



# International Communications Market Report 2011

## **3 Television and audio- visual**

# Contents

<b>3.1 Key market developments in the TV and audio-visual markets</b>	<b>111</b>
3.1.1 Industry metrics and summary	111
3.1.2 Global TV revenues increased in 2010, driven by a recovery in the advertising market and continued growth in subscription revenues	112
3.1.3 Digital television gained ground in many nations during 2010	114
3.1.4 Value-added services on DTV platforms growing in popularity	117
3.1.5 UK consumers most likely to claim they use online TV services	121
<b>3.2 The TV and audio-visual industries</b>	<b>123</b>
3.2.1 Summary	123
3.2.2 Television revenues among comparator countries	123
3.2.3 TV revenue per head among comparator countries	127
3.2.4 TV licence fees most common in Europe	129
3.2.5 Ad recovery drives revenues for many free-to-air broadcasters	130
3.2.6 Pay-TV revenues up despite tough trading conditions	130
<b>3.3 The TV and audio-visual consumer</b>	<b>134</b>
3.3.1 Summary	134
3.3.2 Digital television take-up on main sets	135
3.3.3 Take-up of HDTV services, digital video recorders and connected TVs	140
3.3.4 Pay-television penetration	143
3.3.5 Consumption of broadcast television services	145
3.3.6 Use of video-on-demand services	149

## 3.1 Key market developments in the TV and audio-visual markets

### 3.1.1 Industry metrics and summary

The TV and audio-visual chapter focuses on three topics - key market developments in the sector; industry revenue, and trends among TV and audio-visual consumers. It includes a global overview and country-level analysis of the 17 comparator countries.

- Key Market Developments details some of the major TV and audio-visual industry trends during the past year, covering analysis of global revenue, take-up of digital TV and technology developments.
- The TV and audio-visual industries section focuses on key revenue trends among comparator countries, including financial results for major pay-TV and free-to-air broadcasters.
- The TV and audio-visual consumer section examines patterns of digital television take-up, including adoption of high-definition television services and digital video recorders. This section also examines how viewers in different countries consume broadcast television channels and TV online.

Figure 3.1 TV industry metrics: 2010

	UK	FRA	GER	ITA	USA	CAN	JPN	AUS	ESP	NED	SWE	IRL	POL	BRA	RUS	IND	CHN	
TV revenue (£bn)	11.3	10.4	11.0	8.1	94.0	4.0	28.6	4.7	5.0	2.4	1.5	0.9	2.2	10.6	3.5	6.7	9.9	
Revs change (% YOY)	8.5	8.8	2.0	6.6	6.3	0.9	6.2	9.9	11.0	0.4	5.8	4.0	10.7	17.6	16.6	17.7	13.6	
Revenue per cap (£)	181	160	135	133	304	119	226	218	106	139	170	189	57	53	25	6	7	
from advertising	59	46	41	65	116	63	105	109	40	39	51	52	21	32	20	1	4	
from subscription	78	82	46	44	187	42	81	78	25	63	84	99	36	19	5	4	3	
From public funds	44	31	48	24	1	15	39	31	41	37	35	38	1	1	0	0	0	
TV licence fee <sup>1</sup>	146	103	185	93	n/a	n/a	175	n/a	n/a	n/a	185	137	40	n/a	n/a	n/a	n/a	
Largest TV platform	Platform	DSat	DTT	DSat	DTT	DCab	DCab	ACab	DTT	DTT	DCab	ACab	DSat	DSat	DSat	ATT	ACab	ATT
	% of homes	42%	38%	34%	41%	39%	44%	25%	43%	69%	42%	37%	52%	43%	39%	36%	59%	33%
TV viewing (mins/day) <sup>2</sup>	242	212	223	246	283	230	n/a	188	234	191	166	196	245	222	226	119	158	
No.1 channel share (%)	21	25	14	21	7	13	n/a	18	16	22	23	23	19	42	17	9	7	
DTV take-up (%)	97	93	62	78	87	78	66	75	98	68	63	83	56	59	34	29	33	
Pay TV take-up (%)	52	57	63	26	88	91	60	31	28	98	93	77	76	18	55	82	52	
DSO date	2012	2011	2008	2012	2009	2011	2011	2013	2010	2006	2007	2012	2013	2016	2015	2013	2015	

Source: IDATE / industry data / Ofcom / Mediametrie, Eurodata TV Worldwide. Figures have been converted to GBP using IMF 2010 average exchange rates. <sup>1</sup>The Japanese licence fee costs £102 in terrestrial households or £175 to receive a larger number of channels via satellite. <sup>2</sup>Refers to average TV viewing per head, per day.

Some of the key market developments seen during the past year include;

- **Global TV revenues increased in 2010, by 7.7% year on year to £239bn**, following a recovery in the advertising market (up 9.9% since 2009) and continued growth in subscription income (up 7.1% since 2009).

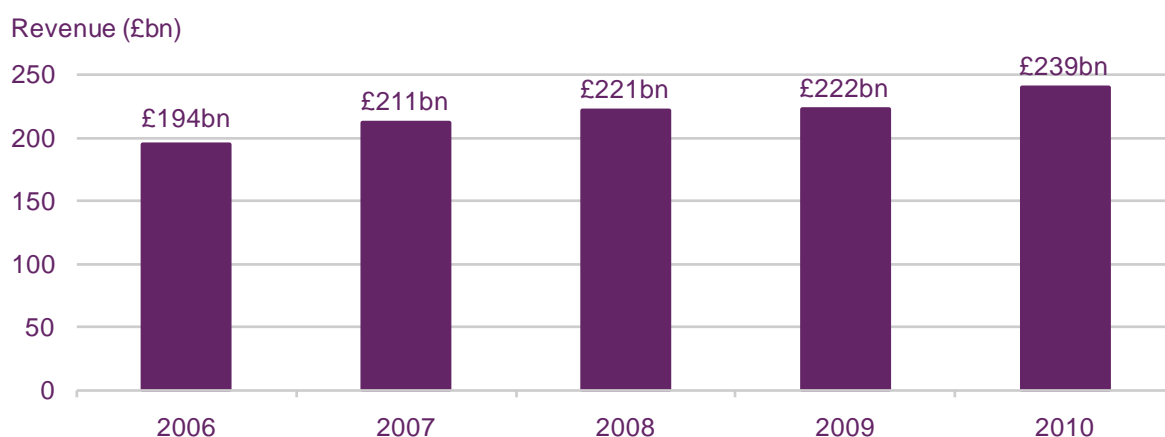
- **Digital TV penetration during 2010 rose in all the countries included in this analysis**, with take-up highest in the UK (97%), France (93%) and Spain (98%). The largest year-on-year increase in take-up of digital television was among homes in Brazil, where penetration rose by 20 percentage points to 59% of households in 2010.
- **Take-up of IPTV in France increased by almost a third in 12 months to reach nearly a quarter (24%) of French main television sets in 2010**, making it the second most popular platform after DTT. No other nation was able to match France for the popularity of the IPTV platform, with the second highest take-up being in Sweden, where penetration stood at one in ten homes.
- **Consumers continue to embrace high definition TV, as channel line-ups grow.** Penetration in the UK increased by a third in 2010, to 21% of main television sets, while HDTV in France and the US entered the mainstream, with penetration for the first time reaching a majority of households (60% (up by 18pp) and 54% (up by 9pp) respectively).
- **Digital video recorders are now widely available in comparator countries.** Take-up was highest in the US at 41%, followed by the UK, where the comparable figure was 35%. Year-on-year adoption in the UK rose fastest, by 4pp, which was also the highest proportional increase over the period.
- **Technologies that have become available more recently are beginning to gather momentum among consumers.** Thirteen per cent of consumers in France claim to have access to an internet-connected television. In Australia, the comparable figure was 9%; in the UK and the US it was 7%. Ten per cent of viewers in Italy claim their main television set is 3D-ready, alongside 8% of those in Germany, 7% in France and 6% in the UK and Australia.
- **Over a quarter (27%) of UK internet users claim to access TV content over the web every week , up 3pp in twelve months**, driven by the popularity of online catch-up services such as BBC iPlayer and 4OD. Internet users in the UK are more likely to watch TV content over the web than users in France, Germany, Italy and the US.

### **3.1.2 Global TV revenues increased in 2010, driven by a recovery in the advertising market and continued growth in subscription revenues**

Ofcom estimates that global TV revenues increased in 2010, by 7.7% year on year, to £239bn. This marks a significant recovery in comparison to 2009, when revenues increased only marginally (0.5%), due to the impact of the economic downturn. Despite the recession, global TV revenues have increased by almost a quarter (23.2%) over four-year period since 2006.

Our analysis of *global* television revenue (presented in this section) incorporates three main components – net advertising revenue, TV licence fees and subscriptions. It also includes revenues from pay-per-view (PPV) services and video on demand (VoD), since these products now form an intrinsic part of many pay-TV offers. This methodology differs from our *country-level* analysis (see paragraph 3.2.2) where the focus is on net advertising revenues, public funds/TV licence fee and subscriptions.

**Figure 3.2 Global TV revenues**



Source: Ofcom analysis based on data from PricewaterhouseCoopers Global Entertainment and Media Outlook 2011-2015 @ [www.pwc.com/outlook](http://www.pwc.com/outlook). IDATE / industry data / Ofcom for US and UK revenues.

Notes: Net TV advertising revenues for Russia have been calculated by discounting 15% of TV advertising spending to remove agency fees and production costs. Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010.

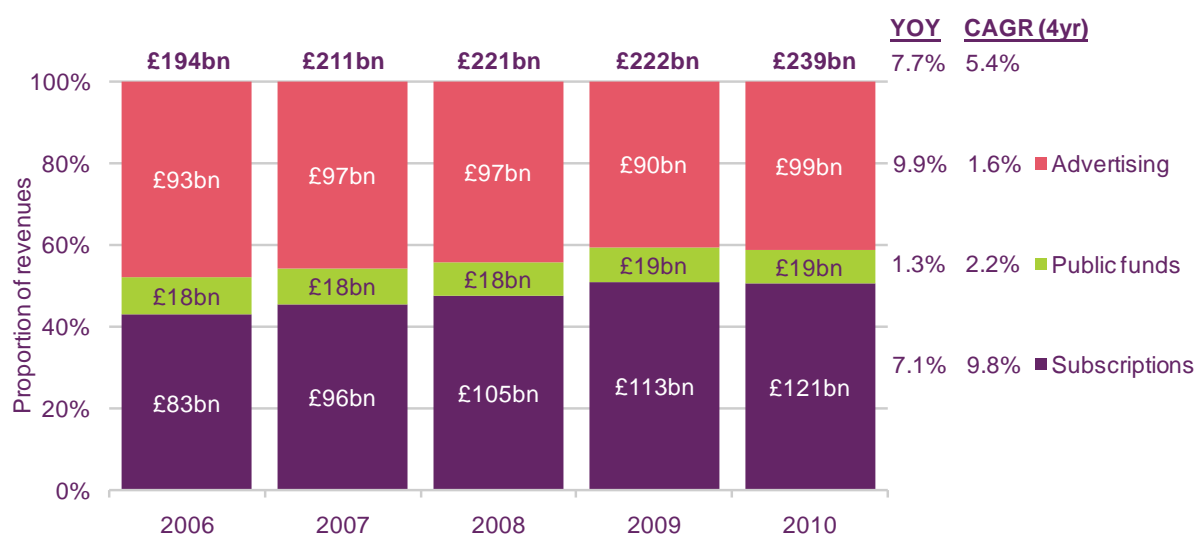
The 7.7% increase in global television revenues to £239bn in 2010 was driven by a recovery in the advertising market, coupled with continued growth in subscription revenues.

Following a decline in 2009, global TV broadcasters experienced a 9.6% increase in net advertising revenues (NAR) in 2010, up £9bn year on year to £99bn. Growth in pay-TV subscriber revenue increased by 7.1% year on year to £121bn in 2010 – the highest level recorded to date.

Growth in pay-TV adoption (see Figure 3.29) has contributed to the increase in subscription revenue, as has the launch of new products and services that platform operators have been able to monetise. The continued take-up of enhancements such as digital video recorders (DVRs), video on demand (VoD), high-definition television (HDTV) and to a lesser extent, three-dimensional TV (3DTV) has helped pay-TV broadcasters increase average revenue per user (ARPU). These products are examined in greater detail in Section 3.3 of this report.

Public funding, usually sourced from TV licence fees or government grants, remained unchanged in 2010 at £19bn. Revenue from this source has also been relatively stable over a four-year period, growing on an average compound basis by 2.2% per year, and bringing revenue up to £19bn in 2010 from £18bn in 2006. Subscription revenues increased by 9.8% on a compound annual basis over the same period, while net advertising revenue (NAR) increased by just 1.6% per annum over the four-year period – the lowest compound annual growth rate of the three revenue streams.

**Figure 3.3 TV industry revenues, by source**



Source: Ofcom analysis based on data taken from PricewaterhouseCoopers Global Entertainment and Media Outlook 2011-2015 @ [www.pwc.com/outlook](http://www.pwc.com/outlook). IDATE / industry data / Ofcom for US and UK revenues.

Notes: Net TV advertising revenues for Russia have been calculated by discounting 15% of TV advertising spending to remove agency fees and production costs. Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010.

