Summary profiles of pay TV in France, Germany, Italy, Spain, Sweden and United States

Annex 9 to pay TV market investigation consultation

Publication date: 18 December 2007

Annex 9

Summary profiles of pay TV in France, Germany, Italy, Spain, Sweden and United States

This section contains an Ofcom-commissioned independent report produced by Spectrum Value Partners profiling the pay TV industry landscapes for a number of countries, specifically:

- France
- Germany
- Italy
- Spain
- Sweden
- US

France

International pay TV Study
Executive Summary

September 2007

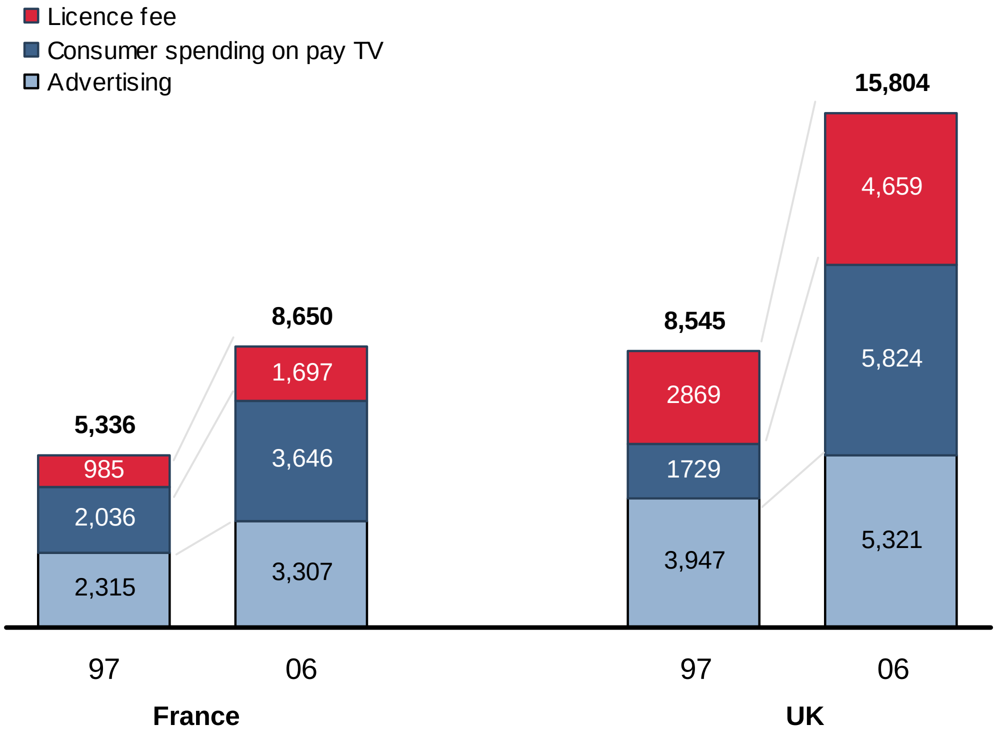
Introduction - major players in the French TV market

Platforms		Broadcasters	
Satellite	**CanalSat** (result of merger of TPS and CanalSat in 2006)	**PSB**	**France Televisions** (France 2, France 3, France 5)
Cable	**Noos Numericable** (result of merger of Numericable and Noos UPC in 2005)	**FTA Commercial Terrestrials**	**TF1** **M6**
IPTV*	**Orange** **Freebox** **Neuf TV**	**Pay commercial terrestrial**	**Canal Plus**

Note: * Not a complete list of players

In France, revenues from TV advertising, the licence fee and consumer spending on pay TV are all significantly lower than in the UK

France: Total TV revenues (€m)



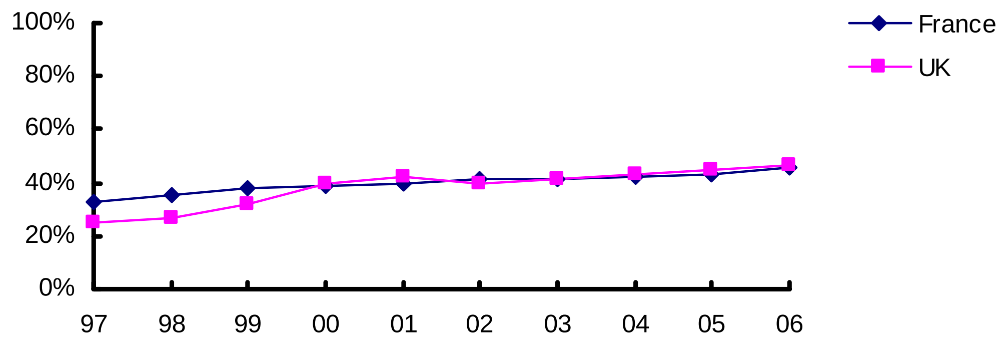
CAGR 97 - 07	Advertising	Consumer spending on pay TV	Licence fee	Total
France	4.0%	6.7%	6.2%	5.5%
UK	3.4%	14.4%	5.5%	7.1%

- French TV revenues are only 55% of UK TV revenues
  - advertising revenues are 62% of UK levels
  - consumer spend on pay TV is 63%
  - licence fee is 36%[(1)]
- Since 1997, total French TV revenues have grown from €5.3bn to €8.7bn, at a CAGR of 5.5% (97-06), compared to 7.1% in the UK
- Consumer spend on French pay TV has been growing
  - slightly faster than advertising and licence fee funding
  - but much less quickly than in the UK
- In 1997, consumer spend on pay TV was higher than in the UK; today the reverse is true

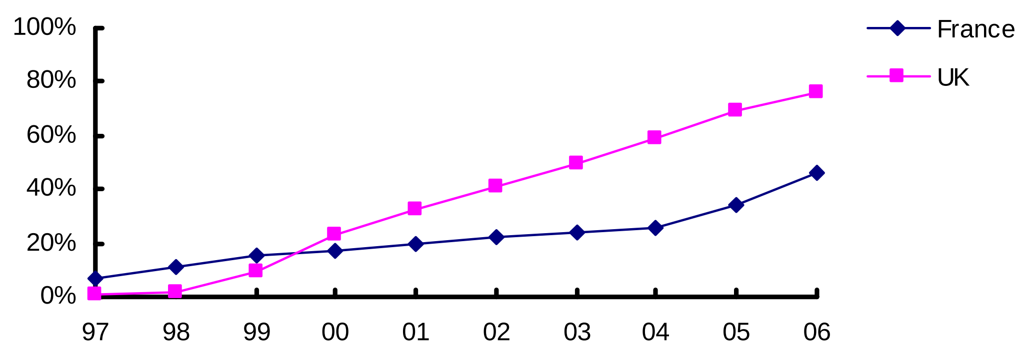
Note: (1) French public channels also receive revenue from advertising
Source: ZenithOptimedia, Screen Digest

France and the UK have similar pay TV penetration, but France lags the UK in the uptake of digital TV – due to the later launch of DTT

Pay TV penetration



Digital TV penetration

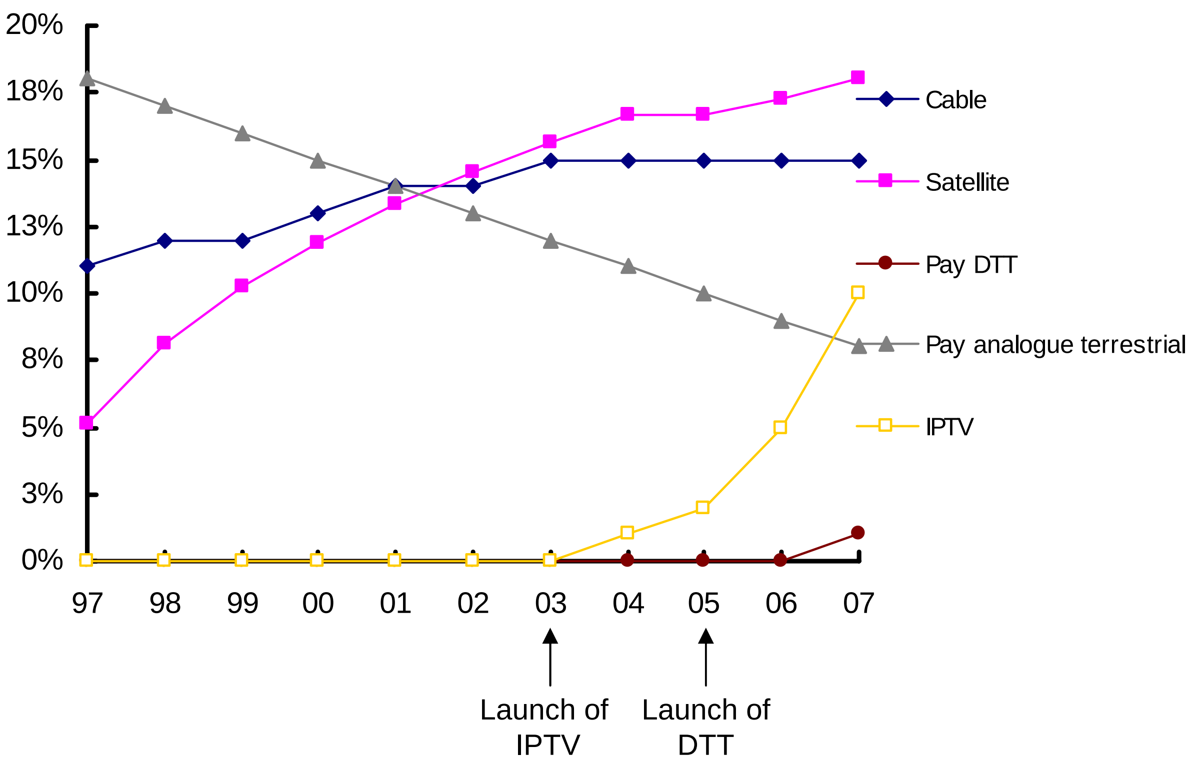


- France's pay penetration closely resembles the UK's
  - France had more pay TV in 1997 (33% versus 25%), due to the early launch of pay analogue terrestrial channel (Canal Plus)
  - in 2006, both had 46%
- However, France currently has significantly fewer digital TV households, due to
  - later introduction of DTT
  - 68% of cable households still analogue (almost all of UK cable households are now digital)
- With the introduction of DTT in 2005, digital penetration has more than doubled
  - from 26% in 2004
  - to 46% in 2006

Source: Spectrum / Value Partners analysis, Screen Digest

In France, all four pay TV platforms have at least 8% penetration – with satellite overtaking cable as the leading platform

France: Evolution of pay platforms (TV household penetration, %)



1982 – Launch of cable
1984 – Launch of Canal Plus's pay TV analogue terrestrial channel
1992 – Launch of CanalSat
1996 – Launch of TPS (satellite service)

Source: Screen Digest

- The French pay TV market is split between four main platforms
  - satellite (forecast penetration in 2007 of 18%), cable (15%), IPTV (10%), and pay analogue terrestrial TV (8%)
- Pay analogue terrestrial used to be the leading pay platform (having launched in 1984)
  - its presence hindered the uptake of other platforms
  - since 1997, its penetration has been in decline
- In 2002, **satellite** became the **leading pay platform**, ahead of cable
  - satellite's strong premium content (especially football) has been a key success factor
- IPTV launched in 2003 - and quickly gained a foothold as several telcos have launched services
- DTT launched in 2005, and now has 13% penetration
  - pay DTT launched in 2006 - forecast to be in 1% of homes by the end of 2007

Four major broadcast groups operate in the French market – their six analogue terrestrial channels taking 86% of viewing

France: Major broadcasters

francetélévisions

- Government owned; funded by a combination of licence fee and advertising
- Operates three public analogue terrestrial channels (France 2, France 3 and France 5), with combined viewing share of 39% (19%, 15% and 5% respectively), and five cable and satellite channels

TF1

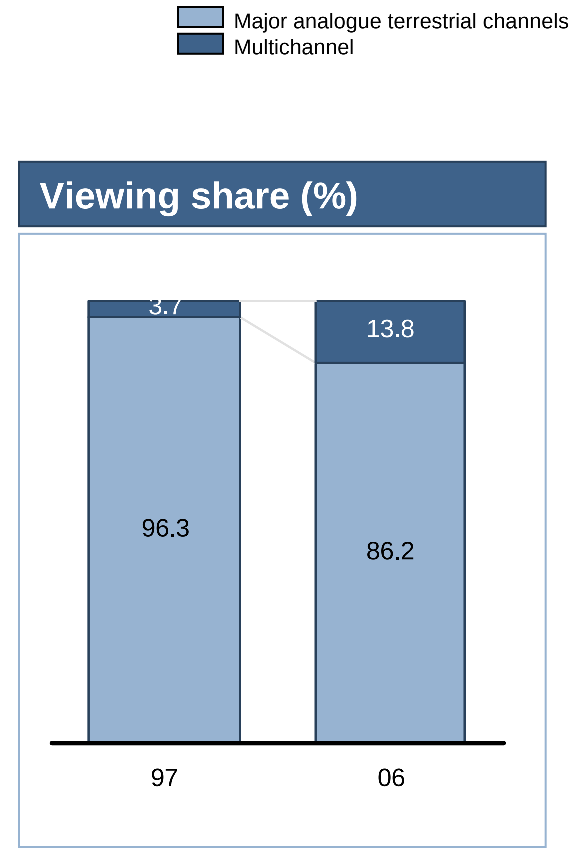
- Commercial broadcaster
- 42.9% owned by Bouygues group; most of the remaining shares are floated
- Operates TF1, the leading FTA terrestrial channel (32% viewing share), and 11 thematic channels

M6

- Commercial broadcaster
- 49% owned by RTL Group
- Owns M6, an analogue terrestrial FTA channel with 13% viewing share, and eight thematic channels

CANAL+ GROUPE

- Wholly owned by Vivendi Universal
- Owns major stake in Canal Plus, the pay analogue terrestrial channel (audience share of 3%), the Canal Plus bouquet[(1)], and nine thematic channels

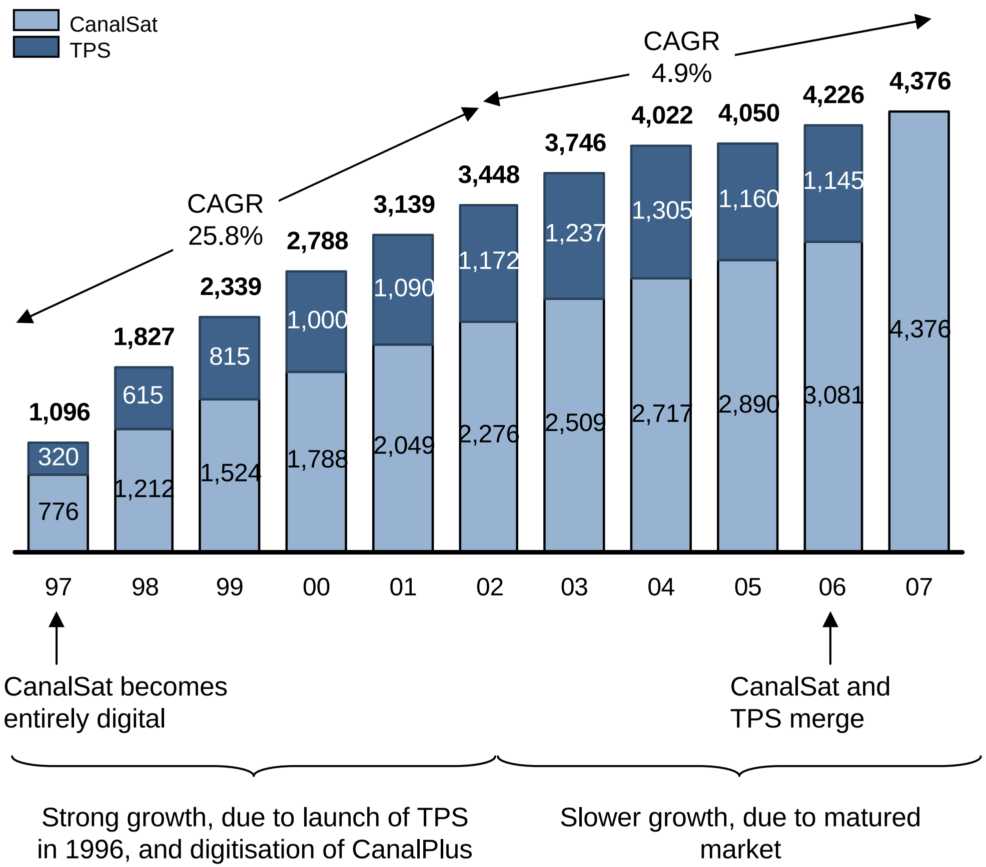


Note: (1) Five channels: Canal+, Canal+ Sport, Canal+ Cinema, Canal+ Decale, Canal+ Hi-tech
Source: Informa, Press reports, ZenithOptimedia, Spectrum/ Value Partners analysis

Until their merger in 2006, France had two satellite platforms – CanalSat (owned by Vivendi Universal) and TPS (owned by TF1 and M6)

France: Satellite Consolidation

Subscribers by operator (000s)



- Between 1997 and 2007, satellite subscribers increased from 1.1m to 4.4m (currently 18% penetration)[(1)]
- Until 2006, France had two satellite operators, CanalSat (owned by Vivendi Universal) and TPS (owned by the two largest commercial analogue terrestrial channels, TF1 and M6)
- Although TPS initially had some success in increasing its share of the pay satellite market (from 29% in 1997 to 35% in 2001) it lost ground to CanalSat in the 2000s, falling to 27% in 2006
  - CanalSat was generally perceived by consumers as having a stronger content offer, especially its premium content (football)
- In early 2007, CanalSat merged with TPS, forming a single operator, CanalSat, owned by all of the major commercial analogue terrestrial channel owners, and Lagardere
  - CanalPlus Group (65%), Lagardere (20%), TF1 Group (9.9%), and M6 Group (5.1%)

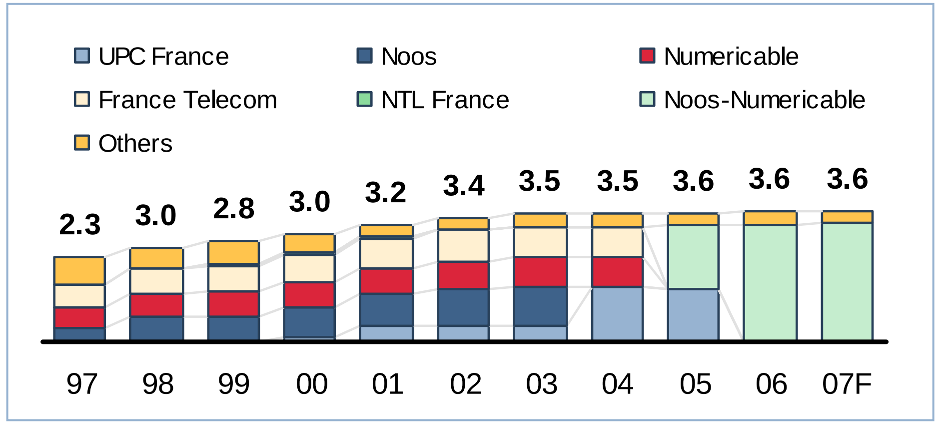
Note: (1) The penetration of satellite is constrained by tight planning restrictions preventing the installation of dishes in some mainly urban areas
Source: Screen Digest, Press reports

As cable growth has flattened, the sector has seen significant consolidation – with Noos Numericable now taking 90% share

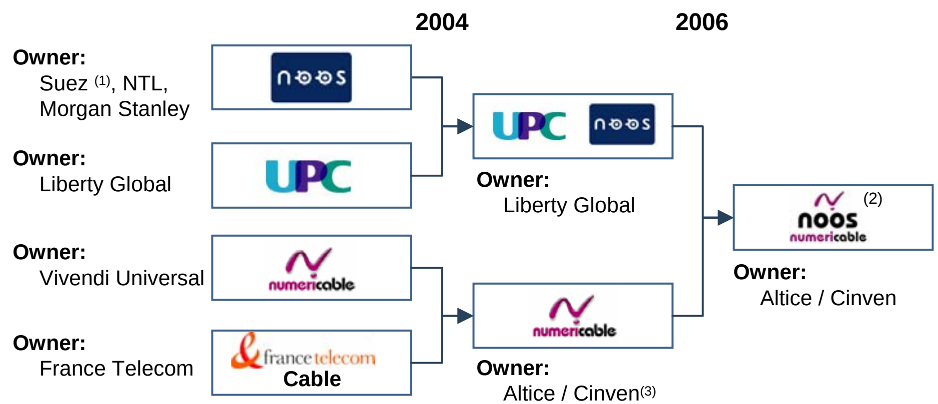
France: Overview of consolidation

- Over the last ten years, cable subscriber numbers have grown by over 50%
  - from 2.3m in 1997
  - to 3.6m in 2007
- But, since 2002, growth has stagnated (1.2% CAGR, 2002-07)
- Since 2004, the market has heavily consolidated, going from four major operators, to one operator, with 90% market share
  - consolidation was triggered by the repeal of regulation preventing a single operator from passing more than 8m inhabitants
- The merged company, Noos Numericable, is now backed by private equity(2)
  - may lead to greater investment in digitising the platform and acquisition of premium content

Subscribers by operator (m)



Overview of cable mergers, 2004-2006

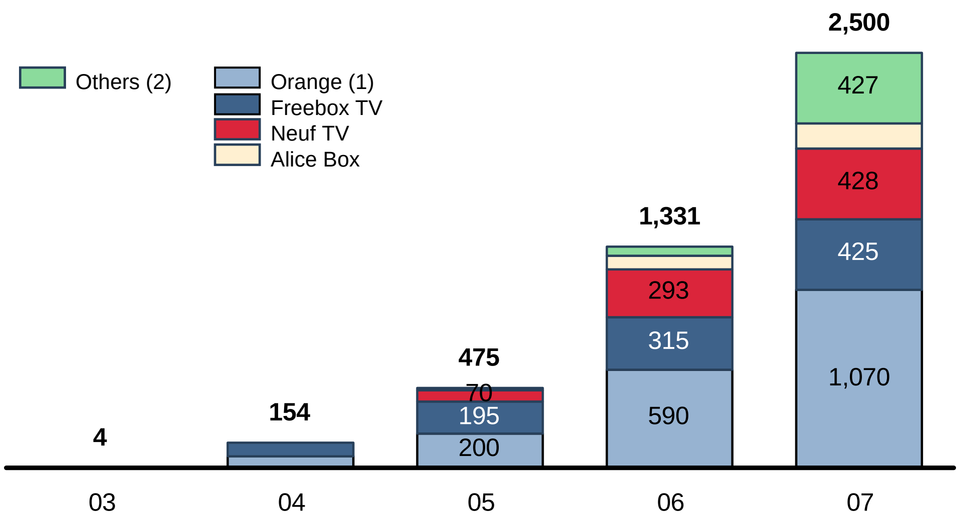


Note: (1) Suez International Industrial and Services Group; (2) Also known as Ypsos; (3) Cinven is a UK private equity firm; it has a 70% stake in Altice, a European cable operator
Source: Screen Digest, Annual Reports, Press reports

France has the largest IPTV market in Europe – with a forecast 2.5m households by the end of 2007

France: IPTV launches

Subscribers by operator (000s)



- 03: Launch of IPTV in Lyons by France Telecom. Free launched IPTV
- 04: Canal Plus launched IPTV packages
- 05: Alice acquired Liberty Surf. Launch of Neuf TV
- 06: Orange launched broadcast TV
- 07: SFR has announced plans to launch triple play

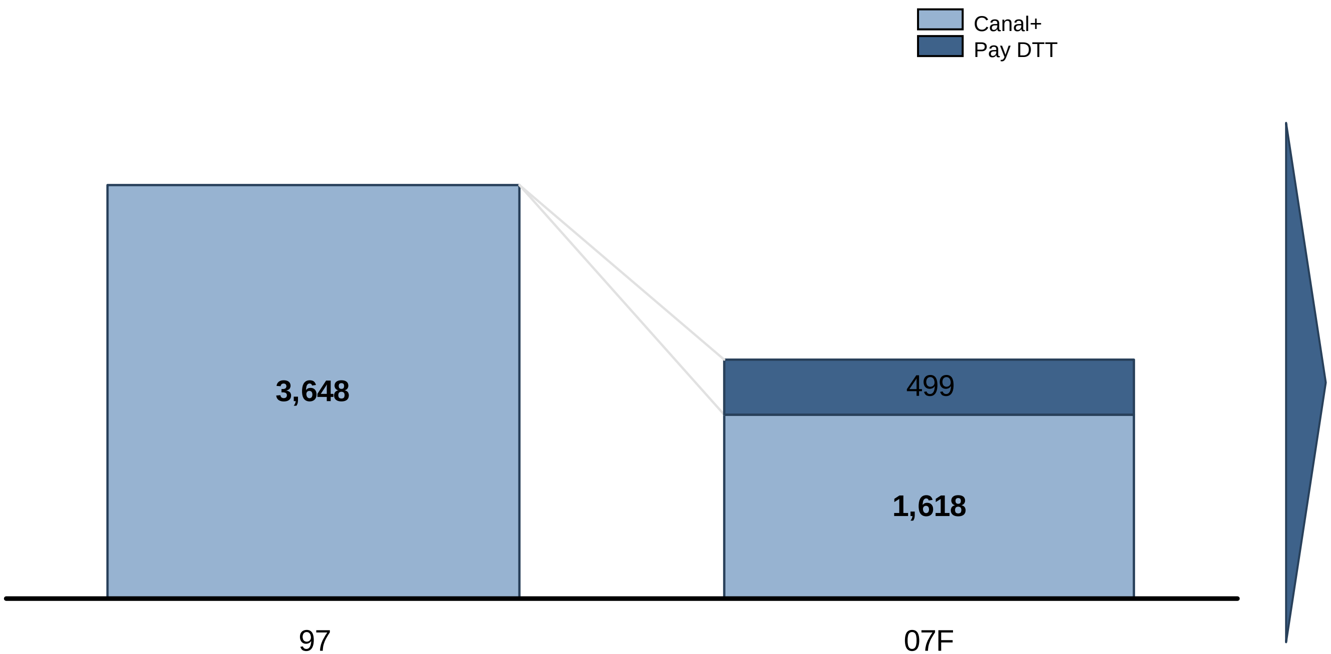
- In terms of subscribers, France is the most advanced IPTV market in Western Europe, forecast to reach 2.5m households by the end of 2007
- Services launched by all the major telcos
  - France Telecom (Orange)
  - Iliad (Freebox)
  - Neuf Cegetel (Neuf TV)
  - Telecom Italia (Alice)
  - Deutsche Telekom (Club Internet)
- **Key drivers of success** include
  - tight planning restrictions on satellite dishes in major cities
  - good ADSL 2+ infrastructure
  - a competitive broadband market
  - relatively low multi-channel penetration

Note: (1) Orange previously named MaLigneTV (2) "Others" includes Club Video, Darty Box, AOL TV and Tele2 TV
Source: Screen Digest, Press reports, Engadget

The number of subscribers to pay analogue terrestrial has fallen - as Canal Plus Groupe has migrated customers to its digital services

France: Pay terrestrial subscribers

Subscribers by platform (000s)

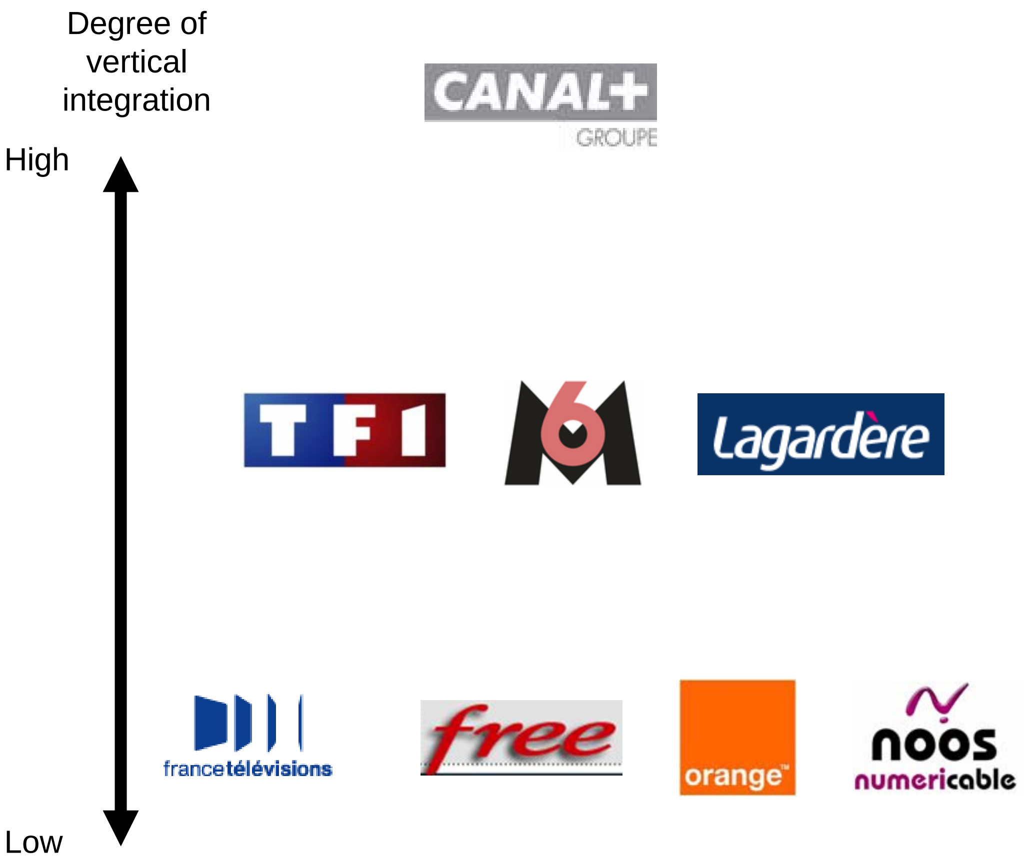


- France is one of the few countries with both analogue and digital pay terrestrial services
  - both services are owned by Canal Plus France, which is also the holding company of CanalSat[1]
- Canal Plus is a single, relatively expensive, analogue terrestrial channel (€31.90 / month)
- Its subscriber numbers have fallen sharply as Canal Plus Groupe has migrated subscribers to its satellite service and, more recently, to DTT
  - both digital platforms offer superior packages for prices not much higher than the single analogue channel
- Pay DTT, launched in 2005, offers a single pay package of 30 channels, including premium sport and football; but it has yet to gain significant numbers of subscribers

Note: (1) Canal Plus France is owned by Canal Plus Groupe (65%), Lagardere (20%), TF1 Group (9.9%), and M6 Group (5.1%)
Source: Informa, Screen Digest, Press reports

Canal Plus Groupe is France's most vertically integrated broadcast group; TF1, M6 and Lagardere are integrated with CanalSat via minority stakes

France: Vertical integration of key players



- **Strong vertical integration**
  - majority stake in CanalSat (and in the rights to CanalSat wholesale packages)
  - largest stake in Canal Plus analogue terrestrial pay channel
  - owns 16 thematic channels, including major football and movie channels
  - owns Canal Studios, the major film producer in France

- Players with **positions across most of the value chain**
  - minority stakes in CanalSat and its wholesale package (5.1% to 20%)
  - minority stake in Canal+ channel
  - ownership of some thematic channels
  - in the case of TF1 and M6, major analogue terrestrial channels
  - some in-house production capability

- Ownership of platforms (or channels), but **very limited vertical integration**

Source: Informa, Screen Digest, Press reports

Historically, TPS withheld its channels from other platforms; since the merger, CanalSat's position has significantly strengthened

Carriage dynamics

TPS

- Prior to its merger with CanalSat in 2006, TPS was owned by TF1 Group and M6 Group – most of the channels on the platform were owned by TPS and its shareholders
- In order to differentiate their platform, the **TPS owners did not place their channels on other pay platforms** - except where "must carry" rules applied
  - the two main channels, M6 and TF1, had "must carry" status - but only for cable and not for CanalSat or IPTV
  - in 2004, IPTV provider, Free complained to the Conseil de la concurrence[(1)], but the complaint was not upheld, as TPS had not refused to make its channels available – they had only failed to agree commercial terms

CanalSat's position – post-merger

- Since the merger of CanalSat and TPS, **CanalSat has gained a very strong position** when negotiating with channels, as it is the only platform with a very popular premium channel package
  - cable has a large number (c. 1.5m) of subscribers who only take basic packages
  - IPTV operations rely on CanalSat for premium content (e.g. Orange takes its whole channel package above basic from CanalSat)
  - pay DTT is owned by CanalSat

CanalSat / TPS merger conditions

- A number of **conditions were imposed at the time of the merger** – two of the more significant were:

1. **CanalSat is required to make available seven channels** (second-tier premium channels) to all pay-TV distributors who wish to carry them
2. **Independent channels are guaranteed a certain number of positions** on the merged platform:
   - channels are defined as **not** being "independent" if their owners are shareholders in CanalSat, or they have long-term movie output deals with CanalSat (the latter effectively excluding the large US studios)
   - there have since been disputes between CanalSat and US studio channels seeking to renew their carriage deals (Fox International's Voyage channel and Disney's Jetix have both had difficulty in renewing their deals)

Note: (1) French competition authority
Source: Spectrum / Value Partners analysis

In France, the choice of premium packages is limited, due to the reliance of other operators on CanalSat's wholesale packages

