by IPTV providers (although, it's very likely that these would be carried without such an obligation given their attractiveness to viewers). Local channels must also be carried in Belgium and France.

#### **7.6 Net neutrality**

The debate on net neutrality has started to reach Europe from the US. But, this debate is probably less relevant for IPTV services provided over closed networks than for other types of services streamed over the public Internet.

Net neutrality refers to a data network that assigns all transmissions equal priority as they are passed along the network. This principle which was implemented by the developers of the Internet for efficiency and costs reasons, is now challenged by some market players who argue that users and companies should be able to pay to ensure that their transmissions have priority over others. They argue that net neutrality does not guarantee quality of service for some real time applications such as VoIP and live video streaming, where packet delivery is time critical.

For others and in particular for some content providers and consumer groups, abandoning net neutrality would go against the principles of equality and openness that characterize the Internet. One of the risks of a 'two-tiered Internet' is obviously that network operators use packet shaping and prioritisation tools in an anti-competitive way so as to disadvantage their competitors' services.

In order to avoid degradation in the quality of transmission offered to third parties to unacceptably low levels, the European Commission is proposing as part of its current review of the EU regulatory framework for electronic communications that NRAs have the power to:

*“set minimum quality levels of network transmission services in an NGN (Next Generation Network) environment based on technical standards identified at EU level”.*

## **7.7 Broadcasting licences**

The EU 2003 regulatory framework introduced a general authorisation regime for the operation of an electronic communications network (including networks for broadcasting), requiring at the most a notification to the telecoms regulatory authority.

Annex IV (Table 7.4) shows what additional authorisations or licences an IPTV provider would need from the broadcasting authority depending on the types of services provided:

- VoD. Since VoD are information society services under the Electronic Commerce Directive there should be no authorisation or licence needed. This is the case for seven of the countries. In Belgium (Dutch speaking community) and the Netherlands a notification must be made to the broadcasting authority. While in Belgium (French speaking community) a full licence must be granted by the authority. This does not appear to be in line with the directive.
- Distribution of already licensed TV channels (either licensed in the same Member State or in another Member State under the country of origin principle of the TWF). This activity does not require a notification or licence from the broadcasting authority in six of the countries. A notification must be made to the authority in Belgium (French speaking community), France and Spain (autonomous region of Cataluña). This could be seen as contrary to the TWF which says that Member States cannot restrict the retransmission of television broadcasts originating from other Member States. If the amount or type of information required in the notification is too cumbersome this might be considered a disproportionate restriction to retransmission (for example, in Belgium, Belgacom had to provide copies of the licences granted to TV channels in other Member States!).
- Where an IPTV provider goes beyond simple distribution of already licensed TV channels and exercises editorial control over programming then a licence is needed from the broadcasting authority in all nine countries. However, it is not particularly clear from the national laws at what point the IPTV operator would be considered to exercise “editorial control” and how this is defined. For example, would choice of channels offered in different subscription bouquets or time-scheduling of programmes be considered as editorial control, or only where the IPTV provider were to supply its own channels, for example, a teleshopping channel?
- Finally, in the two countries with a federal government structure (Belgium and Germany), responsibility for broadcasting is a regional competence and broadcasting authorisations/licences are issued at the regional level (although, in Germany it is possible that one regional media authority issues a nationwide broadcasting licence). The same applies to the autonomous region of Cataluña in Spain.

## ANNEX I: IPTV COMMERCIAL OFFERS

The table below describes commercial IPTV offers which are viewed over a fixed broadband connection (DSL or fibre-to-the-home (FTTH)) with a standard television set. IPTV services are offered over closed content distribution networks and are different from video streaming over the public Internet viewed on a PC.