### 3.1.3 Digital television gained ground in many nations during 2010

#### Main TV sets in Spain, UK and France are nearly all digital

Among the comparator countries, digital television (DTV) take-up patterns fell into one of three types in 2010:

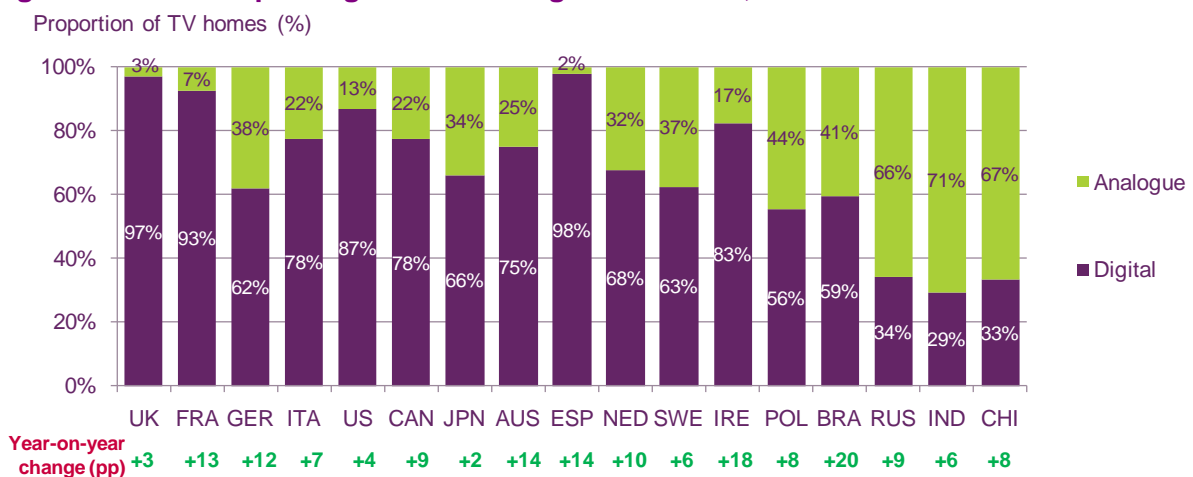
- Almost complete digital conversion.** People in the UK (97%), France (93%) and Spain (98%) have almost universal access to digital television on their main television sets. This may be explained by the recent (in the case of Spain), or imminent, completion of digital terrestrial television switchover in these countries, coupled with the popularity of the terrestrial television platform in each.
- Digital television available in 60% to 80% of homes.** In a large number of comparator countries, DTV take-up is below 80% - in some cases well below that figure. There are several drivers behind this, including lower levels of terrestrial television take-up (analogue or digital), rendering the market less sensitive to the effects of terrestrial switchover programmes. With analogue cable services remaining popular in many countries, take-up of digital services is correspondingly lower; for example, Germany (62%), Japan (66%) Sweden (63%) and the Netherlands (68%).
- Analogue platform predominating.** In Russia (34%), China (29%) and India (33%), analogue television platforms are connected to the majority of main sets. This reflects the developing nature of the television markets in these countries. The onset of digital switchover may well drive DTV take-up in future years.

Year on year, growth in the take-up of digital television platforms was highest in Brazil, where take-up rose by 20 percentage points to 59% of homes in 2010. Households in the Republic of Ireland also embraced digital television in large numbers, with penetration rising

by 18 percentage points to 83%. In Spain, where switchover was completed in 2010, DTV homes grew by 14 percentage points, and the figure was the same in Australia, where the switchover programme began in 2010 and is scheduled to be completed by 2013. There was also a double-digit increase in take-up in France (by 13 pp – switchover will be completed in November 2011) and in the Netherlands (10pp – fuelled by the growing popularity of digital cable services and IPTV).

Elsewhere, DTV growth was more modest. A nine percentage point increase in DTV adoption in Canada was driven by the rapid conversion of analogue cable homes to digital; in Italy a seven point increase came about as a result of rising adoption of digital terrestrial television during 2010 (with DSO having already started in some regions).

**Figure 3.4 Take-up of digital and analogue television, 2010**

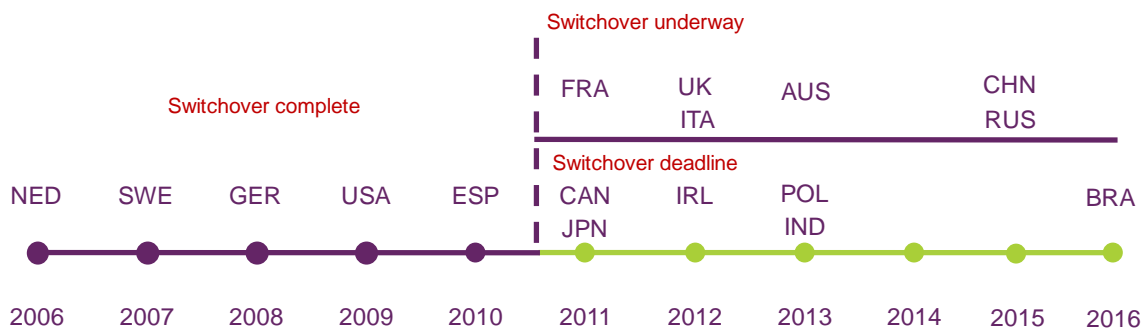


Source: IDATE / industry data / Ofcom.

Since Ofcom began publishing this international benchmarking study, in 2006, seven countries have switched off their analogue terrestrial television service, including the Netherlands, Sweden, Germany, the US, Spain, Canada and Japan.

In Spain, the terrestrial TV platform has always been very popular, unlike other countries where cable or satellite have proved more popular. The completion of DSO in Spain has therefore been a significant achievement. In 2010 terrestrial television accounted for nearly 70% of all main television sets in Spain, with take-up of digital terrestrial having risen by 10 percentage points during 2010.

**Figure 3.5 Timeline for digital switchover, by country and date**



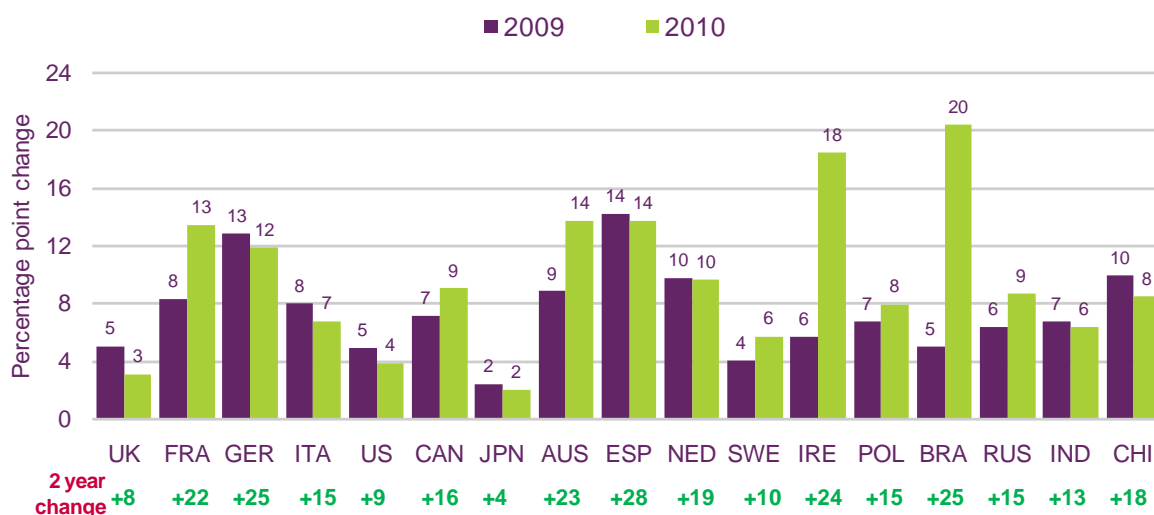
Source: IDATE / industry data / Ofcom.

Three countries experienced a rapid acceleration in household take-up of digital television during 2010. The 13 percentage point increase in France was nearly double the comparable figure in 2009 (8 percentage points); in Ireland, the 18pp rise in 2010 was three times that of 2009. Both are facing the completion of digital television switchover in the next 12 months. But by far the most substantial acceleration in DTV take-up has been in Brazil, where the 20pp rise in take-up during 2010 was five times the 2009 figure.

More modest levels of growth in household take-up were experienced in Canada (9pp, up by 2pp year on year), Sweden (6pp, up by 2pp) and Russia (9pp, up by 3pp), Elsewhere, DTV take-up has begun to slow down in the past twelve months, possibly driven by increasing levels of digital television adoption.

Taken together, the last two years have seen substantial double-digit increases in DTV take-up in many of the countries covered in this report – ranging from 22pp in France and 23pp in Australia to 25pp in Brazil and Germany and 28pp in Spain.

**Figure 3.6 Percentage point change in the take-up of DTV, 2009 and 2010**



Source: IDATE / industry data / Ofcom.

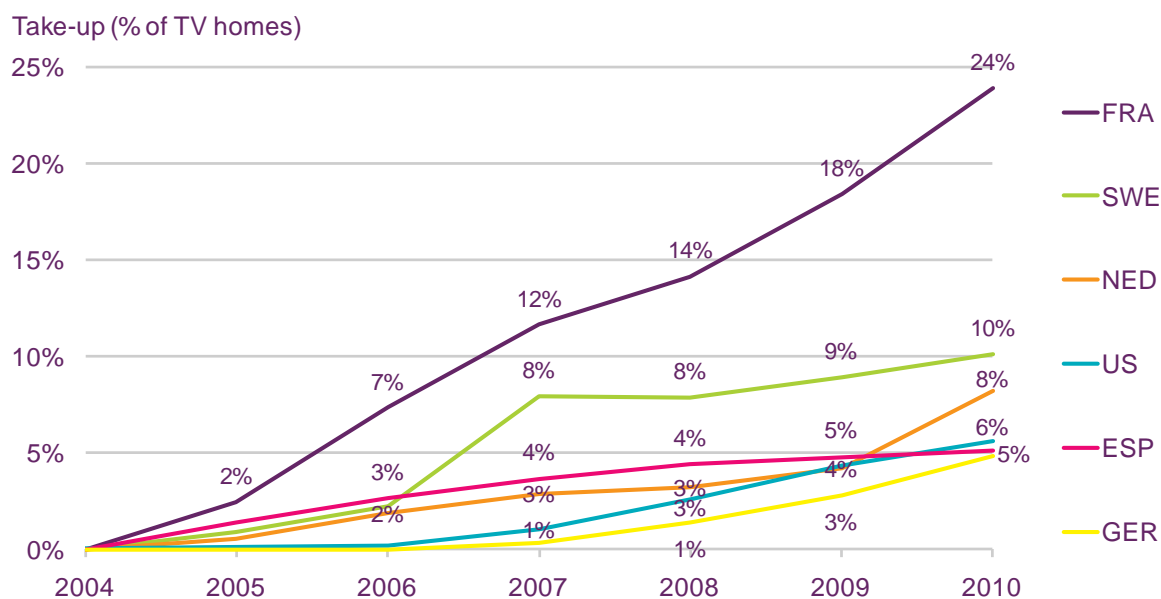
### **IPTV take-up grew rapidly in France, reaching nearly a quarter of homes in 2010**

This report first highlighted the growing popularity of IPTV (albeit at a relatively low level in many countries) in 2009. As investment in advanced, high-bandwidth telecommunications infrastructures continues, IPTV is becoming a viable alternative in many more homes. But in the face of a range of well-established competing digital platform technologies, it can be challenging for a new technology such as IPTV to gain a foothold. Figure 3.7 illustrates how IPTV has grown in popularity among those countries where take-up exceeded 4% in 2010.

In 2010, the platform entered the mainstream in France, with take-up rising by a third to reach nearly a quarter (24%) of French main television sets in 2010. No other nation was able to match France in terms of IPTV popularity, because the IPTV platform was introduced to the market relatively early, in the context of low cable availability. That said, rates of take-up are high elsewhere; in Sweden, penetration reached 10% in 2010, up by 1pp year on year; 8% of homes in the Netherlands now have the technology, double the figure in 2009. Among US households, the comparable figure was 6% (up by a third) and in Germany 5% (up by 2pp over the period).



**Figure 3.7 IPTV take-up on main TV sets in countries where take-up exceeded 4% in 2010**



Source: IDATE / industry data / Ofcom.

Notes: Only countries where IPTV take-up exceeded 4% of television homes in 2010 are shown in the chart.

### 3.1.4 Value-added services on DTV platforms growing in popularity

The transition to digital television is well under way in most of the countries covered by this report; and it is complete, or nearly so, in several. So the product features enabled by digital technology – wider channel choice; greater interactivity; radio on television – are now, for many people, the default expectation.

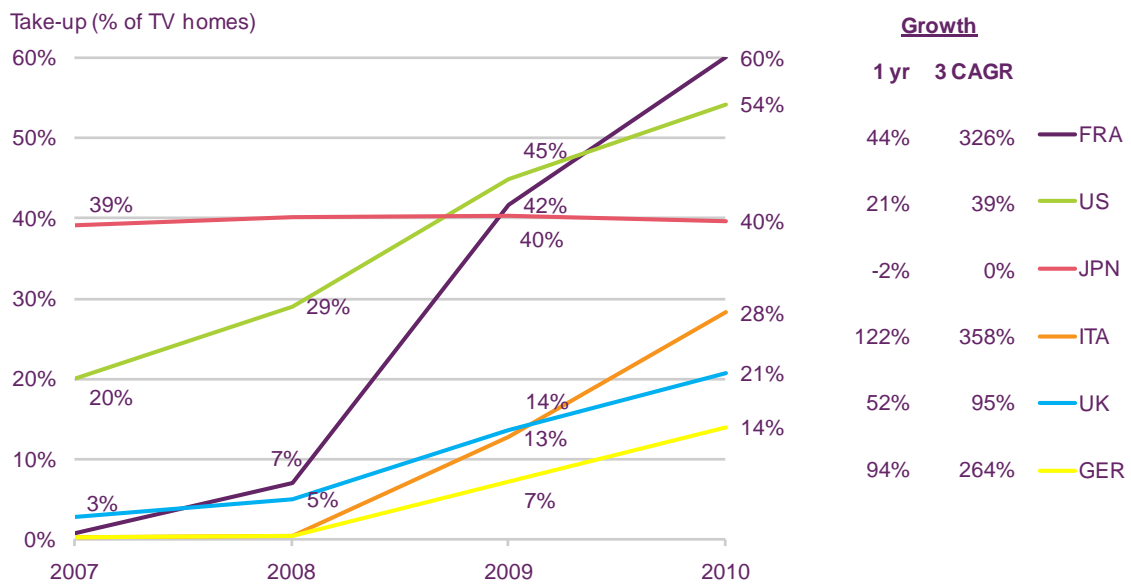
But as one particular aspect of the television market becomes mainstream, so the platform operators turn to new, value-added services to ensure that their proposition remains distinctive, and therefore competitive, in comparison to alternative products. High-definition TV (HDTV) services are one example (though many might argue that this is now a mainstream, well established technology); digital video recorders are another; internet-enabled set-top-boxes and 3D-ready televisions also fall into this category.

#### HDTV available in a majority of French and US homes for the first time

Among the six countries for which high-definition television subscriber/homes data were available, the story in 2010 was of rapid adoption and high levels of take-up in both France and US, where penetration grew to 60% (up by nearly a half) and 54% (up by a fifth) respectively in 2010.