France – Current consumer packages

	Satellite	Cable	IPTV	DTT (pay)
• Basic	• 100+ channels	• 135 channels	• 50 – 60 channels	• Free DTT channels
• Premium (operator offer)	• 200+ channels, including Ligue 1 and strong movie content • All packages available, including Foot+(1)	• 200+ channels • Weaker content offering than on satellite	• None • (premium channels available a la carte on Free)	• ~15 channels, including a reduced, three channel version, of Le Bouquet(4)
• CanalSat packages, provided to operators on a wholesale basis(3)		• Only Canal Plus bouquet (4)	• Orange: all CanalSat packages, including Foot+ • Free: CanalSat Bouquet and Nouveau(2)	
• Value-added services	• HD, Multi-room, PPV films	• Multi-room, PVR	• VoD, PVR, Multi-room, HD	• None
• Bundling	• None	• Triple and Dual play packages available • Basic TV package only available in a bundle	• TV only sold as part of a triple play package	• None
• Pricing strategy	• A premium service, with the most comprehensive content offering	• The price of TV alone is relatively high, to encourage customers to take bundles	• Seek to differentiate themselves with low priced bundled offers	• Premium pricing; offers few channels, but with the strong premium offering

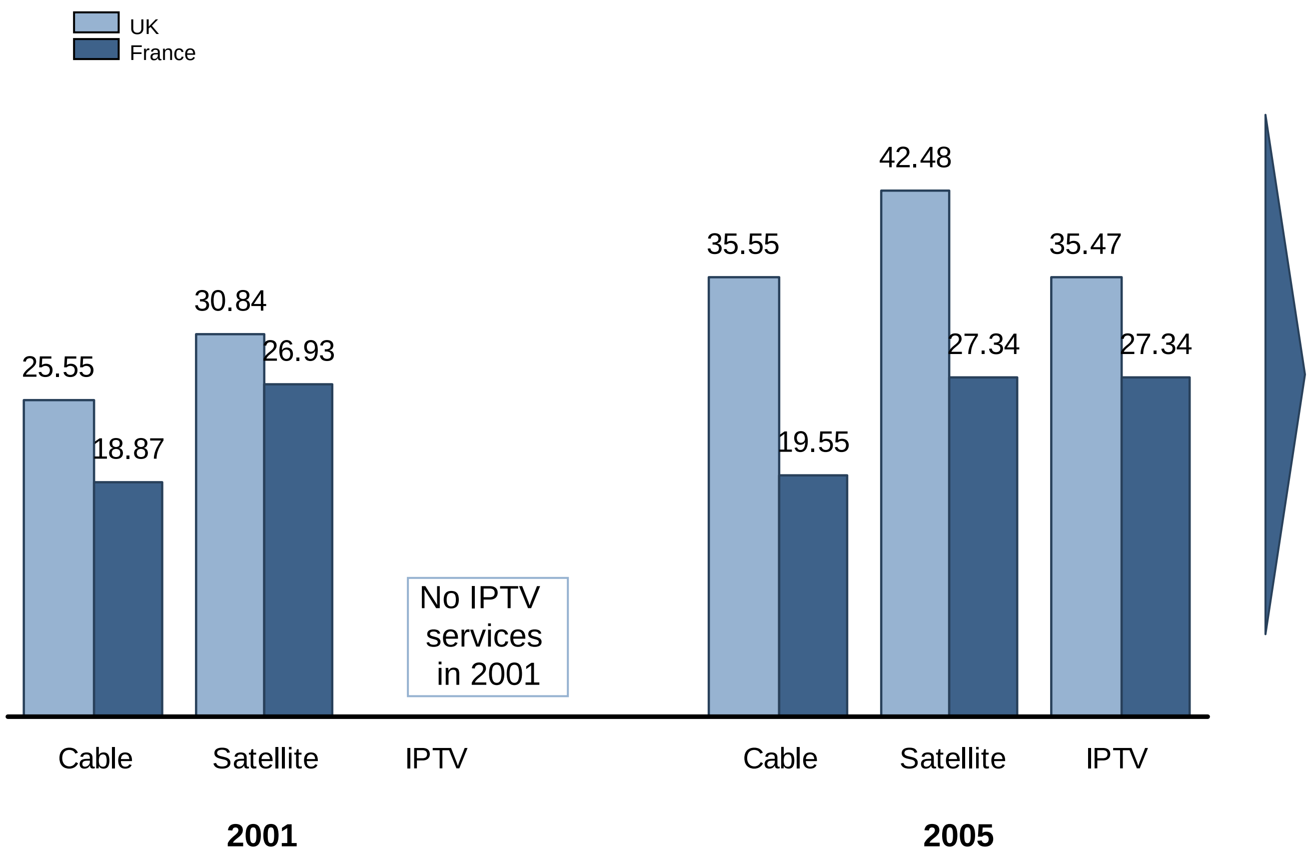
- **CanalSat offers its premium Canal+ Le Bouquet(4) to other operators on a wholesale basis**
- **The IPTV operators also have agreements with CanalSat to carry some or all of the CanalSat packages:**
  - Orange has the most comprehensive agreement which includes carriage of the premium Foot+ channel
- **Cable does not have such agreements with CanalSat,** but carries most of the channels available in the CanalSat packages within its own packages - with the important exception of the premium Foot+ channel
- **Currently, Foot+ is only available on CanalSat and Orange**

Note: (1) Foot+ shows the majority of live football games (three a week are shown on Canal Plus channel) (2) CanalSat Nouveau is a bundled package of 140 of channels available on CanalSat (3) Offered to subscribers as separate packages (4) Five channels: Canal+, Canal+ Sport, Canal+ Cinema, Canal+ Decale, Canal+ Hi-tech, but Foot+ is not part of this package

Source: Company websites

Since 2001, pay TV subscription levels in France have risen slowly, but remain significantly lower than for pay TV services in the UK

France – Pricing trends ($) (average monthly rates - PPP pricing)

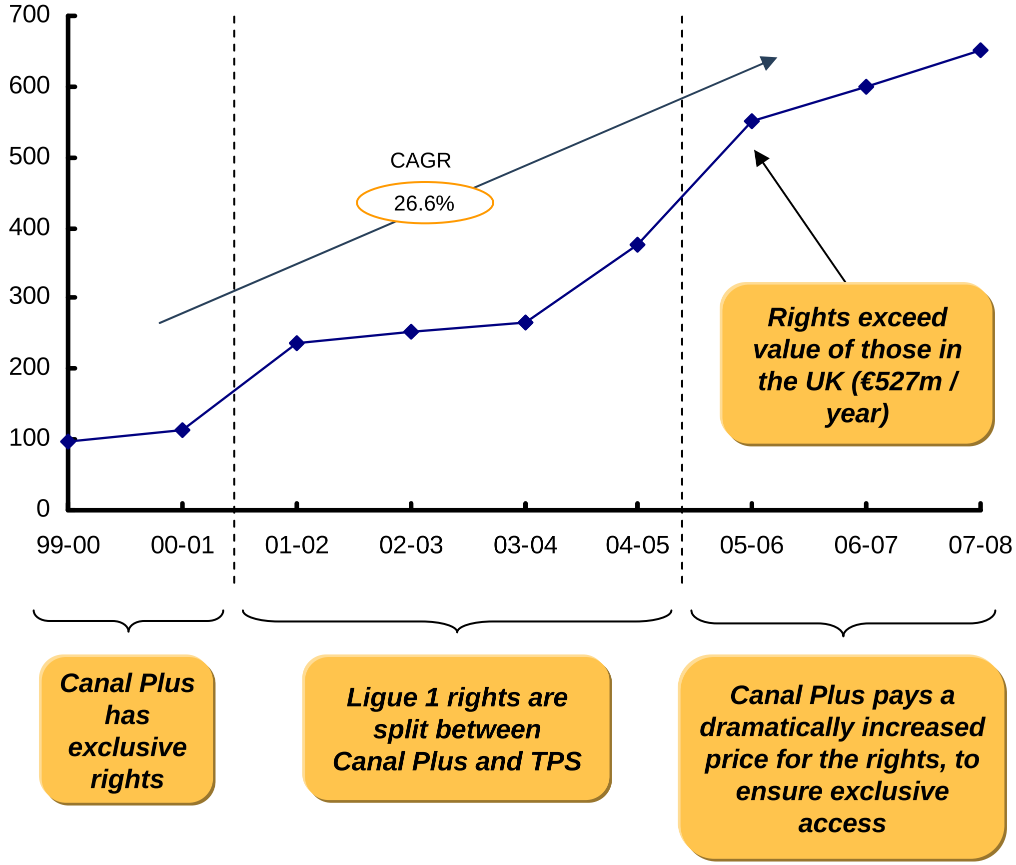


- In 2001 and 2005, satellite average monthly rates were about 40% higher than cable's
- From 2001 to 2005, the PPP prices of cable and satellite packages have risen slowly (CAGR of 0.9% and 0.4% respectively)
- Pay television services are significantly cheaper than in the UK; this variation has become more marked since 2001
  - in 2001, cable and satellite in France were respectively 26% and 12% cheaper than in the UK
  - in 2005, cable and satellite were 45% and 35% cheaper in France, respectively

Source: Informa *TV in Western Europe*, company websites, EIU

Between 1999/00 and 2007/08, the value of French football rights grew dramatically, due to fierce competition between Canal Plus and TPS

France: Value of Ligue 1 football rights over time (€m)

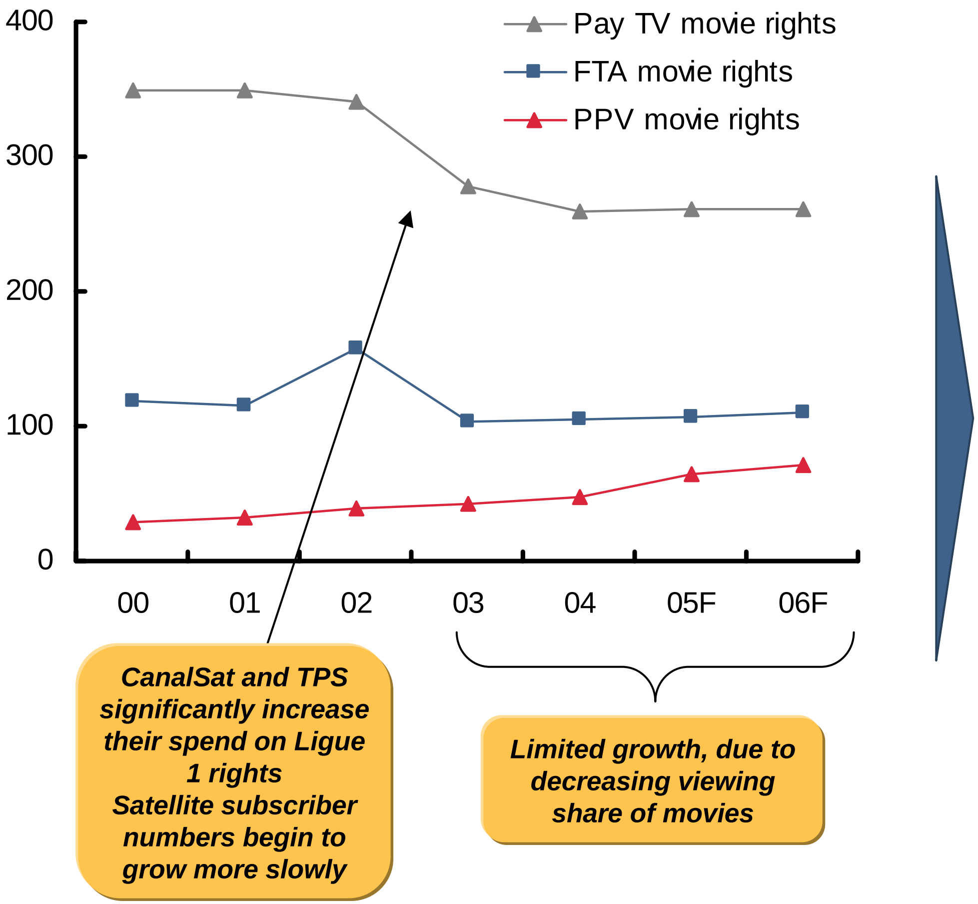


- Since 1999, Ligue 1 rights have significantly increased in value, due to competition between TPS and CanalSat
- The rights are sold in packages; as a result, between 2001 and 2005, the rights were split between Canal Plus and TPS; with the former paying significantly more to gain more attractive rights
- In 2005, Canal Plus Groupe bid almost twice as much as TPS for Ligue 1 rights, thus gaining all live rights
  - Canal Plus bid an average of €600m / season
  - TPS bid €327m per season
  - when TPS lost its football rights to CanalSat, the two groups moved to merge (completed in 2006)
- As a result of the CanalSat / TPS merger, CanalSat is hoping to achieve a 60% reduction in its spend on premium content rights
  - competition from other platforms is expected to be weak
  - the value of the rights may, therefore, fall significantly

Source: TV Sports Markets, Sportcal, Spectrum / Value Partners benchmarks

As the value of football rights has risen, the value of pay TV movie rights has declined

France: Value of movie rights over time (€m)



- In 2006, France was the second largest pay TV movie rights market in Europe, second only to the UK
  - pay TV spend of €261m, compared to the UK's €586m
- Pay TV comprises 76% of total TV spend on movie rights, compared to an average of 56% across Europe
  - market boosted by Canal Plus's film production investment obligations (20% of revenues[(1)])
  - FTA market hindered by restrictions on when films can be broadcast (e.g. films cannot be shown on Friday evenings or at any time on Saturdays)
- Since 2003, pay TV movie rights have been flat, following a fall from 2002 to 2003
  - in 2003, satellite subscriber numbers grew more slowly than in previous years
  - in 2001, CanalSat and TPS significantly increased their spend on football rights

Note: (1) 20% of the pay analogue terrestrial channel's revenues
Source: Screen Digest European Movie Rights Market 2005

French regulators have intervened in the film and sports rights markets, but CanalSat still retains the majority of premium content rights

Regulatory bodies

- The key regulatory bodies are the Conseil de la concurrence (CC, the competition body) and the Conseil superieur de l'audiovisuel (CSA, the television regulator)
- These bodies only advise the government, which makes the final decision on regulation and intervention

Key areas of regulation and intervention - content

Film

- **TF1 and M6 are not permitted to show films** on Wednesday and Friday evenings, all day Saturday, or before 20:30 on Sundays; this is intended to protect cinema attendance
- Less strict rules apply to Canal Plus, but in return, the channel is required to invest 20% of its revenues in movie production(1)
- In 1999, TPS complained that Canal Plus was abusing its dominant position in the film market, by pre-purchasing rights to films it produced, preventing others from purchasing the PPV rights; La Conseil de la concurrence upheld TPS's complaint
- Since the merger, CanalSat's film deals are limited to a maximum of three years – to allow other platforms to acquire the rights

Football rights

- In 2003, **CanalSat attempted to buy all the live football** rights (which were being sold in a series of packages)
  - Canal Plus made relatively low bids for individual packages, but offered a large 'exclusivity premium', in return for being granted all the live rights
  - La Conseil de concurrence ruled that such "exclusivity premiums" should not be allowed – however, it did not make it illegal for one company to acquire all the live rights
- In the next bidding round, CanalSat made high offers for each individual package and, as a result, succeeded in acquiring all the live rights
- Deals are allowed to last a maximum of three years

Note: (1) Canal Plus was allowed to develop as a premium film platform, and therefore be exempt from the strict FTA film rules, but in exchange, it was required to invest heavily in film
Source: Spectrum / Value Partners analysis

Rules about the number of homes which a single cable operator may pass have been relaxed, but differential rules re "must carry" remain

Key areas of regulation and intervention – Ownership and competition

Competition

- When Vivendi Universal took control of Canal Plus Group in 1999, the CSA required that the autonomy of Canal Plus channel be respected, by allowing the channel to own de facto its subscriber base, although it was legally owned by Vivendi

Cable regulation

- Until 2004, a single cable operator could not pass more than 8m individuals (c. 3m households); this led to a fragmented market with four major operators
- In 2004, this legislation was repealed, triggering a bout of consolidation

Must carry regulation

- Cable and satellite are subject to different 'must carry' regulation, as cable platforms are classified as broadcasters, and satellite as distributors:
  - as a result, cable must carry TF1, M6 and Canal Plus, but satellite has no such obligations
  - cable objected and DTT-only channels have now been given "must deliver"(1), rather than must carry status, on all platforms

Note: (1) Must deliver means that channels must be delivered if the channel wants to be, but the channel is not obliged to offer itself to platforms
Source: Spectrum / Value Partners analysis

Germany

International pay TV Study
Executive Summary

September 2007

Introduction - major players in the German TV market

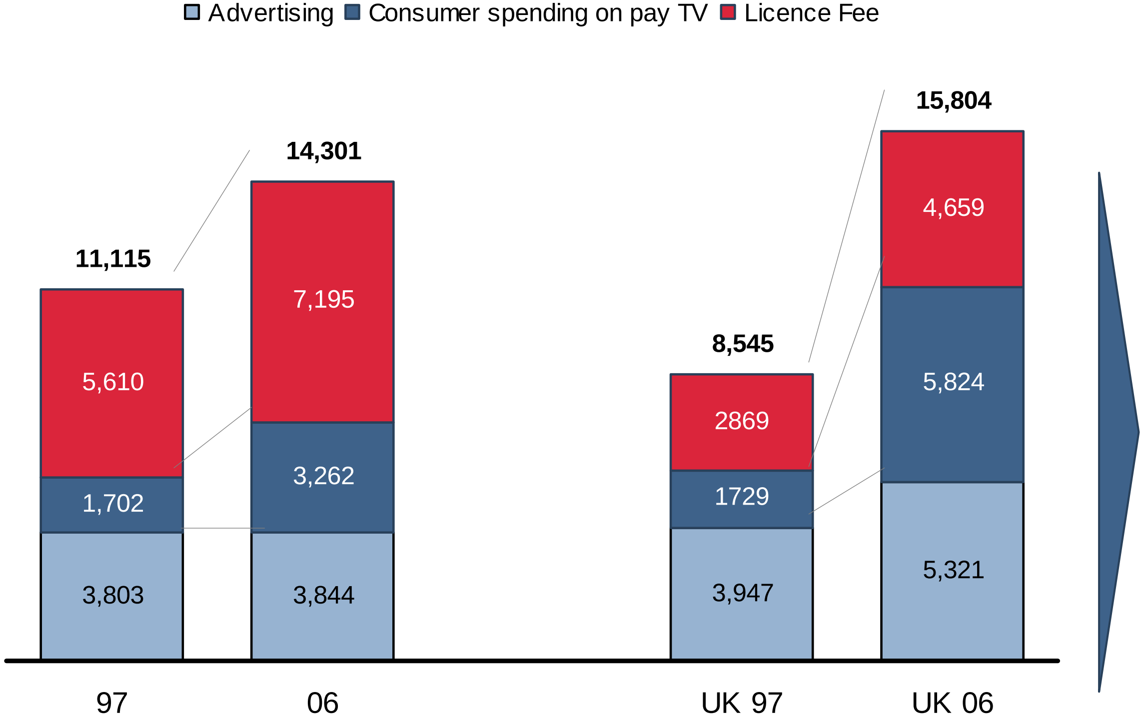
Platforms	
Satellite	**Premiere** (following merger of Premiere and DF1 in 1999)
Cable*	**Kabel Deutschland Gruppe** **Unity Media** (created following merger of Ish and Iesy – also owns sports marketing arm, Arena)
IPTV*	**T-Online** **T-Home**

Broadcasters	
PSB	**ARD** **ZDF**
FTA Commercial Terrestrials	**RTL** **ProSiebenSAT.1**

Note: * Not a complete list of players

In 1997, consumer spending on pay TV(1) in Germany was very similar to the UK – but today the UK market is almost 80% larger

Germany: Total TV revenues (€m)



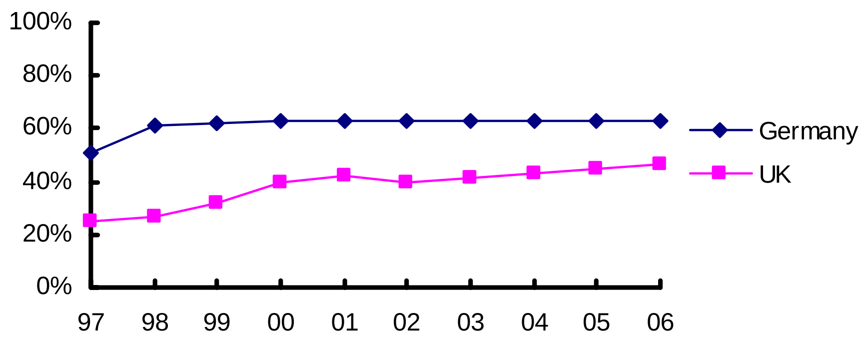
CAGR 97 - 07	Advertising	Consumer spending on pay TV	Licence fee	Total
Germany	0.1%	7.5%	2.8%	2.8%
UK	3.4%	14.4%	5.5%	7.1%

- German TV revenues are 90% of UK TV revenues, with a much higher proportion coming from the licence fee
  - advertising revenues are 72% of UK levels
  - consumer spending on pay TV is 56%(1)
  - licence fee funding is 154%(2)
- Since 1997, German TV revenues have grown slowly
  - from €11.1bn to €14.3bn; CAGR of 2.7%
  - whilst UK TV revenues have grown at 7.1% CAGR
- Consumer spending on pay TV has been the fastest growing revenue stream in the German market (CAGR of 7.1%)
  - driven by new premium pay TV services offered on digital cable and satellite
  - however, growth has been much slower than in the UK (CAGR of 14.4%)

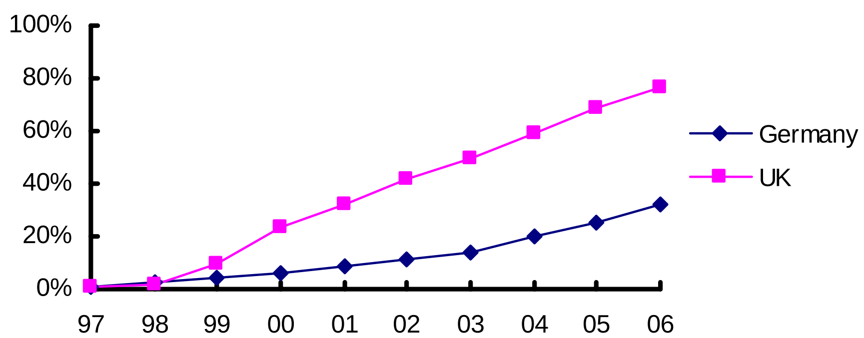
Note: (1) Consumer spending on pay TV includes subscriptions and PPV expenditure (2) Public channels also receive revenue from advertising
Source: ZenithOptimedia, Screen Digest

German pay TV penetration is higher than in the UK, but the uptake of digital services is lower

Pay TV penetration



Digital TV penetration



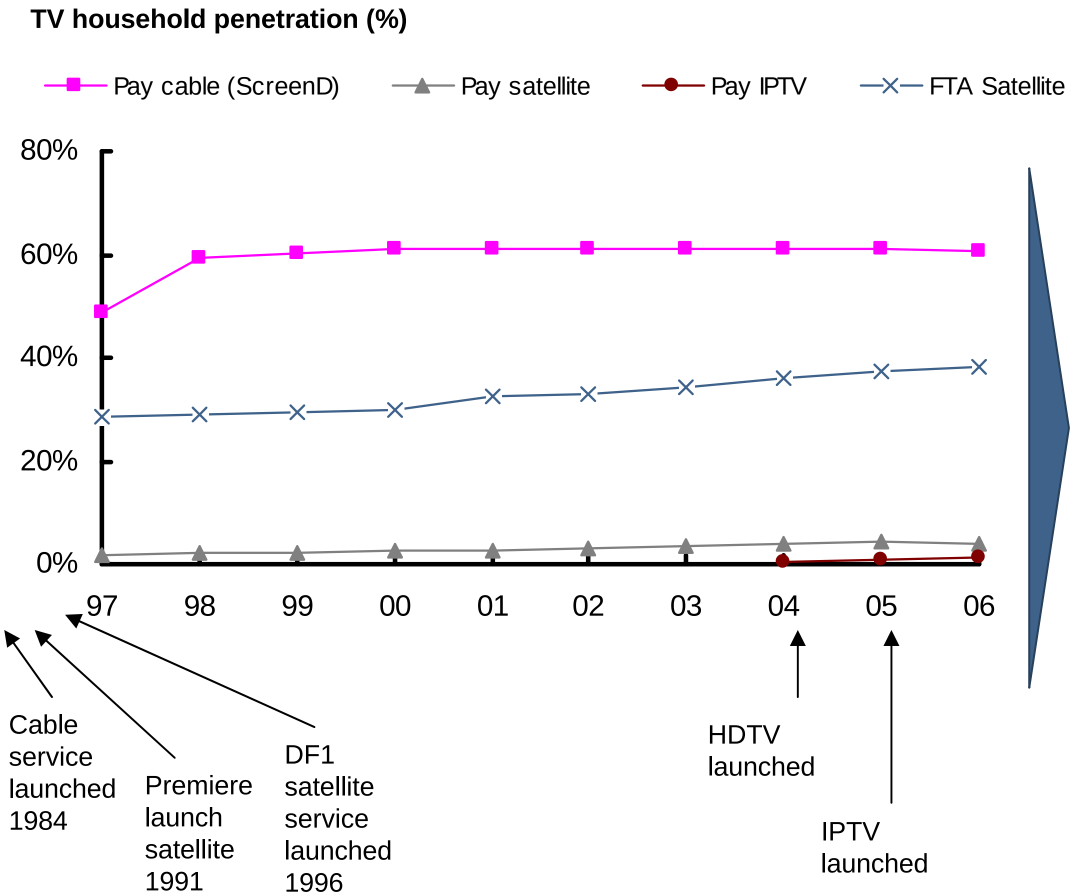
- Pay TV penetration is higher in Germany (63%) than in the UK (46%)
  - primarily due to the widespread adoption of basic cable services(1)
- Since 1998, pay TV penetration has been extremely stable
- Germany has a relatively low level of digital penetration (32% at the end of 2006), compared to 76% in the UK
- Key differences between the German and UK markets are
  - over 80% of German cable subscribers still have analogue services
  - DTT penetration in Germany is very low (because most households already have cable or free satellite)

Note: (1) For the purposes of this report, we have classified basic cable as pay TV – because consumers pay a monthly fee for access to the TV service. However, in some reports, basic cable is not referred to as pay TV, because none of the consumer fees are passed through to the channels; instead, the channels pay a carriage fee to the cable operators.

Source: Spectrum / Value Partners analysis, Screen Digest

Cable accounts for 92% of pay TV households – with satellite and IPTV accounting for only 6% and 2%, respectively

Germany: Evolution of platforms (penetration)



- **Cable** is the leading pay TV platform in Germany, with a household penetration of 60%, a figure which has remained constant since 1998
- Cable's high penetration rates are largely due to
  - the service typically being available for about €10 a month (or less)
  - in many apartment buildings, cable is provided as part of the basic package of utilities
- **Pay satellite** has not achieved high penetration (4% of households)
  - it offers premium content, such as live football
  - but the growth of the platform has been hindered by the widespread availability of multi-channel TV, via free satellite or at very low cost via cable
- **IPTV** only has 2% penetration - broadcast services only launched in 2006, due to
  - widespread availability of multi-channel TV on other platforms (as above)
  - limitations in the DSL infrastructure

Source: Screen Digest

Since 1997, the major FTA channels have seen some loss of share, but their parent groups still retain the majority of viewing

Germany: Major broadcasters

Public broadcasters

ARD

- ARD is a federation of ten regional TV and radio authorities from the 16 Länder; its main channels are:
  - Das Erste (national channel) – 14% audience share
  - ARD III (eight regional channels) – 14% share
  - Audience share for the group – 29%

ZDF

- An independent non-profit agency established by joint contract between the German federal states
- 14% audience share

Commercial broadcasters

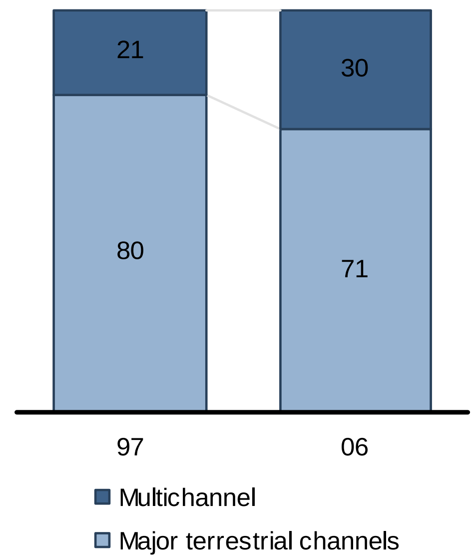
ProSiebenSat.1

- Majority controlled by German Media Partners, a consortium of investors headed by US investor Haim Saban
- Operates two major terrestrial channels: Sat.1 (10% audience share) and Pro7 (7% share), plus five thematic channels
- Audience share for the group - 20%

RTL GROUP

- 90% owned by Bertelsmann (Europe's largest FTA broadcaster)
- Operates the leading commercial channel, RTL (13% audience share), and nine thematic channels
- Audience share for the group - 25%

Viewing share (%)

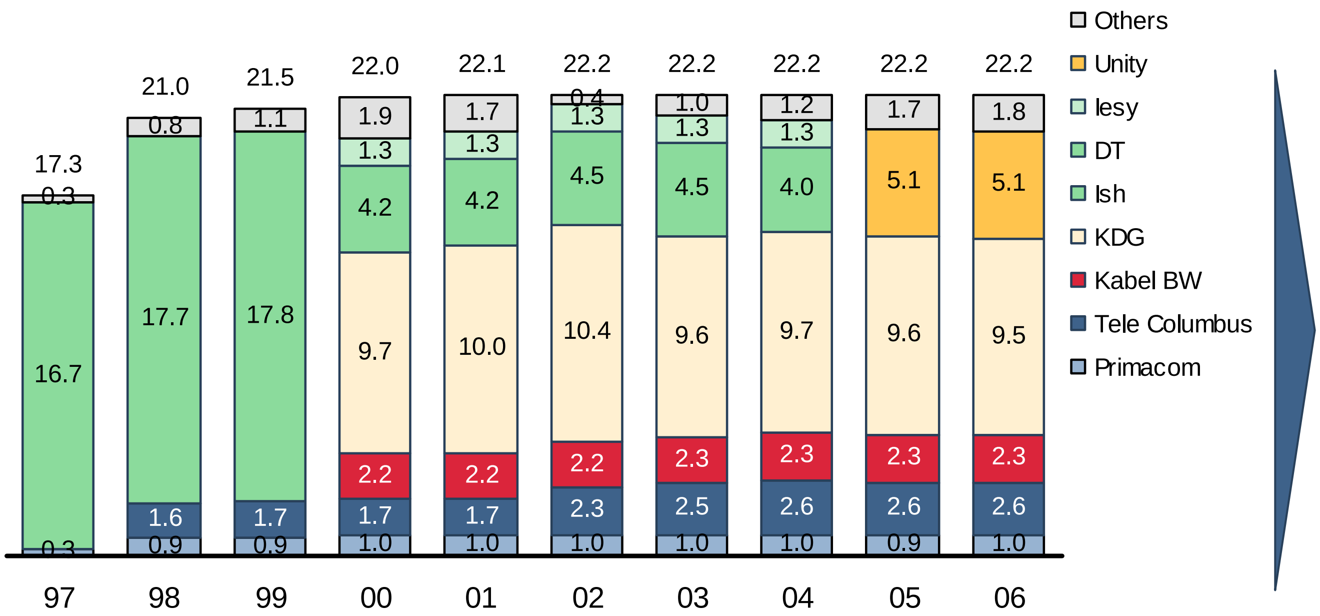


Source: Informa, Press, Spectrum analysis

In 1999/00, following liberalisation, the cable sector fragmented - it has now started to consolidate again

Germany: Cable subscribers[1]

Subscribers by operator (m)



- The cable sector was liberalised in 1999/2000
- Several attempts have been made to re-consolidate the sector (some have been made by private equity players):
  - some moves have been blocked by the Cartel Office, e.g. in 2004, KDG (the largest operator) was not allowed to buy three other companies
  - others have been permitted, e.g. in 2005, Unity Media (now the #2 cable player) was established from a combination of three players
- The cable market has a fragmented vertical structure[2] – as a result, the major operators often do not have a direct billing relationship with their customers
  - hindering innovation in the sector, e.g. digitisation and the marketing of differentiated services

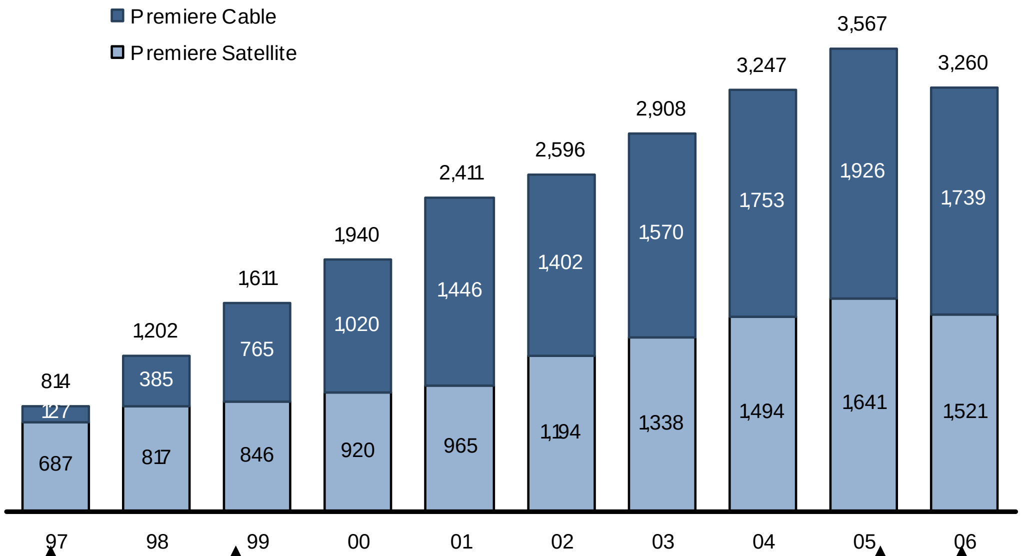
Note: (1) Due to differences on subscriber reporting data, subscriber numbers for KDG in 2000 have been estimated (2) The cable sector is divided into four levels - Level 1: Uplink to satellite, Level 2: Downlink to headend, Level 3: Transmission over CATV network on public land up to the individual building, Level 4: Transmission within the building/housing complex to the TV socket. It is rare for the same company to be both a level 3 and level 4 player