**Table 7.1: IPTV Commercial Offers**

	Operator	IPTV service name and weblink	Geographical coverage Or population coverage	Technical solution			Number of subscribers (source + date)
				Access network (incumbent own infrastructure, alternative operator LLU or FTTH)	ADSL, ADSL2+, VDSL	Set-top box integrated with DTT decoder?	
<b>BE</b>	Belgacom	<a href="#">Belgacom TV</a>	Half of the population according to Belgacom	Belgacom own infrastructure	ADSL, ADSL2+, VDSL, depending on the location.	No	74K end June 2006. (source: Belgacom <a href="#">press release</a> )
<b>DK</b>	Tele Denmark	<a href="#">TDC TV</a>	Not available	Own infrastructure	ADSL	No	No data available
	Dansk Bredbaand	<a href="#">Dansk Bredbaand</a>	Not available	Own infrastructure	FTTH	No	No data available
<b>FR</b>	France Telecom	<a href="#">Ma ligne TV</a>	National, but must be within 2.5km of a FT switch	France Telecom own infrastructure	ADSL2+	Yes	306K end June 2006 (source: <a href="#">Echosdunet</a> )
	Neuf Telecom Cegetel	<a href="#">Neuf Telecom</a>	In total 1251 MDFs opened for Full unbundling (out of around 12000) then be within 2.5km of a FT switch where Neuf Telecom has implemented physical access	LLU	ADSL2+	Yes	60K end Dec 2005 (source: Free Telecom)
	Free Telecom (Illiad Group)	<a href="#">Free</a>	In total 1251 MDFs opened for Full unbundling (out of around 12000) then be within 2.5km of a FT switch where Free has implemented physical access	LLU NB FTTH launched in Paris in Sept 2006	ADSL2+	Yes	1.26m end June 2006 (source Free Telecom)
	Telecom Italia	<a href="#">Alice</a>	In total 1251 MDFs opened for Full unbundling (out of around 12000) then be within 2.5km of a FT switch where Telecom Italia has implemented physical access	LLU	ADSL2+	Yes	No data available

	Operator	IPTV service name and weblink	Geographical coverage Or population coverage	Technical solution			Number of subscribers (source + date)
				Access network (incumbent own infrastructure, alternative operator LLU or FTTH)	ADSL, ADSL2+, VDSL	Set-top box integrated with DTT decoder?	
DE	DT	<a href="#">T-Home</a>	<i>T-Home Complete</i> (VDSL) available in 10 metropolitan areas <i>T-Home Classic</i> (ADSL2+) available in many regions all over Germany	Subscription to 'T-DSL' service based on DT's own infrastructure (DSL)	<i>T-Home Complete Basic</i> and <i>T-Home Complete Plus</i> : VDSL <i>T-Home Classic</i> : ADSL2+	No	No data available. Commercial launch in August/September 2006
	Hansenet, a Telecom Italia subsidiary	<a href="#">Alice Home TV</a>	Region of Hamburg and City of Lübeck	Hansenet own infrastructure (DSL) based on LLU	ADSL2+	No	No data available. Commercial launch in April/May 2006.
IT	FastWeb	<a href="#">Fastweb</a>	Most densely populated cities in Italy.	Fastweb's own FTTH or ADSL based on LLU from Telecom Italia	FTTH, ADSL and ADSL2+	No	874K ( <a href="#">Q2 2006 financial reports</a> ). Total number of households in Italy c.a. 22m.
	Telecom Italia (TI)	<a href="#">Alice Home TV</a>	On Sept. 11, 2006 TI <a href="#">announced</a> that the service is currently available in 70 major cities, and by the end of 2006 it will reach 250 cities.	Telecom Italia own infrastructure	ADSL2+	No	No data available
NL	KPN	<a href="#">Mine TV</a>	Not available	Own infrastructure	ADSL2+	No	No data available (IPTV offer launched in May 2006).
	Tele2	<a href="#">Tele2 TV</a>	Not available	LLU	ADSL2+	No	No data available In a <a href="#">press release</a> , Versatel mention 84K ADSL 2+ clients 2Q 2006 (dual and triple play clients).
ES	Telefónica	<a href="#">Imagenio</a>	National coverage	Telefónica's own infrastructure	ADSL	Yes	206K end 2005 Source: <a href="#">CMT annual (2005) report</a> (page 32)
	Jazztel	<a href="#">Jazztelia TV</a>	National coverage	Own optical fibre + LLU	ADSL2+	Not yet. Announced to be available shortly.	No data available
SE	Telenor with Viasat	<a href="#">Bredbandsbolaget</a>	Available in major cities	Own fibre and LAN infrastructure and xDSL based on LLU from Telia Sonera	ADSL + VDSL depending on the location. FTTH	Yes	No data available
	TeliaSonera	<a href="#">TeliaSonera</a>	Available in major cities	Own fibre and xDSL infrastructure	ADSL FTTH	Yes	No data available