In Japan, high-definition television has been available, in analogue or digital form, for many years. As a result, the technology is well-established, and around 40% of homes have a high-definition television service available to them. But the Japanese market has not experienced any growth in HD equipment adoption. From a lower base HD take-up in Italy doubled during 2010, rising to 28%, while penetration in the UK rose by a half to 21% of main sets over the same period. In Germany, where HD take-up started slowly, (compared to Italy, for example), take-up nearly doubled over the year to reach 14% of main television sets.

**Figure 3.8 Growth in the number of HD television homes**



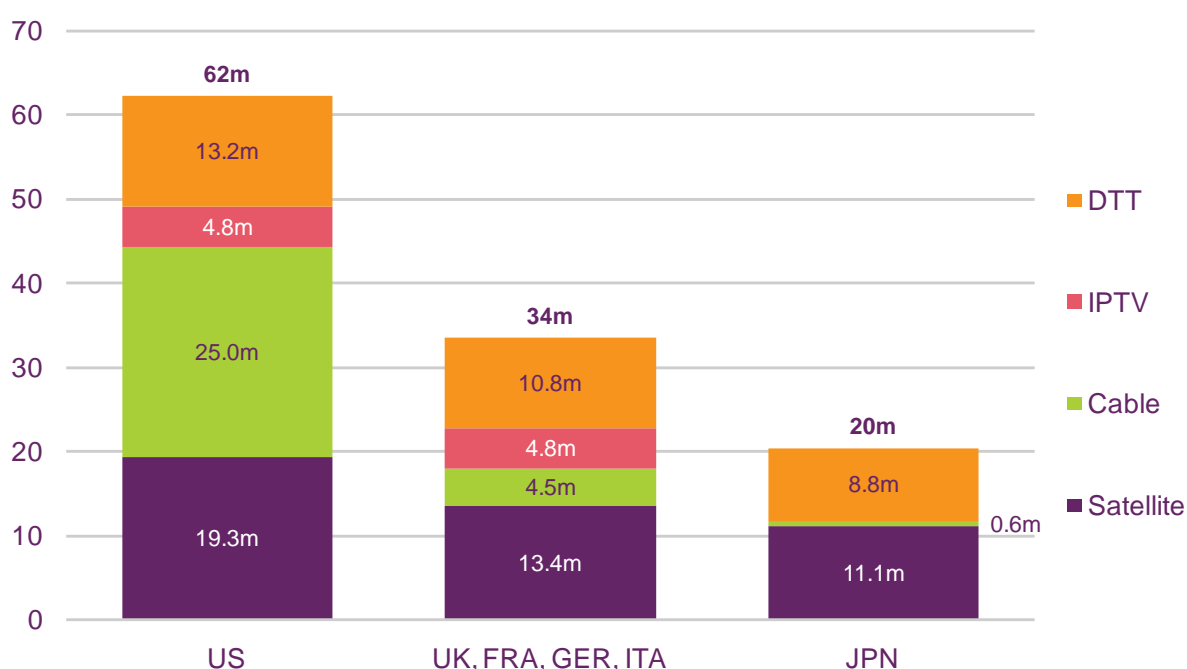
Source: IDATE / industry data / Ofcom.

Across countries, a variety of platforms have been responsible for bringing HD content into homes. In the US, cable was the most popular platform, followed by satellite and then DTT. Together with IPTV, there were around 62 million HD US homes in 2010.

Among the larger European territories, DSat was the most popular route to HD, accounting for 13.4 million households. DTT was the second most popular platform, with a further 10.8 million homes; digital cable and IPTV commanded a further 9.3 million between them.

In Japan, cable's contribution to HD homes was very small in 2010. But of the 20 million total, 11 million received HD content through the satellite platform, with DTT accounting for just under 9 million.

**Figure 3.9 Number of HD homes, by platform and country, end 2010**



Source: IDATE / industry data / Ofcom.

Notes: Paying and FTA HD homes; no data available for IPTV take-up in Japan.

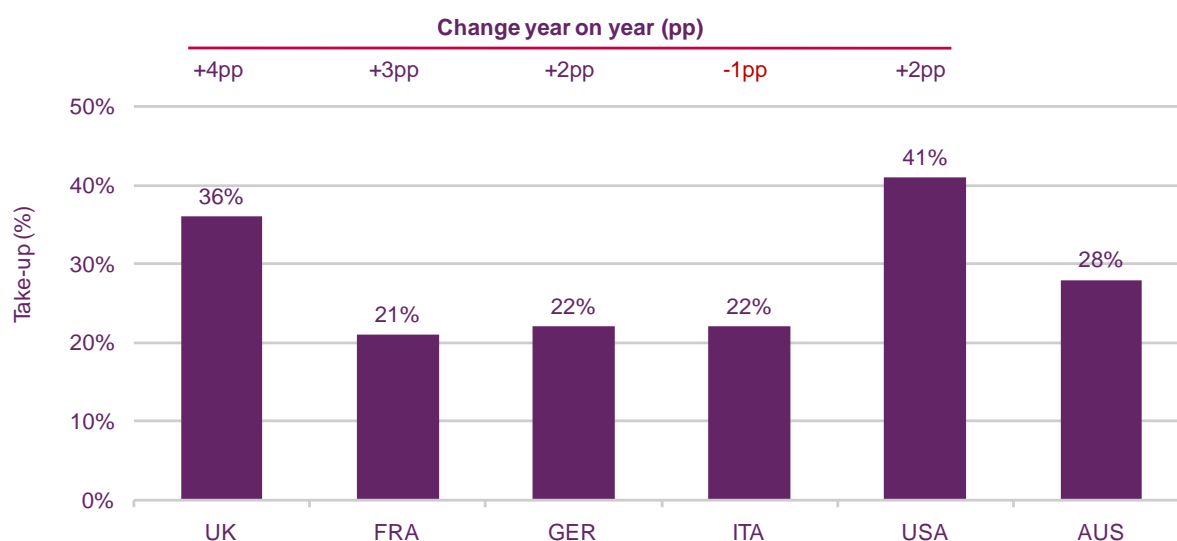
### Digital video recorders available in nearly three in ten homes across the UK, France, Germany, Italy, the US and Japan

Digital video recorders (that enable TV programmes to be recorded, paused and rewind) are becoming more widely available. Among homes in France, Germany, Italy, Japan, the UK and the US in 2010, DVRs were connected to the main set in one nearly in three (28%) households.

By country, more than a third (36%) of viewers in UK homes had access to a DVR, along with 41% of those in the US; in both, pay-TV providers have promoted their adoption among existing subscribers. Take-up in Australia was just over a quarter, at 28%, while in France, Germany and Italy take-up was lower, with DVRs connected to the main television set in around a fifth of homes (21%, 22% and 22% respectively).

Year on year, growth in DVR adoption was highest in the UK, where take-up rose by 4pp between 2010 and 2011. In the US, France and Germany, it rose by 2 pp.

**Figure 3.10 Claimed DVR take-up and year-on-year changes in take-up**



Source: Ofcom consumer research, October 2011

Base: All those who use the internet. Total sample size: UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

Q: Which of the following devices do you own and personally use?

### Connected TVs and 3D televisions begin to gather momentum

Digital technologies, introduced more recently to enhance the television-viewing experience, also began to gain in popularity during 2011.

Among television viewers in France, 13% claim to have a television screen that connects to the internet, providing access to, for example, television catch-up services, video sharing applications and social networking sites. Nine per cent of consumers in Australia made the same claim, while take-up in the UK and US stood at 7%, and at 6% in Germany and Italy

#### **IPTV and connected televisions**

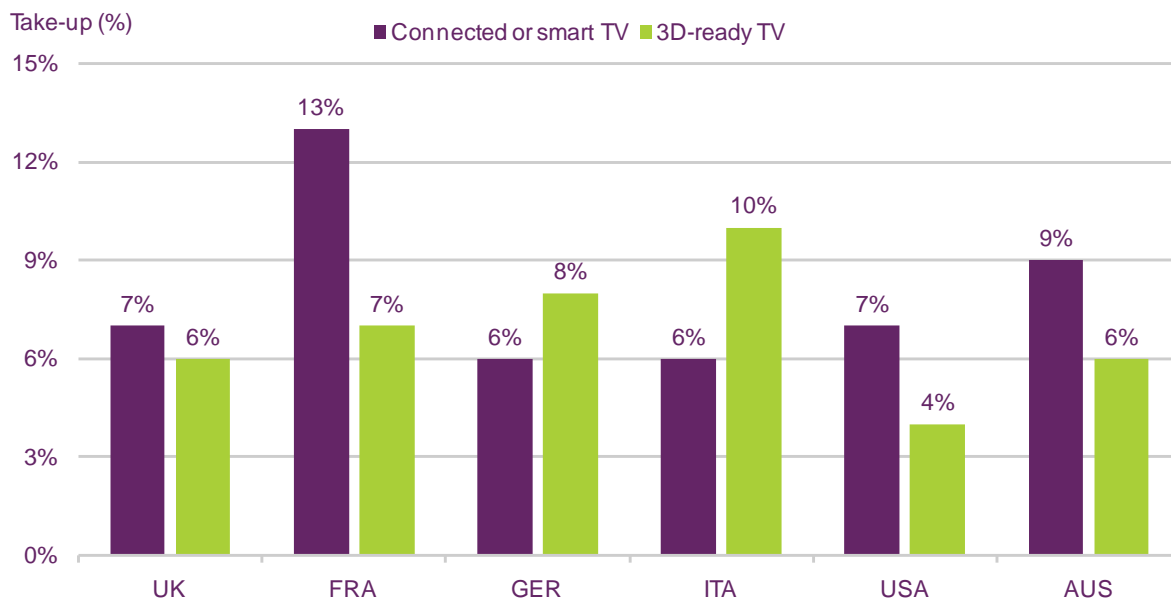
Both IPTV and connected televisions provide a means by which viewers can get access to audio-visual content through internet-based distribution technologies. The distinction between the two comes in the form of both (i) the device that provides the connectivity, and (ii) the quality of service associated with that connection.

An IPTV service is typically supported by a set-top box, which connects to content services offering a guaranteed quality of service – so the AV content is, in terms of picture quality, indistinguishable from a broadcast-based service. A connected TV gains access to the internet through a consumer's broadband connection, for example through a WiFi router. As a result, content is delivered over the open internet, so that picture/service quality will be influenced by the consumer's broadband connection speed and by congestion on the open internet.

Televisions with 3D capability (when the screen is viewed using special glasses) are also growing in popularity. Ten per cent of viewers in Italy claim their main television set is 3D-ready -capable, alongside 8% of those in Germany, 7% in France and 6% in the UK and Australia. The comparable figure for viewers in the US was 4%. These figures should be treated with a degree of caution owing to the comparative newness of the technologies and the possibility of over-claim among consumers (for example, as a result of confusion between connected television and IPTV); moreover, the extent to which consumers actually

connect their internet-enabled television to the web was not explored in the consumer research – i.e. consumers may have the capability to connect their TV to the web, but not actually do it.

**Figure 3.11 Claimed take-up of connected televisions and 3D-ready TVs**



Source: Ofcom consumer research, October 2011

Base: All those who use the internet. Total sample size: UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

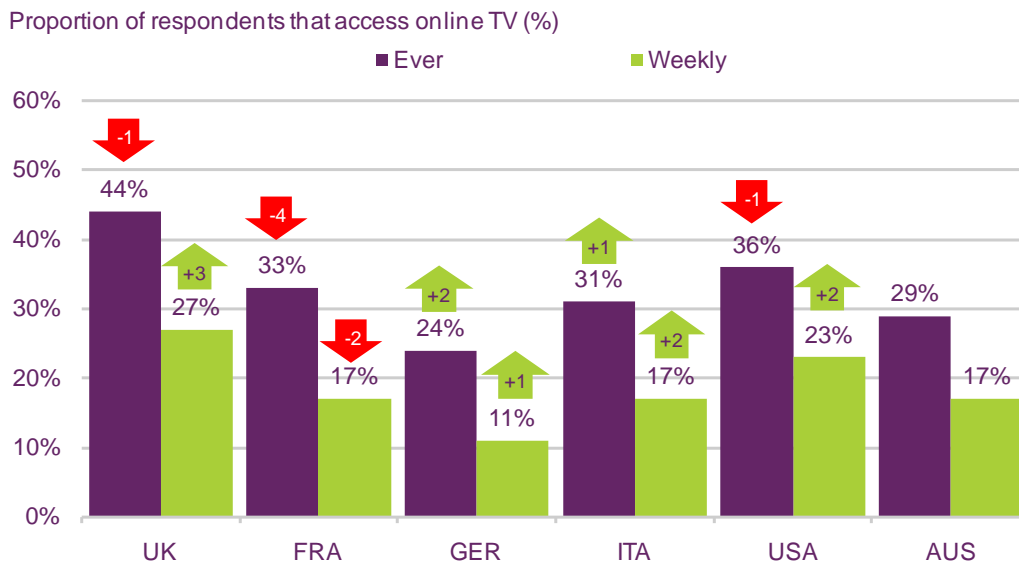
Q: Which of the following devices do you own and personally use?

### 3.1.5 UK consumers most likely to claim they use online TV services

With broadband now in the majority of homes in many of our comparator countries, Ofcom's consumer research shows that people in the UK are the most likely to access TV content over the internet. Over a quarter (27%) claimed to do this *every week*, up 3pp in twelve months (this figure increases to 44% when asked whether they had *ever* accessed TV content over the web.) Despite IPTV failing to gain a foothold in the UK so far (see Figure 3.7), TV catch-up services delivered over the open internet such as BBC iPlayer, 4OD and ITV Player have proved popular. In 2010, 15% of the UK online population visited BBC iPlayer in an average month - four times more than those who visited 4OD, the second most popular online catch-up site.

Consumers in the US were not far behind the UK, with over a fifth (23%) of respondents claiming to access TV content over the internet on a weekly basis, up 2pp since 2009. The growing popularity of accessing TV content over the web, coupled with an increase in the penetration of IPTV on main television sets, may be driving the decline in the proportion of homes in the US taking traditional pay-TV services, which declined 0.6% year on year to 88% of households (see Figure 3.29).

**Figure 3.12 Accessing TV content over the internet**



Source: Ofcom consumer research, October 2011.