Source: Screen Digest, Press reports

Satellite subscribers reached a peak of 1.6m in 2005, but fell back 9% when Premiere lost the football rights

Germany: Satellite development

Subscribers by operator[1] (000s)



Premiere launches digital service, Premiere World
DF1 was launched in 1996

Premiere merges with DF1

Launch of Arena satellite services

Launch & collapse of PrimaCom's satellite platform "easy.tv" on "economic grounds"

Arena collaboration with Premiere delayed by competition authorities – approved in 2007

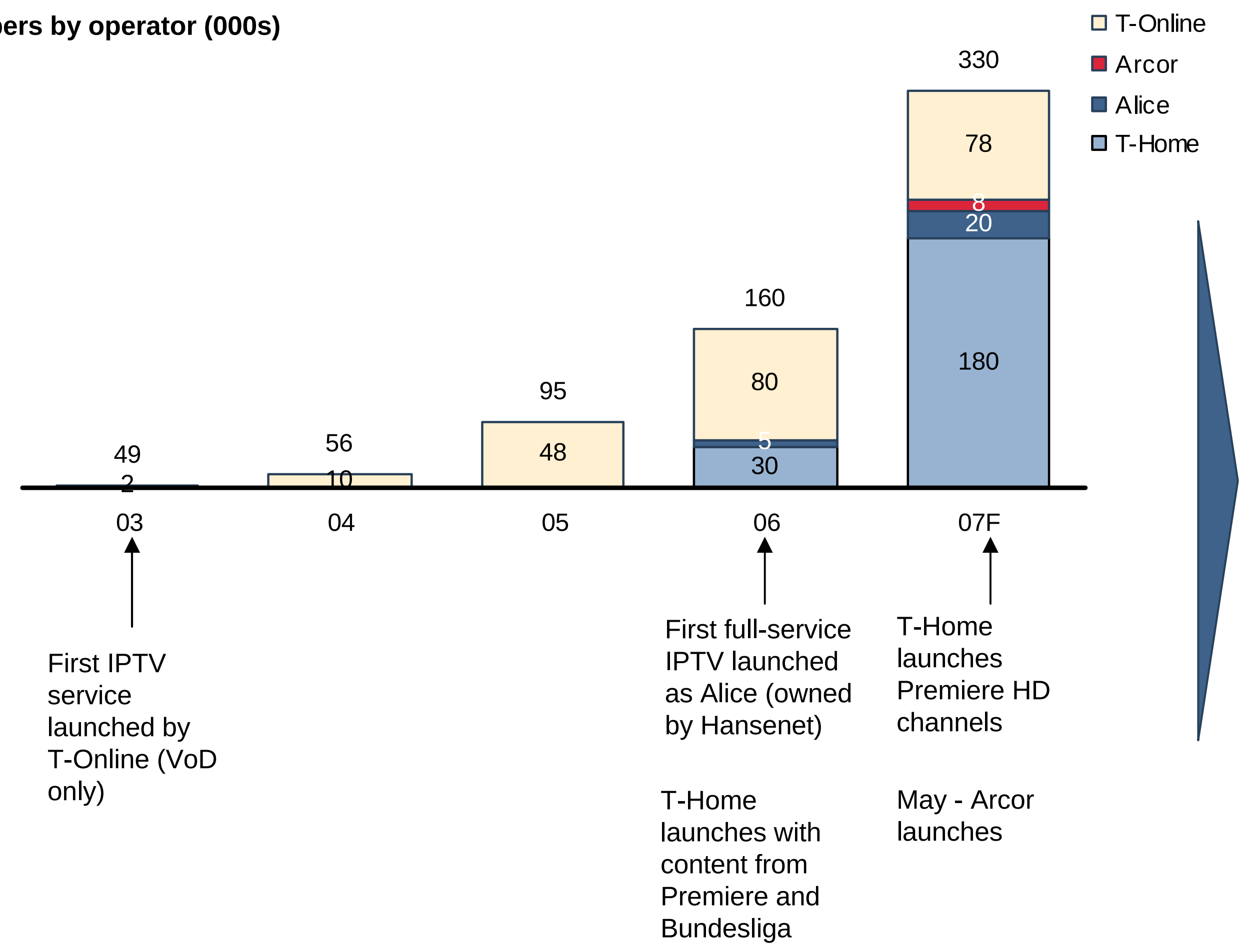
- The first German satellite service was launched in 1988 and the first digital services in 1996 (DF1) and 1997 (Premiere) - the two platforms merged in 1999
- The main driver of satellite growth has been Premiere's premium content channels (which, until 2005, included live German football)
  - Premiere also offers its channels over cable networks (customers contract directly with Premiere)
- In 2005, satellite subscriber numbers peaked at 1.6m (4% penetration) – but fell back in 2006, following Premiere's loss of the football rights to Arena (owned by cable operator, Unity Media)
- Other players have launched their own satellite services, but they have not been successful
  - in particular, when Arena won the football rights, it wanted access to Premiere's set-top boxes, but Premiere refused – effectively forcing Arena to launch its own satellite platform, which has struggled to attract subscribers

Note: (1) Figures for Arena not available
Source: Screen Digest, Press reports

Broadcast IPTV services have only recently been launched - they have yet to make a significant impact

Germany: IPTV launches

Subscribers by operator (000s)



- In 2003, Deutsche Telekom launched the first German IPTV service
  - T-Online, a VoD-only service
- In 2006, IPTV services offering broadcast TV were introduced
  - Alice (owned by Hansenet) and T-Home (Deutsche Telekom)
- The introduction of IPTV services has been hindered by the DSL infrastructure, some of which is not capable of supporting IPTV

Source: Screen Digest, Press reports

In Germany, Premiere and Unity Media are the most vertically integrated companies

Germany: Vertical integration of key players

Degree of vertical integration

High

Low

- **Premiere and Unity Media / Arena both have a high degree of vertical integration**
- Premiere
  - owns the Premiere satellite platform
  - produces 11 own-branded channels
  - acquires extensive sports and film rights
- Unity Media / Arena
  - Unity owns cable operators Ish and Iesy
  - Arena has acquired (and sub-licensed) the live rights to Bundesliga football matches – it also operates a channel package and a satellite platform

- In contrast, Kabel Deutschland (KDG) and T-Online are both firmly positioned as platform operators with no significant vertical integration
- Commercial broadcasters, RTL and Pro7Sat.1, are primarily focused on their channel businesses

Source: Informa, Screen Digest, Press reports

The major FTA broadcasters (public and commercial) are the most powerful players in the German TV market

Channel positioning and carriage dynamics

Public channels

- ARD and ZDF are well funded through the licence fee (and advertising)
- They have a strong position relative to platforms, due to their "must-carry" status – their carriage fees are regulated

Major Commercial broadcasters

- RTL and Pro7Sat.1 are in a powerful position, due to their continuing high viewing shares
- Previously reluctant to move to digital
  - given digital multi-channel's potential to fragment the viewing shares of the major incumbent commercial broadcasters
  - RTL and Pro7Sat.1 were able to hinder digital cable by boycotting it, after cable providers demanded that the broadcasters should pay them carriage fees – a settlement was finally agreed in Jan 2006
  - in 2006, both broadcasters launched their own pay thematic channels

Channels owned by other broadcasters

- Analogue cable only has a limited number of available slots (typically about 30) - decisions about which channels should gain access to these slots are subject to the intervention of the regulators in each of the Länder
- As several channels (e.g. the major FTA channels) have "must carry" status, channels owned by other broadcasters are often unable to secure widespread carriage; it is easier, however, for them to gain carriage on digital platforms

Channels owned by platform operators

- Prior to the entry of Arena in 2005, Premiere's channels seemed to be in a strong position with respect to rights holders – however, this did not prevent them from losing the rights to Arena
- Arena's subsequent experience - in particular, in its attempts to gain access to Premiere's set-top boxes and Kabel Deutschland's cable network - suggests that channels owned by platforms do not have as much negotiating power relative to other platforms, as they might have thought (or hoped)

Source: Spectrum / Value Partners analysis

Analogue cable and free satellite services provide an extensive range of channels - premium content is available only on digital pay platforms

Germany – Current consumer packages

	Analogue cable(1)	Free satellite	Pay satellite	Digital cable(3)	IPTV
Basic	• c30 basic FTA channels	• c300 FTA channels	• No longer offers a basic package(2)	• All basic FTA channels • C. 60 channels • Video-on-demand	• 60 FTA channels
Extended basic	• None	• None	• Two general entertainment packages • New platform launching Sept 07	• Second-tier premium channels, e.g. Disney, TCM, MTV	• 29 second-tier channels, inc. TCM, National Geographic, MTV
Premium	• None	• None	• Premium packages from Arena / Premiere • HD offer	• Arena / Premiere packages over cable • International channels	• Arena / Premiere packages • HD offer
Value-added services	• None	• None	• Mobile TV services • Near-VoD (via PVR)	• Video-on-demand (in enabled areas)	• Programmes on-demand • PVR services
Bundling (with telephony / online)	• None	• None	• None	• Available with broadband Internet and telephony in some areas • Precise packaging of bundle depends on operator	• Offered, at a minimum, as part of a triple-play service including DSL and telephony • Some operators offer quad-play with mobile

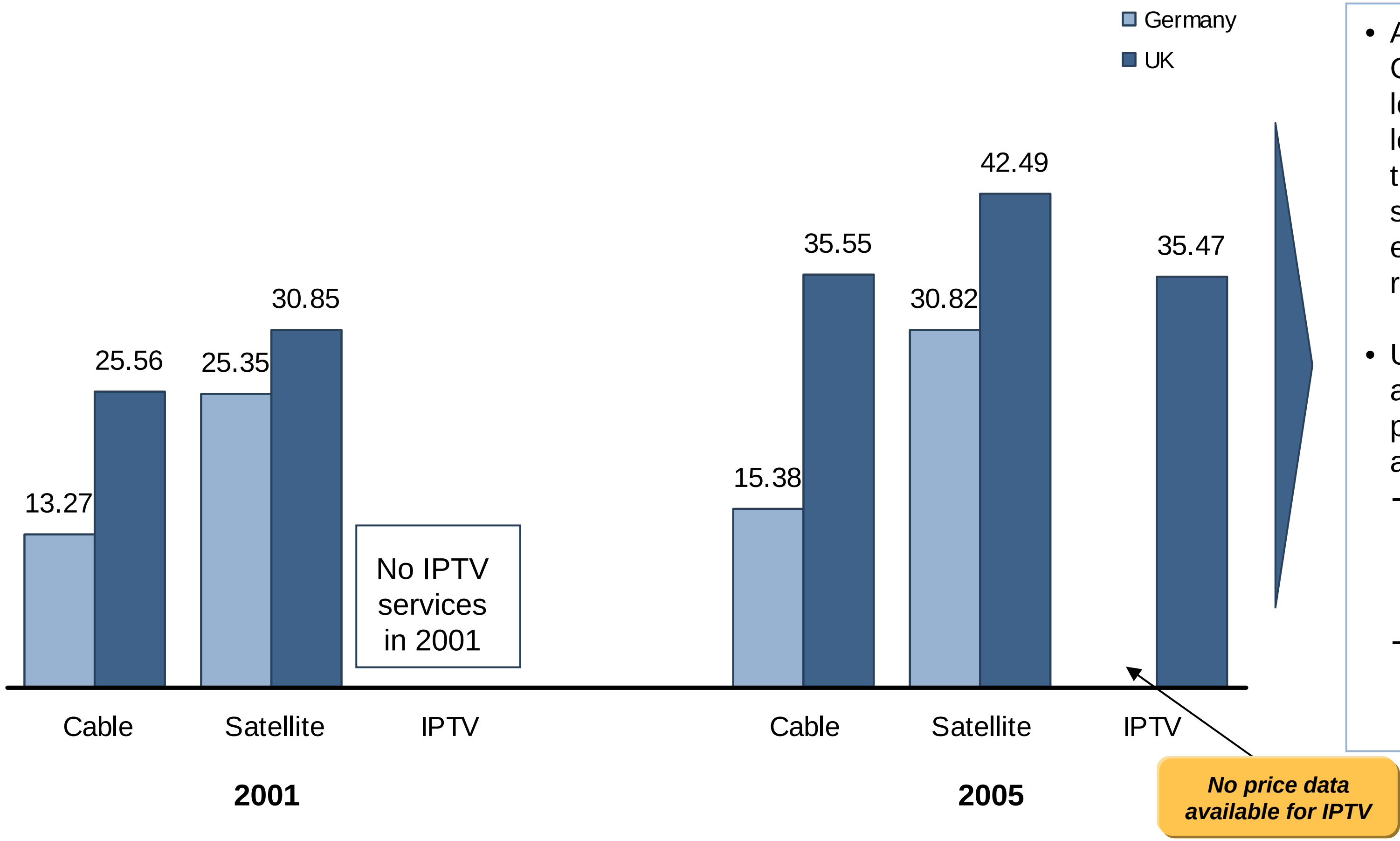
- Multi-channel TV is available on both analogue cable and free satellite (either for free or for a minimal charge)
- Extended basic services are currently available on digital cable and, from September 07, also on satellite
- Premium services (the Arena and Premiere packages) are available on:
  - pay satellite
  - digital cable
  - IPTV
- Triple play packages are being offered in some cable areas and as part of bundled IPTV packages

Note: (1) Channels are Free-To-Air, but subscribers pay c. €10 a month for access (often included in renter's utility bills); (2) Premiere withdrew its basic package in mid-2006; (3) Digital requires a new set-top-box for existing analogue cable subscribers

Source: Screen Digest, company websites

Based on PPP, German pay TV services are considerably less expensive than the UK's – a feature which is becoming more pronounced

Pricing comparison with the UK – (US$, PPP)

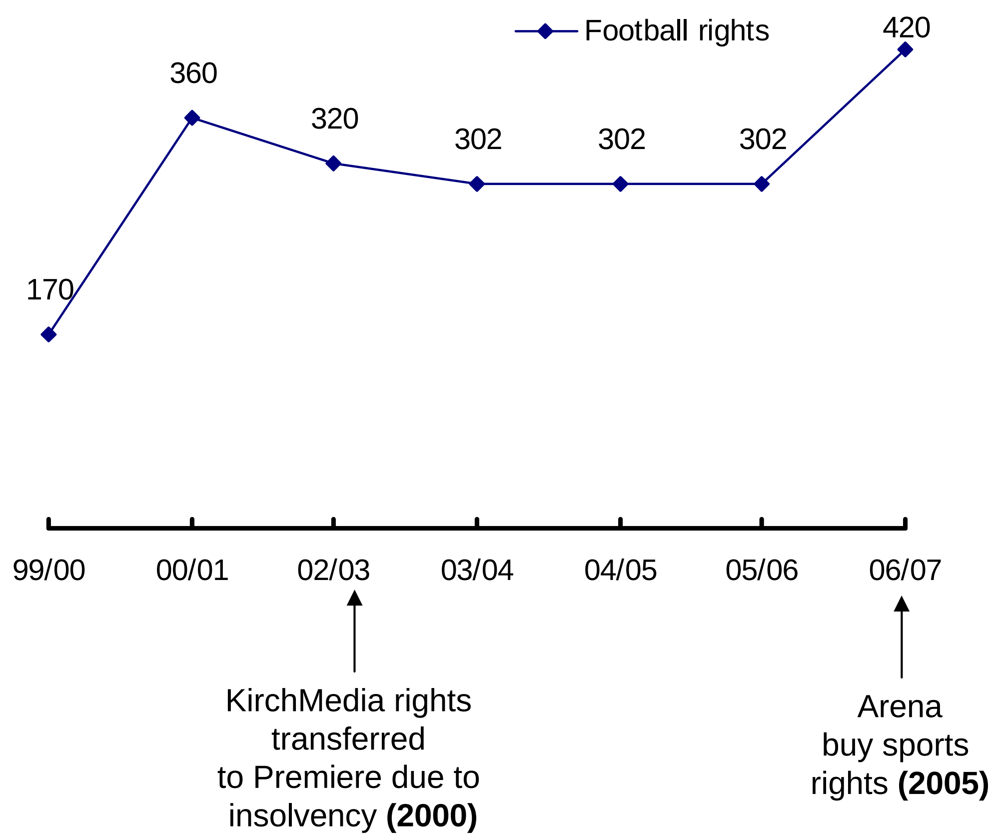


- A PPP comparison shows German pay TV prices to be lower than the UK's – at least, in part, a reflection of the differences in the services (UK offerings, especially for cable are richer)
- Using PPP, between 2001 and 2005, German pay TV prices have not been rising as quickly as in the UK
  - in Germany, satellite and cable prices rose at 5.0% CAGR and 3.8% CAGR, respectively
  - in the UK, satellite prices rose at 8.3% CAGR and cable prices at 8.6% CAGR

Source: Informa *TV in Western Europe*, company websites, EIU

Between 2001 and 2005, a lack of competition for pay TV rights saw the value of football rights stagnate – until Arena won the rights in 2005

Germany: Value of sports over time (€m)(1)



- As a proportion of total football income, the value of pay football rights is lower than in other European countries:
  - 28% in Germany, compared to 45% in the UK and 55% in Italy
  - a reflection of relatively low consumer take-up of pay TV football
- Despite relatively low consumer interest, during the 1990s, the value of football rights rose sharply
  - from €40m p.a. in 1991, when the rights were first acquired by KirchMedia (owner of Premiere), to €360m in 2001 (CAGR of 27%)
- In 2000/01, KirchMedia collapsed – in part, because of overpaying for various rights - but Premiere (via a restructured KirchMedia) was able to continue its operations
- The Bundesliga responded by reducing the price for the rights by 16% - and they remained at that level until 2005, when new entrant Arena bid for and won the rights

Note: (1) This includes live, highlight, IPTV / internet and international rights
Source: Deutsche Bank, TV Sports Markets, Spectrum / Value Partners Analysis

However, Arena's football strategy has faced significant challenges

Germany – Pay TV football since 2005

Arena wins live football rights

- In 2005, Unity Media, via its wholly-owned subsidiary, Arena, created a major shock by beating Premiere to the live Bundesliga rights

Arena's problems with Premiere & KDG

- Arena's strategy was dependent on securing carriage via other operators' systems, in particular, Premiere and Kabel Deutschland
- Arena failed to reach agreement with these two players - fatally undermining the company's business model

Proposed deal between Arena and Premiere

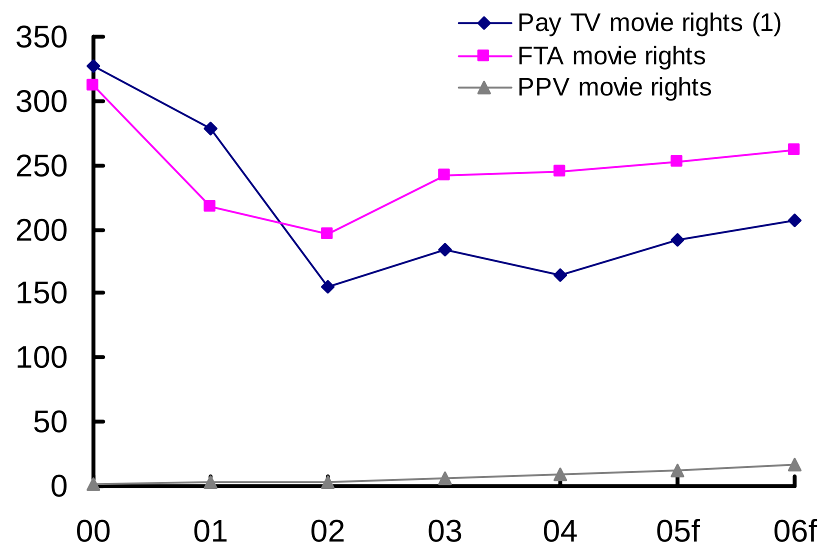
- Arena then negotiated a new deal with Premiere
  - Premiere would distribute the football via 1) its satellite platform; and 2) its existing arrangement with Kabel Deutschland, whereby Premiere distributes its TV services over the KDG network
  - Premiere's channels would be made available to Unity Media cable subscribers
  - Unity Media would take a 16.7% stake in Premiere

Approval by the Cartel Office

- The Arena / Premiere deal was investigated and, in July 07, approved by the Cartel Office (with certain restrictions)
- The main rationale for approving a deal (which would effectively see the end of competition for pay TV football rights) was the absence of a viable alternative: i.e. Arena was making heavy losses and Premiere was the only potential partner

Since 2002, the value of FTA movie rights has exceeded the value of pay TV rights

Germany: Value of movie rights over time (€m)



- **German FTA television is much more active in buying movie rights than UK FTA broadcasters**
  - in 2006, FTA rights accounted for 56% of the total movies rights value, compared to 26% in the UK

- Between 2000 and 2002, both **pay and FTA film rights values declined sharply**, before recovering after 2003
  - pay-TV rights values declined, due to the collapse of the Kirch empire; this also had a knock-on effect on the value of FTA rights
  - FTA rights payments were put under further pressure in the advertising slump of the same period - CAGR (6%), 2000-04

- The **PPV market is much less mature than the UK**, but is growing faster
  - in 2004, worth €9m vs. €58m in the UK
  - CAGR of 67% vs 41% in the UK (2000-04)
  - restricted by **longer German PPV windows**, which are ~6 months after release on video, compared to between 2 and 5 months in the UK

Note: (1) Note pay TV rights also include Austria
Source: Screen Digest European Movie Rights 2005

Many regulatory interventions have focused on potential competition impacts (1 / 2)

Regulatory bodies

- Most broadcast regulation is the responsibility of the individual Länder
- The Bundeskartellamt (Cartel Office) gets involved in the more significant competition-related issues

Key interventions – cable mergers

Liberty acquisition of KDG

- In Jan 2002, Liberty Global, owner of cable operators EWT and Primacom, wanted to merge with Kabel Deutschland (the largest cable operator in Germany)
- The Bundeskartellamt blocked the deal on the grounds that the merger would damage competition in the pay TV market

KDG acquisition of Ish / Iesy

- In Oct 2004, Kabel Deutschland wanted to acquire Ish, Iesy and Kabel BW
- The Bundeskartellamt did not approve the deal as it would have strengthened KDG's dominant position in the input market, i.e. vis-à-vis TV programme providers

Mergers of Ish, Iesy and Tele-columbus

- In June 2005, BC Partners sought to merge three cable operators (via two separate deals)
- Both merger projects were cleared – on the grounds that neither of the two mergers would result in the creation or strengthening of a dominant position
- The approval of these deals led to the creation of Unity Media (now the second largest cable operator in Germany)

Source: Spectrum / Value Partners analysis

Many regulatory interventions have focused on potential competition impacts (2/2)

Key interventions

Encryption of RTL and Pro7Sat.1

- In December 2006, RTL and Pro7Sat.1 announced their intention to move to an encrypted satellite platform (having previously been available on FTA satellite)
- The Bundeskartellamt blocked the deal on the grounds that the joint approach of the two broadcasters would be unlawful under cartel law

Arena / Premiere collaboration

- As mentioned previously (slide 25), after Arena's initial failure to achieve its required subscriber numbers, it wanted to establish a sub-licensing arrangement with Premiere
- This raised significant competition issues (as the deal would reduce the likely potential purchasers of pay TV football rights from two to one)
- Nevertheless, the Bundeskartellamt approved the deal (with certain restrictions) – because there appeared to be no viable commercial alternative

Source: Spectrum / Value Partners analysis

Italy

International pay TV Study
Executive Summary

September 2007

Introduction - major players in the Italian TV market

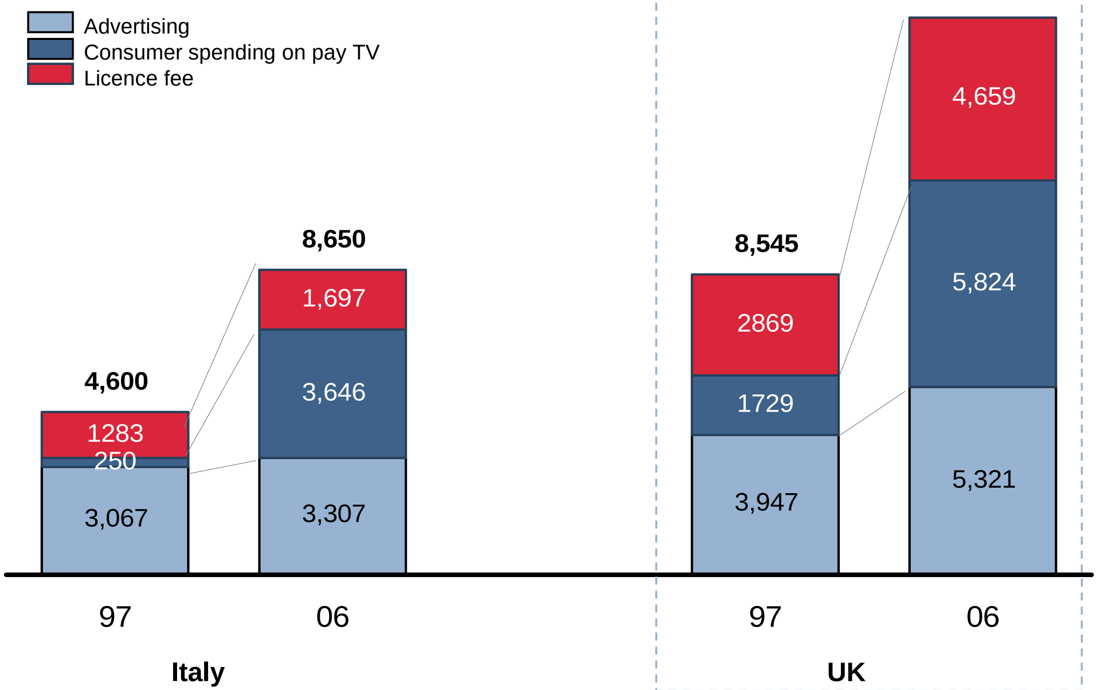
Platforms	
Satellite	**Sky Italia** (formed following merger of Telepiù and Stream in 2003)
Cable	**None**
IPTV*	**Fastweb** **Alice** (owned by Telecom Italia)

Broadcasters	
PSB	**RAI**
FTA Commercial Terrestrials	**Mediaset** **La 7** (owned by Telecom Italia)
Pay commercial terrestrial	**Mediaset** **La 7** (both offer PPV on DTT)

Note: * Not a complete list of players

In the last nine years, increasing consumer spend on pay TV(1) has been the primary driver of growth in the Italian TV market

Italy: Total TV revenues (€m)



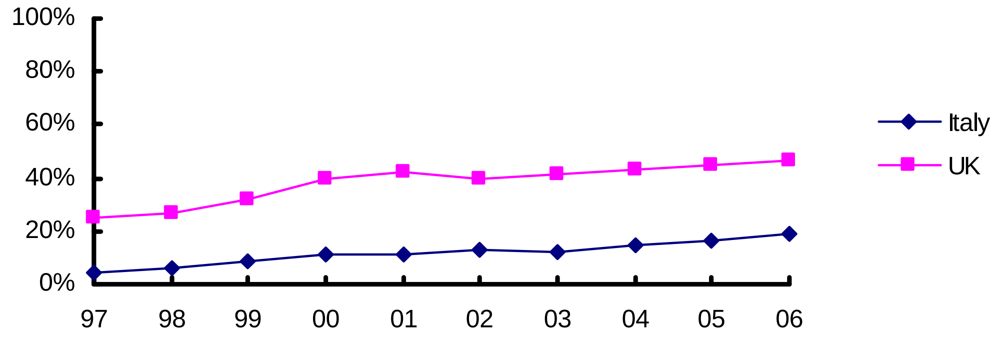
CAGR 97 - 07	Advertising	Consumer spending on pay TV	Licence fee	Total
Italy	0.8%	34.7%	3.2%	7.3%
UK	3.4%	14.4%	5.5%	7.1%

- Overall, Italian TV revenues are only 55% of UK TV revenues
  - advertising revenues are 62% of UK levels
  - consumer spend on pay TV is 63% of UK levels
  - licence fee is 36% of UK levels
- Over the last nine years, total Italian TV revenues have grown from €4.6bn to €8.7bn, at a CAGR of 7.3% (97-06), a similar rate to the UK's 7.1%
- Growth in the Italian market has largely been driven by rising consumer spending on pay TV (37.7% CAGR), with advertising (0.8% CAGR) and the licence fee (3.2% CAGR) growing much more slowly
  - this is a similar, but more pronounced, pattern to the UK market, which has seen consumer spending grow at a CAGR of 14.4% versus 3.4% for advertising and 5.5% for licence fee

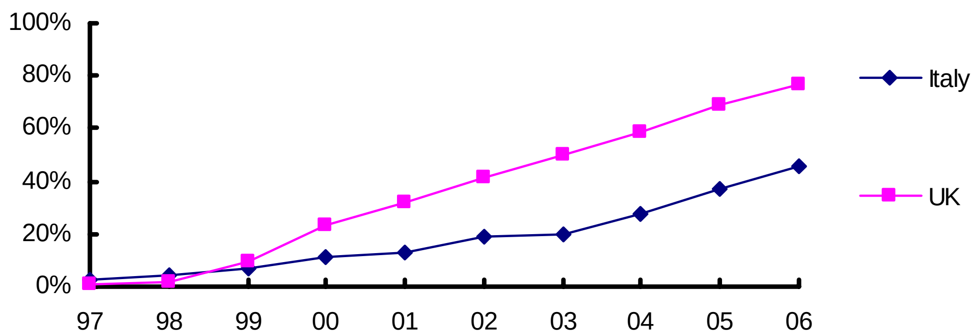
Note: (1) Consumer spending includes both subscription and PPV revenues
Source: ZenithOptimedia, Screen Digest

Since 2004, digital TV penetration has grown significantly in Italy, but both digital and pay TV penetration levels remain below those of the UK

Pay TV penetration



Digital TV penetration



- **Italy's pay penetration is much lower than the UK's**
  - in 2006, 18.6% in Italy and 46.3% in the UK
- **Lower pay TV take-up in Italy is the result of**
  - **pay services being launched relatively late** (mid-90s)
  - Italy has **strong and very popular FTA channels**, thus reducing the appeal of pay TV
  - in 2004, the primarily free **FTA DTT platform** was launched; it offers consumers a free multi-channel platform and, since 2005, optional PPV(1)
- **The penetration of digital TV is much lower than in the UK, but, since 2004, it has been growing quickly**
  - prior to 2004, the only digital platforms available were for pay TV, thus limiting take-up
  - **in 2004, FTA DTT was launched;** it has been very popular and is largely responsible for the increasing number of digital homes

Note: (1) DTT PPV customers are not included in the pay TV penetration figures, but in Q3 06 there were 1.7m active PPV cards – equivalent to 7.4% of households

Source: Spectrum / Value Partners analysis, Screen Digest

In the absence of cable, satellite has become the major pay TV platform, but the introduction of DTT has changed the overall platform landscape

Italy: Evolution of pay platforms (TV household penetration, %)

Timeline

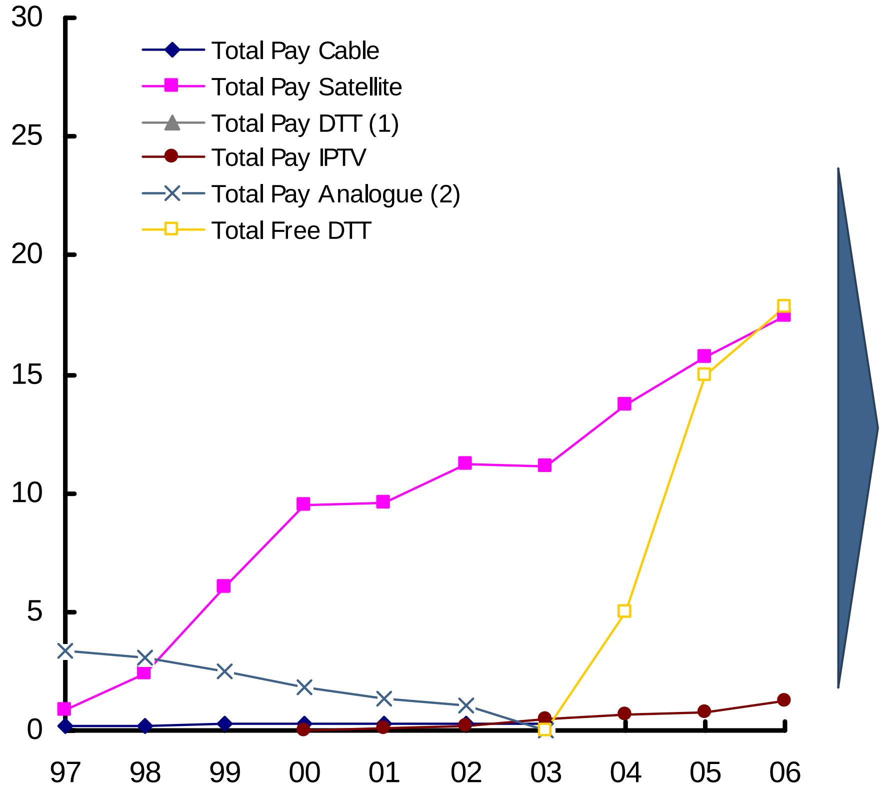
1997
- Launch of Telepiù's satellite service;
- Launch of Stream's cable service

1999
- Stream begins simultaneous broadcasts **via satellite**

2000
- Fastweb begins roll out of IPTV

2002
- Cable roll-out ceases

2004
- Stream cable system is closed (3)