	Operator	IPTV service name and weblink	Geographical coverage Or population coverage	Technical solution			Number of subscribers (source + date)
				Access network (incumbent own infrastructure, alternative operator LLU or FTTH)	ADSL, ADSL2+, VDSL	Set-top box integrated with DTT decoder?	
	SkyCom	<a href="#">FastTVnet</a>	Available in major cities	Fibre infrastructure from over 20 municipal networks	FTTH	No	No data available
	Telenor	<a href="#">Canal Digital</a>	Available in major cities	FTTH	FTTH	Yes	No data available
UK	Video Networks (merged with Tiscali UK in August 2006)	<a href="#">Homechoice</a>	London only	LLU		No	Between 4K and 10K in 2006 (according to press reports)
	BT plans to launch before end 2006	<a href="#">BT Vision</a>	-	BT own infrastructure	-	Yes	-

Source: Cullen International

## ANNEX II: FOOTBALL RIGHTS

The table below shows whether a fixed IPTV operator has rights to live broadcast of national premier league football matches and whether those rights are:

- exclusive rights across all TV platforms (i.e. can only watch matches on IPTV operator)
- exclusive rights for IPTV platform only (i.e. matches also available live another pay TV platform, e.g. cable, satellite)
- Note: Under the Television Without Frontiers Directive, some matches may be considered as “events of major importance” (e.g. final of the national football cup) and be required to be available on free TV. These matches are not covered in the table below.

The table does not cover rights for Mobile TV platforms.

**Table 7.2: Football Rights**

	IPTV operator	Does IPTV providers have exclusive rights for...		Period of rights How much paid?
		all TV platforms (i.e. can only be watched on IPTV)	IPTV platform only (i.e. can be watched on other pay TV platforms)	
<b>BE</b>	Belgacom TV	Yes NB The two public broadcasters signed an agreement with Belgacom TV to show one match live per week until Dec. 2006.	No	July 2005 to July 2008. € 36m per year.
<b>DK</b>	Tele Denmark	No	No	Until Dec. 2006.
	Dansk Bredbaand	No	No	
	Viasat (MTG) has exclusive broadcasting rights to broadcast live matches from the Danish premier league until December 31, 2006 that apply to all platforms, including IP-TV. IP-TV providers willing to broadcast the Danish football matches have to sign distribution agreements with Viasat.			
<b>FR</b>	France Telecom's Ma Ligne	No (but distribution of Canal+ standard offer - see comment below)	Yes for 'Foot Plus' offer FT has signed a 3 year agreement with Canal+ whereby it has the exclusivity of reselling Canal Foot Plus offer (see comment below)	3 years Canal+ paid € 600 m per year. FT is under stood to be paying € 50m per year to Canal+
	Free	No (but distribution of Canal+ standard offer - see comment below)	No But other specific football rights (French League Cup). Free has an agreement with France Television, the <a href="#">rights holder</a> for the football cup. Iliad <a href="#">press release</a>	
	Alice Télécom	No (but distribution of Canal+ standard offer - see comment below)	No Resell TPS foot offer that has the rights for English football, UEFA and the champions league	
	Canal+ has won the auction for four lots regarding live broadcast of national premier league football matches (some rights have also been granted to Orange for Mobile TV). Canal+ proposes: <ul style="list-style-type: none"> <li>• live broadcast of 3 national premier league football matches in its standard offer</li> <li>• live broadcast of 7 additional premier league football matches in its 'Foot Plus' offer.</li> </ul> Canal+ resells its standard offer to cable, satellite and to IPTV operators. An exclusive distribution right on IPTV platforms has been granted to France Telecom for the 'Foot Plus' offer.			