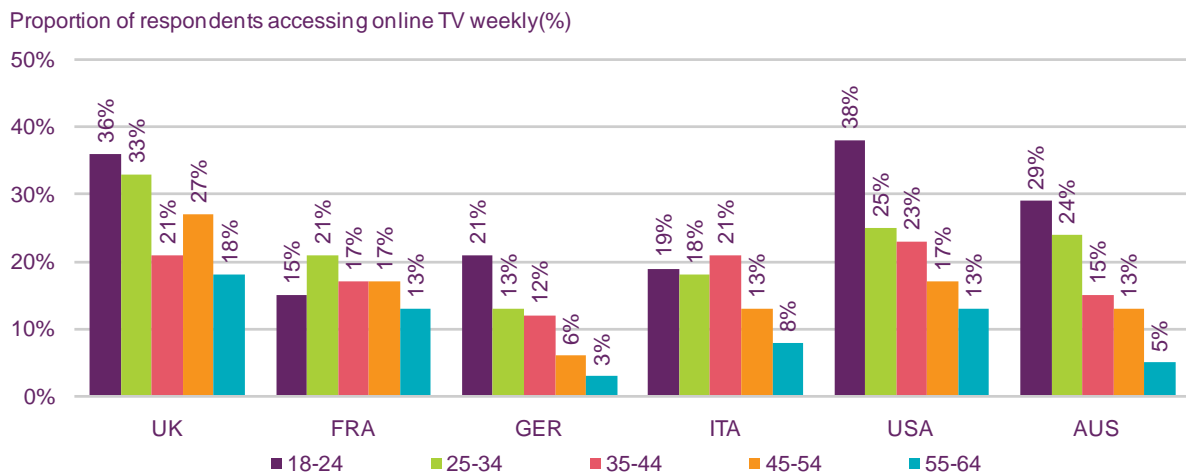
Base: All those who use the internet. Total sample size: UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

Q: Which of the following activities do you use your home internet connection for?

Note: Australia not included in 2010 research.

For the majority of our comparator countries, the propensity of consumers to access TV content online diminishes with age, with people aged 18-24 most likely to access TV content over the web, and those aged 55-64 the least likely to do this. In the UK, over two-thirds (69%) of respondents aged 18-34 claim to access TV content over the internet every week - the comparable figure for the US is 63%. Among those aged 55-64, these figures fall to 18% and 13% respectively.

**Figure 3.13 Accessing TV content over the internet, by age**



Source: Ofcom consumer research, October 2011.

Base: All those who use the internet, UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

Q: Which, if any, of the following activities do you use your home internet connection for?

## 3.2 The TV and audio-visual industries

### 3.2.1 Summary

This section focuses on the TV and audio-visual industries, looking at the key revenue trends among our comparator countries and financial results for major pay-TV and free-to-air broadcasters.

- **Revenue among the 17 countries analysed by Ofcom increased by 7.7% in 2010 to £215bn as all countries experienced increases year on year**, driven by a recovery in advertising revenue as well as continued increases in subscription income.
- **The UK has the largest TV market in Europe by revenue**, recording an 8.5% increase to 11.3bn, compared to revenues of £11.0bn for Germany, the second largest European market in 2010 (up 2.0% versus 2009).
- **All of the nine European markets included in our analysis, as well as Canada, saw revenues increase in 2010, although to varying degrees.** Spain had the strongest growth in percentage terms (up by 11% to £5bn), driven by increases in public funding, while the Netherlands remained relatively flat with a marginal increase of 0.4% in 2010.
- **Collective revenue among the BRIC countries - Brazil, Russia, India and China – increased by 16.2% in 2010, up £14bn to £31bn.** Brazil saw growth of 17.6% to £10.6bn in 2010, making it the largest television market of the BRIC countries. China, the second largest market, grew by 13.6% to £9.9bn.
- **Pay-TV companies continue to out-perform their free-to-air counterparts in terms of revenue generated in 2010.** The pay-TV operator experiencing the most significant increase in earnings was BSkyB in the UK, up £600m (13.2%) to £5.3bn. In contrast, Sogecable of Spain experienced a drop in revenue for the second year running; to 1.4bn in 2010.
- **Pay-TV operators continue to increase average revenue per user (ARPU) as more subscribers trade up to premium products** such as digital video recorders (DVRs) and high-definition TV. In the UK, Virgin Media earned annual ARPU of £570 per customer (up from £538 in 2009) compared to a figure of £508 per customer for BSkyB in 2010 (up from £492 in 2009).

### 3.2.2 Television revenues among comparator countries

#### In 2010 revenues increased in all 17 comparator countries

Revenues among the 17 countries analysed by Ofcom increased by 7.7% in 2010 to £215bn; all 17 countries saw year-on-year increases. The BRIC countries – Brazil, Russia, India and China – saw their joint TV revenue increase by 16.2% in 2010, up £4bn to £31bn. Growth was largely driven by increases in advertising, with the exception of India, where income from subscription revenues outstripped income from advertising.

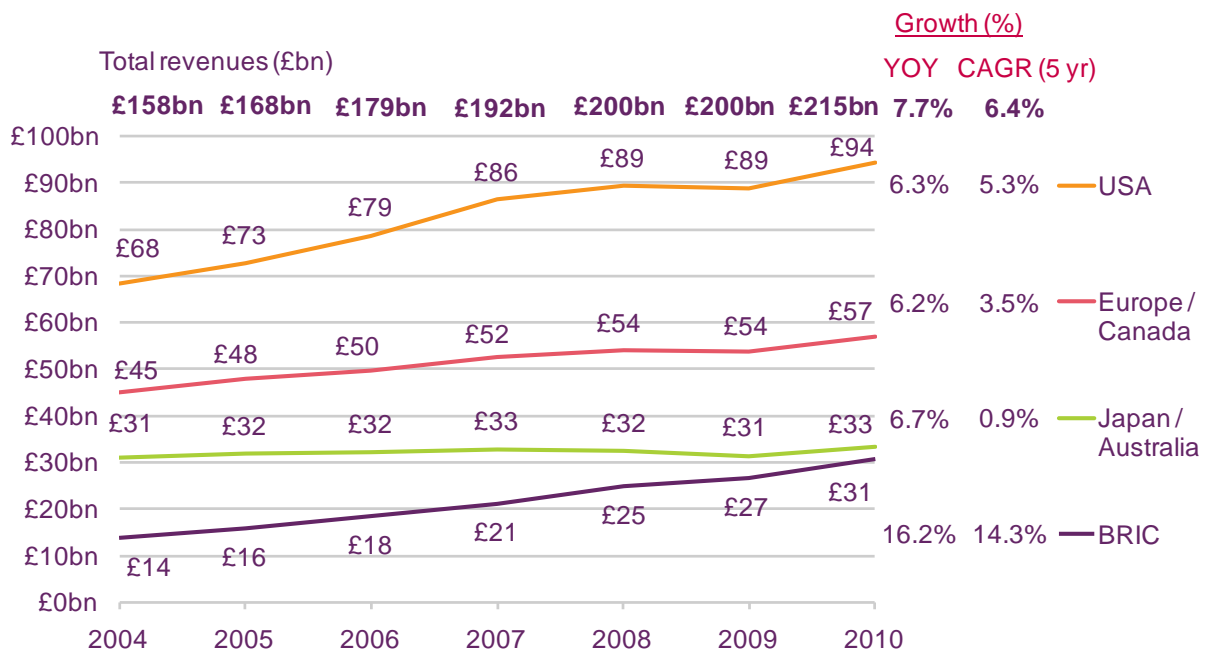
The gap between the BRIC countries and the combined revenues of Japan and Australia has diminished over the past five years, with the two regions now almost equal in terms of television revenue. While the combined revenues of Japan and Australia increased by 6.7%

year on year (to £33bn), compound annual growth over a five-year period has been relatively flat compared to the other regions, at just 0.9%.

The combined revenues of Europe and Canada still fall some way below the US, which, as the largest television market globally, generated revenue of £94bn in 2010, an increase of 6.3% on 2009.

Our analysis includes revenue generated from pay-TV subscriptions (excluding pay-per-view and video on demand), public funding and licence-fee revenues, and net television advertising revenues. This differs from our analysis of global television revenues (see Figure 3.2) which includes pay-per-view and VoD.

**Figure 3.14 TV industry revenues among comparator countries**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only. Europe includes the European countries in this analysis – UK, France, Germany, Italy, Spain, the Netherlands, Sweden, Republic of Ireland and Poland. BRIC is Brazil, Russia, India and China.

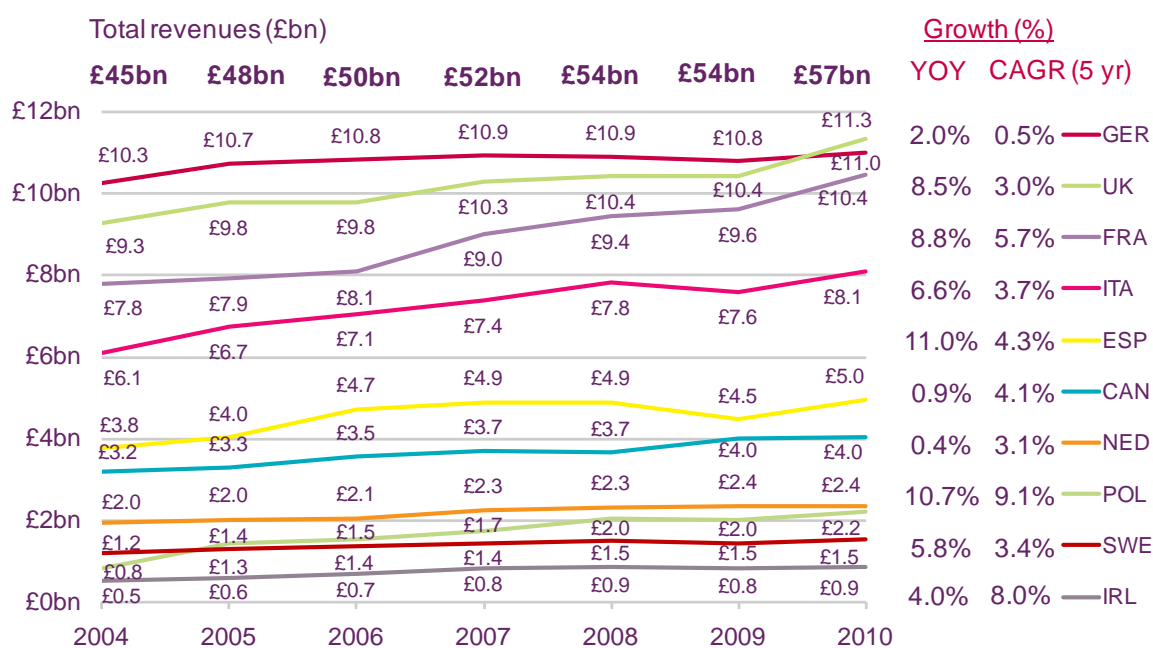
All of the nine European markets included in our analysis, as well as Canada, saw revenues increase in 2010, although to varying degrees. Spain saw the strongest growth in percentage terms between 2009 and 2010, up by 11% to £5bn, although this was due to an increase in public funding. The increase for Spain follows a significant decline the previous year, and so represents only a return to 2008 levels. In contrast, TV revenues in the Netherlands remained relatively flat, with a marginal 0.4% increase in 2010.

The UK has the largest TV market in Europe in terms of revenue, generating income in 2010 of £11.3bn, compared to £11.0bn for Germany, the second highest television market in Europe<sup>17</sup>.

<sup>17</sup> Note that the UK TV revenue total differs slightly from our 2011 *UK Communications Market Report*, which included ‘other’ TV revenues (of £0.7bn). For reasons of consistency, these revenues have been excluded in our international analysis.



**Figure 3.15 TV industry revenues among European countries and Canada**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only. Europe includes the European countries in this analysis – UK, France, Germany, Italy, Spain, the Netherlands, Sweden, Republic of Ireland and Poland.

TV revenues increased in 2010 for all four BRIC countries. For the second year running, India saw the highest proportional growth in revenue, up by 17.7% to £6.7bn. Brazil experienced growth of 17.6%, making it the largest TV market of the BRIC countries, while China, the second largest market, had a 13.6% increase to £9.9bn.

Russia, the only BRIC country whose revenue fell in 2009, returned to growth in 2010, with a 13.6% increase to £3.5bn.

**Figure 3.16 Total TV industry revenues among BRIC countries**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only. BRIC is Brazil, Russia, India and China.

Figure 3.17 illustrates the changing composition of TV industry revenues by country between 2005 and 2010. In all 17 comparator countries, TV revenues rose over the five-year period.

Revenues among the major European television markets of Germany, the UK, France and Italy all grew and generated a relatively consistent revenue mix between subscriptions, public funding and net advertising. In all cases, pay-TV was the fastest-growing source of revenue over the five-year period between 2005 and 2010.