- **The Italian pay TV market is split between three main platforms**
  - satellite – 17.4% penetration
  - IPTV – 1.2% penetration
  - pay and FTA DTT – 17.9% penetration
- **Until recently, the multi-channel market was delivered by a single platform**
  - satellite is the only pay platform with critical mass, owing to the lack of cable in Italy
  - however, since its launch in 2004, DTT has made rapid gains and has just overtaken satellite to become the leading multi-channel platform
  - DTT's ability to offer PPV services is likely to affect the overall development of pay TV
- IPTV is also making steady gains (**Italy is one of the most established IPTV markets in Europe**), but penetration is still only 1%
- Cable rollout began in 1997, but was quickly suspended due to high capital investment costs and a lack of political and industry support

Note: (1) Pay DTT services exist (using PPV rechargeable cards – in Q3 2006 1.7m) but penetration figures, over time, are not available
(2) Canal+ pay analogue channel
(3) Exact date of closure of Stream cable service is unknown – the service was wound down over an extended period

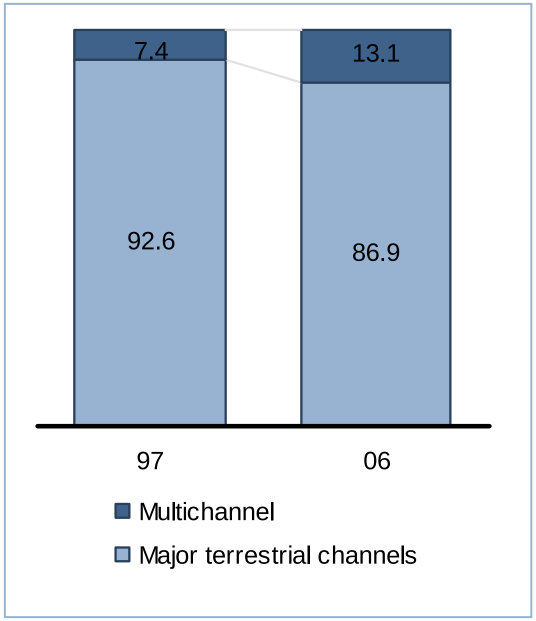
Source: Screen Digest

Public broadcaster, RAI, and commercial media group, Mediaset, are the leading channel owners in Italy, accounting for 84% of viewing

Italy: Overview of channel owners

Company	Channels	Viewing share		Ownership
RAI **Public broadcaster, funded by licence fee and advertising**	**RAI 1**	• 23.0%	43.6%	• State
	RAI 2	• 11.3%		
	RAI 3	• 9.3%		
	Twelve digital channels	• n/a		
Mediaset **Commercial media group**	**Canale 5**	• 21.0%	40.3%	• 35.5% Fininvest (controlling stake – part of the Berlusconi empire) • 60% floated
	Italia 1	• 11.1%		
	Rete 4	• 8.2%		
	Seven digital channels	• n/a		
Telecom Italia Media **(Commercial media group)**	**LA7**	• 3.0%		• 23.4% Telefonica
	MTV Italia	• c1%		
	TI digital channels	• n/a		

Viewing share (%)

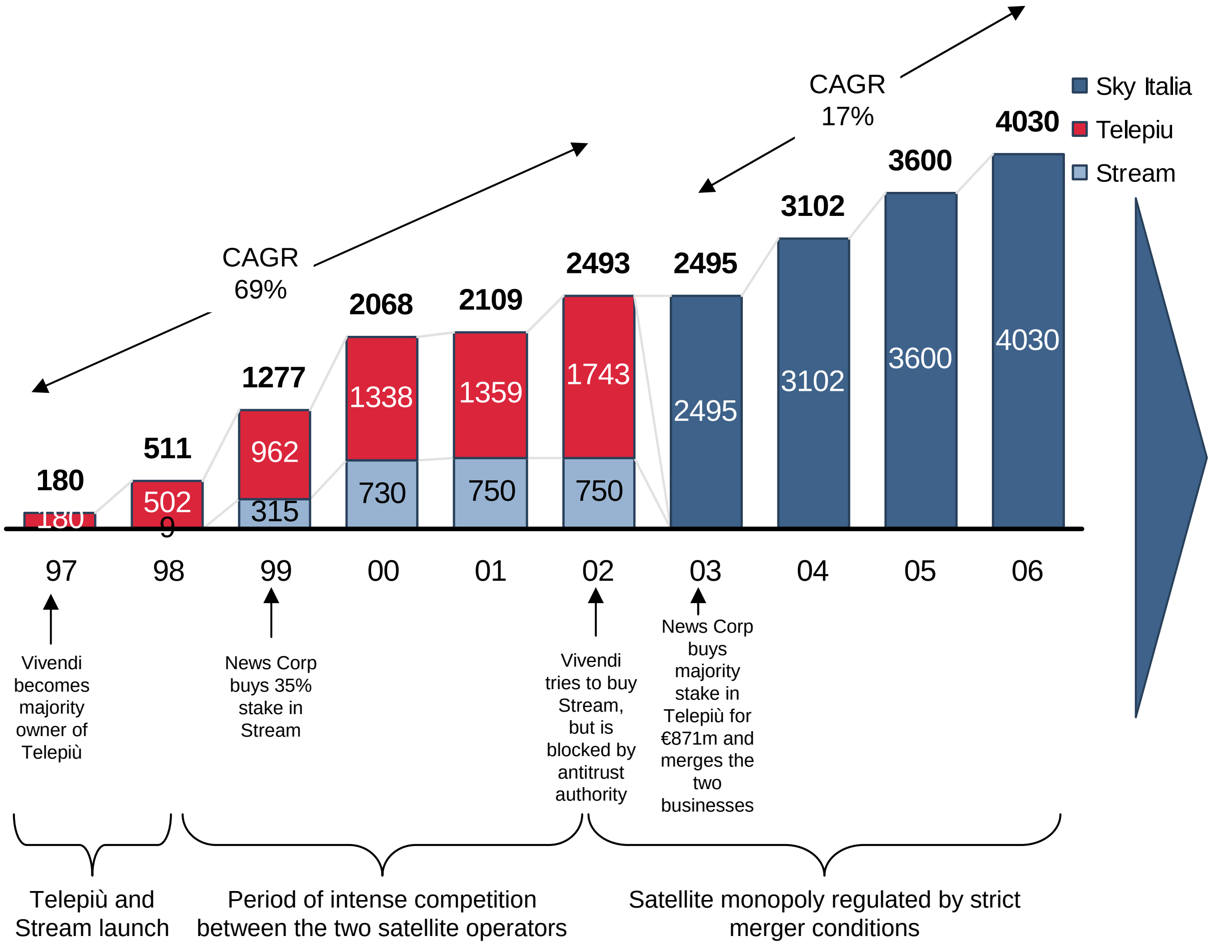


Source: Informa, One TV Year in the World (2007), Telecom Italia Annual Report 2006

Following the merger of the two rival satellite operators in 2003, Sky Italia has increased its subscribers from 2.5m to 4.0m

Italy: Satellite Consolidation

Subscribers by operator (000s)



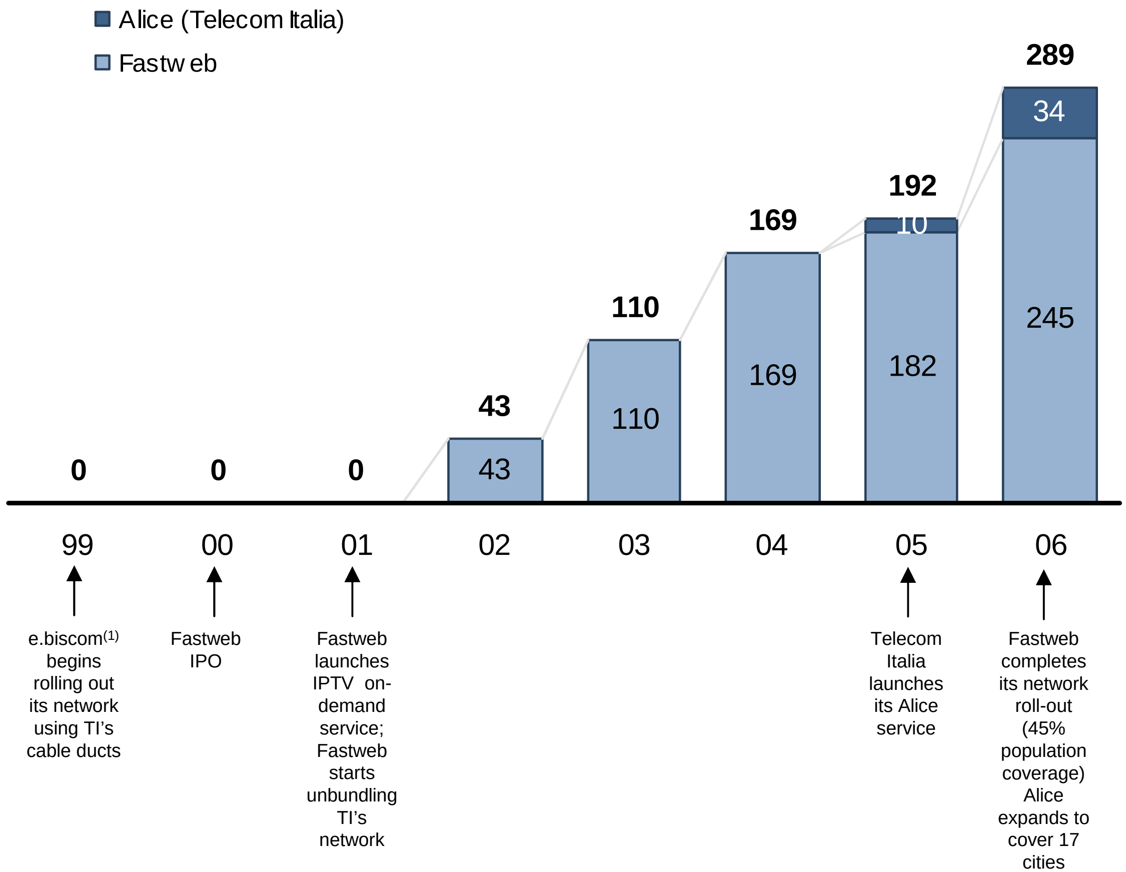
- **Between 1997 and 2006, satellite subscribers increased from 180k to 4.0m (17% penetration)**
- **From 1998 to 2003, a battle for subscribers took place between the Vivendi-owned Telepiù and News Corp's Stream** (the pre-cursors of Sky Italia)
  - Telepiù was the original satellite platform, having launched in 1996
  - Stream was launched by Telecom Italia as a cable service, but began simulcasting on satellite in 1998, when cable roll-out was suspended
- **Prior to their eventual merger in 2003, several attempts were made to merge Telepiù and Stream**
  - in 2002, Vivendi's attempts to take over Stream were blocked by Italian antitrust authorities
  - News Corp eventually persuaded the authorities to allow the merger, by threatening to abandon its service
- **Since the merger, Sky Italia has added over 1.5m subscribers, at a CAGR of 17%**

Source: Screen Digest, Press reports

The Italian IPTV market is still very small – with penetration of only 1%

Italy: IPTV

Subscribers by operator (000s)

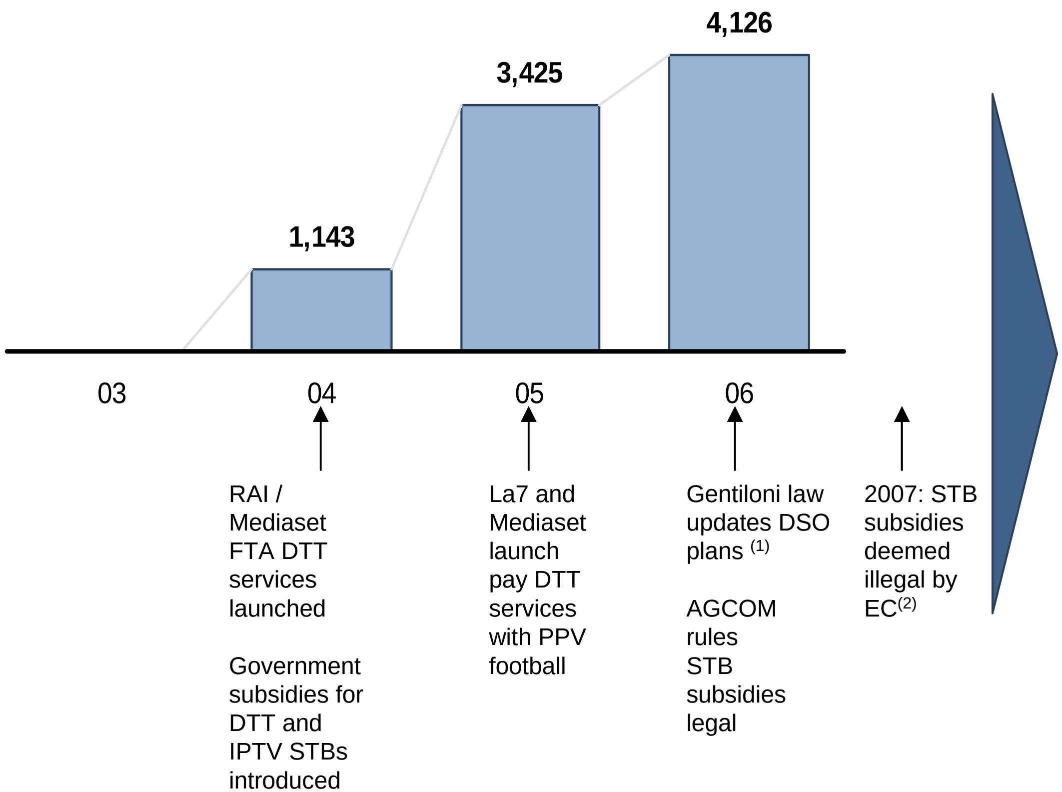


- **As in most Western European territories, IPTV is at an early stage of development:**
  - Fastweb is the clear market leader, followed by Telecom Italia's Alice service
  - other players are poised to enter the market, e.g. Tiscali and Wind (a fixed / mobile operator)
- **Key drivers of IPTV's success include:**
  - low pay TV penetration and, in particular, the absence of cable
  - roll-out of high quality infrastructure

Note: (1) e.biscom was the founding owner of the Fastweb service (rebranded as Fastweb soon after launch)
Source: Screen Digest, Press reports

Since its launch in 2004, DTT has grown quickly - in part, due to the availability of premium content on a pre-paid PPV basis

Italy: **DTT households (000s)**



- **Since its launch in 2004, DTT has grown rapidly**
  - 4.1million homes (18% of HHs) have DTT services
  - the platform has grown rapidly, supported by set-top box subsidies and the introduction of PPV football
- **Currently, there is no central DTT platform** (i.e. no equivalent to the UK's Freeview) – multiplex operations, programme information and marketing are undertaken separately by RAI, Mediaset and others
- **In 2005, Mediaset and Telecom Italia both introduced pay-as-you-go premium PPV services - these have attracted more than a million users**
  - by 3Q06, Mediaset had 1.7m customers (as defined by number of active pre-paid PPV cards)
- **Mediaset has gained customers through its offer of attractive premium content on a PPV basis:**
  - Mediaset is the second major buyer of premium rights in the Italian market, after Sky Italia
  - in 2004, Mediaset had output deals with five major Hollywood studios and, in Sept 07, signed a new joint deal with Warner and Universal
  - in 2006, the broadcaster concluded a multi-platform deal with several Serie A clubs

Note: (1) DSO was originally planned for 2006, but this date has been pushed back several times and now stands at 2012, though local sources suggest that this date is still unlikely to be achieved
(2) MHP-specific STB subsidies from 2004-2005 deemed illegal (excluded satellite); new platform-neutral subsidies (2006-) are legal

Source: Screen Digest, Press reports

Mediaset and Sky Italia are both vertically integrated but, whilst Sky is subject to regulatory conditions, Mediaset has a relatively free rein

Italy: Vertical integration of key players

High

Degree of vertical integration

Low

- **Mediaset has a high degree of vertical integration**
  - it owns three major commercial channels (Canale 5, Italia 1 and Rete 4)
  - key content and production assets, including AC Milan, Medusa (a film producer / distributor) and a stake in Endemol
  - only serious pay TV competitor to Sky Italia with its DTT PPV service, which may become a full pay TV service, i.e. a bouquet of pay channels on DTT (similar to BSkyB's new proposition in the UK)
  - currently, controls two DTT muxes, although, in the future, these may have to be shared

- **Sky Italia has a broad portfolio, but is subject to important regulatory conditions**
  - Sky Italia controls the satellite platform, but, under its merger conditions, is required to provide access to its platform to third parties(1)
  - bouquet of popular Fox channels (available on Sky Italia)
  - it has extensive sports rights, but these are limited to the satellite platform - due to merger conditions

- **Telecom Italia is present across various elements of the value chain**
  - channels (La7, MTV),
  - platforms (DTT multiplex ownership, Alice IPTV service)
  - but there is very limited integration between its services

- **Limited vertical integration**
  - **Fastweb** is focused on its IPTV platform and consumer devices

Note: (1) Sky Italia must provide third party broadcasters with access to the satellite platform and ensure unbundled access to all "technical bottleneck services" needed by prospective satellite competitors

Source: Informa, Screen Digest, Press reports

Mediaset is the most powerful player in the Italian TV market – it is able to wield significant power in its dealings with platform operators

Channel positioning and carriage dynamics

Power of the analogue terrestrials

- Although there are no "must carry" rules in Italy, the analogue terrestrial channel groups (RAI and Mediaset) remain powerful relative to the pay TV platforms, due to the popularity and high viewing shares of their channels – for example, Mediaset is able to charge Fastweb prices to re-broadcast its three core channels (Canale 5, Italia 1 and Rete 4) over IPTV, which Fastweb considers unreasonable(1)
- The near-term future strength of the terrestrial groups seems assured, as Mediaset and RAI have transferred their duopoly to the DTT platform, securing two multiplexes each
- However, proposed legislation may threaten the power of the analogue terrestrial broadcasters
  - Gentiloni law would make Rete 4 and Rai 3 digital-only, forcing them to negotiate carriage on other platforms
  - Mediaset and Rai may be forced to auction some of their digital spectrum

Privileged affiliated channels

- Sky has invested in and has heavily promoted its own channel portfolio e.g. Fox Crime
- These channels have been used as a substitute for unaffiliated channels
  - likely to lead to downward pressure on carriage fees paid to third party channels

Weak unaffiliated channels

- The satellite monopoly means that unaffiliated channels, even those which are part of powerful international groups, have limited power when negotiating with the pay TV operators, e.g. international bouquets (such as Discovery) have seen reductions in their carriage fees
- An exception, to date, have been the niche Italian channel groups, e.g. Sitcom, which have a more defensible position, due to the distinctive nature of their content

Note: (1) We do not have details of the charges, but Fastweb has taken Mediaset to court on several occasions

Source: AGCOM interview, Spectrum / Value Partners analysis

Satellite provides the richest content offer, IPTV services only come as part of triple play bundles, and DTT offers the flexibility of PPV

Italy – Overview of generic offer by platform

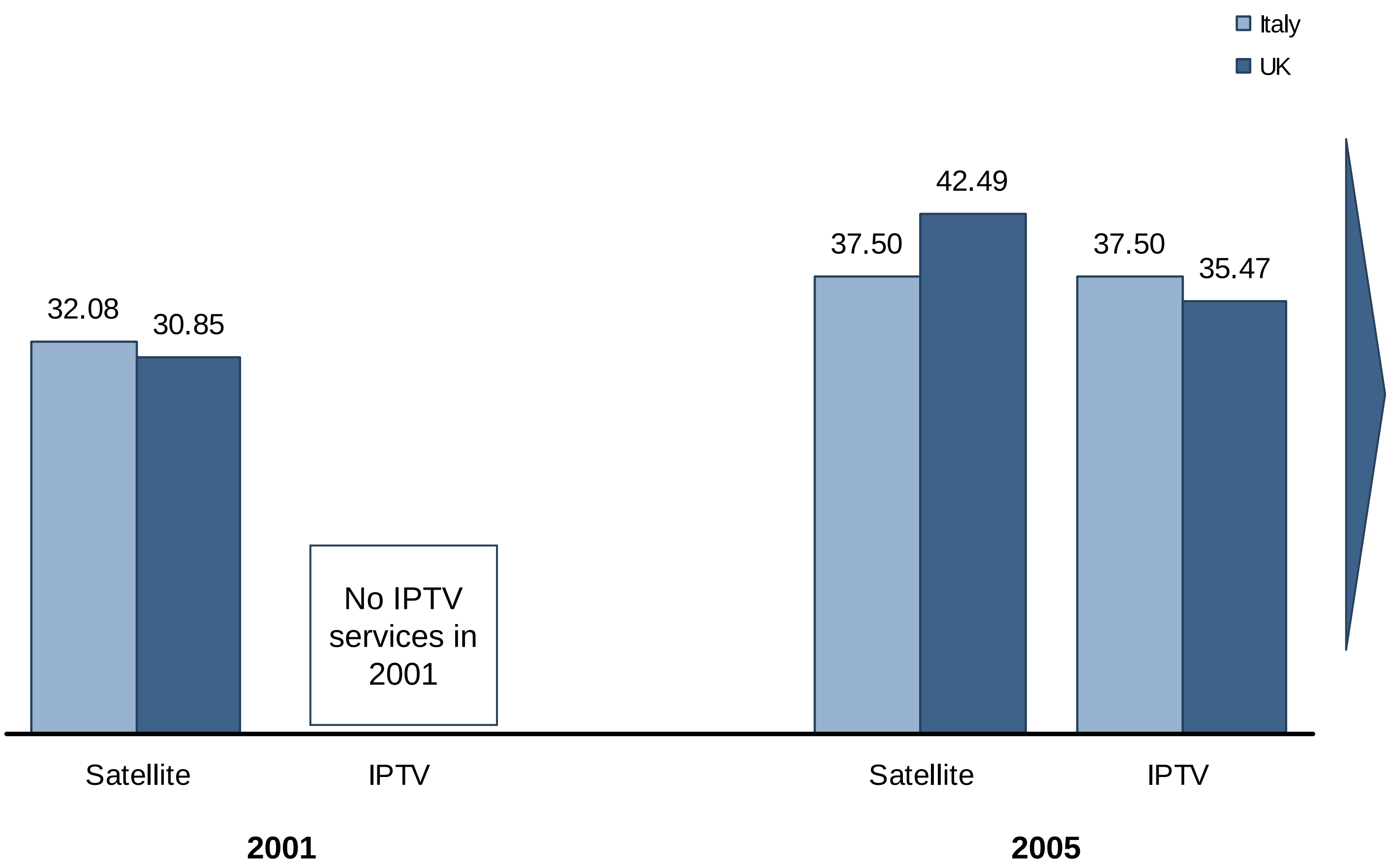
	Satellite	IPTV	DTT
Basic	• 67 Channels • Channels include Sky Vivo, Fox, Discovery, MTV and Eurosport News	• 30 channels • Terrestrial and DTT FTA channels	• 28 channels • MTV, La7, Sport Italia, Rai Doc
Extended basic	• Additional channel packages available with four to nine extra channels on top of the basic package	• Same additional channel packages, including Mondo, the Sky basic package	• n/a
Premium	• 100+ Channels • The basic package, plus three additional channel packages (e.g. sport, films)	• 70+ Channels • Basic package, plus the premium Sky offering	• The Mediaset PPV service offers six PPV channels, paid for with a pre-paid card that is inserted into the STB
Value-added services	• PPV for film and sport • Multi-room service available • Sky HD • 'My Sky' PVR	• PPV for film and sport • VoD • PVR facilities with some providers • HD ready STBs from some providers (HD content planned soon)	• None
Bundling (with telephony / online)	• None	• The TV service can only be bought as part of a triple play package	• None
Pricing strategy	• Premium pricing with the most comprehensive content offer	• Seeks to match satellite on channel packages provided by Sky	• Free core offer plus PPV films and movies, providing maximum flexibility for consumers

- Sky Italia has control of the most comprehensive content package but, under strict merger conditions, it is obliged to offer this content to other pay TV providers, i.e. the IPTV providers
- IPTV is not available as a stand-alone service – operators use IPTV as an added incentive for consumers to sign up to their internet and telephony services
- The Mediaset PPV service on the DTT platform gives consumers access to premium content - without the need for a base subscription or regular financial commitment

Source: (1) Screen Digest, company websites

On a PPP basis, Italian satellite TV is somewhat cheaper than in the UK

Pricing comparison with the UK – (US$, PPP)

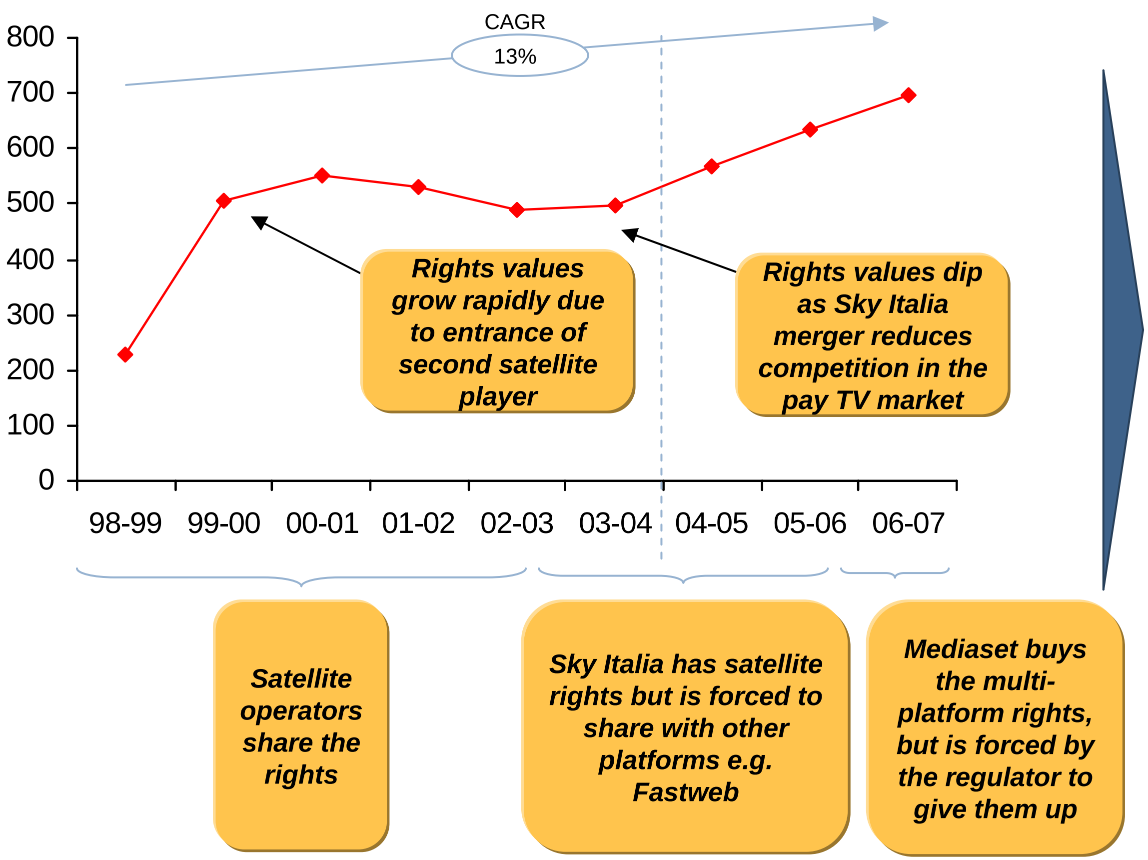


- In 2001, on a PPP basis, satellite TV in Italy was slightly more expensive than in the UK
- However, since 2001, the prices of satellite TV have risen more slowly than in the UK
- Possibly due to increased competition from
  - DTT (both for FTA multi-channel TV and live football via PPV)
  - IPTV's triple play offer

Source: Informa *TV in Western Europe*, EIU

The value of Serie A football rights has risen steadily, but erratically - significantly affected by changes in the structure of the market

Italy: Value of Serie A football rights over time (€m)

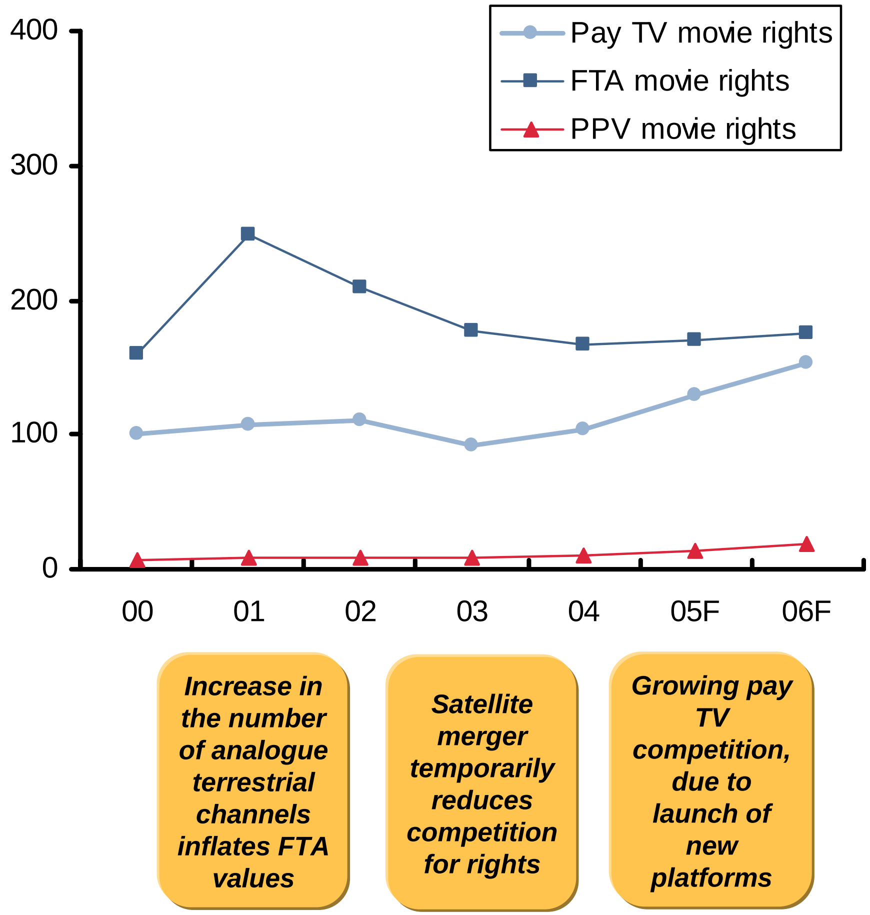


- In 2006/07, Serie A rights were worth €696m (32% higher than the €527m for the Premier League)
- Since 1998, Serie A rights have grown at a CAGR of 13% - due, in main to growing pay penetration and the entrance of new platform players
- However, rights increases have been erratic
  - in 1999, after selling on a collective basis was banned, rights for the 99/00 season were sold for 120% more than in 98/99
  - following the cessation of competition between the two satellite operators, rights values fell in 2002/03
  - in 2004/5, Mediaset and Telecom Italia started to offer DTT PPV services and rights values rose 14%
- Since the satellite merger in 2003, football rights have been distributed across the various pay TV players – merger conditions have prevented Sky from doing exclusive deals – and clubs opted to sell on an individual basis
- In 2006, Mediaset completed a multi-platform deal with most of the major clubs - but, in order to avoid regulatory intervention, it sold the rights on to other platforms
  - under the new Legga Delega (2007), such multi-platform deals are now illegal

Source: TV Sports Markets, Sportcal, Spectrum benchmarks

Italian pay TV movie rights are worth less than FTA rights – but the gap appears to be closing

Italy: Value of movie rights over time (€m)



- The pay TV movie market in Italy is much smaller than in the UK
  - in 2004, Italian pay TV movie rights were worth €103m; in the UK, they were worth €539m
- Italian pay TV movie rights are also worth less than their FTA equivalent – whereas, in the UK, pay TV rights are valued three times higher than FTA rights
- This situation reflects three main factors
  - the relatively low levels of pay TV penetration in Italy (19%), compared to 46% in the UK
  - the high viewing share of and competition between Italian FTA channels (the peak in 2001 was due to the launch of Telecom Italia's La7)
  - the merger of the satellite platforms (coinciding with a decline in value of the pay TV rights in 2003)

Source: Screen Digest European Movie Rights 2005

Italian media legislation focuses mainly on the FTA broadcasters and anti-trust issues

Regulatory bodies

- The key regulatory bodies are:
  - Autorità per le Garanzie nelle Comunicazioni (AGCOM), the regulator of the telecommunications, broadcasting and publishing sectors
  - Autorità garante della concorrenza e del mercato (AGCM), the Competition Authority

Key areas of regulation and intervention

FTA legislation

- Most media-specific legislation relates to the FTA terrestrials and, in particular, to Mediaset
  - early laws formalised the operations of RAI and Mediaset, e.g. RAI law (1975), Berlusconi decree (1984)
  - more recent laws have been introduced, either to facilitate or restrict the actions of Mediaset, depending upon the political affiliation of the incumbent government, e.g. Gasparri law (2004), Gentiloni law (yet to be passed)

Anti-trust legislation

- Over the last thirty years, several media-specific anti-trust laws have been introduced, each setting a limit on the portion of the advertising market a single player could control, e.g. Mammi law (1990), Maccanico law (1997)
- Over the years, the size of the portion which could be controlled has gone up and down, and the definition of the market, to which the limit applies, has been changed – nevertheless media concentration remains high

Pay TV merger conditions

- The only pay TV regulations are the conditions which were imposed on Sky Italia at the time of the satellite merger
- Sky must allow other satellite operators access to its platform, must not tie-up premium rights in long-term deals, and must share its exclusive content and channels with other non-satellite platforms
- Sky had to give up its analogue terrestrial frequencies; on DTT, Sky is allowed to have free channels, but not pay