	IPTV operator	Does IPTV providers have exclusive rights for...		Period of rights How much paid?
		all TV platforms (i.e. can only be watched on IPTV)	IPTV platform only (i.e. can be watched on other pay TV platforms)	
DE	Deutsche Telekom in cooperation with Premiere	Not applicable	DT has exclusive rights for IPTV only Arena (a subsidiary of Unity Media, one of the big cable TV operators) has exclusive rights for Pay TV platforms (cable, satellite)	July 2006 to July 2009 Price not published, according to media reports approx. € 45m for the three seasons.
IT	Telecom Italia ( <a href="#">Alice Home TV</a> )	No (but see the note below)	No (but see the note below)	Depends on the contract with an individual team (but see the note below)
	<a href="#">FastWeb</a> (access to content of Sky)			
<p>There is no collective rights management in Italy, and the broadcaster negotiate directly with the clubs.</p> <p><b>Competition Authority decision on Mediaset of June 2006</b></p> <p>On June 28, 2006 AGCM, the Italian Competition Authority, found (<a href="#">provvedimento n. 15632</a>) that private terrestrial broadcaster Mediaset had abused its dominant position by entering into agreements with Juventus, Inter, Livorno, Roma, Milan, Lazio and Sampdoria giving it long-term, exclusive and pre-emptive rights to broadcast matches on all platforms.</p> <p>During the investigation, Mediaset however committed, from 2007:</p> <ul style="list-style-type: none"> <li>to maintain exclusivity only on the digital terrestrial platform, and sell other rights to third parties in an equitable, transparent and non-discriminatory manner</li> <li>not to include any further clauses regarding right of first refusal or right of pre-emption.</li> </ul> <p>Following the opening of the investigation, Mediaset sold the broadcasting rights for Serie A matches played "at home" of Juventus, Inter, Roma and Lazio, giving SKY exclusive satellite broadcasting rights as well as ceding non-exclusive broadcasting rights on different alternative platforms.</p> <p>Mediaset also agreed with Juventus, Inter, Milan, Lazio, Roma and Livorno to reduce the duration of rights acquired from 2007 to a maximum of two years with an option to renew for one further season. Therefore, the contracts originally intended to last until 2016, will expire in 2009 unless the option is exercised.</p> <p><b>NewsCorp/Telepiù</b></p> <p>On April 2, 2004 the European Commission <a href="#">approved</a> a concentration, subject to conditions, where News Corporation Limited (NewsCorp) acquired control of the whole of the Italian pay-TV's Telepiù and Stream. Telepiù and Stream then merged their activities in a combined satellite pay-TV platform (Sky Italia). The conditions relating to access to content included that:</p> <ul style="list-style-type: none"> <li>NewsCorp will waive exclusive rights in relation to blockbuster movies, football matches and other sport rights for non-satellite transmission. Cable, DTT and Internet operators will thus be able to buy content directly from right owners (e.g. film producers, football clubs, other sport rights owners)</li> <li>non-satellite competitors will be able to buy premium content from NewsCorp by means of a wholesale offer based on 'retail minus' pricing. The wholesale offer will work on an unbundled and non-exclusive basis</li> <li>access to content will be facilitated also for potential satellite competitors by allowing rights owners to unilaterally terminate without penalties their ongoing contracts with Sky and by limiting the duration of future contracts (2 years for football clubs and 3 years for film producers).</li> </ul> <p>The commitments will be in force until Dec. 31, 2011.</p>				
NL	Tele 2	Yes In Sept. 2006, Tele2 and KPN <a href="#">have concluded</a> a distribution agreement: Tele 2 will offer its football package through KPN's DVB-T and IP-TV networks.	No	From Dec. 2005 to Aug. 2008. € 30.5m per year.
ES	Telefónica <a href="#">Imagenio</a>	No	No	
	Jazztel <a href="#">(Jazztelia TV)</a>	No	No	
<p>For 2006/2007 and 2007/2008 seasons, the audiovisual rights of the Spanish league and the Spanish cup are held by Audiovisual Sport (<a href="#">owned</a> by <a href="#">Sogecable</a>, a satellite platform). Audiovisual Sport has distribution agreements with IPTV and cable operators.</p>				
SE	Telenor with Viasat Broadcasting <a href="#">(Bredbandsbolaget)</a>	No Distribution agreement with Viasat that offers its football package over Bredbandsbolaget's IP-TV network	No	See note below