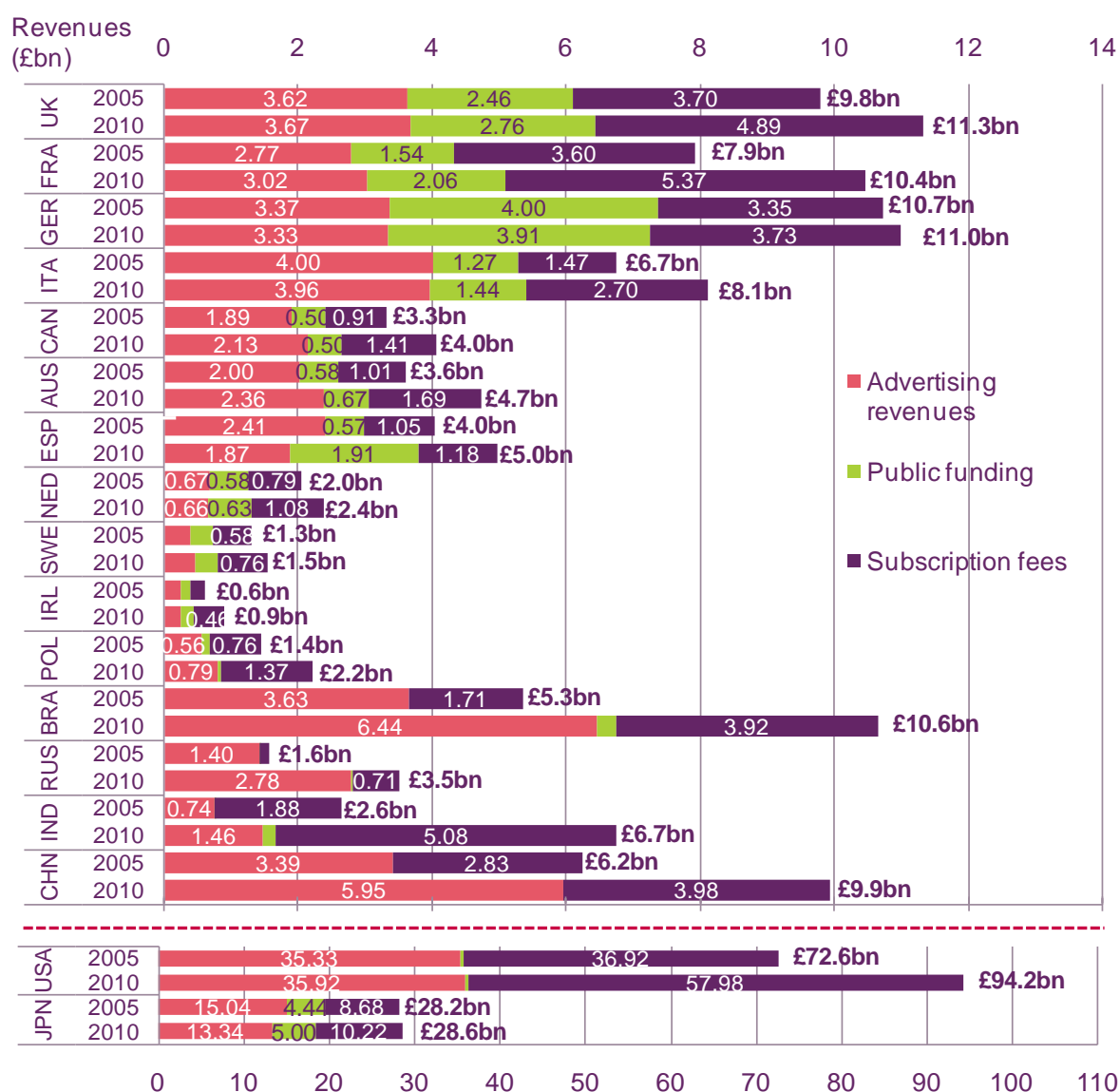
In other European countries, Spain is notable for having increased public funding three-fold over the past five years, from £0.57bn in 2005 to £1.91bn in 2010. It introduced legislation in September 2009 that prohibited TV advertising and other means of generating direct revenue for public broadcaster RTVE. To compensate for this loss, a tax system was introduced. Free-to-air commercial broadcasters and pay-TV operators have to pay 3% and 1.5% of their respective revenues to fund RTVE, while operators of electronic communications have to pay 0.9%. Meanwhile, 80% of the existing levy on radio spectrum used is also granted to RTVE, up to a maximum of €330m. the existing levy on radio spectrum.

The US and Japan, the two largest countries by revenue, are included at the bottom of the chart to accommodate the higher scale. The US experienced relatively flat TV advertising revenues over the five-year period, with the vast majority of growth coming from pay-TV subscriptions (up from £72.6bn in 2005 to £94.2bn in 2010). In contrast, Japan experienced a decline in advertising revenues (from £15.04bn in 2005 to £13.34bn in 2010) while revenues from pay-TV subscriptions remained constant at around £28bn.

The television markets of the BRIC countries all recorded increases in total revenues between 2005 and 2010, driven by an increase in both net advertising revenue and subscriptions. However, the BRIC countries are notable for a lack of public funding, with

only Brazil and India having any public funds attributed to TV in 2010 – £0.3bn and £0.2bn respectively.

**Figure 3.17 TV revenues among comparator countries, by source 2005 and 2010**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only. Different scale used for USA and Japan due to larger size.

### 3.2.3 TV revenue per head among comparator countries

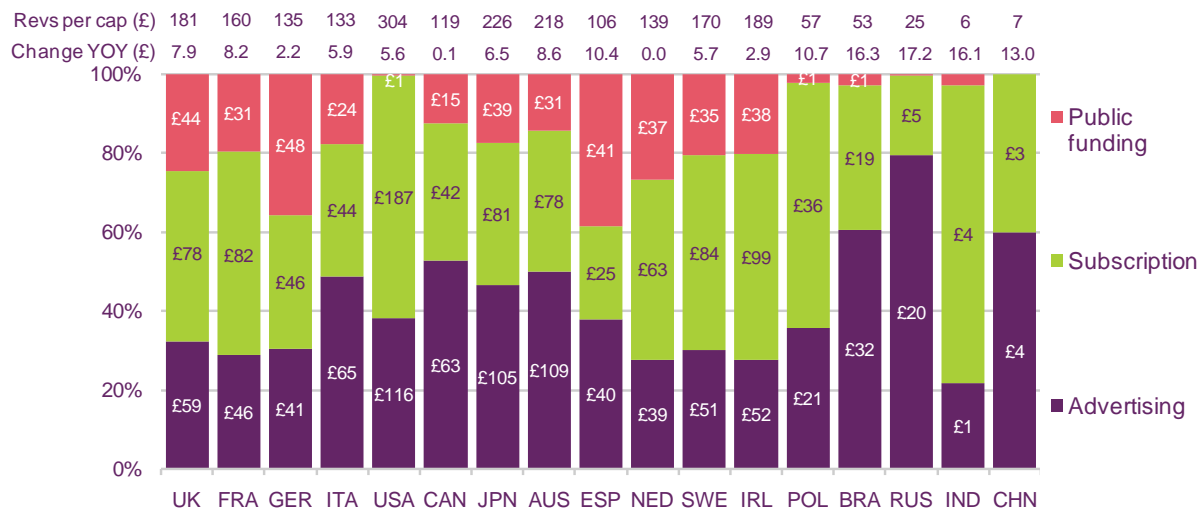
#### The US continues to generate the most revenue per head

Per head, revenue in the US continued to lead the 17 comparator countries, generating £304 per head in 2010, an increase of 5.6% year on year. This is some way ahead of the second-highest, Japan, which has increased by 6.5% since 2009 to £226 per head.

The UK, recorded a 7.9% increase in revenue per head; to £181 in 2010.

Russia experienced the largest growth in revenue per head in 2010 (up 17.2% on 2009), although it is worth noting that, given its large population and lower TV revenues, revenue per head in Russia (together with India and China) is much lower than the other comparator countries.

**Figure 3.18 TV revenue per head, by source 2010**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only; figures inside the bars represent industry revenue per head by source.

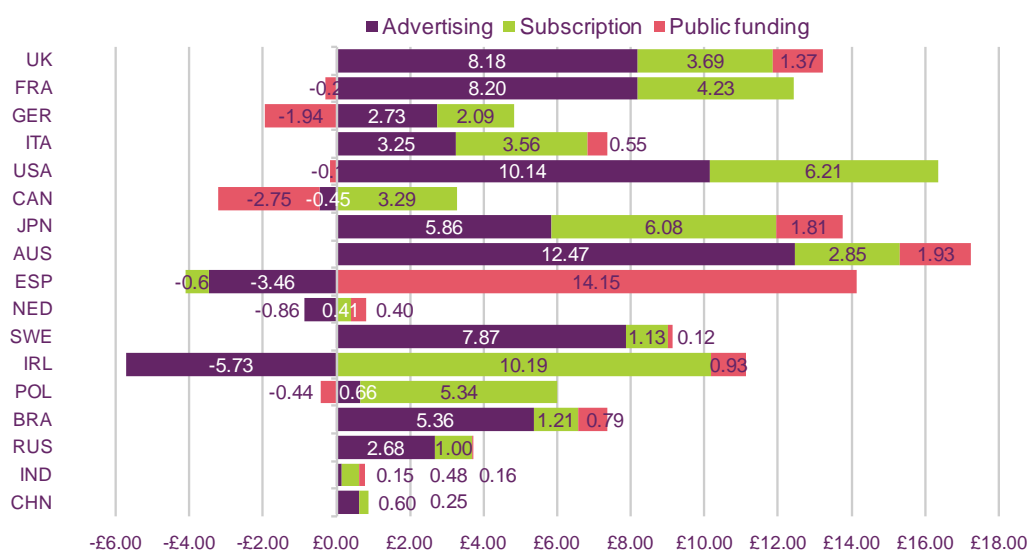
### Advertising and subscriptions revenues per head bounce back in 2010

Figure 3.19 details the changes by country in revenue per head, split by the three component parts. In almost all countries, advertising revenue per head increased year on year as the industry recovered from the declines experienced in 2009 as a result of the economic downturn. The only countries not to recover advertising revenues in 2010 were Ireland and Spain (and to a lesser extent Canada and the Netherlands) where advertising continued to fall on a per-capita basis; by £5.73 and £3.46 respectively.

Declines in advertising revenues per head for Ireland in 2010 were offset by growth in per-capita subscription revenue, which increased by £10.19 on 2009. The US also experienced significant increases in subscription revenues per head, with a £6.21 increase year on year, while in the UK it rose by £3.69.

In terms of public funding the most notable change is a large increase in revenue for Spain (up £14.15 versus 2009). This is due to the Spanish government having changed the funding structure of its main public broadcaster, RTVE. Further information on public funding in the Spanish TV market is provided below.

**Figure 3.19 Changes in components of TV revenues per head: 2009 to 2010**



Source: IDATE / industry data / Ofcom.

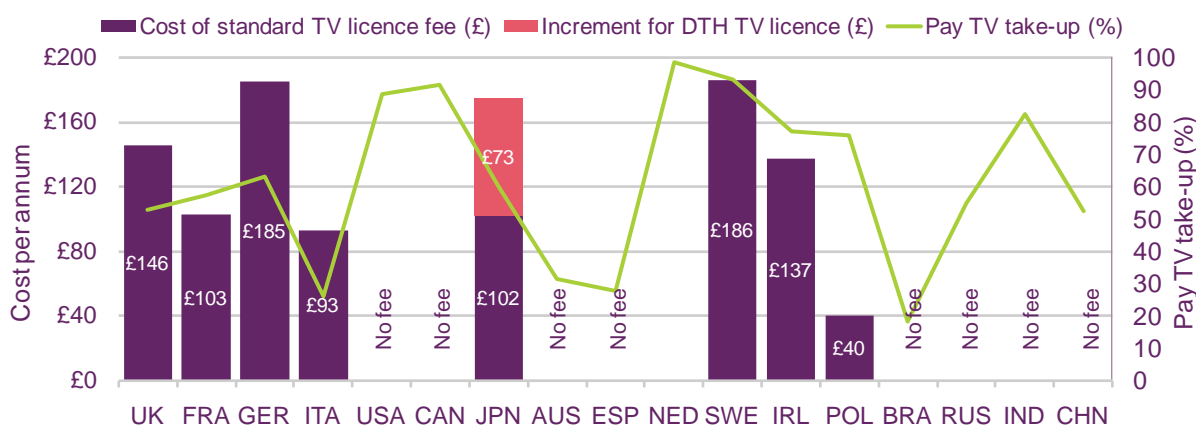
Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. Revenues include advertising, subscriptions and sources of public funding only; the bars represent changes in industry revenue per head, by source.

### 3.2.4 TV licence fees most common in Europe

Public funding, in the form of TV licence fees paid for by viewers, remains an important element of TV finance in most of the major European markets included in this analysis. Figure 3.20 illustrates the cost of TV licence fees and the markets in which they operate. It also shows pay-TV penetration, for comparison.

The UK's licence fee was the fourth most expensive, at £146 (up from £143 in 2009), behind Sweden (up from £173 in 2009 to £186 in 2010), Germany (£185, down from £192) and Japan (unchanged at £175 for a satellite TV licence). There does not appear to be any correlation between viewers' propensity to pay a TV subscription and whether or not they are already paying a TV licence fee.

**Figure 3.20 Cost of a TV licence fee**



Source: IDATE / industry data / Ofcom.

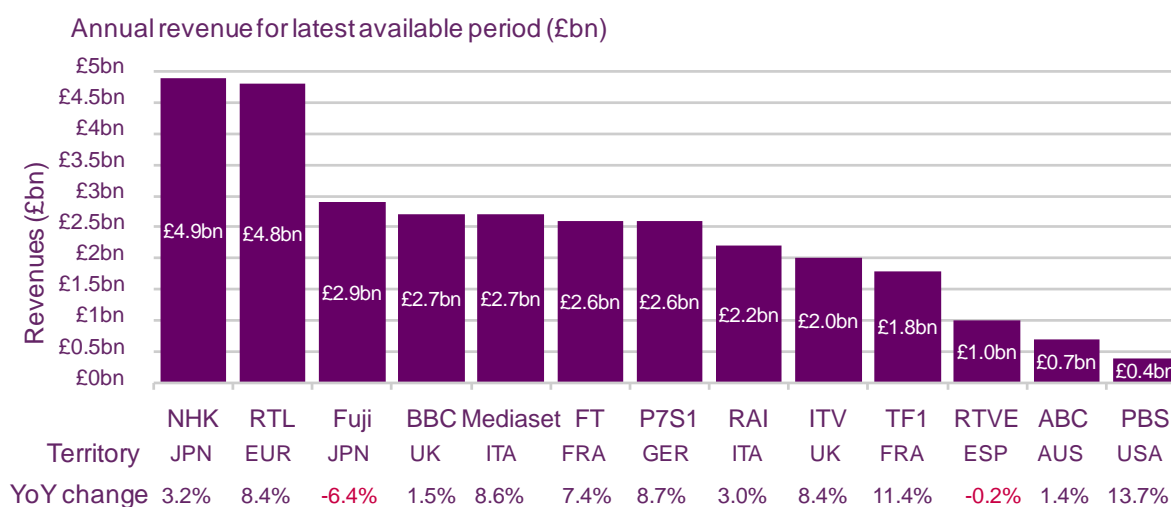
Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010; Prices as of end 2010. Note: The Japanese licence fee costs £102 in terrestrial households or £175 (rounded) to receive a larger number of channels via satellite.

### 3.2.5 Ad recovery drives revenues for many free-to-air broadcasters

In 2009, nine of the 13 free-to-air broadcasters included in our analysis experienced declines in revenue, due to the advertising downturn and exposure to cyclical advertising markets. 2010 saw a resurgence in the advertising market, resulting in the major free-to-air broadcasters growing their revenues year on year. In the UK, ITV saw an increase of 8.4% to £2.0bn, whilst ProSieben in Germany recorded an increase of 8.7%. TF1 in France and RTL in the Netherlands both experienced increases of 8.4%.

The only free-to-air broadcasters in our analysis in Figure 3.21 which failed to report an increase in revenues since 2009 were Fuji in Japan (down 6.4%) and RTVE in Spain (down 0.2%).

**Figure 3.21 Latest reported revenues from selected free-to-view operators, 2010**



Source: IDATE / industry data / Ofcom.