Football regulation

- The Legge Delega (2007) mandates a return to collective bargaining for football rights, under the control of the Lega Calcio
- The law also requires revenues to be redistributed from the larger clubs to the smaller ones and prevents buyers from acquiring rights to platforms which they do not own/operate

Source: Spectrum / Value Partners analysis

Italian media legislation focuses mainly on the FTA broadcasters and anti-trust issues (cont'd)

The nature of Italian regulation

Photocopy laws

- Italian media laws from the last 25 years are often known as "photocopy laws", as they have tended to legitimise the status quo, instead of trying to impose any kind of system or plan; for example, in 1976, law 202 legalised local commercial TV networks. Over the next ten years, Berlusconi acquired enough local networks to create a de facto national network – this network was not legitimised until the 1985 emergency "Berlusconi decree", which saved the "illegal" national stations from being turned off

Enforcement of legislation

- Some media regulations, which would have engendered significant change in the Italian media sector, have not been enforced - for example
  - if the antitrust rules detailed in the Maccanico law had been imposed, Mediaset's Rete 4 would have been forced to become satellite-only; instead, the channel was allowed to continue broadcasting until it was "re-legitimised" by the Gasparri law
  - the 2001 Digital Broadcasting law, which required any operator with more than one analogue channel to sell at least 40% of its total DTT capacity to third parties, is only now being enforced

Source: Spectrum / Value Partners analysis

Spain

International pay TV Study
Executive Summary

September 2007

Introduction - major players in the Spanish TV market

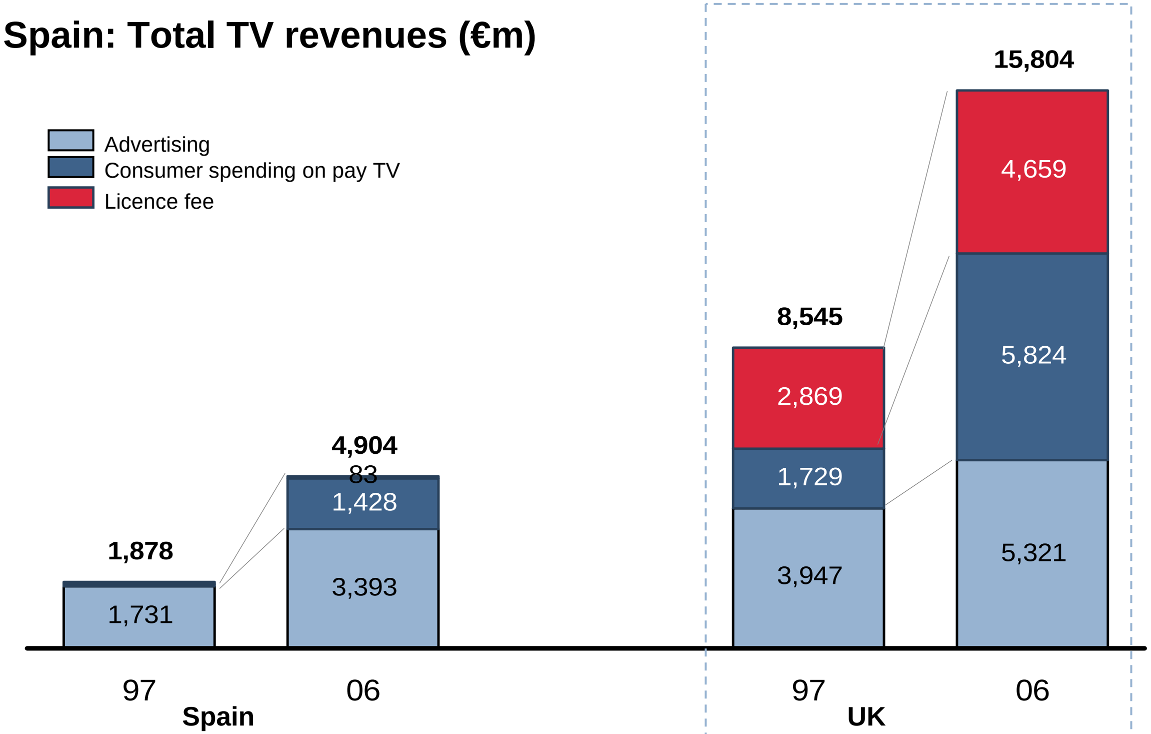
Platforms	
Satellite	**Digital+** (owned by Sogecable - formed from merger of Via Digital and Canal Satélite in 2002)
Cable	**Ono** (formed from merger of Ono and Auna in 2005)
IPTV*	**Imagenio** (Telefonica) **Jazztelia**

Broadcasters	
PSB	**RTVE** (operates two channels: TVE1 and La2)
FTA Commercial Terrestrials	**Antena 3** **Cuatro** (owned by Sogecable) **Telecinco** **La Sexta**

Note: * Not a complete list of players

Though still small relative to the UK, in recent years, the Spanish pay TV market has grown rapidly

Spain: Total TV revenues (€m)



CAGR 97 - 07	Advertising	Consumer spending on pay TV	Licence fee	Total
Spain	7.8%	38.3%	1.9%	11.3%
UK	3.4%	14.4%	5.5%	7.1%

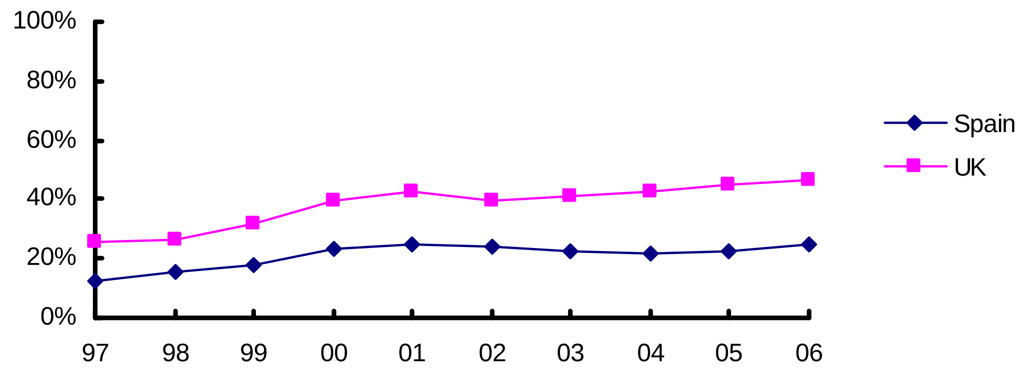
- **Spanish TV revenues are only 31% of UK TV revenues**
  - advertising revenues are 64% of UK levels
  - **consumer spending on pay TV is 25% of UK levels**
  - licence fee is 2% of UK levels (1)
- Since 1997, total Spanish TV revenues have grown from €1.9bn to €4.9bn, at a CAGR of 11.3% (97-06), compared to 7.1% in the UK
- Since 1997, a strong economy has led to significant growth in advertising and consumer spending on pay TV
  - advertising has grown at a CAGR of 7.8% (97-06), versus 3.4% in the UK
  - consumer spending on pay TV has grown (from a low base), at a CAGR of 38.3% (97-06), versus 14.4% in the UK

Note: (1) There is no TV licence fee in Spain. RTVE, the national public broadcaster, received €84m in direct government funding in 2006, but supplemented its budget with a further €700m in debt financing from the government. This additional debt funding, plus regional public funding of local channels, means that some public funding is not captured above

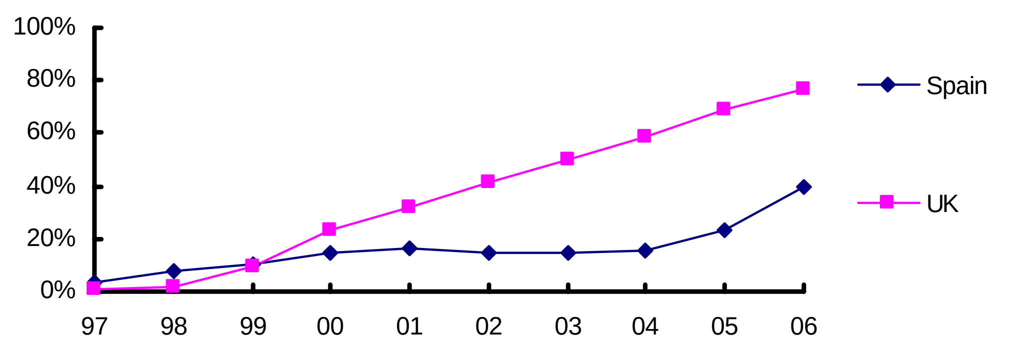
Source: (1) Consumer revenues and government funding - Screen Digest (2) TV advertising - ZenithOptimedia

The penetration of pay and digital TV are significantly lower in Spain than in the UK – but both are on an upward trend

Pay TV penetration



Digital TV penetration



- **The penetration of pay TV in Spain (25%) is low, relative to the UK (46%)**, reflecting the later date at which satellite and cable pay TV services were launched and the strength of the FTA offer
  - seven FTA terrestrial channels
  - mandated access to football on FTA TV(1)
  - recently, a strong free DTT platform
- **The migration to digital has been slower than in the UK, in part because of the collapse of the first DTT platform**
  - in 2000, 'Quiero' a pay DTT platform was launched, but it collapsed two years later due to debts from the acquisition of PPV football rights and low subscriber take-up
- **Since 2004, digital take-up has increased rapidly**
  - IPTV launched in 2004
  - free DTT service launched in 2005 - with reduced sales tax on STBs
  - cable platforms have increased digitisation, in order to offer triple play packages - similar to those offered by IPTV players

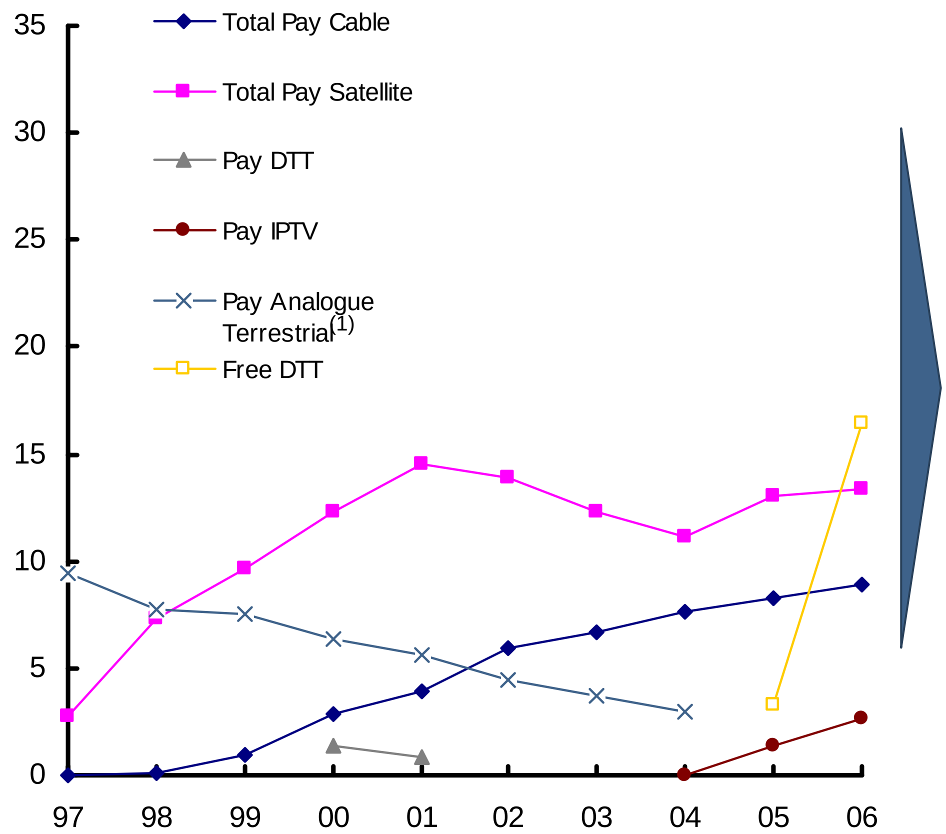
Note: (1) One La Liga match per week must be shown on FTA TV
Source: Screen Digest

Satellite is the leading pay TV platform, with 13% penetration – cable has 9%, and IPTV 3%

Spain: Evolution of multichannel platforms (TV household penetration, %)

Timeline

1995	• Cable Act legitimises cable operators
1996	• Launch of two pay satellite services
1998	• Launch of Ono cable service
2000	• Pay DTT platform launches
2002	• Collapse of pay DTT platform
2003	• Two pay satellite services merge
2004	• Canal+ pay analogue ends(1) • IPTV roll-out begins
2005	• Cable merger • DTT relaunched as a FTA service
2007	• Two new IPTV services launched



- **The Spanish pay TV market is split between three main platforms**
  - satellite (13.4% penetration)
  - cable (8.9%)
  - IPTV (2.7%)
- **Over time, the level of competition in the market has varied**
  - **1996-2002**: growing competition, due to launch of satellite, cable and DTT services
  - **2002-2005**: reduced competition, due to the satellite and cable mergers, the collapse of Quiero (pay DTT platform), and the replacement of the Canal Plus pay analogue terrestrial channel with an FTA alternative
  - **since 2005**: increased competition, due to the roll-out of IPTV and launch of free DTT

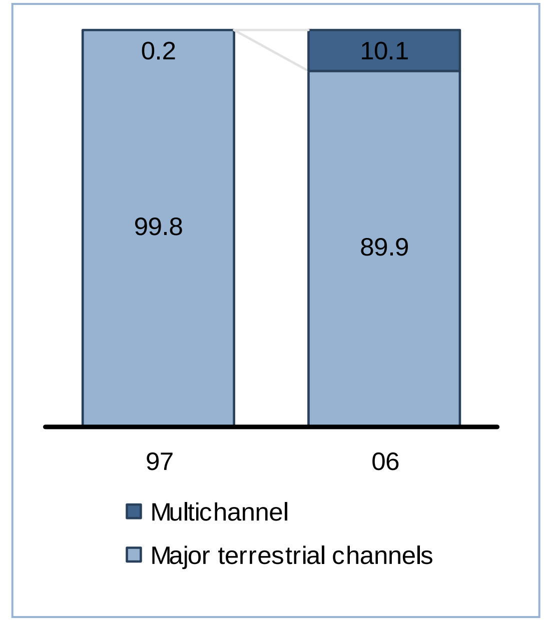
Note: (1) Canal Plus analogue terrestrial channel – closed in 2004/05; replaced by a new FTA channel
Source: Screen Digest

Collectively, the major FTA terrestrial channels retain a very high share of viewing - augmented by the recent launches of Cuatro and La Sexta

Spain: Overview of channel owners

Company	Channels	2006 Viewing share		Ownership
rtve	TVE1	• 18.3%	23.1%	• 100% state owned
	La2	• 4.8%		
Telecinco	Telecinco	• 21.2%	21.3%	• 50.1% Mediaset • 13% Vocento • 36.9% floated
	Telecinco Estrellas	• 0.08%		
	Telecinco Sport	• 0.02%		
Antena 3	Antena 3	• 19.4%		• Planeta-De Agostini • RTL Group
Sogecable (owner of Digital Plus, satellite platform)	Cuatro (launched 2005)	• 6.4%		• 33% Prisa • 17% Telefonica • 4.5% Vivendi Universal • 3% Eventos SA
	22 digital only channels	• n/a		
laSexta	La Sexta (launched 2006)	• 1.8%		• 40% Televisa • 60% GAMP (Grupo Árbol-Globomedia [40%], Mediapro [38%], BBK [10%], El Terrat [7%] and Bainet [4%])
FORTA[1]	12 regional channels	• 17.3%		• Mainly publicly owned

Viewing share (%)

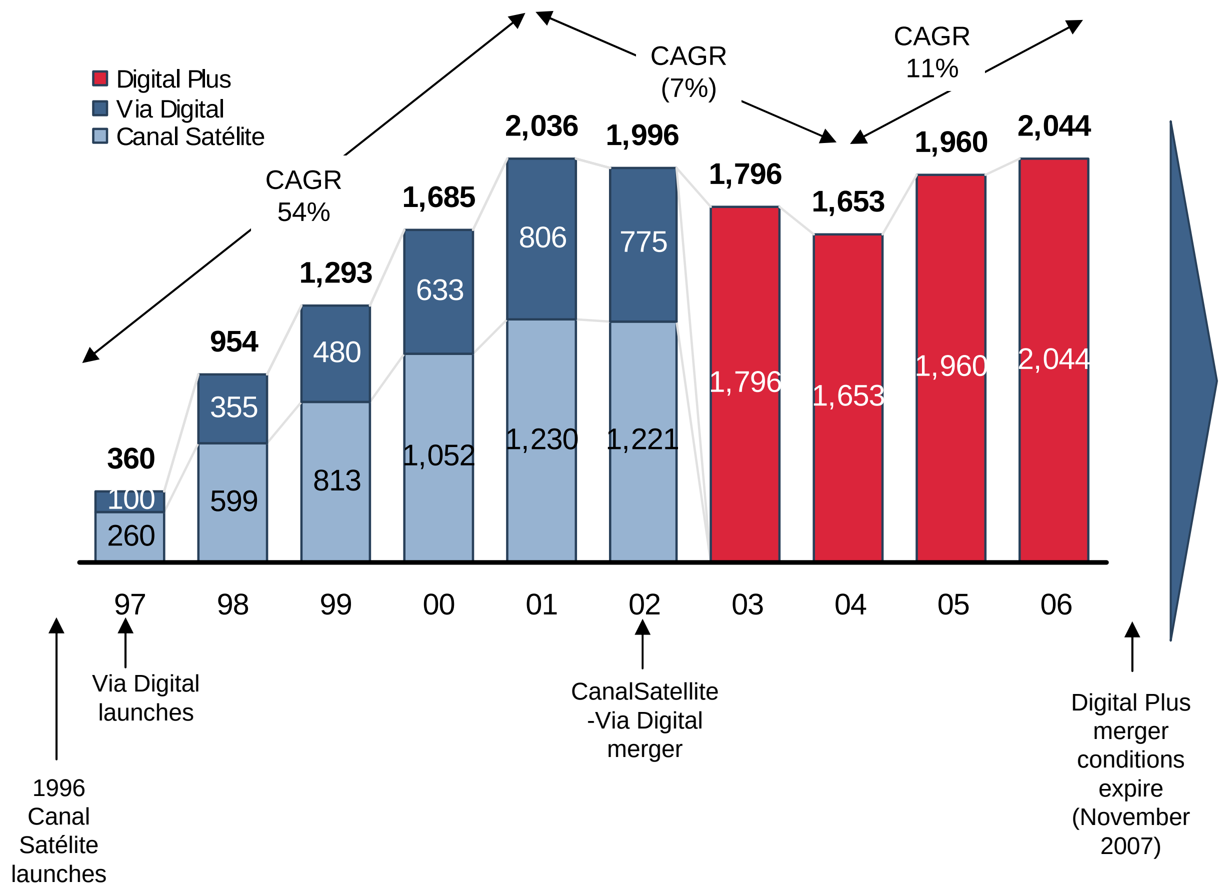


Note: FORTA is the association of Spanish regional channels – not the owner
Source: Informa, Eurodata- One TV Year in the World (2006), Santander 04.09.06

Since the satellite merger in 2002, Digital Plus has struggled to maintain its subscriber base, mainly due to onerous merger conditions

Spain: Satellite Consolidation

Subscribers by operator (000s)



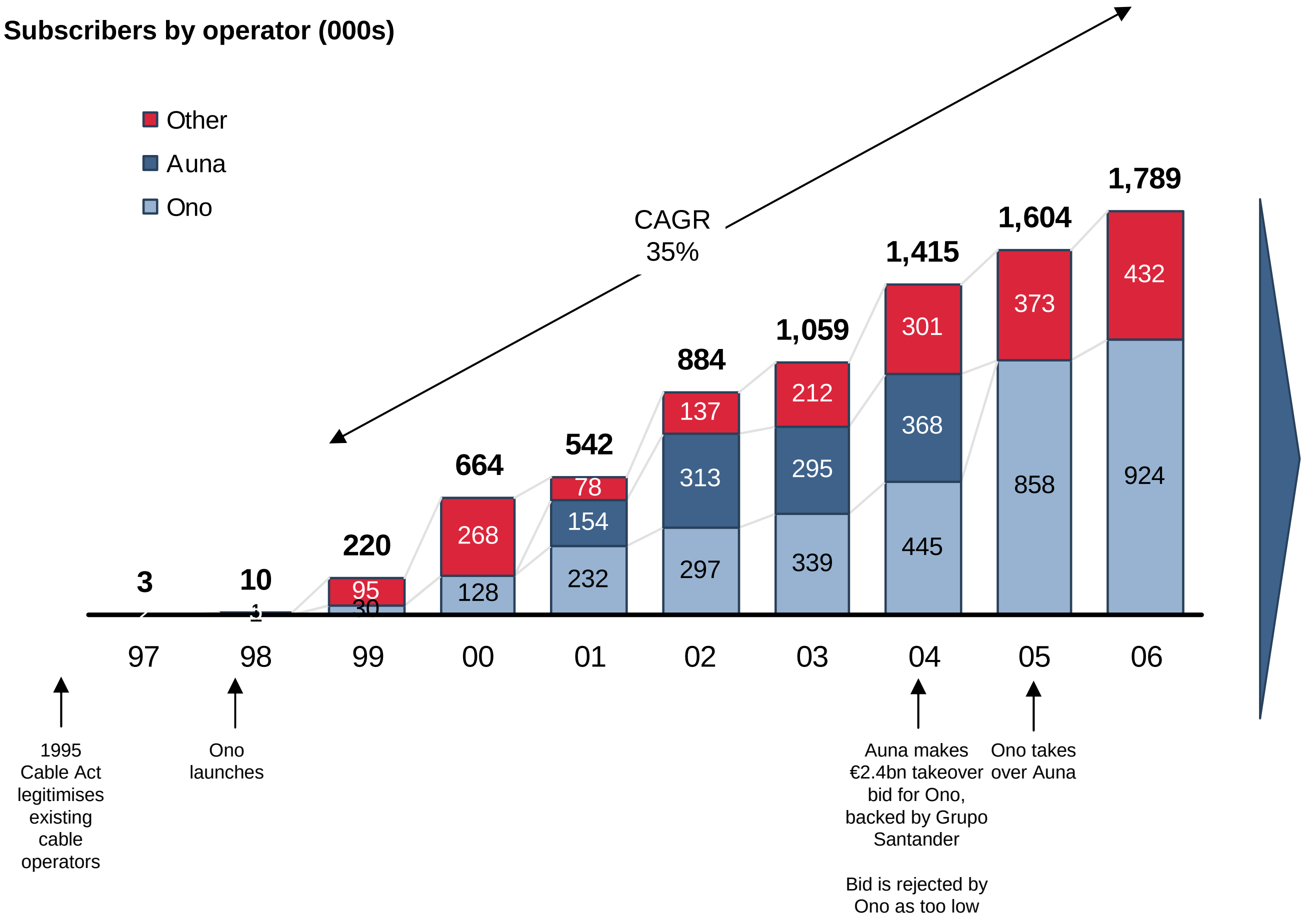
- **Satellite was the first multi-channel pay TV platform in Spain**
  - Canal Satélite (backed by Canal+ and Prisa) launched in 1996; Via Digital (backed by Telefonica) launched in 1997
- **Before the merger of the two satellite operators in 2002, they competed aggressively for subscribers**, resulting in
  - repeated takeover bids
  - inflation in cost of broadcast rights
  - structural deficits
- **Since the merger, Digital Plus (owned by Sogecable[1]) has struggled to sustain its subscriber base**, due to:
  - onerous merger conditions, e.g. the operator has been denied exclusive access to premium content
  - its positioning as a premium priced service (Via Digital had been a more mass market proposition)
- In November 2007, the merger conditions expire – Digital Plus is expected to form a strategic partnership with Telefonica, its part owner, to resell its channel packages over IPTV

Note: (1) Sogecable’s major shareholders are Prisa 33%, Telefonica 17%, and Vivendi Universal 5%
Source: Screen Digest, Press reports

Until the Ono-Auna merger in 2005, no cable operators had the scale to compete with Digital Plus for rights

Spain: Cable Consolidation

Subscribers by operator (000s)



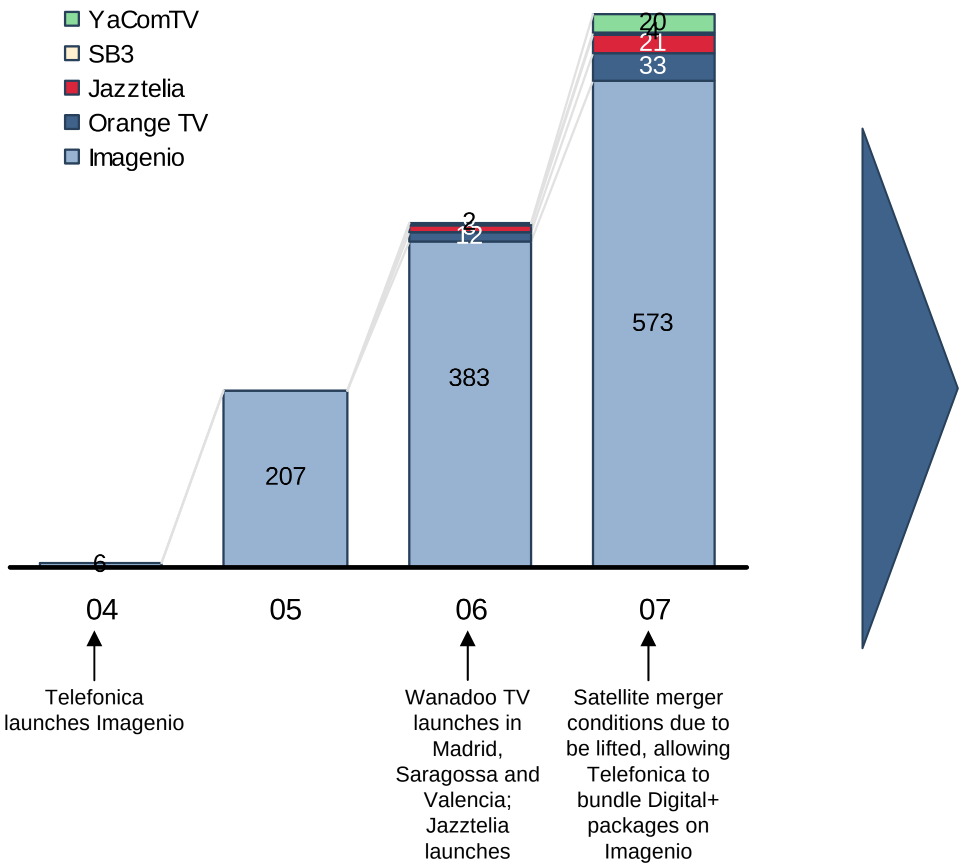
- **The Spanish cable market is less developed than in many other Western European markets**
  - licences were first granted in 1997 and 1998
  - the initial structure of 37 franchise areas created a fragmented sector
  - potential competition from Telefonica, which also had the option to build cable in each franchise area, discouraged investors
- **The sector has seen fairly rapid consolidation - the two main players, Ono and Auna, merged in 2005**
  - prior to their merger, Ono and Auna acquired most of the smaller Spanish cable operators
  - the Spanish regulator approved the Ono-Auna merger, in order to encourage competition with Telefonica
- Ono is now attempting to strengthen its position against Digital Plus by creating its own channels

Source: Screen Digest, Press reports, Screen Digest "European Programme Rights"

Since its launch in 2004, Telefonica's Imagenio IPTV service has begun to establish a position in the pay TV market

Spain: IPTV launches

Subscribers by operator (000s)



- **Telefonica launched Imagenio, Spain's first IPTV service, in 2004**
- **In 2005, the bundling of services (TV, internet and telephony) was allowed by the regulator**
  - giving IPTV operators a differentiator against Digital Plus
- **Imagenio** remains the leading player with 86% of all IPTV subscribers
- **Imagenio is now attracting more new pay TV subscribers than other platforms due to its innovative services and triple play**
  - in 1Q06, Imagenio captured more than 50% of new pay TV subscribers, whilst Ono captured just 27%
  - as the incumbent telco, Telefonica controls both the infrastructure and retail elements of the IPTV platform - it has used this position to support the growth of the Imagenio platform
- **At the end of 2007, the market is likely to change significantly**, when Telefonica will, for the first time since the satellite merger, be allowed to bundle Digital Plus's TV packages

Source: Screen Digest, Press reports, Screen Digest "European IPTV"

Vertical integration is common across the Spanish pay TV market – to date, Sogecable has been the most effective at leveraging its position

Spain: Vertical integration of key players

Degree of vertical integration

High

Low

Sogecable

ONO

Telefónica

MEDIAPRO

- **Sogecable: High degree of vertical integration**
  - owns the Digital+ satellite platform
  - owns the premium Canal+ bouquet (five channels) and Cuatro (FTA terrestrial channel)
  - key content and production assets, including 80% stake in Audiovisual Sport (a broker of sports rights), rights to the majority of key La Liga football clubs until 2008, and film distribution subsidiaries (e.g. Warner Sogecine)

- **Ono: Broad proposition across most of the pay TV value chain**
  - owns Ono cable platform
  - content and production assets, including investment in 'Teuve' (production company) and PPV volume deals with major Hollywood studios
  - Teuve operates 11 thematic channels

- **Imagenio: Broad proposition across most of the pay TV value chain**
  - its parent, Telefonica, owns telephony, data and IPTV infrastructure in Spain as well as Imagenio IPTV platform
  - part owner of Canal+ bouquet through 16.7% stake in Sogecable
  - some key content in the form of PPV volume deals with several Hollywood studios

- **Mediapro: Broad proposition across most of the pay TV value chain**
  - Football and Formula 1 rights
  - TV production company
  - 25% stake in La Sexta (FTA terrestrial channel)

Source: Informa, Screen Digest, Press reports

The analogue terrestrials and the Sogecable-owned Canal+ bouquet are the most powerful channels in Spain

Channel positioning and carriage dynamics

Public channels

- Historically, the public RTVE channels have been powerful relative to the cable operators, due to "must carry" rules(1)
- However, their ability to negotiate strongly is declining, due to budget cuts and a consequent reduction in their demand for premium content
  - significant cut backs in in-house production, in order to finance RTVE's €7.5b debt
  - the government has restricted RTVE's rights acquisition activities e.g. banned from bidding for World Cup rights

Commercial terrestrial channels

- The commercial terrestrial channels have considerable power relative to the platform operators – because pay TV penetration is still relatively low and the TV advertising market has been growing rapidly
- The FTA sector, as a whole, benefits from the designation of a one live La Liga match per week as a listed event, which has to be broadcast on FTA
- The buoyancy of the advertising market has enabled the terrestrial commercial broadcasters to negotiate aggressively with the pay TV operators
  - La Sexta was able to withdraw from Digital Plus and, hence, avoid high carriage costs of €800k, when its football strategy drew audiences of 17% in peak periods

Channels owned by platform operators

- One of Sogecable's most valuable assets is the Canal Plus bouquet of five premium channels, which it uses to differentiate Digital Plus from other platforms
- Rivals have tried to gain access to these channels, but, wherever possible, Sogecable has resisted such moves:
  - under the merger conditions, Digital Plus was forced to share one premium channel with other platform operators
  - Digital Plus responded by cutting investment in the chosen channel – to make it a less attractive proposition
  - the cable operators complained, but were unable to achieve a satisfactory result
- Ono has begun to create its own channels, but these lack premium content and are not carried on Digital Plus

Note: (1) Does not apply to the satellite platform
Source: Spectrum / Value Partners analysis

The various Spanish pay platforms offer very similar content packages, with the Canal Plus bouquet as the only real differentiator