	IPTV operator	Does IPTV providers have exclusive rights for...		Period of rights How much paid?
		all TV platforms (i.e. can only be watched on IPTV)	IPTV platform only (i.e. can be watched on other pay TV platforms)	
	TeliaSonera	No Distribution agreement with Canal+ that offers its football package over TeliaSonera's IP- TV network	No	
	Telenor with Canal Digital	No Distribution agreement with Canal+	No	
	FastTV	No Distribution agreement with Canal+	No	
	In Feb. 2006 the Swiss rights agent, Kentaro Group, paid EUR 28 million to the Swedish Football Association in a five year contract for its Allsvenskan National league rights over the next five years. Broadcasters including Viasat, Canal+, TV4 and SVT have to negotiate directly with the Swiss company for rights to the domestic Allsvenskan competition.			
UK	Homechoice	No. Homechoice offers Sky sports via retail distribution agreement with Sky		
	BT Vision (to be launched end 2006)	No	No	<a href="#">Rights</a> to show 242 "near-live" Premier League matches per season, for 3 years (2007/08 to 2009/10). Shares non-exclusive rights with BSkyB. BT and Sky paid £84 million (€125 million)

Source: Cullen International

### ANNEX III: MUST CARRY OBLIGATIONS FOR FIXED IPTV

The table below shows:

- whether must-carry obligations apply to fixed IPTV operators
- which TV channels must be carried
- the compensation model for must-carry
- whether broadcasters have any “must offer” obligation to offer their programming to IPTV operators

**Table 7.3: Must carry obligations for fixed IPTV**

	Must-carry obligation on fixed IPTV operators	Which TV channels?	Compensation Who pays who, IPTV operator or broadcaster?	Must-offer obligation for broadcasters to fixed IPTV operators
<b>BE</b>	French speaking community: Yes Must carry obligation apply to cable networks (without distinction between coax and IP networks). (Media Decree, art. 81)	<ul style="list-style-type: none"> <li>• Belgian French-speaking public channels (TV+radio).</li> <li>• 2 Belgian Dutch-speaking public TV channels (with reciprocity conditions) and all public radio channels.</li> <li>• Belgian German-speaking public services (radio channels)</li> <li>• Local TV channels (limited to those where the subscriber is located)</li> <li>• International channels, appointed by the government, in which the French-speaking public broadcaster participates (TV5).</li> </ul> (Media Decree, art. 82)	Transport and broadcasting costs borne by IPTV providers.	No
	Flemish Community: No	-	-	No
	German-speaking Community: No	-	-	-
<b>DK</b>	No	-	-	No
<b>FR</b>	Yes No justification in the law. Must carry is imposed on all platforms that do not use frequencies assigned by the broadcasting regulator.	<u>Mandatory - Public channels</u> France 2 France 3 France 5 France 4 (digital only) Arte TV5 Services of Réseau France Outre-Mer that are destined to the metropolitan public La Chaîne Parlementaire Services for disabled people associated to the channels to be carried Law 86-1067 <u>On request from the channels</u> Local channels Analogue & digital free-to-air channels but unclear ( <i>access to distribution terminal</i> ) – Art. 34-4 Law 86-1067	Transport and broadcasting costs borne by IPTV providers.	Yes – public channels only The public broadcaster licence (cahier des charges de France Télévision) requires the provision of public channels to all networks.
<b>DE</b>	No	-	-	No
<b>IT</b>	No	-	-	No
<b>NL</b>	No	-	-	No
<b>ES</b>	No	-	-	No