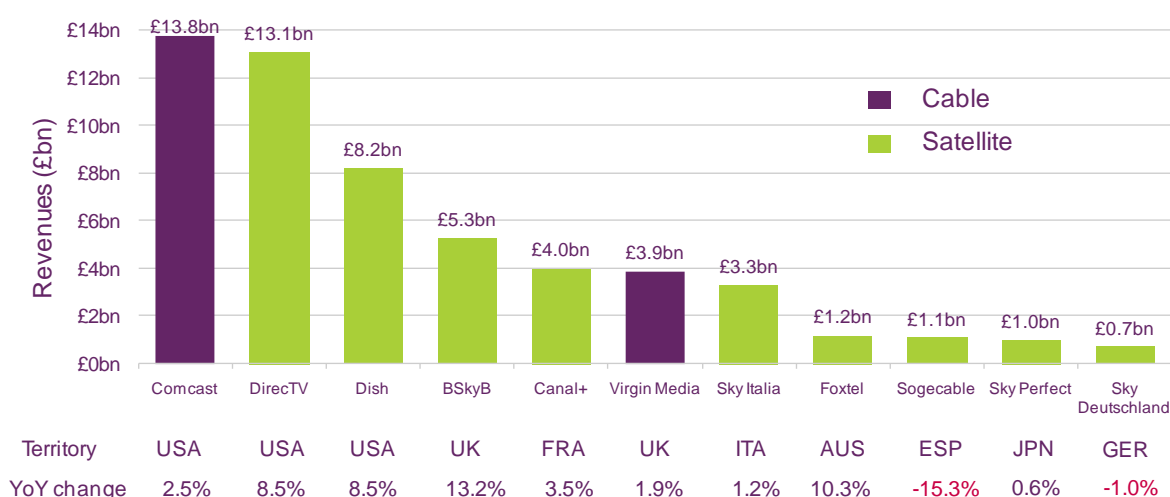
Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010; Comparisons should be regarded as indicative only due to the possibility of differences in financial reporting between broadcasters. From 2009, RTL figure includes its key European markets; Mediaset includes Italian business and from 2005 FTA and pay TV (year ending Dec 31) BBC represents its income allocated to TV; RAI figures include licence fee (split between radio and TV unknown), TV advertising and sponsorship; ProSieben, group revenues (years ended Dec 31); France Televisions is licence fee and advertising; TF1 includes French channels (years ended Dec 31); PBS and the ABC are total revenue to year ending June 30; Fuji TV is broadcasting and production, year ending March 31; RTVE is advertising and public funding (as of year ending Dec 31)

### 3.2.6 Pay-TV revenues up despite tough trading conditions

Pay-TV companies continue to outperform their free-to-air counterparts, with revenues up for all but two operators in our analysis. The pay-TV operator which experienced the most significant jump in earnings, proportionally, was BSkyB in the UK, up £600m (13.2%) to £5.3bn (this also includes revenues from its telecommunications services). Comcast, the largest pay-TV operator in the US, recorded a 2.5% increase, pushing its total reported revenue up to almost £14bn.

Sogecable (which owns the Digital Plus satellite broadcaster in Spain) experienced a drop in earnings for the second year in a row – declining 18.6% in 2009 to 1.4bn, and a further decline of 15.3% in 2010 to £1.1bn. Competition in Spain has intensified in recent years as IPTV operators have entered the market and pay-DTT has begun offering a low-cost means of accessing some premium content.

**Figure 3.22 Latest reported revenues from selected pay-TV operators, 2010**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010; where possible we have reported revenues related to the TV services only (including advertising). Comcast includes video and advertising revenues; Time Warner Cable includes video and advertising revenues; BSkyB include retail, wholesale and advertising revenues; KDG includes cable access and TV/radio revenues; Virgin Media includes consumer and content revenues; Sky Italia revenue based on IDATE's estimate from News Corporation's annual report; Canal+ represents Canal Plus Group pay-TV revenues; Sogecable's platform is Digital Plus.

### Australia generated the most pay-TV ARPU in 2010

Average revenue per user (ARPU) can provide insights into the relative performance of different pay-TV operators (Figure 3.23 focuses on annual ARPU). The Australian television market delivered the highest ARPU level in 2010 at £695, up by 21.5% since 2005.

Figures from Foxtel (Australia's largest pay-TV platform, with 1.54 million customers in June 2010), indicate that a high proportion of the customer base were taking premium services – roughly 250,000 of its subscribers were taking Foxtel's high-definition TV services; 35% opted for the multi-room service, and almost a third (60%) took Foxtel's DVR.

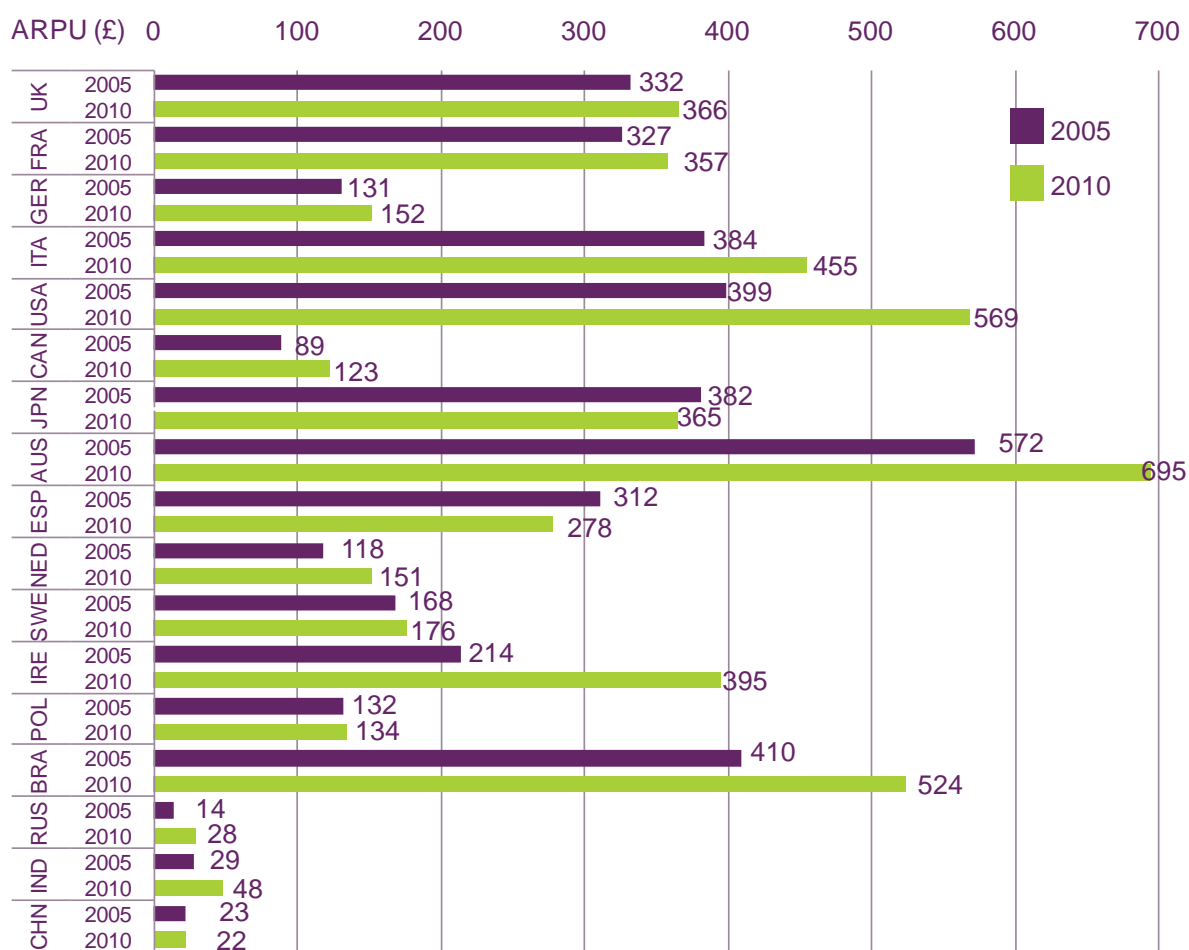
The Australian market was some way ahead of the second highest-ranking ARPU figure, in the US, which stood at £569, representing a 43% increase over five years.

The third-highest market by ARPU was Brazil, where ARPU stood at £524 in 2010, up from £410 in 2009. DirecTV Latin America, the satellite broadcaster that holds a majority stake in Sky Brazil, has cited growing demand for its pre-paid DVR and HDTV services in 2010, driven by a rapidly growing middle market segment.

Japan and Spain were the only countries in our analysis to experience a decline in ARPU over the five-year period, down by 4.5% to £365 and by 10.9% to £278bn respectively, as consumers migrated away from satellite TV to other platforms such as digital terrestrial and IPTV.

The UK was among the countries with higher ARPU, at £332 at the end of 2010, up by 10%.

**Figure 3.23 Pay-TV ARPU, by country: 2005-2010**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010. ARPU is average revenue per user, representing the average revenue generated per pay TV subscriber.

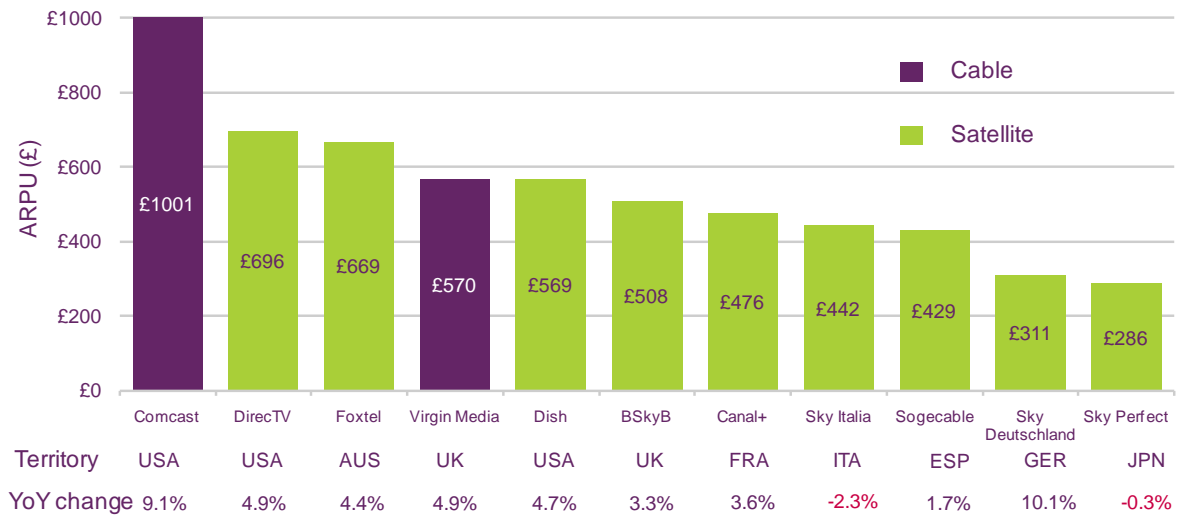
### US operators generate the highest ARPU

Figure 3.24 analyses annual ARPU, reported at the end of 2010, for selected pay-TV operators and shows that at £1001, Comcast generated a substantially higher ARPU than other operators in our analysis – although this includes revenues earned from pay-TV and telecommunications products such as telephone and broadband

Virgin Media earned average revenue of £570 per customer, up from £538 in 2009. It is the only UK operator to offer a ‘quad-play’ product bundle of TV, telephone, broadband and mobile.



**Figure 3.24 Latest reported ARPU for selected pay-TV operators, end 2010**



Source: IDATE / industry data / Ofcom.

Notes: Ofcom has used an exchange rate of \$1.546 to the GBP, representing the IMF average for 2010; latest available company reports; ARPU is average revenue per user; figures are indicative only as definitions of ARPU may differ and some operators include telecommunications revenue in annual ARPU (the chart is therefore also not directly comparable to country level ARPU analysis) Platform represents main distribution method.

## 3.3 The TV and audio-visual consumer

### 3.3.1 Summary

This is the final chapter of the audio-visual section. In Section 3.3.2 it examines patterns of digital television take-up, before considering the adoption of high-definition television, digital video recorders and connected televisions (Section 3.3.3). Section 3.3.4 analyses the number of pay-TV homes in each country, before examining how viewers in different countries consume broadcast television channels and TV online (Section 3.3.5). Section 3.3.6 concludes with a consideration of consumers' use of video-on-demand services.

- **In the UK, Spain and France, nine in ten homes had digital television by the end of 2010**, with take-up reaching 97%, 98% and 93% respectively. In the US, the comparable figure was 87%, while 83% of households in the Republic of Ireland had DTV.
- **Year on year, growth in digital television take-up was greatest in Brazil**, where penetration rose by 20 percentage points. In the Republic of Ireland, DTV take-up increased by 18pp, while in Spain and Australia it increased by 14pp. By comparison, take-up in the UK rose by 3pp over the same period, as the digital switchover programme entered its final phase.
- **Despite the growing take-up of a range of digital media technologies, minutes per head of TV viewing rose in 2010 in many countries.** TV was most popular in the US in 2010, where viewers watched an average of 283 minutes per day, up by 1.1% year on year. In Italy, the comparable figure was 246 minutes (up by 3.4% over the year), and in Poland 245 minutes (2.1%). The equivalent figure in the UK was 242 minutes – up by 7.6%.
- **Take-up of high-definition services has entered the mainstream in several countries, reaching 60% of all homes in France** (up by nearly half on the year). In the US the figure was 54% (an increase of one fifth) and 40% in Japan (little changed over the period). In the UK, HDTV was available to a fifth (21%) of homes – up by over half year on year.
- **Digital video recorders are increasingly prevalent among homes in comparator countries.** Across the UK, France, Germany, Italy, US and Spain, nearly three in ten households had a DVR connected to their main set. Take-up of these devices was highest in the US, where take-up stood at 41% in Q4 2011 (up by 2pp year on year). The UK ranked second, with penetration rising to 36% over the period (up by 4pp – the largest increase among the countries in this survey).
- **By country, pay-TV take-up at the end of 2010 was highest in the Netherlands (98%) and Sweden (93%), alongside India (82%), the US (88%) and Canada (91%);** this compared to take-up of 52% in the UK. Growth in pay-TV penetration was greatest in Russia (up by 6.4pp), the Republic of Ireland (up by 5pp), France (+4.6pp), Japan (+3.8) and Brazil (+3.4). In the UK, pay-TV take-up rose by 0.5pp over the same period.
- **In the US, over a third (34%) of consumers claim to personally use a video-on-demand service, compared to 29% in France and just under a quarter (24%) in the UK.** Growth was highest in those countries where use of video on demand has yet to reach a mainstream audience – rising by 33% in Germany and 31% in Italy.