Spain – Current consumer packages

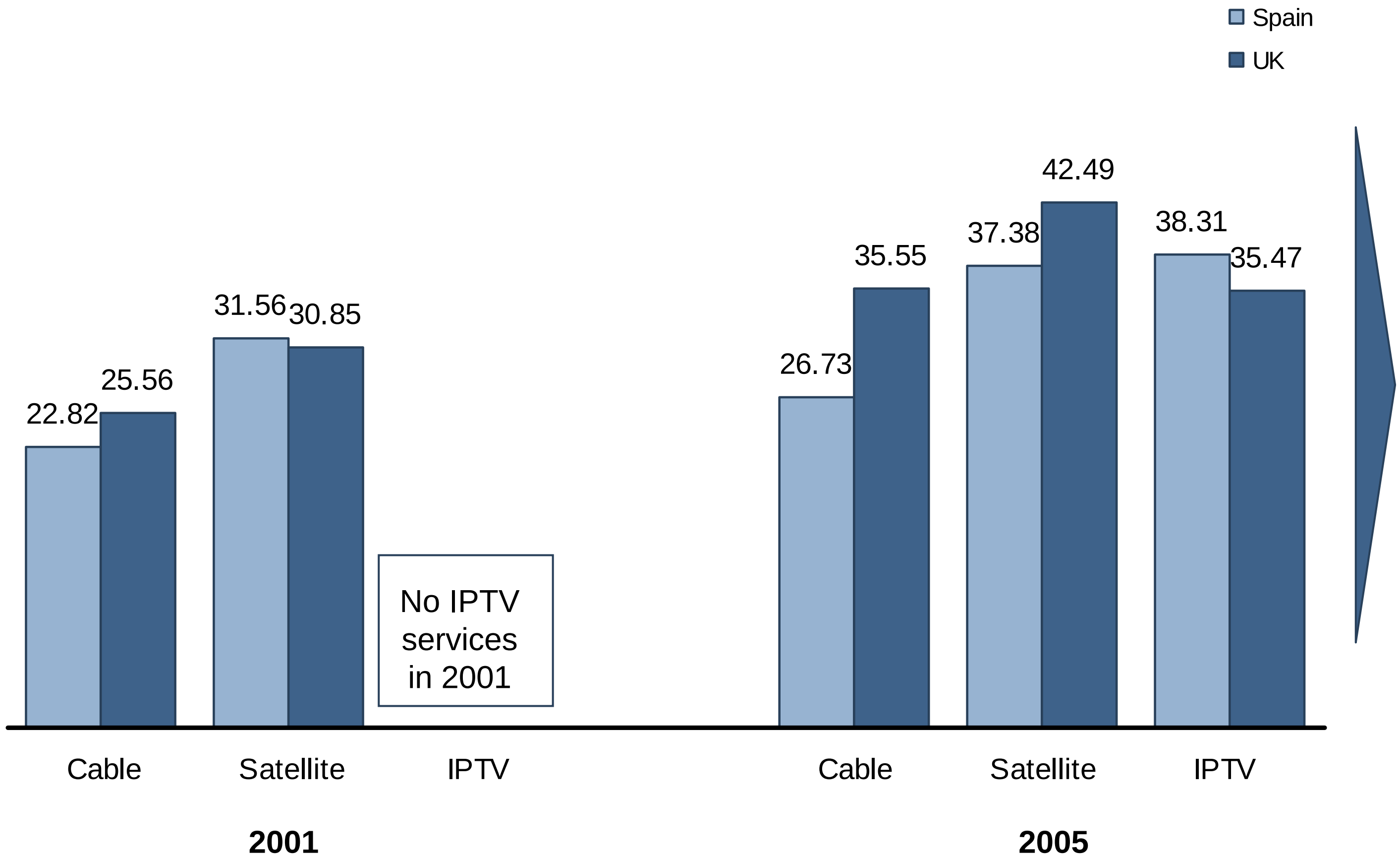
	Satellite	Cable	IPTV
• Basic	• 20+ channels • FTA channels and Canal+	• 40 channels • FTA channels and some second tier channels (e.g. Discovery, MTV)	• 30 channels • FTA channels and five second tier channels (e.g. Nickelodeon)
• Extended basic	• 40+ channels • FTA channels, Canal+ and some second tier channels (e.g. Jetix[(1)], Cosmo TV[(2)])	• 60+ channels • Basic package, plus children's or sport and film packages	• None
• Premium	• 75+ channels • Premium content, such as Canal+ Sport, Fox, Disney, 10 film channels	• 75+ channels • Premium content, including extra sport and film channels	• 60 channels • Second tier channels (e.g. Disney and Eurosport) • Premium content requires extra subscription (e.g. MGM, Sportmania)
• Value-added services	• PPV ('Taquilla') • Recently launched PVR product which is also HD ready (plans to introduce HD TV soon in Spain)	• Video on Demand ('Ojo') • PPV ('Mirador') • Multi-room service available	• Video on Demand ('Videoclub') • PPV ('Tribuna Imagenio')
• Bundling	• Currently none – but planning to cross-sell with Telefonica from November 2007	• Triple and Dual Play services available and actively promoted	• Triple and Dual Play services available and actively promoted

Note: (1) Formely Fox Kids (2) Cosmo TV is an offshoot of the women's magazine franchise

- **The services offered on each of the platforms is very similar**; the only notable exception being the availability of some channels
  - **The Canal Plus bouquet is only available on Digital Plus**
    - Digital Plus owns the Canal Plus bouquet of channels
    - it does not wholesale these channels to other operators
  - **Ono owns Teuve, a production company, which operates 11 channels**
    - these channels are sold wholesale to other operators, but are not available on the Digital Plus platform

On a PPP basis, satellite and cable services are somewhat cheaper in Spain than they are in the UK, but IPTV is more expensive

Pricing comparison with the UK – (US$, PPP)

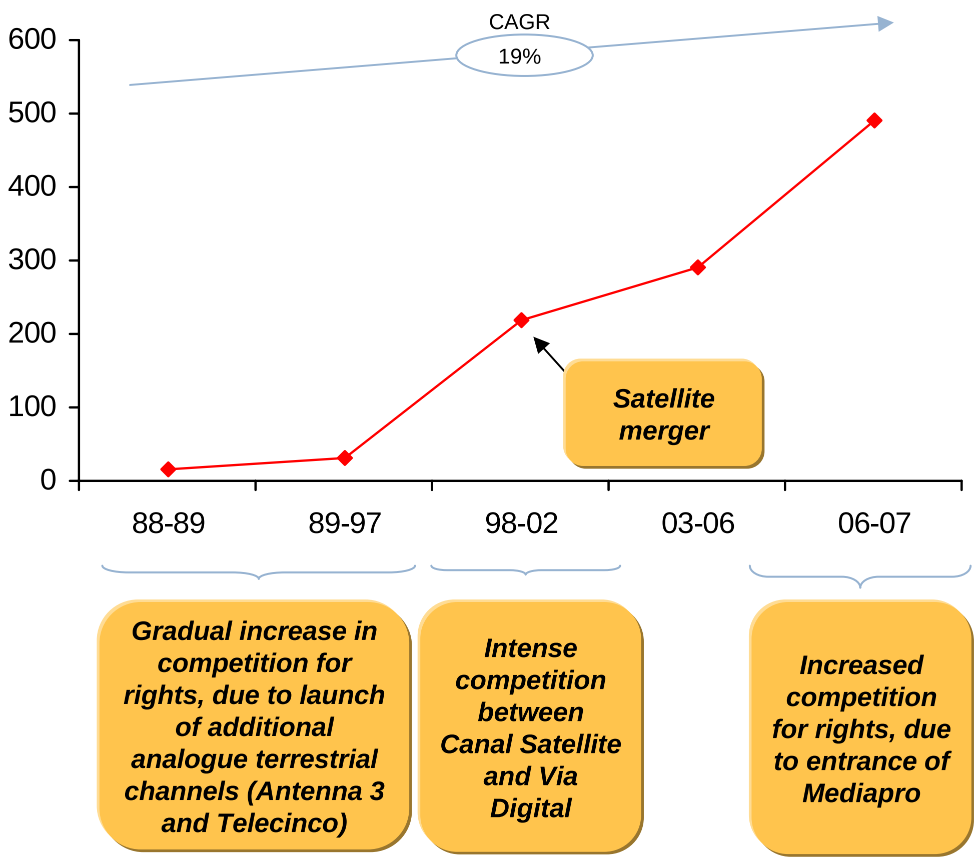


- In 2001, cable was cheaper in Spain than in the UK but satellite was marginally more expensive
- Between, 2001 and 2005, the prices of both services rose more slowly in Spain than in the UK
- IPTV in Spain has a similar price to satellite, making it more expensive than in the UK

Source: Informa *TV in Western Europe,* EIU

The value of Spanish football rights has grown from €15m / season in 1988-89 to €490m / season in 2006-07

Spain: Value of La Liga football rights over time (€m)



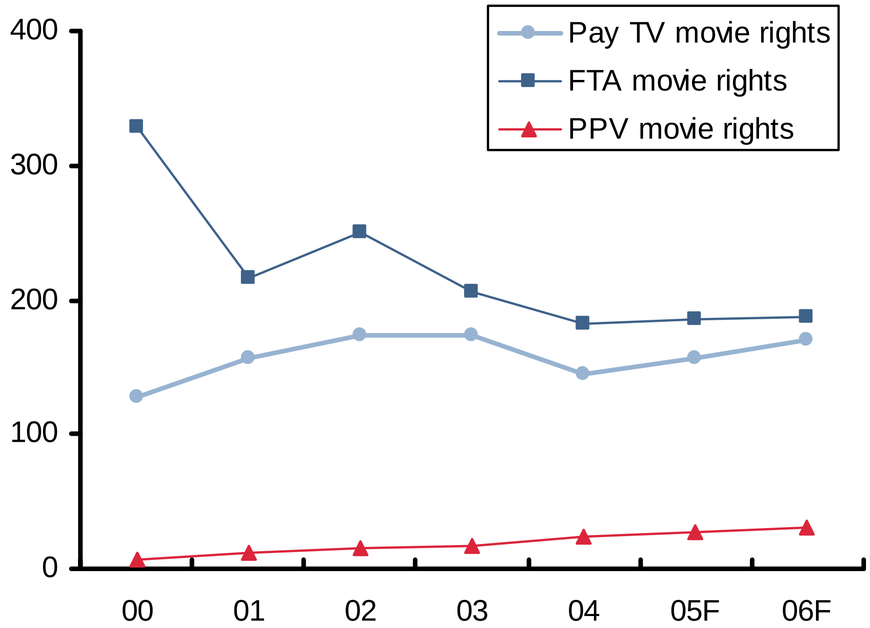
Note: (1) In addition, one match a week is mandated to be on FTA TV
(2) Following a court ruling in October 2007, Sogecable (via AVS) retains rights for the 2007/08 season, but, thereafter, Mediapro will have the majority of rights deals with the major clubs

Source: TV Sports Markets, Sportcal, Spectrum benchmarks

- Over the last twenty years, the value of Spanish football rights has grown dramatically:
  - from €15m for the 88/89 season
  - to €490m for the 06/07 season (CAGR of 19%)
- Increases in rights values have been driven by changes in
  - the rights sales strategies of the clubs
  - the level of competition in the pay TV market
- Between 1989-94 and 1998-02, football rights values increased sevenfold - due to the re-introduction of individual selling
- Between 2003-06 and 2006-08, values increased by 70%, following the entrance of Mediapro as an acquirer of football rights
- Until recently, Sogecable, through its ownership of Audiovisual Sport, has been the primary acquirer of live football rights in Spain
- However, it has been difficult for Digital Plus to use football as a differentiator – since 2000, EC intervention has forced it to share its live football with other platforms(1)
- The merger conditions expire this year, but Sogecable has, for the first time in ten years, lost the rights – to Mediapro(2)

The value of pay TV movie rights has remained relatively low

Spain: Value of movie rights over time (€m)



Launch of Quiero

Collapse of Quiero (pay DTT platform)

Via Digital-Canal Satellite merger

Launch of IPTV

Relaunch of DTT

Cable merger

Canal+ pay analogue service closes

- The value of Spanish pay TV movie rights is significantly lower than in the UK
  - in 2004, Spanish rights - €145m; UK rights - €539m
- Spanish pay TV movie rights are also worth less than FTA rights; in the UK, pay TV rights sell for three times the price of FTA rights
- This reflects four main factors:
  - fewer TV households in Spain (15.8m) than in the UK (25.4m)
  - relatively low levels of pay TV penetration in Spain (25%), compared to the UK (46%)
  - the high viewing share of Spanish FTA channels
  - a reduction in competition amongst pay TV players, e.g. the collapse of pay DTT operator, Quiero, and the satellite merger in 2002
- However, the gap between the value of pay TV and FTA rights has been falling – following a decline in the value of FTA rights, due to
  - the popularity of low cost TV shows, such as Big Brother, replacing movies in the FTA schedules
  - the shift in favour of Spanish language movies, in which the terrestrial broadcasters invest directly

Source: Screen Digest European Movie Rights 2005

The regulator for audio-visual services has limited powers – as a result, anti-trust legislation is often used to shape the pay TV sector

Regulatory bodies

- The key regulatory bodies are:
  - the Comisión del Mercado de las Telecommunicaciones (CMT) - telecommunications and audio-visual services
  - the Servicio de Defensa de la Competencia (SDC), the competition authority
  - the Tribunal de Defensa de la Competencia (TDC), the competition court

Key areas of regulation and intervention

Sector legitimisation

- The relatively slow development of the Spanish media sector has meant that, to date, most legislation has been concerned with legitimising and organising the FTA and pay markets e.g. the Statute of Radio and Television (1980), which established RTVE; the Private Television Act (1988), which legitimised commercial players; and the Telecommunications, Satellite and Cable Acts, all from 1995, which licensed the key operators

Pay TV merger conditions

- The main pay TV laws are the conditions applied at the time of the Digital Plus merger, forcing Sogecable to open up its platform to unaffiliated channels, restricting the length of premium content deals, giving third parties access to, at least, one of Sogecable's premium channels and imposing a retail price cap until 2006
- These conditions are due to end in 2007, allowing Sogecable to buy exclusive content and partner with Telefonica

Anti-trust investigations

- As the CMT lacks enforcement powers, the SDC frequently uses anti-trust regulation to control the pay TV sector
  - currently conducting several investigations into competition and concentration, including:
    - . an investigation into Sogecable's historical football monopoly, on which the TDC is due to rule imminently
    - . an investigation into Mediapro's new seven year deals with Real Madrid and Barcelona
    - . an investigation into proposed Telefonica-Sogecable collaboration (when the merger conditions expire, the two companies are planning to buy rights together <u>and</u> develop joint triple play packages)

Football regulation

- Listed event legislation, introduced in 1997, means that one La Liga match per week must be available on FTA
- In 2000, an EC investigation into PPV football ruled that the satellite operators must resell their rights to the cable operators at "a reasonable market price"

Source: Spectrum / Value Partners analysis

OFFICE OF COMMUNICATIONS

Sweden

International pay TV study
Executive Summary

November 2007

Introduction - major players in the Swedish TV market

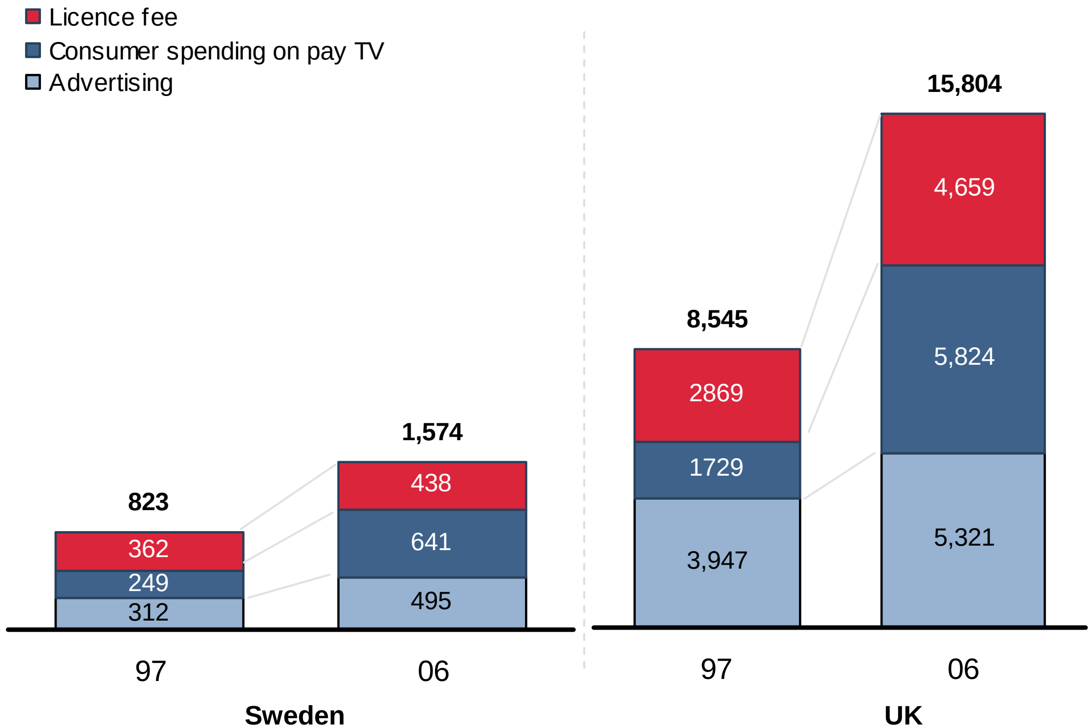
Platforms	
Satellite[1]	**Canal Digital (**owned by Telenor) **Viasat** (owned by MTG)
Cable	**Com Hem** **Canal Digital** (owned by Telenor)
IPTV[2]	**Telia Digital TV** (owned by Telia) **Bredbandsbolaget** (owned by Telenor) **Canal Digital-TV via bredband** (owned by Telenor)
DTT	**Boxer** (owned by Government-owned Teracom and 3i)

Broadcasters	
PSB	**SVT**
FTA Commercial Terrestrials	**TV4** **TV3** (owned by MTG) **Kanal 5** (owned by ProSiebenSat.1, following its acquisition of SBS in 2007)
Pay Channels	**Canal+** (Nordic Canal+ owned by ProSiebenSat.1)

Note: (1) Both satellite providers operate throughout the Nordic region; including Denmark, Finland and Norway (2) Not a complete list of players

The Swedish TV market is significantly smaller than the UK's, but is otherwise similar in the split and growth of revenues

Sweden: Total TV revenues (€m)*



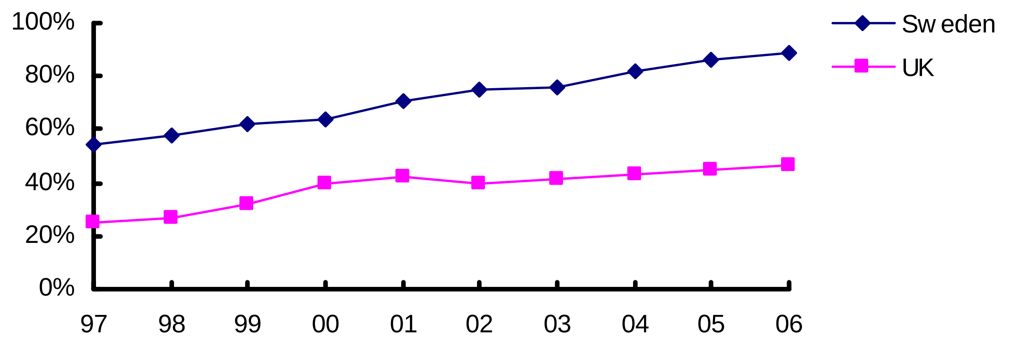
CAGR 97 - 06	Advertising	Consumer spending on pay TV	Licence fee	Total
Sweden	5.3%	11.1%	2.1%	7.5%
UK	3.4%	14.4%	5.5%	7.1%

- Swedish TV revenues are 10% of UK TV revenues – on a TV household basis, they are about 66% of UK levels
- The split of TV revenues is very similar to the UK's
  - advertising 31.4% (UK 33.7%)
  - consumer spend 40.7% (UK 36.9%)
  - licence fee 27.8% (UK 29.7%)
- In the last nine years, Swedish TV revenues have grown from €823m to €1,574m, at a CAGR of 7.4% (97-06), close to the UK rate of 7.1%
- Growth in the Swedish TV market has come from increasing consumer spend on pay TV (CAGR of 14.4%), followed by advertising (CAGR of 5.3%) and the licence fee (CAGR of 2.1%)
  - patterns of growth are very similar to the UK

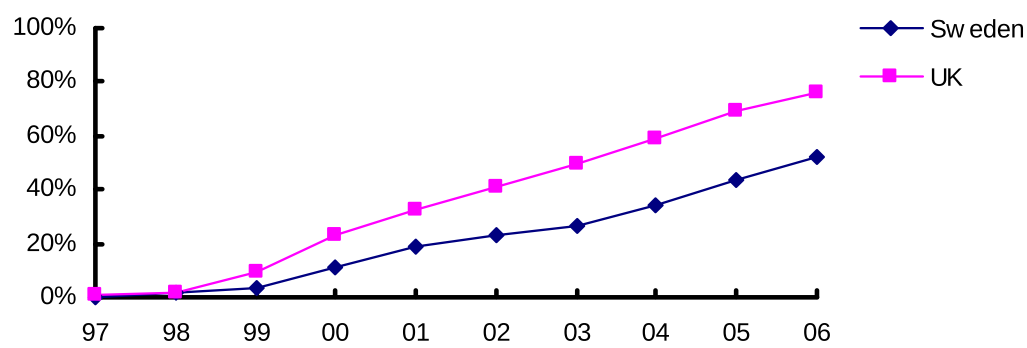
Note: * The two charts are not to the same scale
Source: ZenithOptimedia, Screen Digest, Spectrum Value Partners analysis

In Sweden, the uptake of pay TV is higher than in the UK, but digital penetration is lower

Pay TV penetration (% TV HH)



Digital TV penetration (% TV HH)

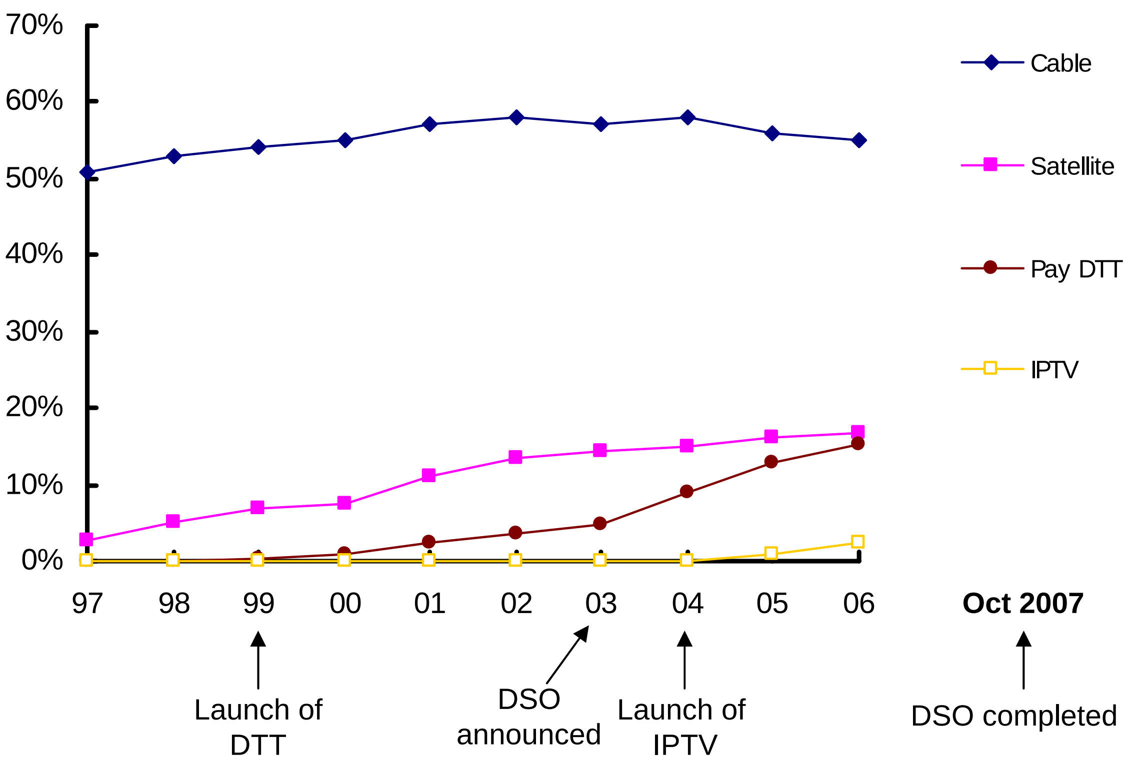


- Swedish pay TV penetration, at 89% of TV households, is almost twice that in the UK, which stands at 46%
  - mainly due to widespread adoption of basic cable services (similar to the German market)
- However, Sweden has a lower digital penetration (52% in 2006) than the UK (76%), despite the completion of digital switchover in October 2007
  - in 2006, 79% of Swedish cable subscribers still had analogue services (typically receiving about 20 channels)
- With the 2003 announcement of digital switchover, digital penetration doubled from 26% in 2003 to 52% in 2006

Source: Screen Digest, Spectrum Value Partners analysis

Cable is the leading pay platform with 55% penetration – by 2006, satellite and DTT had reached 17% and 15%, respectively

Sweden: Evolution of pay platforms (TV household penetration, %)



- Cable has consistently been the leading pay TV platform, 55% of TV households in 2006, up from 51% in 1997
  - characterised by a "landlord system[1] – difficult to switch to an alternative platform
- Over the last decade, satellite has been steadily increasing, reaching almost 17% penetration by 2006
- Since the 2003 announcement of digital switchover in Sweden (completed in 2007), pay DTT has increased significantly, reaching the same level as satellite
  - rising from 5% in 2003 to 15% in 2006
- IPTV has only reached 2% penetration
  - major players only entered the market in 2004/05

1983 – Launch of cable
1991 – Launch of satellite (Viasat)

Note: (1) The majority of households are in apartment blocks, so landlords contract directly with cable operators on behalf of end-users – meaning that a basic cable package is often included in the rent
Source: Screen Digest

Four large broadcast groups operate in the Swedish market – they have seen some loss in viewing share to multi-channel

Sweden: Major broadcasters

SVT

- State-owned; wholly funded by licence fee
- Operates six national channels (SVT1, SVT2, news channel SVT24, children's Barnkanalen, educational Kunskapskanalen and UR) and one European channel SVT Europa – viewing shares of 21.8% (SVT1) and 14.5% (SVT2) in 2006

TV4

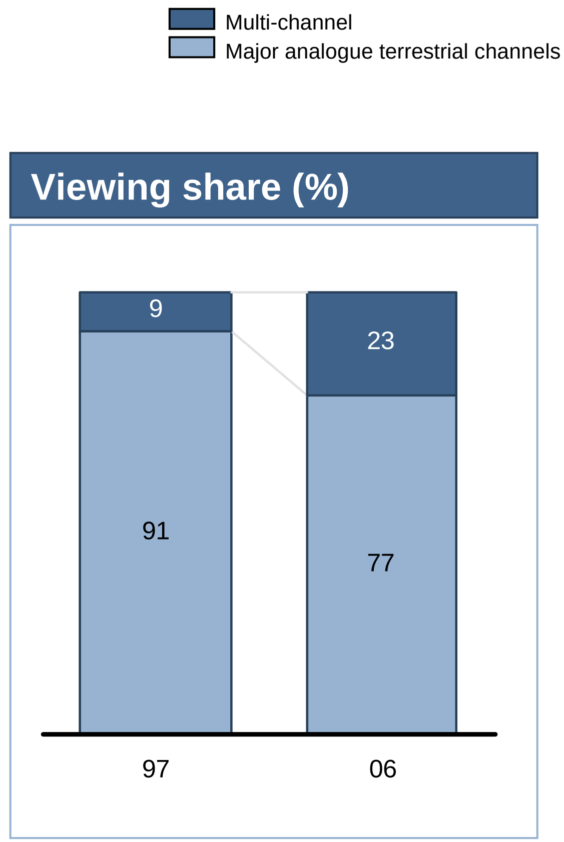
- Commercial broadcaster with some PSB obligations
- Ownership: fully owned by Bonnier(1) through Nordic Broadcasting Oy
- Broadcasts one free-to-air channel (TV4) with 22.2% viewing share (in 2006), and nine thematic pay TV channels, available on cable, satellite and DTT

MTG

- Nordic media group based in Sweden
- Operates major commercial FTA channel, TV3 – viewing share 9.4% (2006)
- Also operates TV3+, ZTV, TV6 and TV8 on digital terrestrial and the MTG-owned Viasat

ProSiebenSat.1 Media AG / SBS

- Scandinavian-based European broadcaster, SBS Broadcasting, merged with ProSiebenSat.1 in Jun 07
- Broadcasts three free-to-air channels (Kanal 5, Kanal 9 and The Voice TV) - viewing share of Kanal 5 was 8.8% in 2006
- Owns Canal+ premium channels (acquired from Canal Plus Groupe in 2005)



Note: (1) Swedish media group consisting of over 200 companies within publishing and broadcasting
Source: Informa, Mediamatningar I Skandinavien, Press reports, ZenithOptimedia, Spectrum Value Partners analysis

Over the past ten years, Com Hem has been the leading cable operator – in 2006, it acquired the number two player, UPC

Sweden: Cable subscribers

Subscribers by operator (m)

Com Hem launched in 1983 as the first cable operator in Sweden – at that time known as Televerket Kabel TV

Canal Digital is formed from Seth KabelTV, Sweden Online and Telenor

Com Hem acquires UPC

Operator	97	98	99	00	01	02	03	04	05	06	07F
Tele2		0.13	0.15	0.17	0.19	0.21	0.18	0.19	0.18	0.18	0.18
Sweden Online	0.19	0.19	0.19	0.19	0.20	0.21	0.20	0.20			
Seth KabelTV						0.01	0.02	0.02			
Canal Digital									0.24	0.25	0.25
SjarnTV UPC	0.23	0.23	0.24	0.25	0.27	0.27	0.28	0.29	0.30		
Comhem	1.31	1.33	1.35	1.36	1.38	1.40	1.41	1.43	1.43	1.76	1.75
Total	2.00	2.10	2.16	2.22	2.30	2.34	2.34	2.37	2.38	2.40	2.38

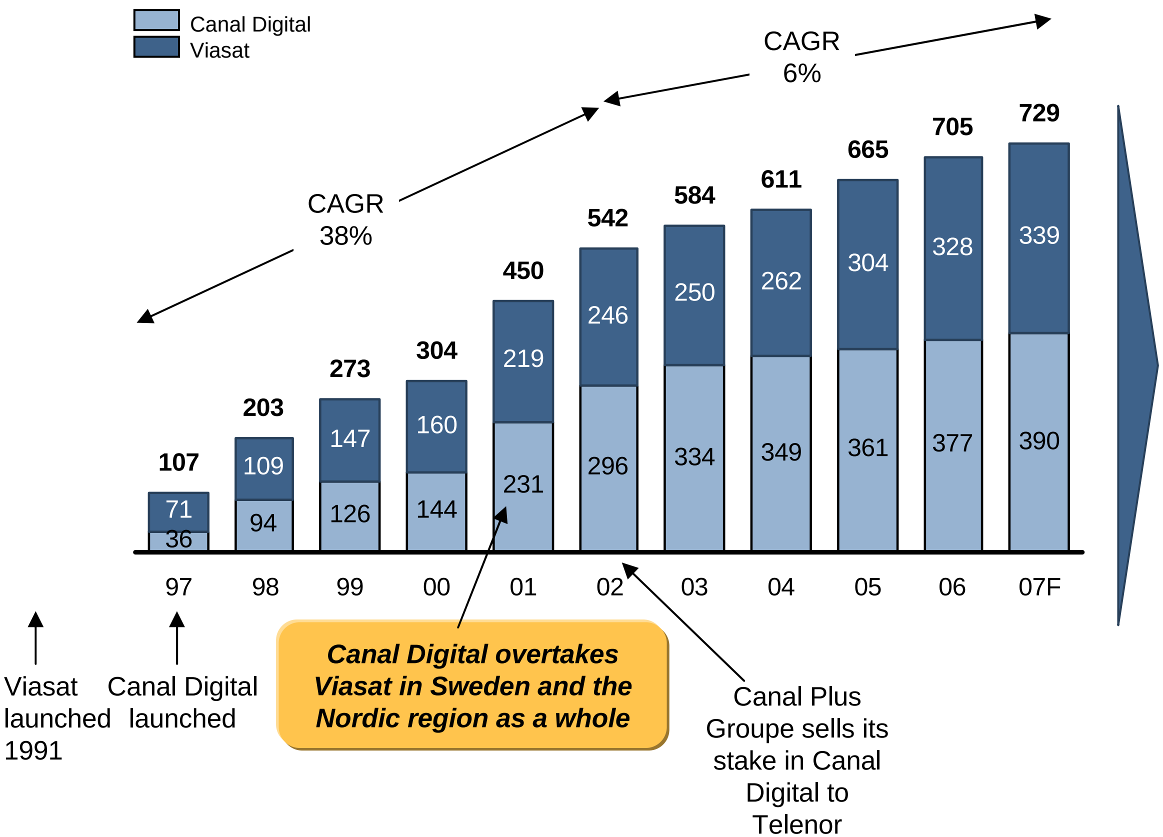
- Cable TV was launched in Sweden in 1983, by state-owned telecoms operator Televerket (prior to its privatisation as Telia)
- Com Hem is the successor to this (cable) business and has maintained its position as the number one player (in part because of the difficulty of switching cable operators – an option for only about 20% of cable households)
- Following its acquisition of #2 player UPC in 2006, Com Hem has increased its share of the cable market from 60% to 74%
- The two other players are
  - the cable arm of Canal Digital, formed in 2004/05, from a combination of Sweden Online, Telenor Vision and Seth Kabel TV
  - Tele2, which has not made any acquisitions

Source: Screen Digest, Press reports

Since 1997, satellite subscribers have been steadily increasing – the market is split between Viasat and Canal Digital

Sweden: Satellite Competition

Subscribers by operator (000s)



- The Swedish (and Nordic[1]) market has two satellite operators
  - Viasat (owned by MTG) launched in Sweden in 1991
  - Canal Digital[2] launched in Sweden in 1997
    - . a joint venture between Telenor and Canal Plus Groupe
    - . since 2002, 100% owned by Telenor
- In the five years after the launch of Canal Digital, the Swedish satellite market grew rapidly
  - CAGR of 38% (97-02), slowing to 6% CAGR (02-07)
- Canal Digital increased its share of the satellite market from 34% in 1997 to 57% in 2004 – but has since seen its share fall slightly to 53% in 2006
  - neither operator has a content offering which is significantly more attractive than the other
- Across the whole Nordic region, Canal Digital overtook Viasat as the largest player in 2001 - but both players have continued to grow
  - in 2001, Canal Digital had 568k subscribers and Viasat had 550k – in that year Viasat suffered heavily from smart card piracy, losing 50k subscribers in one year
  - since 2001, Canal Digital has grown at a 10.7% CAGR (01-06), reaching 943k subscribers, while Viasat has grown at a slightly slower pace of 8.3%, with 820k subscribers in 2006