	Must-carry obligation on fixed IPTV operators	Which TV channels?	Compensation Who pays who, IPTV operator or broadcaster?	Must-offer obligation for broadcasters to fixed IPTV operators
SE	<p>Yes</p> <p>Cable networks and other wired electronic communications networks used for transmission of TV broadcasts to the public and a significant number of households connected to the network use it as their principal means to receive TV broadcasts. Public communications networks based on paired metal loops, where only a limited number of channels can be broadcasted, e.g. using ADSL technology, are however exempt from must-carry.</p> <p>Chapter 8 of <a href="#">Law (1996:844) on radio and TV</a>.</p>	<p>Four public service channels financed by TV-licence fees: SVT1, SVT2, SVT24 and UR</p> <p>One commercial FTA analogue channel (TV4) – only until February 2008 (analogue switchover date)</p>	<p>Rights holders have previously refrained from requesting compensation for the material subject to copyright that is included in the programme services covered by the must-carry obligation. From July 1, 2005 rights holders are entitled to request compensation from network operators under the Copyright Act (1960:729) for these programme services as well. Network operators then have a right to reasonable cost compensation from a broadcasting undertaking under the Copyright Act, if the must-carry obligation would otherwise be unreasonably burdensome. If the parties cannot agree on the matter, RTVV, upon special request, can decide on the allocation of the copyright costs.</p>	None
UK	<p>Yes, in principle but not in practice</p> <p><a href="#">Art. 64</a> of the Communications Act 2003 provides for must-carry on ‘<i>networks by means of which public electronic communications services are provided that are used by a significant number of end-users as their principal means of receiving television programmes</i>’, Thus must carry is a generic obligation imposed on all electronic communications networks, e.g. potentially all broadcast platform providers, including IPTV.</p> <p>However must-carry has not been implemented as platform and content providers have reached agreements to carry the public broadcast channels through commercial negotiation.</p>	<p>Must-carry services are listed in the Communications Act 2003 as the broadcasters with public service obligations:</p> <ul style="list-style-type: none"> <li>• The BBC is the government-funded public broadcaster offering news, sport and its own dramatic programming.</li> <li>• ITV (Channel 3) is a commercial broadcaster funded from commercial revenues, for example advertising. It consists of 15 regional franchises. It has public service obligations to provide a range of high quality programming, in particular for regional programming.</li> <li>• Channel 4 is a non-profit public corporation funded from commercial revenues, for example advertising. It has public service obligations. It is supposed to provide programming that appeals to segments of the audience not served by the other broadcasters (that exhibit ‘distinctive character’ and appeals to a ‘culturally diverse society’.)</li> <li>• Channel 5 is a commercial broadcaster funded from commercial revenues, for example advertising. It has public service obligations to provide a range of high quality programming.</li> <li>• <a href="#">Teletext Ltd.</a> is the public teletext service in the UK. It is commercially funded and has public service obligations (see <a href="#">2006 Statement of Programme Policy</a>).</li> </ul>	Commercial negotiation	<p>Yes, if an IPTV network offers public electronic communications to a “significant number of end users”</p> <p><a href="#">Art. 272-276</a> Communications Act 2003 requires Ofcom to put in the license for each broadcaster with public service obligations rules to ensure:</p> <ul style="list-style-type: none"> <li>• they are carried on all networks offering public electronic communications to a significant number of end-users as their primary means of receiving TV programming;</li> <li>• their content is made available to as many members of the intended audience as possible;</li> <li>• broadcasters may not charge for their content.</li> </ul>