### 3.3.2 Digital television take-up on main sets

#### More than nine in ten homes have digital television in the UK, France and Spain

Figure 3.25 and Figure 3.26 illustrate the growing take-up of digital television across the 17 comparator countries; for ease of interpretation, the countries are illustrated in two charts. Note that the UK digital television figures in this report are compiled using a different methodology to Ofcom's quarterly DTV [report](#); as a result, the two sets of data are not directly comparable.

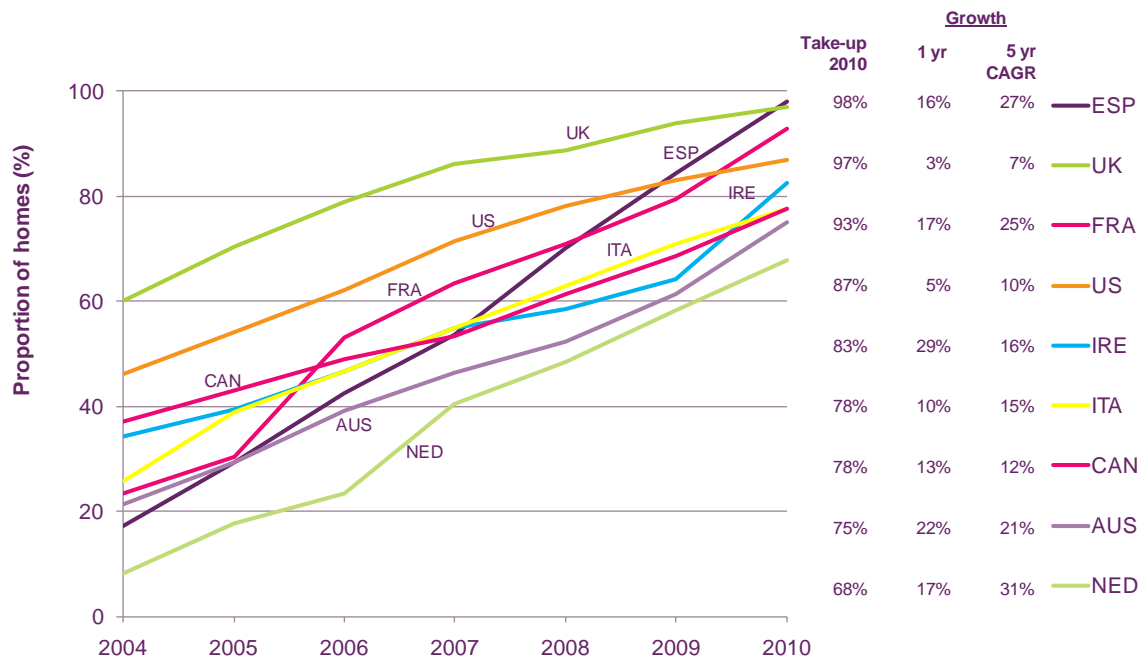
Homes in Spain benefited from near-universal take-up on main sets, as the digital switchover programme was completed in 2010. In the UK, take-up reached 97% by the end of 2010, while in France, where terrestrial switchover will be completed in November 2011, over nine in ten homes (93%) had digital television. In the US, where the analogue terrestrial signal was switched off in 2009, digital television take-up reached 87%; in the Republic of Ireland, penetration reached 83%, and exceeded the 80% threshold for the first time in 2010.

At the opposite end of the spectrum, digital television take-up in Russia, China and India remained well below the average among comparator countries (68%), at 34%, 33% and 29% respectively. But in each case the rates of DTV adoption ran well ahead of the comparator country averages (which stood at 20% year on year, and 28% per annum over a five-year period).

Annual rates of DTV take-up varied substantially among the remaining comparator countries. In the UK, US and Japan, they were in single digits – perhaps less surprising in the UK and US, given the high levels of DTV penetration (97% and 87% respectively); in Japan year-on-year DTV growth was comparatively slow despite DTV take-up of 66%. This might be explained by the comparatively slow digital migration among analogue cable subscribers.

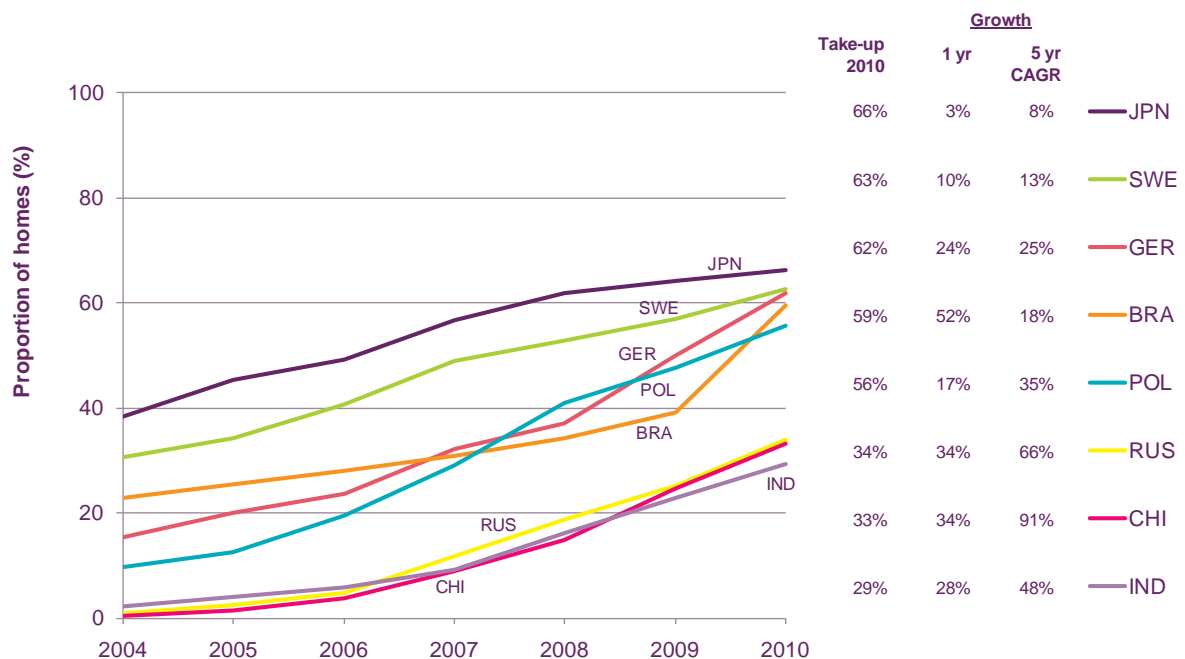
The highest rates of growth in DTV take-up year on year were in the BRIC countries, as a result of rapid DTT migration in Brazil, high rates of digital satellite take-up in Brazil, Russia and India, and high levels of digital cable migration in China. Digital migration rates were also high in the Republic of Ireland (up by nearly a third as a result of increases in digital terrestrial, satellite and, to a degree, cable take-up) and Germany (up by a quarter, brought about by migration to digital on both the cable and satellite platforms)

**Figure 3.25 Take-up of digital television – top nine comparator countries**



Source: IDATE / industry data / Ofcom.

**Figure 3.26 Take-up of digital television – the next eight comparator countries**



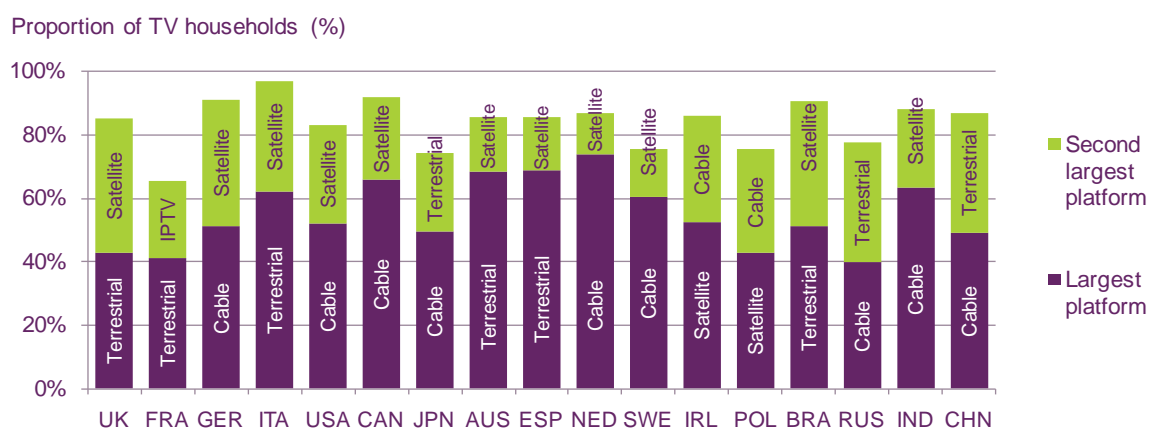
Source: IDATE / industry data / Ofcom.

Taking both analogue and digital technologies *together*, cable is the most popular television platform in more than half (nine) of the 17 comparator countries, comprising Germany, the US, Canada, Japan, the Netherlands, Sweden, Russia, India and China. Terrestrial is most popular in a further six countries, including the UK, France, Italy, Spain, Brazil and Australia.

Satellite is the largest platform in the remaining two countries, Poland and the Republic of Ireland.

While satellite may not be the top technology choice in many countries, it is often the second most popular platform, taking second place in eleven of the 17 countries analysed here. Terrestrial accounts for a further three countries (Japan, Russia and China), cable for two (Poland and the Republic of Ireland) and IPTV one (France).

**Figure 3.27 The two most popular DTV platforms, by country, 2010**



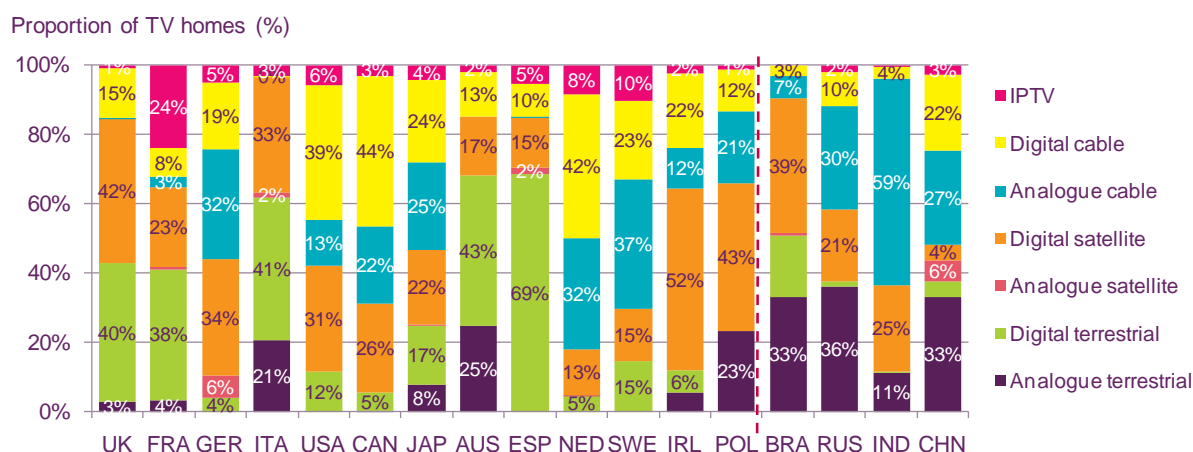
Source: IDATE / industry data / Ofcom.

Splitting the platforms into their analogue and digital components, the *digital* terrestrial television platform continues to be the largest by market share in Spain (69% of main sets), Australia (43%), Italy (41%) and France (38%). It is also a substantial player in the UK (with a 40% share), ranking second to digital satellite (42%). *Digital* satellite is also the leading platform in Germany (with a 34% market share), and in Brazil (39%), Poland (43%) and the Republic of Ireland (52%). *Digital* cable is the most popular platform in the US (with a 39% share of homes), and in Canada (44%) and the Netherlands (42%).

Despite the progress made in many countries in migrating homes to digital television platforms, analogue technologies are still widely used. The analogue cable network is still popular in India, where this is the largest platform with a 59% share of main television sets. The comparable figure in Sweden is 37%, and 32% in the Netherlands and Germany.

Analogue terrestrial technology still has a substantial share of sets in Russia (36%), where it is the largest television platform overall; the same is true in China, where it has a 33% share of homes. While it is no longer the largest platform in many more developed economies, a quarter of Australian homes at the end of 2010 took analogue terrestrial, and nearly a quarter (23%) of Polish homes also had analogue terrestrial tuners connected to their main sets. The comparable figure in Italy is 21%. Analogue satellite has little or no market share in any of the countries in this report. It commanded a 6% share of homes in both Germany and China, and a 2% share in Spain.

**Figure 3.28 Take-up of DTV, by platform and country: 2010**



Source: IDATE / industry data / Ofcom.

Figure 3.29 sets out changes in the percentage point take-up of the different television platforms. The red/green tint provides an indication of the relative change in each platform's take-up, when compared to the other changes set out in the table.

The association of analogue technologies with 'red' tints makes clear the degree of migration from analogue to digital technologies. On average, analogue platforms lost a collective 10pp of share across the comparator countries; this ranged from a 6pp reduction in North America to 11pp in Europe and 11pp in BRIC. In the UK, where digital television migration is at an advanced stage, DTV take-up rose by just 3pp over the year, as the television market approached saturation.

By country, the most substantial change in take-up in 2010 was experienced by homes in Brazil, where the only analogue television technology to lose market share – terrestrial – saw its market share fall by 20pp. Digital terrestrial was the main beneficiary, picking up 15pp share, while digital satellite take-up rose by 5pp. Analogue terrestrial take-up in the Republic of Ireland fell by 15pp, and there were substantial reductions in Australia (-14pp), Spain (-12pp) and France (-11pp), reflecting a combination of DSO initiatives and the widening availability of digital television platforms.

The progressive upgrade of cable infrastructure to digital during 2010 was reflected in the reduction in analogue cable take-up in the Netherlands, Canada and Sweden, which fell by 10pp, 7pp and 6pp respectively, as digital cable take-up rose more or less commensurately. Elsewhere, the cable market lost share – in Germany, analogue cable take-up fell by 9pp while its digital counterpart rose by just 4pp (possibly explained by higher digital cable tariffs).