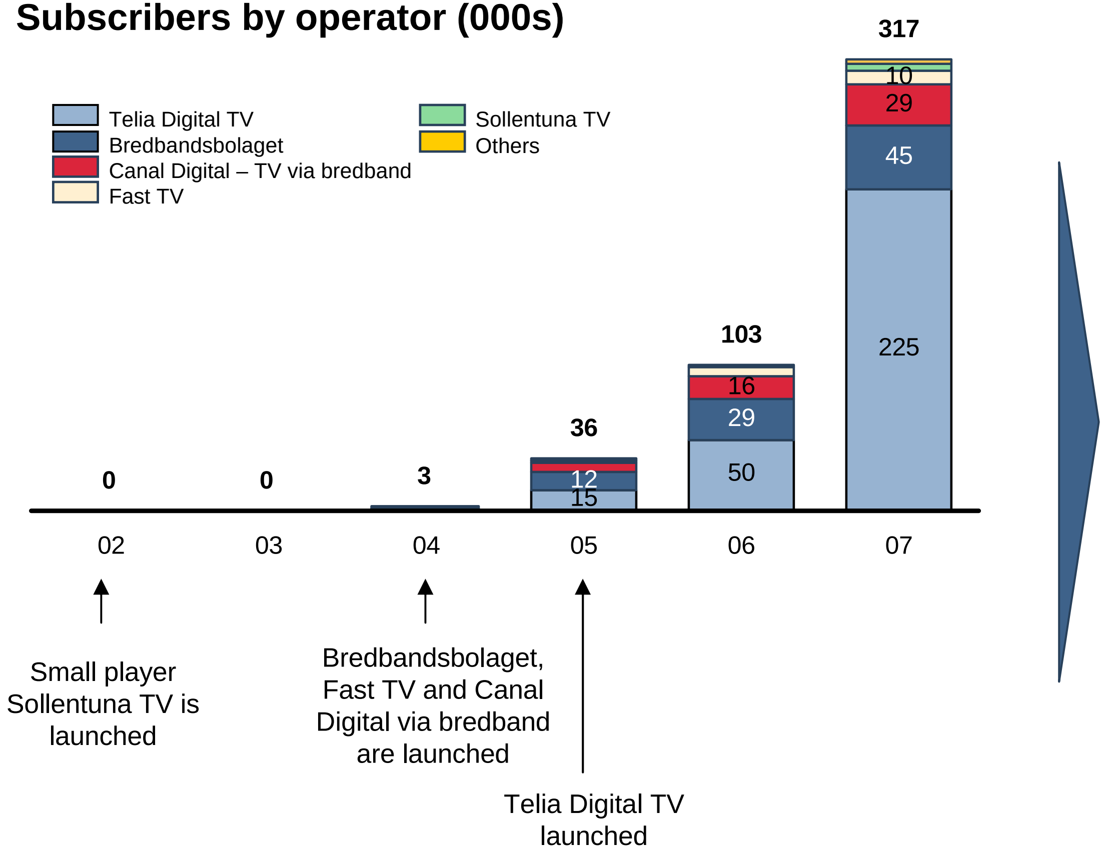
Note: (1) Both Viasat and Canal Digital operate in Denmark, Norway and Finland (2) Canal Digital subsequently launched a cable and IPTV platform in 2005 and 2004, respectively

Source: Screen Digest, Press reports

In 2004/05, the first IPTV services were launched – Telia is the clear market leader

Sweden: IPTV launches

Subscribers by operator (000s)



- In 2004, the first IPTV offerings in Sweden were launched, followed by Telia Digital TV[1] in 2005
  - in 2004, Bredbandsbolaget (Sweden's second largest broadband provider after Telia) signed an exclusive deal with Viasat to distribute the Viasat channels over the IPTV platform until 2009
  - also in 2004, Canal Digital and Fast TV[2] launched IPTV services
  - in 2005, Telia introduced a triple play offering through the launch of its IPTV service, Telia Digital TV
- Competition within the IPTV market has intensified and Canal Digital is trying to acquire greater share, but Telia remains the leader with 71% market share
  - in May 2005, Bredbandsbolaget was bought by Telenor (owners of Canal Digital), who now wish to end the operator's exclusive deal with Viasat, so that they can offer Canal Digital channels
  - Telia has successfully exploited its position as the telecoms incumbent to build market share, and in 2007, it began offering a "Start" package[3] for no monthly charge, as well as four new premium pay packages[4] – growing by 350% in one year

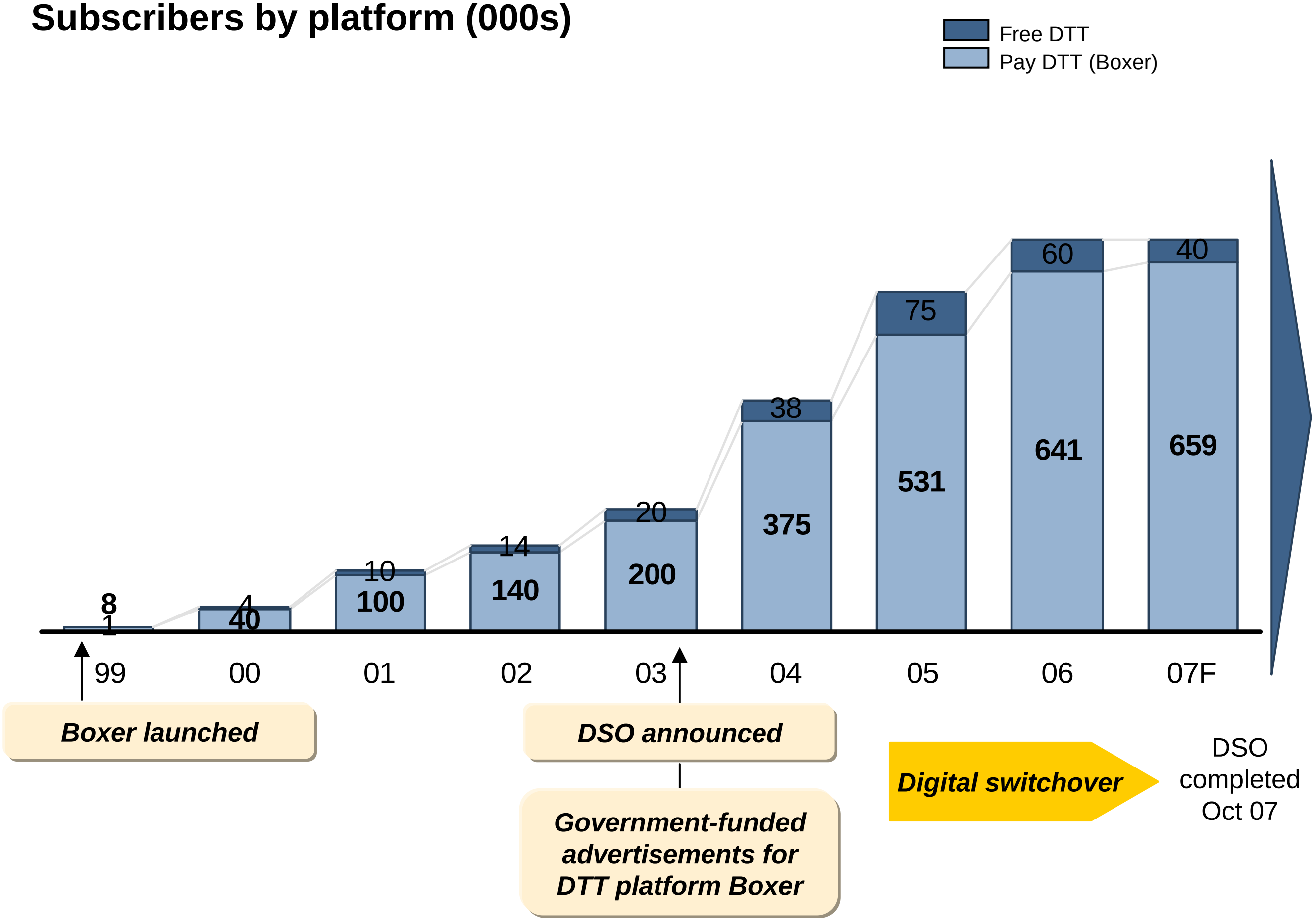
Note: (1) Telia is the fixed telecoms incumbent in Sweden (2) Owned by Bonnier Entertainment until 2006, when it was acquired by broadband company, SkyCom (3) Consists of eight free-to-air channels including SVT1, SVT2, SVT24, Barnkanalen, Kunskapskanalen, TV4, The Voice and Aftonbladet TV7; the first six of which are "must carry" channels (4) Including TV4 channel package, Canal+ Total, Canal+ Sport, Canal+ Film

Source: Screen Digest, Press reports

Boxer is the sole provider of pay DTT – following the announcement of DSO, subscriber numbers grew rapidly

Sweden: Terrestrial subscribers

Subscribers by platform (000s)



- Over 90% of DTT households subscribe to Boxer's pay DTT service
  - offering 12 FTA channels and over 20 pay channels
- Boxer is the sole provider of encrypted terrestrial content and set-top boxes[(1)]
  - channels wishing to be on the DTT platform must either broadcast FTA or use Boxer's encryption services
- DTT (Boxer) had a poor start – by 2003, it had only 200k customers
  - its services were already available through other means
  - digital switchover had not yet begun
- Between 2003 and 2006, Boxer increased its subscriber base rapidly
  - in 2003, digital switchover was announced and was completed in Oct 07
  - in 2003-04, the Swedish Government funded an advertising campaign for Boxer services
  - in 2007, uptake of Boxer levelled off as DSO approached completion

Note: (1) This was designated by the Government at the launch of the Boxer service in 1999. The state has recently announced that it will begin to allow other broadcasters to build pay DTT packages
Source: Screen Digest, Press reports

MTG is the most vertically integrated broadcast group in Sweden – with its own channels and platform

Sweden: Vertical integration of players

Key broadcasters	Own channels		Platforms (subscribers)
	FTA channels	Pay channels	
MTG	TV3 TV6 TV8 ZTV	TV3+ Viasat	Satellite (339K)
ProSiebenSat.1 Media AG	Kanal 5 Kanal 9/The Voice	All Canal+ channels	None
svt	SVT1 SVT2 SVT24 Barnkanalen Kunskapskanalen UR	None	None
TV4	TV4	Nine thematic channels	None
Canal Digital		None	Satellite (390k) Cable (250k) IPTV (29k)
com hem		None	Cable (1,750k)
TELIA		None	IPTV (225k)

- MTG is the most vertically integrated player in Sweden
  - it has its own channels on both free and pay TV
  - it operates its own satellite platform (Viasat)
- The three other major broadcast groups each have their own portfolio of channels but do not own any platforms
  - in 2007, ProSiebenSat.1 acquired the Canal+ premium channels, as part of its acquisition of SBS – previously, in 2005, SBS had acquired the Canal+ channels from Canal Plus Groupe
- In contrast, Canal Digital, Com Hem and Telia all operate platforms, but do not have their own channels
  - uniquely, Canal Digital owns three different platforms (satellite, cable and IPTV)

Source: Informa, Press reports, Company data, Spectrum Value Partners analysis

The FTA broadcasters (public and commercial) are the most powerful players in Sweden

Carriage dynamics

SVT (Public service broadcaster)

- SVT remains very powerful in the Swedish market as, together, the SVT channels remain the most popular channels
  - in 2006, SVT1 and SVT2 had viewing shares of 21.8% and 14.5%, respectively – amounting to a combined share of 36.3%
  - have 'must-carry' status on cable and are available on all platforms
- However, they are gradually losing audience share to multi-channels

TV4

- TV4 is in a powerful position as the most popular single channel in Sweden – 22.2% viewing share (2006)
- It has a diversified channel portfolio of multi-channel offerings (TV400, TV4 Film, etc) enabling it to maintain audience share across all platforms

MTG

- MTG has attempted to differentiate the Viasat platform from Canal Digital by acquiring exclusive sports rights and withholding some channels from its rival satellite operator
- With the exception of TV8 (1), MTG's commercial terrestrial channels (TV3 and TV6) are withheld from Canal Digital's satellite offering, but are available on all other platforms
- Viasat's non terrestrial channels are withheld from DTT and Canal Digital's satellite offering, but some are available on cable

ProSiebenSat.1 (SBS)

- ProSiebenSat.1 (SBS) has a relatively strong terrestrial channel, Kanal 5, but its real competitive strength grew from its premium pay Canal+ channels, which are available on **all platforms** except Viasat(2)

Note: (1) TV8 focuses on news, current affairs, documentaries and drama. In September 2007, the channel was put on the analogue package of dominant cable company, Com Hem (2) When Telenor bought the remaining 50% stake in Canal Digital from Canal Plus Groupe, an agreement was made that, on the satellite platform, Canal+ channels would be shown exclusively on Canal Digital for a ten year period – subsequently reduced by the EC to five years

Source: Informa, Mediamatningar I Skandinavien, company websites, Spectrum Value Partners analysis

Analogue cable provides 19 channels – all other platforms offer a wider range, including premium channels

Sweden – Current consumer packages

	Analogue cable(1)	Digital cable	Satellite (Viasat)	Satellite (Canal Digital)	IPTV	DTT (pay)
Basic	• 19 channels (of which four are must-carry)	• 12 FTA channels(2)	• Entertainment package: 15 channels(2)	• No separate basic package	• No separate basic package	• 12 FTA channels(2) • 4 basic channels
Extended basic	• None	• 30 second-tier premium channels, e.g. Discovery, MTV, CNN, Eurosport	• 23 channels • Choice of Children's and Documentary packages	• 55 entertainment and second-tier premium channels	• 39 channels	• 14 second-tier premium channels, e.g. Discovery, MTV, CNN, Eurosport
Premium	• None	• 10 Canal+ channels(3), 2-10 Viasat, international channels	• Viasat premium channels • 3 sports channels, 7 film channels	• 10 Canal+ channels	• ~10 premium channels from Viasat / Canal+	• 10 Canal+ channels, international channels
Value-added services	• None	• PVR, multi-room	• VOD, PVR, multi-room, multi-house, TV over internet	• HD PVR, PPV, multi-room	• VOD • Internet on TV • TV Photo album	• Video-on-demand (in enabled areas)
Bundling (with telephony / online)	• None	• Triple play from Com Hem and Telia in some areas		• None	• Triple play by Com Hem and Telia in some areas	• None

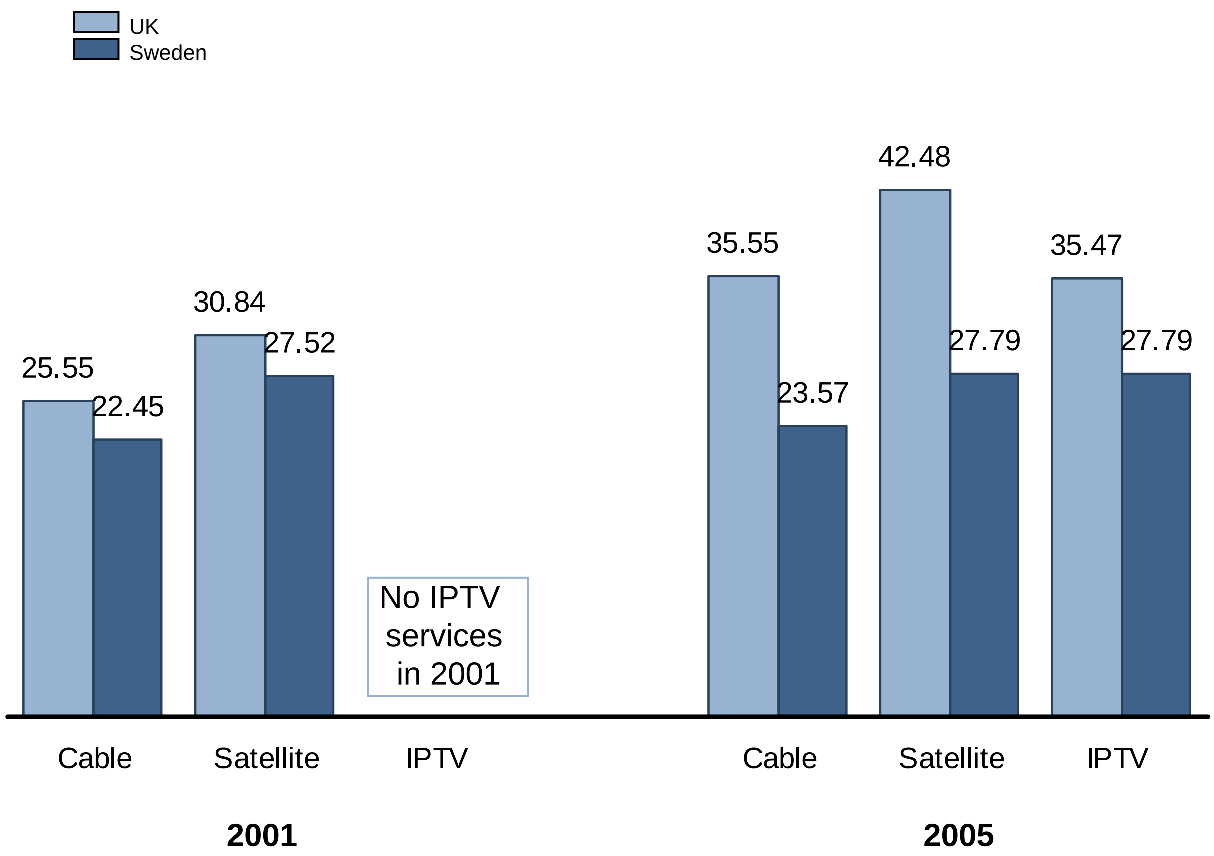
- Separate basic services are available on all platforms, except IPTV and Canal Digital's satellite offerings – the smallest packages have 39 and 55 channels respectively
- Premium Viasat channels are not available on DTT or Canal Digital's satellite service
- In contrast, Canal+ channels are available on all platforms, except Viasat's satellite services
- Triple play packages are being offered in some cable areas and as part of bundled IPTV packages

Note: (1) Digital requires a new set-top-box for existing analogue cable subscribers (2) Includes six must-carry channels (3) Canal+ is not available on Com Hem

Source: Screen Digest, company websites

On a PPP basis, Swedish TV is cheaper on all platforms than in the UK – with prices rising only marginally between 2001 and 2005

Sweden – Pricing trends ($) (average monthly rates - PPP pricing)(1)



- In 2001, on a PPP basis, prices for satellite and cable TV in Sweden were lower than in the UK
- However, in nominal terms, based on exchange rates at that time, prices in Sweden were almost 30% lower than in the UK
  - nominal cable and satellite TV prices in Sweden were 28.6% and 26.6% lower, respectively, than in the UK
- Between 2001 and 2005, prices (on a PPP basis) on all platforms did not increase as fast as in the UK – almost entirely due to fluctuations in exchange rates(1)
- In nominal terms, in the same period, cable and satellite prices in Sweden grew at a similar rate to the UK
  - Swedish cable prices up by 2.0% CAGR in Sweden, compared to 2.5% CAGR in the UK
  - Swedish satellite prices up by 3.0% CAGR compared to 2.5% in the UK

Note: (1) Exchange rates used in PPP evaluation from EIU data: in 2001; SEK9.45 / 1US$ and in 2005; SEK10.13 / 1US$
Source: Informa *TV in Western Europe*, EIU

Unlike in other European markets, no single sports property is the key driver for pay TV

Sweden: Key sports rights ownership

Event	Broadcaster	Details
UEFA Champions League	MTG	• MTG has held the rights since 1999, paying c. **€20m** per season between 2006/07-2008/09 • FTA channel TV3 broadcasts the top four matches each week, the rest is shown on pay-TV platform, Viasat
Golf	MTG	• MTG has the rights to a large number of international golf tournaments: including Ryder Cup and PGA Tour • Dedicated golf channel, ViasatGolf
Word Championships Hockey	MTG	• MTG has had the rights since 1989 • Coverage across TV3, 3+ and Viasat Sport channels including three dedicated Hockey Xtra channels
Allsvenskan (Top domestic football league)	CANAL+, 4	• Canal Plus has first choice of the seven matches played each week – **paid €16.2m** p.a. (2006-10) • TV4 has live rights for 2nd choice matches & highlights • MTG/Viasat, Canal Digital & Com Hem have PPV rights
English Premier League	CANAL+	• Canal+ has had the Premier League rights since 2001, showing matches on its pay channels Canal+ Sport 1 & 2 • One match per week shown on FTA channel, Kanal 5
Elitserien (Top domestic ice hockey league)	CANAL+	• Canal+ has held the Elitserien rights for some time • It has been a particularly important subscription driver, so Canal+ paid c. **€21.6m** per season for 2006/07 - 2009/10

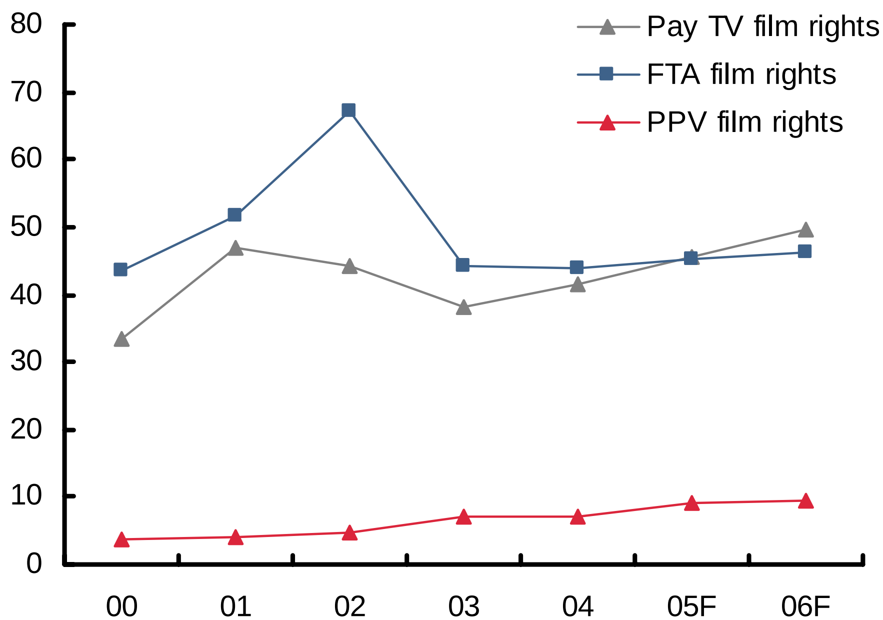
- Unlike in other European countries, in Sweden football is not the key driver of pay TV take-up
  - as evidenced by the annual values of the rights to Champions League (€20m) and the top Swedish football league (€16.2m) – far less than the £669m which is spent in the UK on Premier League rights
  - top Swedish league ice hockey attracts a similar price, at €21.6m
- Pay TV sports rights are split between MTG (Viasat) and channel group, Canal+, which has an exclusive satellite distribution deal with Canal Digital(1)
  - MTG/Viasat has rights to the Champions League, World Championship Hockey, and golf
  - Canal+ has the rights to the top Swedish football and ice hockey leagues, and the English Premier League
- The two satellite operators do not distribute their sports channels on each others platforms, but they are both available on all other platforms – i.e. there is no platform exclusivity
- As a result of this split of pay TV rights, neither operator has built a significant lead

Note: (1) Deal agreed when Canal Plus Groupe sold its stake in Canal Digital to Telenor and the Canal+ channels to SBS

Source: TV Sports Markets, Sportcal, Press reports, Spectrum Value Partners analysis

The Swedish film rights market is evenly split between pay TV and free-to-air broadcasters

Nordic region: Value of film rights over time (€m)



- In 2004, expenditure on pay TV and FTA film rights were very similar – at just over €40m p.a.
  - per TV household, Sweden's expenditure on pay TV film rights is about half that of the UK, but in line with France and Spain and twice that of Germany and Italy
  - before 2004, FTA television in Sweden was more active in buying film rights than UK FTA broadcasters
- Films have been more of a differentiator for the satellite operators than sports – driving increased investment in film rights by pay TV broadcasters (forecast to overtake FTA in 2006)
  - Canal+ has a strong position in the acquisition of premium films from the majority of the major US film production studios(1)
  - MTG/Viasat has fewer contractual links with US majors but is stronger in rights to Nordic films
- As in the UK, PPV currently takes a relatively small share of the market

Note: (1) Including Dreamworks, Time Warner, Fox, Universal, Paramount, MGM and Buena Vista/Disney
Source: Screen Digest 2004

Swedish regulators have tended not to intervene in carriage disputes

Regulatory bodies

- The key regulatory bodies are the Radio och TV-verket (RTVV, the television regulator), Post och Telestyrelsen (electronic communications and postal sector authority) and the Konkurrensverket (the competition authority)
- The first two bodies, for the most part, only advise the government[(1)]
- Konkurrensverket is an independent body making final decisions separately from the government
- Since its introduction in 2002, the EU's regulatory framework for electronic communication and general competition law has been the basis for economic regulation of TV distribution and competition in Sweden

Key areas of dispute – carriage disputes

Canal+ channel exclusivity

- The Swedish authorities did not block an exclusive deal (for the satellite platform) between Canal+ and Canal Digital
  - in 2001, when Telenor purchased the remaining 50% stake in Canal Digital from Canal Plus Groupe, an agreement was made giving Canal Digital exclusive access, for ten years, to the Canal+ channels over the satellite platform (i.e. these premium channels would be withheld from the Viasat platform)
  - national authorities in Sweden, Finland and Norway cleared the transaction without conditions, but the agreement was further investigated by the European Commission – in 2002, the EC found the agreement did not impede competitiveness in the satellite broadcast market, but reduced the duration of the non-compete contract to five years (effectively coming to an end in 2007)

Note: (1) The RTVV regulates local radio and TV services, but decisions on national broadcasters are made by the government

Source: Press reports, European Commission, Spectrum Value Partners analysis

Recent carriage disputes have been resolved within the market, rather than through regulatory intervention

Key areas of dispute – carriage disputes (cont.)

Satellite /cable carriage and marketing dispute

- In 2004, Viasat accused the cable arm of Canal Digital of broadcasting its channels without a specific rights deal
  - Canal Digital had launched a dual-tuner set-top box, enabling subscribers to receive Swedish DTT service Boxer - this included three channels from MTG's Viasat brand: TV3, TV8 and ZTV
  - MTG responded by encrypting the channels; Canal Digital reacted by sending Boxer decryption cards to all subscribers, allowing them to see the Viasat channels once more
- In addition, MTG claimed Canal Digital was unlawfully marketing its Viasat channels, but the issue was resolved without intervention
  - MTG applied to the Swedish Market Court for an injunction to prohibit Canal Digital from mentioning Viasat's TV3, ZTV, and TV8 in its marketing materials
  - Canal Digital notified the Swedish Market Court that it had accordingly changed its marketing - no injunction was necessary
  - MTG subsequently moved its channels to the pay tier on Boxer

Com Hem carriage dispute

- Until 2006, Com Hem paid no carriage fees to the large commercial terrestrial channels, Kanal 5 and TV3, for their analogue broadcasts(1) ; as a result, in 2005, both channels were withdrawn from the operator's analogue cable platform in 2005
- While the issue was reported to the Konkurrensverket by both MTG and SBS Broadcasting, no measures were taken and the situation was resolved over one year later by negotiations between the parties

Note: (1) For digital TV channels, Com Hem pays channels a split of revenues (i.e. the paid consumer price)

Source: Press reports, European Commission, Spectrum Value Partners analysis

In competition issues, regulatory intervention has generally come from the European Commission (EC)

Key areas of regulation and intervention – ownership and competition

Competition

- In 2005/06, the EC allowed the merger of Com Hem and UPC, Sweden's two largest cable operators, stating that any impediment to effective competition related only to a very limited geography and that the position of broadcasters vis-à-vis Com Hem would not deteriorate as a result of the deal

Provision of DTT services

- Since its launch in 1999, Boxer TV-Access AB has been the sole provider on the pay DTT platform; this has led to a number of complaints and regulatory investigations
  - in 2004, satellite operators claimed Teracom(1), the owner of Boxer, received illegal subsidies from the state(2) – an EC investigation temporarily suspended state-aid to DTT but, in 2006, concluded that Teracom had not received illegal subsidies, because transmission payments from SVT to Teracom did not exceed market rates
  - in 2006, the EC launched an investigation into Boxer's monopoly position on DTT(3) – the Swedish government recently (Oct 2007) decided to allow broadcasters to offer their own pay TV packages on the DTT system

Must carry regulation

- In Sweden, only cable operators are subject to "must carry" obligations
  - "must carry" applies to "an entity who owns or otherwise has at its disposal an installation for wire transmissions"(4)
- Digital cable has more "must carry" obligations than analogue cable
  - analogue "must carry" channels include: SVT1, SVT2, TV4 and one other terrestrial channel of the broadcaster's choice
  - digital "must carry" channels include: SVT1, SVT2, TV4, SVT24, SVT Barn & Kunskapskanalen and the local channel

Note: (1) Teracom is a state-funded company operating all terrestrial television and radio transmission systems in Sweden (2) Claims that Teracom received excessive transmission fee payments from the public service broadcaster SVT (funded by the state) in return for transmission services (3) The EU's Competition Commissioner, Neelie Kroes, said "Swedish viewers [were] denied their right, guaranteed by (EU) law, to choose digital terrestrial TV suppliers" (4) Ovum "An inventory to European 'must carry' regulations" 2001

Source: European Commission, European Audiovisual Observatory, Press reports, Spectrum Value Partners analysis

Ofcom
OFFICE OF COMMUNICATIONS

The US

International pay TV Study
Executive Summary

September 2007

Spectrum was commissioned to investigate two aspects of the US market only - the value chain and the consumer perspective

Scope of the US analysis

- Spectrum undertook this analysis of the US market in the context of a wider study of the dynamics of pay TV in selected European markets, including France, Germany, Italy, Spain and Sweden

- The US market differs in several crucial ways from the European benchmarks that Ofcom is using in its pay TV assessment and therefore a more limited study was undertaken for this module of work – US regulation and its implications are not considered

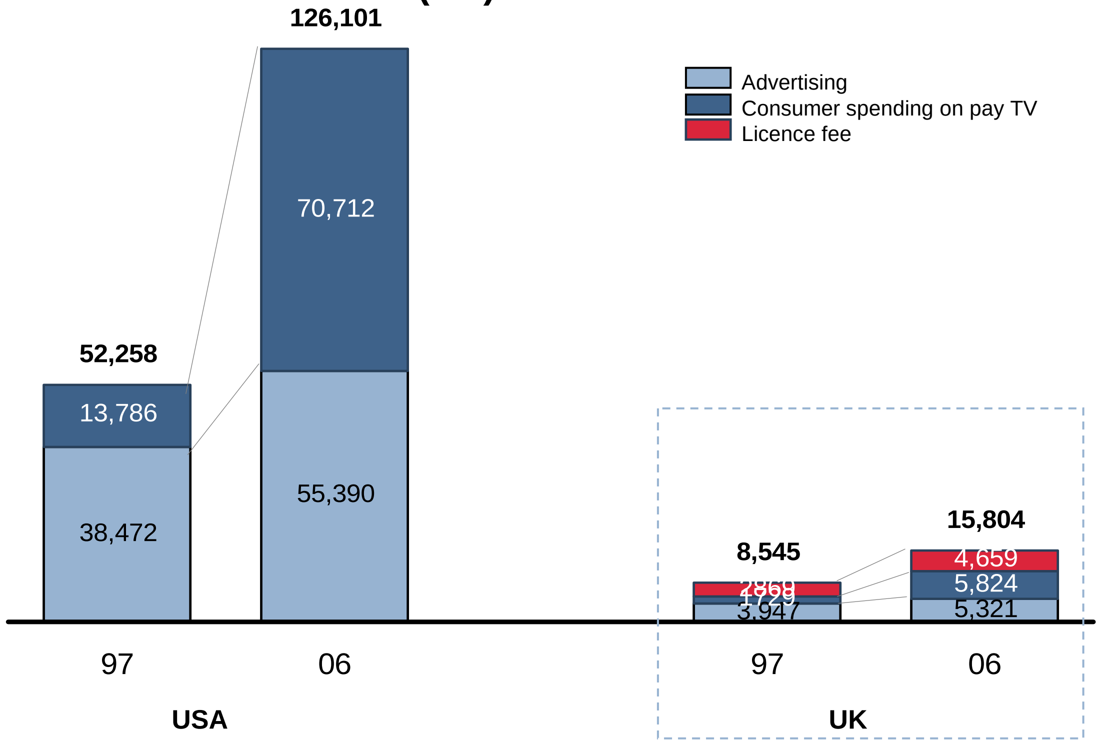
- The US study therefore encompasses:
  - a brief introduction to the pay TV sector
  - an overview of the dynamics of the value chain
  - an examination of the consumer perspective

Overview of key players in the USA's TV market

Parent Company	Major TV Networks	Movie TV Networks	Pay TV Operators
Disney	• **ABC** • Disney Channels • ESPN	• None, although the Disney channel often shows Disney movies	• None
News Corp.	• **Fox** • National Geographic	• Fox Movie Channel	• Until recently, owned a stake in DirecTV, which has now been sold to Liberty Media, subject to IRS approval
NBC Universal	• **NBC** • Sci-fi • Bravo	• Offer their own PPV / VoD channel	• None
Time Warner	• The CW (joint owned with CBS Corp) • CNN • TNT	• HBO • Cinemax	• Time Warner Cable
Viacom	• MTV • Nickelodeon • Comedy Central	• Used to own CBS and Showtime, until the Viacom-CBS split in 2005, but still maintains a close relationship	• None
Liberty Media	• QVC	• Starz	• DirecTV
CBS Corp.	• **CBS** • The CW (joint owned with Time Warner)	• Showtime	• None
Comcast	• E! Entertainment • The Golf Channel	• None	• Comcast
Echostar	• None	• None	• Echostar (DISH)

The US television market is eight times the size of the UK, with consumer spending on pay TV[1] accounting for 56% of the total

USA: Total TV revenues (€m)



CAGR 97 - 07	Advertising	Consumer spending on pay TV	Licence fee[(1)]	Total
USA	4.1%	19.9%	n/a	10.3%
UK	3.4%	14.4%	5.5%	7.1%

- Overall, TV revenues in the US are eight times the size of UK TV revenues
  - advertising revenues are ten times the size of UK levels
  - consumer spend on pay TV is twelve times the level in the UK
  - no licence fee
- Since 1997, total TV revenues in the USA have grown from €52bn to €126bn, at a CAGR of 10.3% (97-06), compared to 7.1% in the UK
- Consumer spending, per pay TV household, on pay TV is 1.3 times that of the UK:
  - US: €687 p.a. per pay TV household
  - UK: €529 p.a. per pay TV household