Source: Cullen International

## ANNEX IV: LICENSING REQUIREMENTS FOR FIXED IPTV SERVICES

The table below shows for fixed IPTV services:

- the authorisation needed to operate an electronic communications network
- the authorisation or licence needed from the broadcasting authority to:
  - offer video on demand (VoD) services (note – there should be none as VoD is an information society service under the Electronic Commerce Directive)
  - distribute already licensed broadcasting channels
  - at what point the IPTV operator would be considered to exercise “editorial control” over programming and how this is defined (for example, would choice of channels offered in different subscription bouquets or time-scheduling or programmes be considered as editorial control, or only where the IPTV provider were to supply its own channels, for example, a teleshopping channel?)
- whether authorisations/licences from broadcasting authority are national or regional (in which case, how many different regional authorities must be dealt with?)

**Table 7.4: Licensing Requirements for fixed IPTV Services**

	Authorisation to operate electronic communications network	Authorisation or licence from broadcasting authority-			
		VoD	Distribution only	“Editorial control” exercised over programme content (specify how editorial control defined)	National or regional broadcasting authorisations or licences (specify how many regions)
<b>BE (FR)</b>	Notification to broadcasting regulator (CSA) (Media Decree, art. 97)	Licence granted by CSA (Media Decree, art. 33)	Notification to CSA (Media Decree, art. 75)	Licence granted by CSA (Media Decree, art. 33) “Editorial control” is not defined.	Regional. Four broadcasting regulators: <ul style="list-style-type: none"> <li>• French-speaking Community</li> <li>• Flemish Community</li> </ul>
<b>BE (VL)</b>	Notification to broadcasting regulator (VRM) (Media Decree, art. 126)	Declaration to VRM (Media Decree, art. 60)	No licence or declaration	Licence granted by VRM (Media Decree, art. 65, 71, 81, 85, 92).	<ul style="list-style-type: none"> <li>• Brussels Region</li> <li>• German-speaking Community</li> </ul>
<b>DK</b>	General authorisation without notification requirement	No licence or declaration	Retransmission of radio and broadcasting channels over cable TV networks is not programming and does not require registration. However, the operator must not make changes to the content.	Registration with The Danish Radio and Television Board if the operator provides programming. This is defined as moving video. The provision of text messages is not considered to be programming. The conditions are set out in Radio- Og Fjernsynsvirksomhed Vha. Satellit Eller Kabel – <a href="#">Bek. 338 av 19. april 2006</a> . Although there is no specific regulations on IPTV, it is expected to be similar to cable.	National