Note: (1) Consumer spending on pay TV includes both subscription and PPV expenditure
Source: ZenithOptimedia, Screen Digest

Cable has long been the leading US pay TV platform, but, in the last decade, satellite has increased its penetration to 27% of households

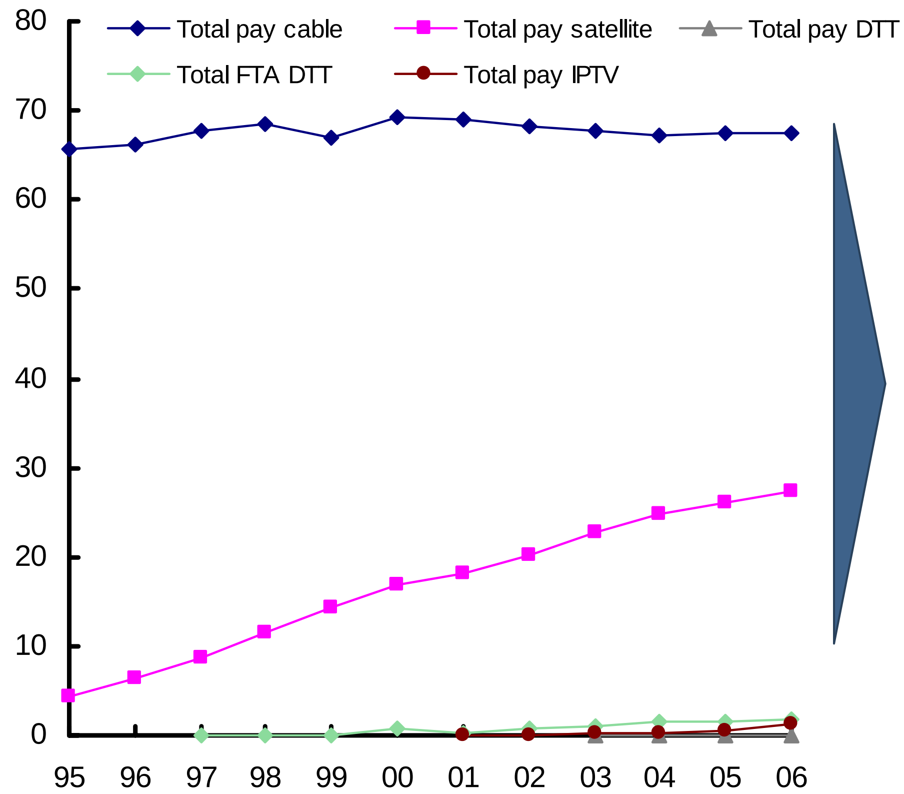
USA: Evolution of pay platforms (TV household penetration, %)

Timeline

1940s
- Cable operators launch rural services to complement terrestrial broadcasts in areas of poor reception
- American Cable Systems (predecessor of Comcast) founded

1970s
- HBO is founded and launches legal challenge which results in opening up of cable sector(1)

1990s
- Time Inc and Warner merge to form Time Warner Cable (1990)
- DirecTV launches (1994)
- Echostar launches (1996)
- Telecommunications Act allows telcos and cable MSOs to begin bundling telephony and TV services (1996)



- Originally launched in the 1940s, cable remains the leading pay TV platform in the US – it has almost universal coverage of the 111m US TV households
- In any local area, there are, typically, at least three competitors
  - one cable operator
  - two satellite operators
  - potentially, one "wireline overbuilder"
- Since 1995,
  - cable penetration has been stable at about 67% of TV households
  - satellite penetration has grown from 4% to 27%
- IPTV services, provided by "wireline overbuilders" (telcos) have 1% penetration
- DTT services launched in the late 90s, but have not gained significant share due to poor reception and a low installed base of terrestrial aerials (due to the scale of cable operations)

Note: (1) Previously cable had been restricted to rural areas and prevented from establishing national networks, in order to protect the terrestrial broadcast industry

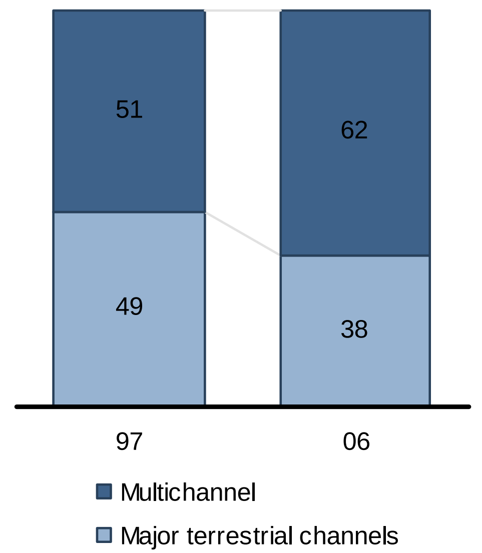
Source: Screen Digest

The owners of the major terrestrial networks have developed strong multi-channel portfolios – mitigating the loss of audience share

USA: Overview of network ownership

Parent Company	Time Warner	Disney	News Corp	NBC Universal	CBS	Viacom	Liberty Media
Major Network	50% of the CW(1)	ABC	Fox	NBC	CBS 50% of the CW(1)		
Selected multi channels	HBO CNN Cinemax	Disney Channels ESPN	FOX News Channel FX Fox Sports Net National Geographic	Telemundo Sci-fi Bravo USA Network NBC Sports	Showtime	MTV Nickelodeon Comedy Central	QVC Starz

Viewing share (%)

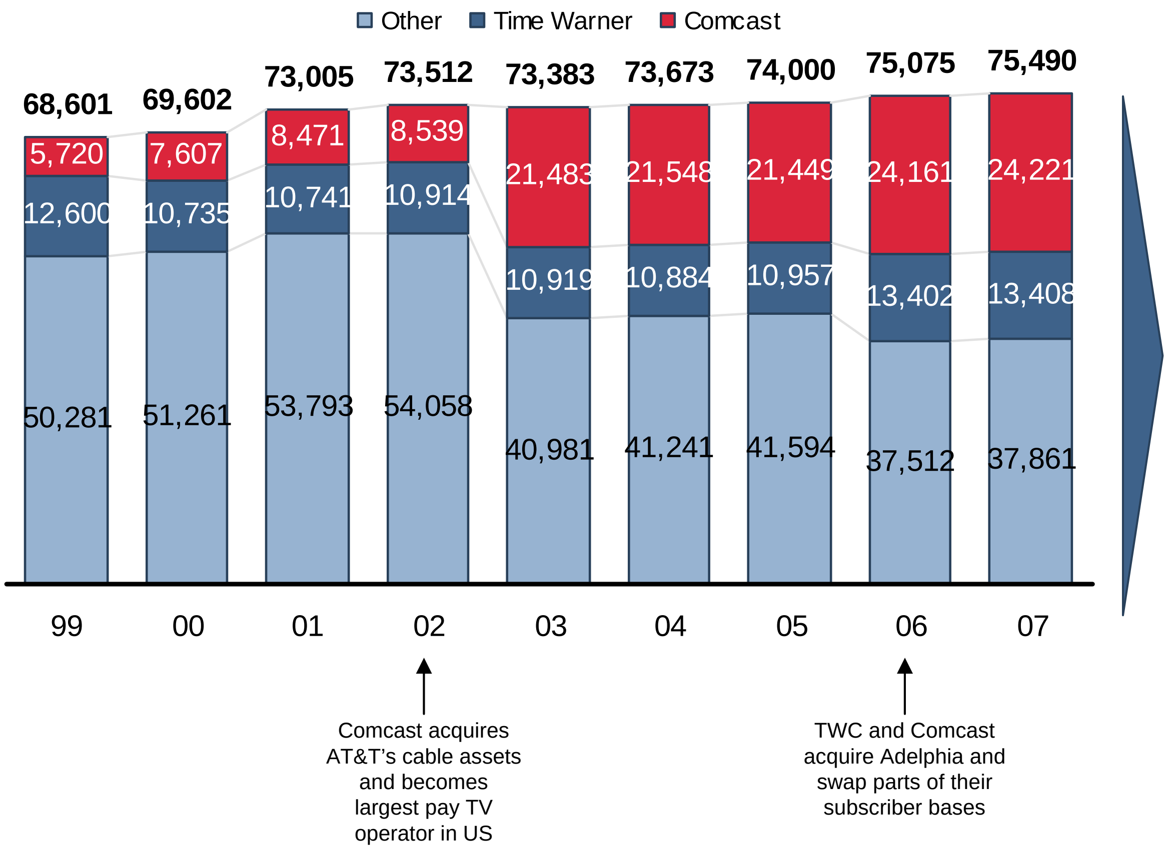


Note: (1) Network formed in 2006 from the merger of the UPN and the WB networks
Source: ZenithOptimedia, Eurodate – One TV Year in the World

From fragmented and localised origins, the US cable sector has been gradually consolidating - two players now have 50% of the market

USA: Cable consolidation

Subscribers by operator (000s)



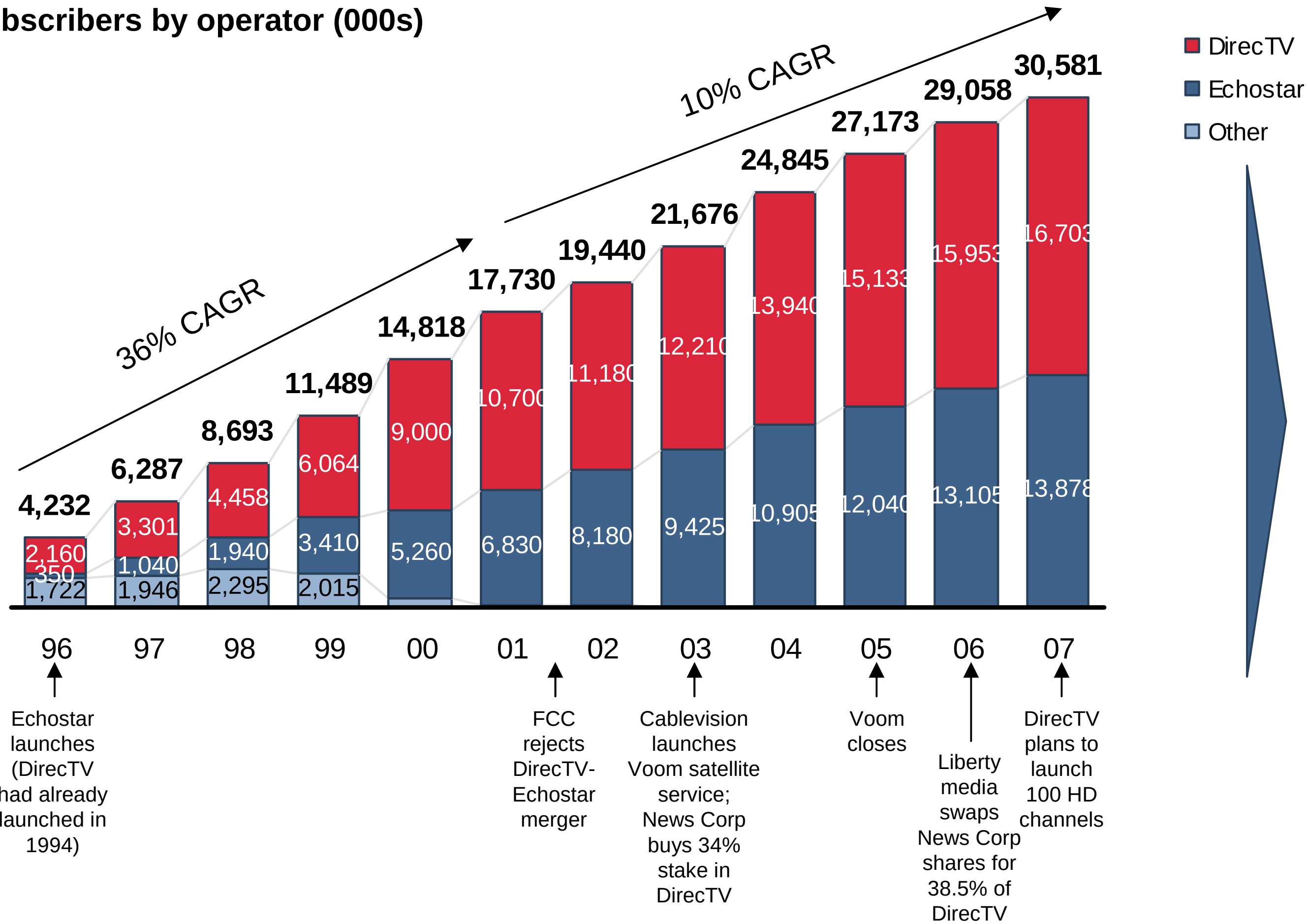
- **The US cable industry can be segmented into four tiers**
  1. Comcast – 20m+ subscribers
  2. Time Warner Cable – 10m+ subscribers
  3. seven operators with between 1 and 6m subs(1)
  4. local operators with fewer than 1m subscribers
- **Over the last 20 years, Comcast and Time Warner Cable (TWC) have acquired aggressively to become the largest players**
- **Recently, they collaborated on the Adelphia acquisition**
  - in 2006, Comcast and TWC jointly acquired the assets of Adelphia (#5 player – bankrupt)
  - they split the assets to maximise the benefit to each operator and swapped assets to increase the clustering of their cable systems
- **Future consolidation may be led by TWC**
  - Comcast is currently restricted by the FCC's unofficial cap on ownership of pay TV subscribers (no single operator may exceed 30% of pay TV subscribers – Comcast currently has 28%)

Note: (1) Cox (5m subs), Charter Communications (5m), Cablevision (3m), Bright House (2m), Suddenlink (1m), Mediacom (1m) and Insight (1m)
Source: Screen Digest, Press reports

The US satellite market is a duopoly between DirecTV and Echostar (DISH)

USA: Satellite Consolidation

Subscribers by operator (000s)



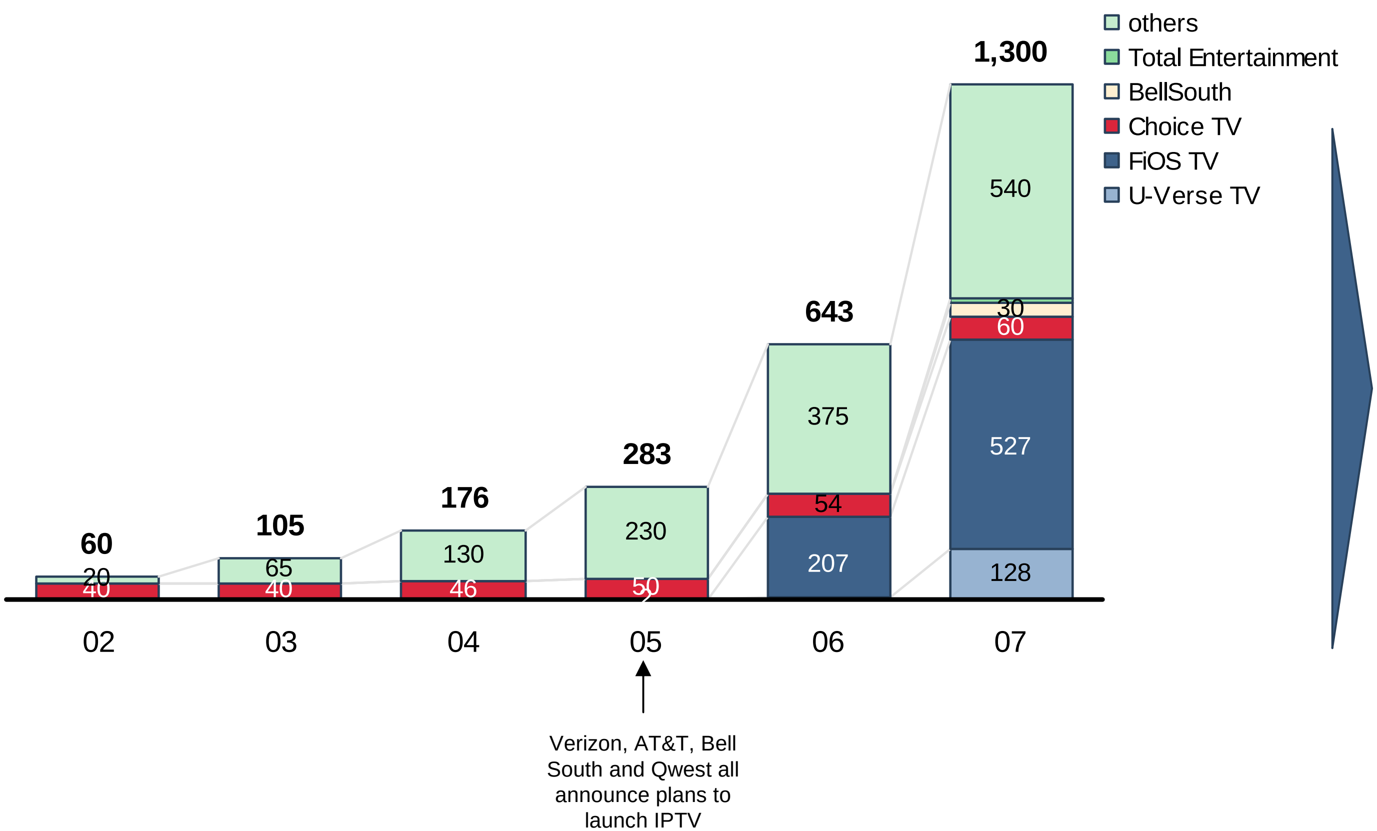
- The US satellite market is essentially a duopoly between DirecTV and Echostar
  - DirecTV launched in 1994 and now has 55% of the satellite market
  - Echostar launched in 1996 and now has 45% of the satellite market
- In the years immediately after their launch, Echostar and DirecTV grew extremely quickly – including through acquisition
- Broadly speaking, the FCC was supportive of the launch of satellite as an alternative to cable
- Growth has now slowed as the market has matured and competition from IPTV increases
- Attempts by other players to enter the market have been short-lived

Source: Screen Digest, Press reports

The US IPTV sector is at an early stage of development

USA: IPTV launches

Subscribers by operator (000s)



- Currently, IPTV takes about 1% of the US pay TV market
  - cable is the leading broadband technology in the US
- Telcos have ambitious targets for IPTV
  - by 2009, AT&T is aiming to pass 19m homes with its U-Verse service
  - by 2010, Verizon is aiming to pass 18m homes with its FiOS service
- To acquire market share before other operators move in, telcos are bundling their products with satellite pay TV services
  - for example, in 2006, Verizon had over 500k subscribers via its partnership with DirecTV, compared to 200k via its own FiOS service

Source: Screen Digest, Press reports

Major developments are currently changing the shape of the US pay TV sector

USA – Ongoing developments

Developments	Implications
• For some time, **cable operators have been under pressure**, owing to the growth of other pay TV platforms, particularly satellite and IPTV • The major cable operators are **rationalising their assets,** to maximise efficiencies from clustering (owning multiple systems in geographically contiguous markets) –e.g. the Comcast / Time Warner Cable sharing of Adelphia assets • **Comcast has 28% of all pay TV subscribers in the US and is, therefore, nearing the FCC's 30% cap** on share of the pay TV market	• Increased geographic clustering is making the cable operators stronger in their core (regional) markets, as it enables them to compete more aggressively for local content e.g. Regional Sports Networks • If Comcast acquires other operators' assets, it will soon **breach the FCC ownership limit** and a competition investigation might then be required
• Following their launch in the mid 90s, the **satellite operators** grew rapidly, but **growth has recently slowed,** due, in part, to – their inability to provide triple play services – the launch of IPTV services by telephony providers, such as Bell South • Echostar and DirecTV have already responded to increased competition by **starting to resell their packages via the telephony providers:** this revenue stream may not be sustainable as the telephone companies develop their own pay TV products, e.g. Verizon's FiOS system • The **ownership of** the largest satellite operator, DirecTV, is likely to change – Liberty Media acquiring a 38.5% stake from News Corp.	• If no action is taken, the satellite operators are likely to continue to see subscriber growth slacken further • **Liberty may hope that its acquisition** is either a preliminary to a merger between **Echostar and DirecTV**, or to some kind of **telephony provider-DirecTV combination** – both these options would almost certainly result in a regulatory investigation – **in 2002, the FCC blocked a previous attempt to merge** the two satellite players, due to the likely impact of such a merger on competition in local markets (reducing the number of pay TV operators from three to two)
• **Telephony providers**, such as AT&T, **have begun to roll-out triple play services**, including a pay TV offer • The FCC recently introduced regulation making it easier for new entrants ("wireline overbuilders") to enter the market	• The entrance of these new players into local markets is expected to **increase the level of competition** in the pay TV market

The major broadcast groups have considerable negotiating power with the pay TV platforms

Importance of vertical integration and cross-ownership

- Vertical integration and cross-ownership gives all but the smallest unaffiliated channels considerable negotiating power with the pay TV platforms

Power of the networks

- The four main broadcast networks are essential to the pay TV operators' core packages
  - broadcast groups use their leverage to secure carriage for their affiliates and cable networks
  - gives affiliated local stations and niche cable networks, owned by major groups, considerably more power than is often the case in Europe

Public stations weaker

- The position of the public stations is weaker (not being part of larger groups)
  - historically, they have been protected by analogue must-carry rules
  - after several years of wrangling, they have now agreed a digital/HD carriage deal with the cable operators (ahead of potential intervention from the FCC)

Impact on Echostar

- Echostar has been at the centre of many of the recent major carriage disputes – it is not vertically integrated with content businesses and, therefore, lacks negotiating power

Source: Spectrum / Value Partners analysis

Vertical integration of movie studios and TV networks makes the US model somewhat different from its European equivalents

USA: Impact of vertical integration on movie rights

Parent Company	Movie Studios	Major TV Networks	Movie TV Networks	Pay TV Operators
Disney	• Walt Disney • Miramax • Pixar • Touchstone	• Disney channels • ABC • ESPN	• None, although the Disney channel often shows Disney movies	• None
News Corp.	• 20th Century Fox	• FX • National Geographic	• Fox Movie Channel	• Until recently owned a stake in DirecTV, which has now been sold to Liberty Media, subject to regulatory approval
NBC Universal	• Universal	• NBC • Sci-fi • Bravo	• Offer their own PPV / VoD channel	• None
Time Warner	• Warner Bros • New Line	• CNN • TNT	• HBO • Cinemax	• Time Warner Cable
Viacom	• Paramount • Dreamworks	• MTV • Nickelodeon • Comedy Central	• Used to own Showtime, until the Viacom-CBS split in 2005 but still maintains a close relationship	• None

- In the US, there are **four premium movie TV networks**
  - **three established by the parent companies of major studios**, i.e. HBO, Cinemax (both Time Warner) and Showtime (was Viacom before the firm was split in two)
  - Starz is owned by Liberty Media
- The four major pay TV platforms all carry versions of each of the movie channel families (multiplexes)
- The shared ownership of studios and movie channels is somewhat different from the UK, where the premium movie channels are operated by and branded as Sky (1)
- In the US, vertical integration results in lower visibility about the value of rights deals than in the UK and other European markets

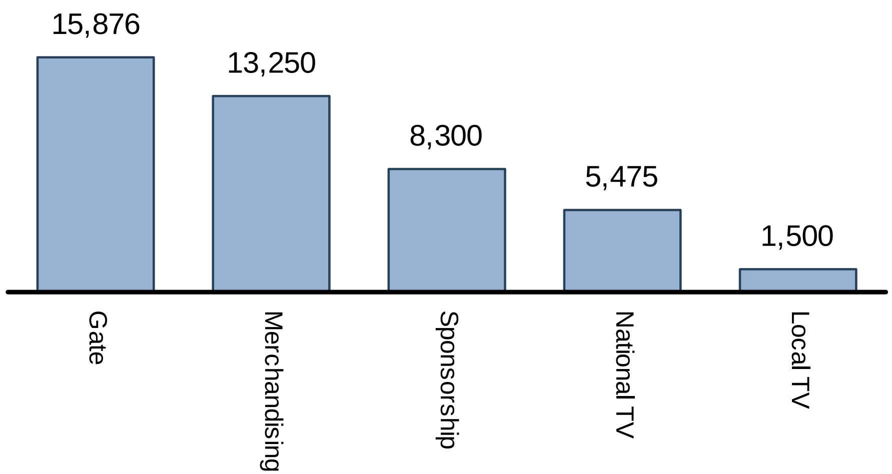
Note: (1) **The key relationship for movie deals is between the studios and the networks, who then negotiate carriage deals with the pay TV operators**

Source: Company websites

The sports market differs from the UK's: TV rights are not the leagues' largest revenue stream and more sports command significant value

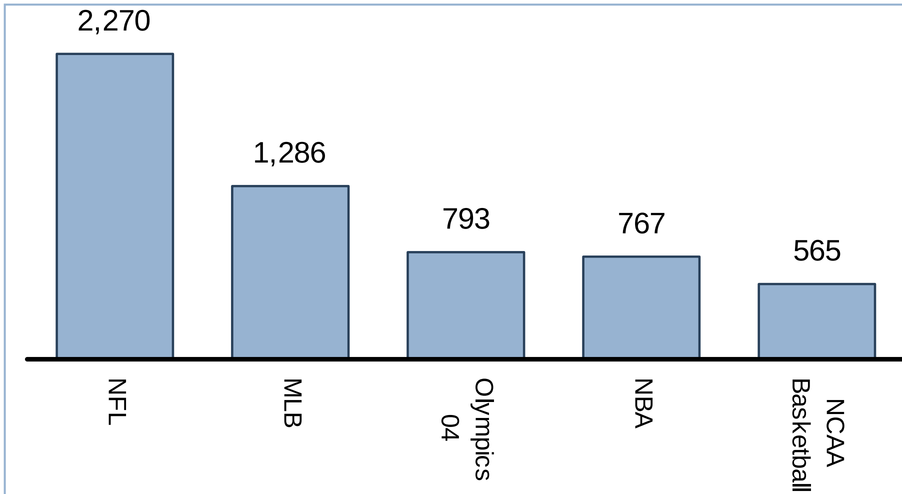
USA: Sports market revenues and top sports TV rights deals 2005 ($m)

US Sports market revenues 2002-2005 ($m)



- TV rights are only the fourth most important sports revenue stream, behind gate revenues, merchandising and sponsorship
  - reduces broadcasters / operators leverage
  - leagues often sacrifice broadcast revenues to maximise gate revenues by blacking-out the local TV coverage if the stadium is not sold out

Top sports TV rights deals 2005 ($m)



- Five leagues or events command TV rights fees in excess of $500m
- However, the NFL still earns significantly more from TV than does any other sport
- Since the mid-1990s, the NFL has achieved significant increases in its rights values
  - $1.1b (1994-97)
  - $2.2b (1998-2005)
  - $3.7b (2006-11)

Source: Sportcal, PWC,

In the US, many of the most popular live matches are shown on the major FTA networks – pay TV tends to pick up second tier events

USA: FTA versus pay TV sports offers

Major FTA networks win most attractive rights	• In the US, a higher proportion of the most popular live (American football) matches is shown on FTA television than in the UK - for example, in American football, the three major NFL packages are all on the major FTA networks - pay TV operators tend to carry second tier events / or less high profile sports
Rights packages split between broadcasters	• Tendency to split rights packages between various broadcasters - the NFL currently has five broadcast partners (CBS, Fox, NBC, ESPN, and DirecTV) - makes it more difficult for broadcasters to differentiate themselves
Pay TV gains "out-of-market" rights	• Pay TV operators / channels tend to offer their customers "out-of-market" packages - for example, if pay sports channel ESPN is broadcasting a game "nationally", and the game is scheduled to be broadcast by a local rights holder, the game will be blacked out on ESPN in that market (usually replaced by ESPNews).
Pay TV operators and Regional Sports Networks (RSNs)	• Pay TV operators (especially Comcast) have tried to increase their share of local sports markets, by buying or acquiring stakes in Regional Sports Networks (RSNs), TV channels which show local sports teams / events
Problems with exclusive deals	• There can be significant political pressure on pay TV operators not to sign exclusive sports deals - for example, in March 07, DirecTV was due to sign an exclusive deal with MLB (Major League Baseball) – but pressure from Congress and a pending investigation by the FCC persuaded the MLB to negotiate a new deal which also included carriage on cable (signed April 07)

Source: Spectrum / Value Partners analysis, NFL

Cable's inherent advantage is its ability to offer on-demand services – satellite has responded by offering channels on an à la carte basis

USA – Current consumer packages

- Although differences exist between the basic packages on cable and satellite, (i.e. the number of channels available), overall content is very similar
- However, two key differences exist between the cable and satellite platforms, which are now affecting the competitive dynamics of the sector
  - satellite lacks the technical capability to provide on-demand services – something Comcast is exploiting in order to maximise differentiation
  - the satellite players offer premium channels on an à la carte basis, but the cable operators do not (because they are trying to protect their margins)(1)

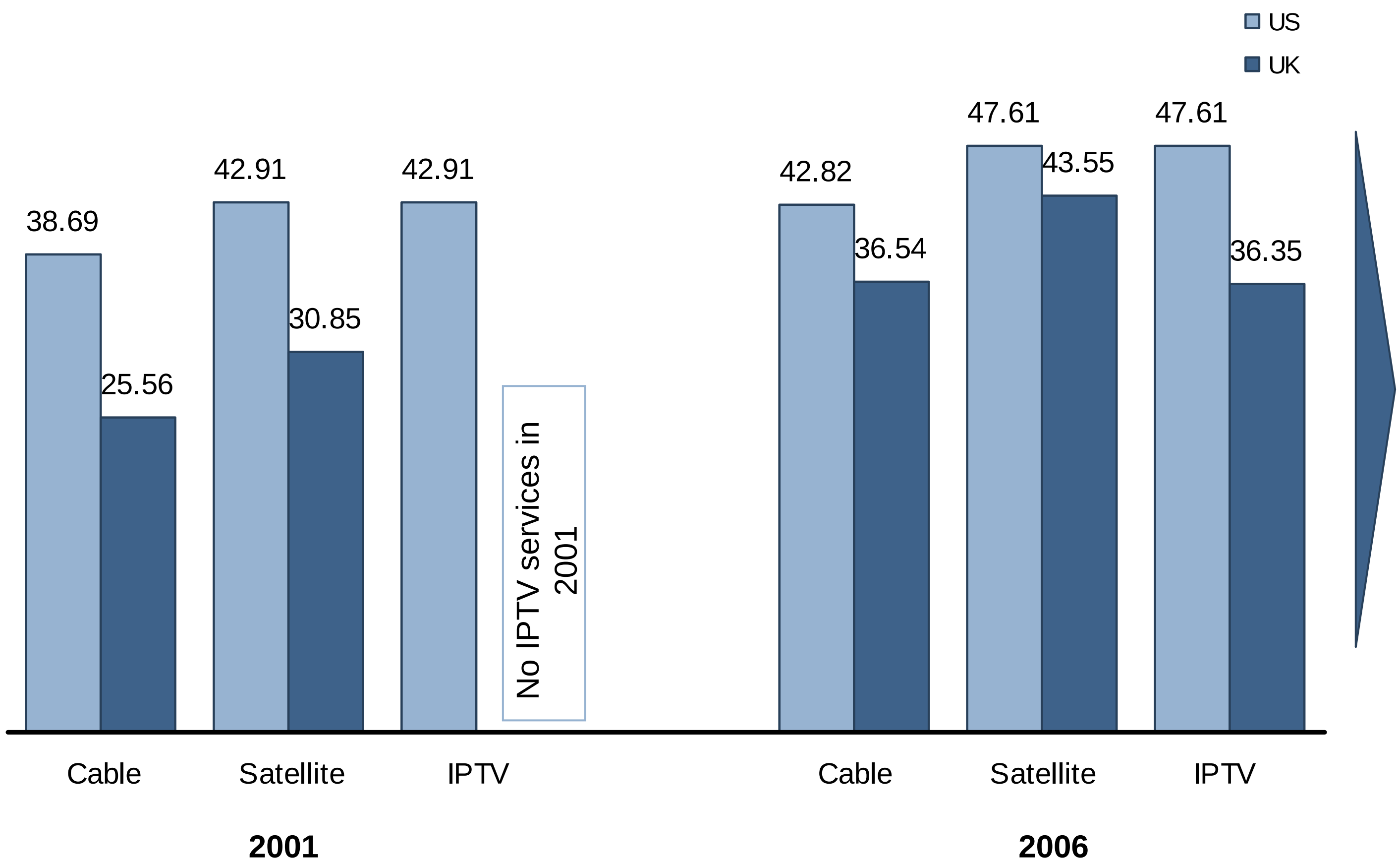
	Satellite	Cable
• Basic	• 40 channels • e.g. Boomerang, Hallmark	• 130+ channels • E.g. Bravo, MTV, Sci-fi, Discovery
• Extended basic	• 100+ channels • Comedy Central, Sci-fi channel	• 130+ channels, including mostly free access to on-demand content (only on Comcast)
• Premium	• 250+ channels • FX, SPN and Premium channels and their multiplexes such as HBO	• 350+ channels • Premium channels and their bouquets, such as HBO
• Value-added services	• PPV • PVR • HD	• VoD • PVR • HD
• Bundling	• Ability to buy internet with satellite with Echostar (DISH), as part of a bundled deal	• Dual and triple play bundled packages are available and marketed with discounts

Note: (1) There is political pressure for à la carte offers to be compulsory (on the basis that it is unfair to force consumers to take channels which they do not want)

Source: Informa, Screen Digest, Operator websites, interviews

When compared on a PPP basis, US pay TV services are consistently more expensive than those in the UK

Pricing comparison with the UK – (US$, PPP)



- On average, US satellite (and IPTV) services are about 10% more expensive than US cable
  - the ratio has remained stable over the last five years
- On a PPP basis, pay TV in the US is more expensive than in the UK – however, the discrepancy is much less than it was in 2001

Source: Informa, EIU