	Authorisation to operate electronic communications network	Authorisation or licence from broadcasting authority-			
		VoD		operate electronic communications network	VoD
FR	Declaration to ARCEP ( <a href="#">Decree n° 2005-862</a> )	No licence or declaration	Declaration to CSA Art 34 of Law 86-1067 and decree 2005-1355	Licence required for the provision of “television services” (i.e. services destined to be received simultaneously by the public and whose main programming is composed of an organised series of programmes with images and sounds. Law 86-1067, art 2 and art 33 and following	National
DE	Declaration to BNetzA (§ 6 <a href="#">TKG 2004</a> )	No licence or declaration (but see comment below)	No licence or declaration (but see comment below)	License granted by the regional media authority (§ 20 <a href="#">Interstate Broadcasting Treaty</a> )	16 different federal states, currently 15 regional media authorities (Berlin and Brandenburg have a common authority).  It is possible that one regional media authority issues a nationwide broadcasting license.
		<p>Many VoD services and distribution only services are “media services” and do not need a licence or notification (§ 4 of the <a href="#">Interstate Treaty for Media Services</a>), but the difference between media services and broadcasting services is rather difficult to determine.</p> <p>According to the Conference of <a href="#">Directors of the Regional Media Authorities</a>, the main difference is, that broadcasting services present and distribute renditions whereas media services are information and communication services (“Informations- und Kommunikationsdienste”).</p> <p>If in doubt, the service provider can ask the regional media authority for a confirmation that the service is a media service. If a regional media authority has to decide on the differentiation between media services and broadcasting services it must consult all other regional media authorities.</p>			
IT	Notification to the Ministry of Communications <a href="#">Decreto Legislativo 1 agosto 2003, n. 259</a>	No declaration nor licence	No declaration nor licence	Authorisation under broadcasting legislation from the Ministry of Communications (“responsibility for the composition of the programming”) <a href="#">Decreto legislativo 31 luglio 2005, n. 177</a> ; <a href="#">AGCOM decision n. 289/01/CONS</a>	National
NL	Declaration to OPTA ( <a href="#">Telecommunication Act</a> , art. 3.1).	No licence or declaration	No licence or declaration	Licence granted by CVDM ( <a href="#">Media Act</a> , art. 71)	National licence. But there are 58 broadcasting Councils (created at the municipality or group of municipalities level) that can impose additional carriage obligations to cable TV networks.
ES	Notification to CMT Art. 6.1 of Law 32/2003 of November 3, 2003 ( <a href="#">General Telecommunications Law</a> )	None	None (at national level) In Cataluña, distributors must inform the Audiovisual Council of Cataluña (CAC) on each of the TV channels offered art. 1 a) and art. 65 of <a href="#">Law 22/2005 of Dec 29, 2005</a> (Audiovisual Law of Cataluña)	Broadcasting national licence (administrative concession) needed for the provision of television programmes. No concept of editorial control. <a href="#">Law 10/1988 of May 3, 1988 on private TV</a> In Cataluña there is only a prior notification obligation to CAC. Law 22/2005 does not define ‘editorial control’ although it makes several references to this concept.	National licence from Ministry of Industry Tourism and Trade + notification to CAC for services provided in Cataluña. <a href="#">Law 10/1988 of May 3, 1988 on private TV</a> and article 60 § 1 and 61 of <a href="#">Law 22/2005 of Dec 29, 2005</a>

	Authorisation to operate electronic communications network	Authorisation or licence from broadcasting authority-			
		VoD		operate electronic communications network	VoD
SE	Notification to PTS	No licence or declaration	No licence or declaration	Transmission of original broadcasts where the broadcaster compiles and is responsible for all or part of a programme service requires registration with the Radio and Television Authority (RTVV). No notification is required for retransmission of programmes	National
UK	Notification to Ofcom ( <a href="#">Art. 33</a> of the Communications Act 2003)	No licence or declaration	No licence or declaration	<a href="#">Art. 232-240</a> of the Communications Act 2003 and Sec. of the Broadcasting Act 1996 defines a television licensable content service (TLCS) license, required for broadcasters on satellite and other electronic communications networks such as wired networks including IPTV (see Ofcom <a href="#">Guidance Notes</a> for TLCS, April 2006). A TLCS is a service provided in analogue or digital format and consists of either editorial ('normal' television programming) and EPGs, teleshopping or self-promotional services.	National

Source: Cullen International

## **LIST OF ABBREVIATIONS**

ADSL	Asymmetric digital subscriber line
AMS	Audiovisual media services
ANOs	Alternative network operators
DMB	Digital Multimedia Broadcasting
DSL	Digital subscriber line
DT	Deutsche Telekom
DTT	Digital terrestrial TV
DVB-H	Digital Video Broadcast Handheld
ECTA	European Competitive Telecommunications Association
FAPL	English Football Association Premier League
FT	France Télécom
FTTC	Fibre-to-the-curb
FTTH	Fibre-to-the-home
GPRS	General Packet Radio Service
IPTV	Internet Protocol television
LLU	Local loop unbundling
MDF	Main distribution frame
NGN	Next generation network
NRA	National regulatory authorities
PPV	Pay-per-view
PSTN	Public switched telephone network
PVR	Personal video recorder
SLU	Sub-loop unbundling
SMP	Significant market power
STB	Set-top box
TWF	Television Without Frontiers Directive
VDSL	Very high bit rate DSL
VoD	Video on demand