**Figure 3.29 Changes in platform take-up (pp) by country and technical platform**

	UK	FRA	GER	ITA	US	CAN	JPN	AUS	ESP	NED	SWE	IRE	POL	BRA	RUS	IND	CHI	Av	Av Eur	Av BRIC	Av NA
Digital terrestrial	-2	6	0	5	1	1	-2	12	11	-1	0	6	0	15	1	1	1	3	3	5	1
Digital satellite	4	1	6	1	0	0	-2	0	0	-1	0	8	2	5	5	5	1	2	2	4	0
Digital cable	0	1	4	0	2	7	3	0	2	7	5	3	6	0	2	1	5	3	3	2	4
IPTV	0	5	2	0	1	0	2	1	0	4	1	1	0	0	1	0	1	1	2	1	1
<b>Total digital</b>	<b>3</b>	<b>13</b>	<b>12</b>	<b>7</b>	<b>4</b>	<b>9</b>	<b>2</b>	<b>14</b>	<b>14</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>8</b>	<b>20</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>6</b>
Analogue terrestrial	-3	-11	0	-6	0	-2	0	-14	-12	0	0	-15	-2	-20	-8	-4	-6	-6	-5	-10	-1
Analogue satellite	0	-1	-3	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0
Analogue cable	0	-1	-9	0	-4	-7	-1	0	-2	-10	-6	-4	-6	0	0	-2	-2	-3	-4	-1	-5
<b>Total analogue</b>	<b>-3</b>	<b>-13</b>	<b>-12</b>	<b>-7</b>	<b>-4</b>	<b>-9</b>	<b>-2</b>	<b>-14</b>	<b>-14</b>	<b>-10</b>	<b>-6</b>	<b>-18</b>	<b>-8</b>	<b>-20</b>	<b>-9</b>	<b>-6</b>	<b>-8</b>	<b>-10</b>	<b>-10</b>	<b>-11</b>	<b>-6</b>

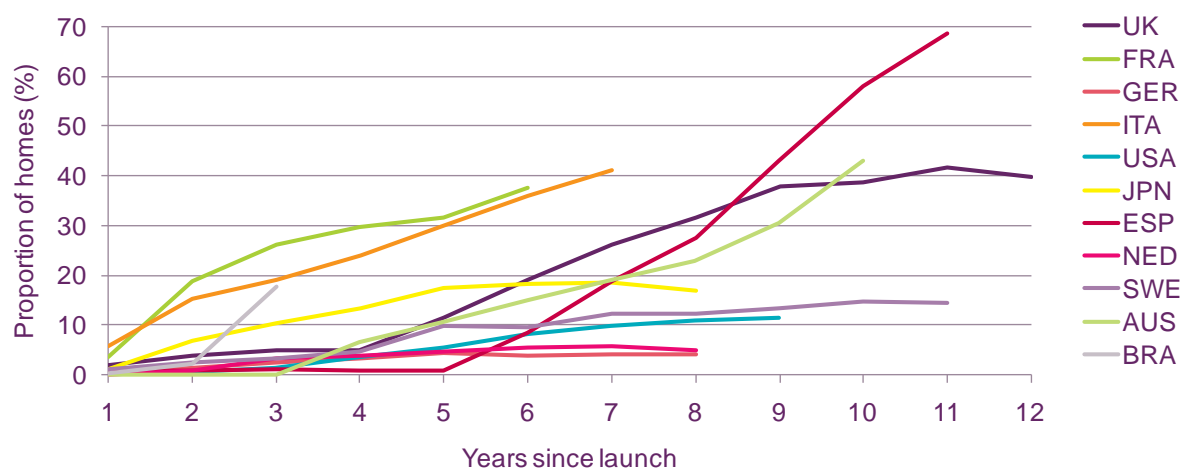
Source: IDATE / industry data / Ofcom.

In many countries, the digital terrestrial platform plays an important role in freeing up analogue broadcast spectrum for alternative uses. As a result, the DTT platform is well established in a range of the comparator countries analysed in this report, including the UK, Spain, Australia, Sweden, the US, Japan and Germany.

Two patterns of adoption have emerged, possibly influenced both by how recently the platform launched in different countries, and by the significance of the platform in each:

- **DTT take-up has begun to plateau.** In the UK, around four in ten homes have DTT connected to their main set, and this figure has remained broadly flat over the past eighteen months. At a lower level, DTT take-up has plateaued in Germany, the Netherlands, the US, Sweden and Japan, at or below 20% of homes.
- **DTT continues to grow in popularity.** In Spain and Australia, where take-up was highest, penetration stood at 69% and 43% respectively in 2010. In both these countries, the platform is long-established, and rising take-up appears to have been fuelled by switchover. In Brazil, Italy and France, the DTT platform launched more recently, yet take-up is at, or near, 40%, in both France and Italy.

**Figure 3.30 Proportion of main sets connected to DTT since platform launch**



Source: IDATE / industry data / Ofcom.

### 3.3.3 Take-up of HDTV services, digital video recorders and connected TVs

#### Take-up of high-definition services has entered the mainstream in several countries

Take-up of high-definition television services on the main television set was highest in France and the US, where take-up stood at 60% and 54% respectively. Such was the year-on-year growth in HDTV take-up (up by 44% in France since 2009, and by 21% in the US) that, for the first time, a majority of households in each country were receiving HD channels.

Growth in HDTV take-up in the US during the past year (21%) was broadly equal to the average annual growth for the past three years (22% per year); in France, however, growth in the past 12 months slowed, to 44%. In Japan, high-definition services have been available for quite some time (beginning with an analogue high-definition standard in the 1980s). But growth in take-up has been modest over the past three years, with the result that having been the leading nation for high-definition take-up, it now lags behind both the US and France.

**Figure 3.31 Number of HDTV homes, by platform and country, end 2010**



Source: IDATE / industry data / Ofcom.

By platform, satellite and cable have together played a significant role in driving HD take-up during 2010. In the UK, satellite (in the form of Sky HD and Freesat HD) was the main driver behind HD growth, accounting for 3.1 percentage points (pp) of HD take-up during 2010 (cable accounted for a further 2.4pp). The same platform (Sky Deutschland in this case) accounted just under a half (3.0pp) of the growth in HD take-up in Germany (cable ranked second, with HD take-up rising by 2.9pp); it also accounted for nearly half of all HD additions in the US (with HD services on satellite rising by 4pp).

In France, by contrast, rising take-up of IPTV widened access in the home to HD channels during 2010, with nearly half of all total growth (8.6pp) in HD coming from IPTV decoders (DTT ranked second, with HD DTT penetration rising by 5.9pp).

The DTT platform not only supported rising HD take-up in France; in the UK, it accounted for a quarter of all new HD additions during 2010, and in Italy, it was a primary driver of rising HD adoption – with take-up there rising by 8.2pp (with satellite accounting for a further 7.5pp).



**Figure 3.32 Percentage point change in the take-up of HD decoders connected to main sets**

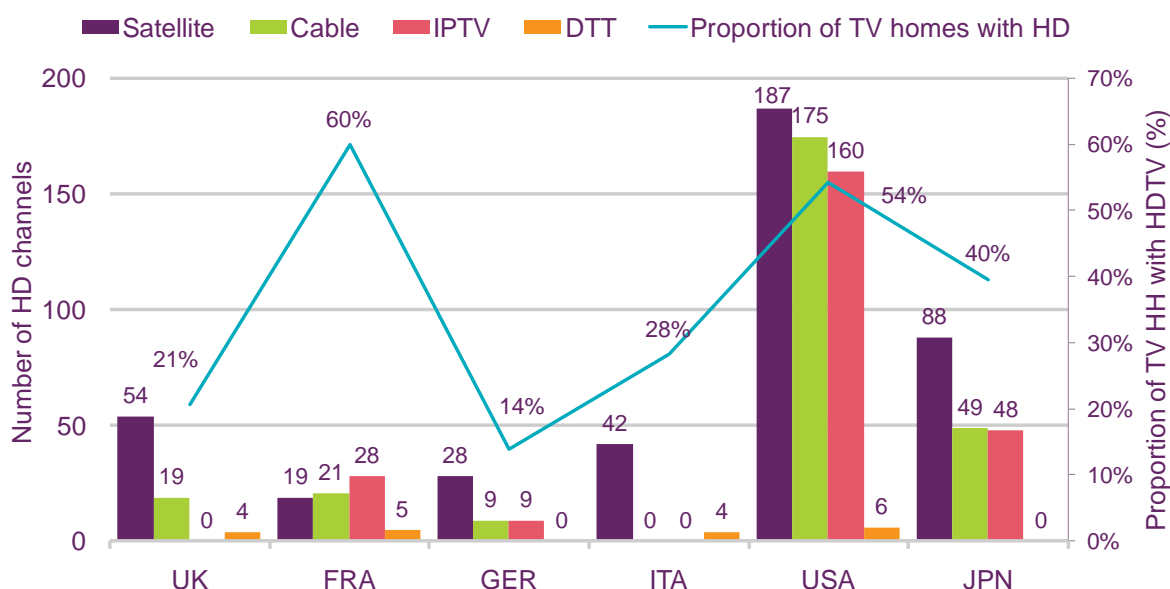
	UK	FRA	GER	ITA	US	JPN
Satellite	3.1	2.8	3.0	7.5	4.0	0.9
DTT	1.7	5.9	0.0	8.2	0.7	-1.4
Cable	2.4	1.2	2.9	0.0	2.8	0.1
IPTV	0.0	8.6	0.9	0.0	2.0	0.0
<b>Net increase</b>	<b>7.2</b>	<b>18.5</b>	<b>6.8</b>	<b>15.7</b>	<b>9.5</b>	<b>-0.3</b>

Source: IDATE / industry data / Ofcom.

Notes: Paying and FTA HD homes; no data available for IPTV in Japan.

With their ability to carry large numbers of high-bandwidth channels, both cable and satellite platforms now tend to offer access to the largest number of high-definition television channels – with satellite platforms typically carrying more HD channels than cable. While DTT has played a role in driving HD take-up in some countries, with less bandwidth on offer, it does, in the main, provide access to only the most well-established free-to-view networks.

**Figure 3.33 Number of HDTV channels and HD penetration, end 2010**



Source: IDATE / industry data / Ofcom.

Figure 3.34 sets out the changes in the number of high-definition channels, available on each platform within the countries where HD data are available. Thanks to the availability of bandwidth, satellite, in the main, continued to add more HD channels to its line-up than any other platform, with double-digit increases in channels in all countries except France during 2010. In France, the IPTV platform added ten HD channels year on year, while satellite added three.

HD viewers in both the US and Japan saw the more substantial increases in HD channel availability across all platforms, with an aggregate increase of 124 channels in the US, and an increase of 64 in Japan.

**Figure 3.34 Increases in the number of HD channels available, by platform: 2009 – 2010**

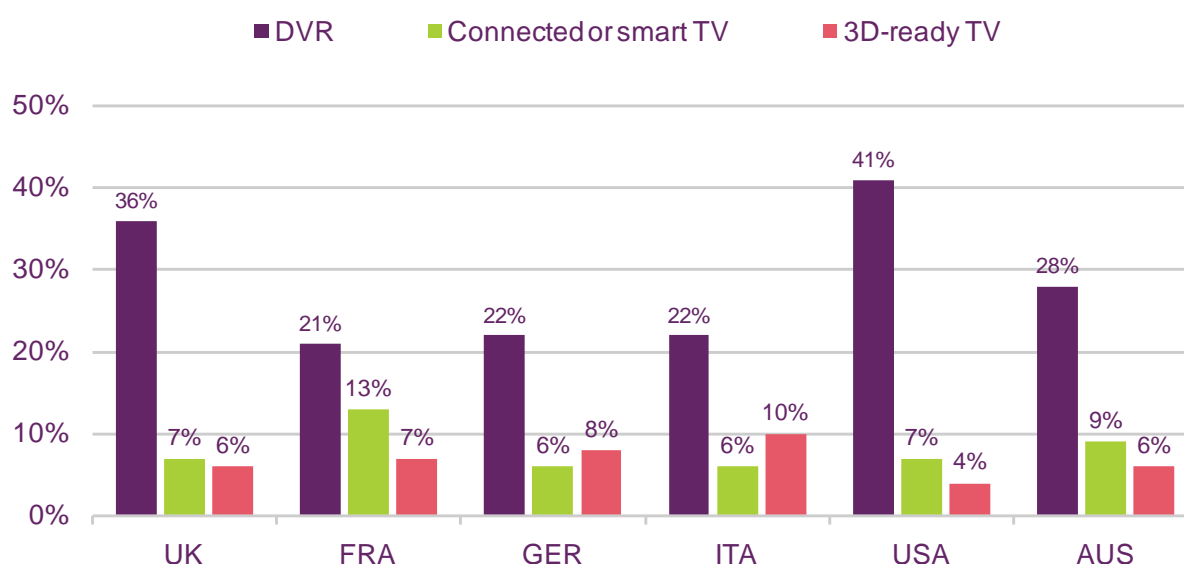
	UK	FRA	GER	ITA	USA	JPN
Satellite	17	3	21	12	37	30
Cable	10	5	2	0	45	17
IPTV	0	10	4	0	42	17
DTT	0	0	0	1	0	0

Source: IDATE / industry data / Ofcom.

### Connected TV and 3D-ready TVs grow in popularity

A range of other digital technologies are now being embraced by television viewers. Digital video recorders (allowing viewers to pause and rewind live television and to store content), were installed in 41% of US homes in 2010 and in 36% of UK homes. Connected televisions are a relatively recent innovation, allowing viewers to connect their television screens to the internet and thereby gain access to, for example, catch-up television services, social networking sites and video-sharing applications. Take-up was highest in France, where 13% of consumers claim to have a connected TV at home; this was followed by Australia (9% penetration) and the US and the UK (7% each). Televisions capable of displaying 3D content are being adopted by a small minority of households, appearing in 10% of homes in Italy, 8% in Germany and 7% in France; the comparable figure in the UK was 6%. The figures for connected TVs should be treated with a degree of caution owing to the comparative newness of the technologies and the possibility of over-claim among consumers (for example, as a result of confusion between connected television and IPTV); moreover, the extent to which consumers actually connect their internet-enabled television to the web was not explored in the consumer research – i.e. consumers may have the capability to connect their TV to the web, but not actually do it.

**Figure 3.35 Take-up of digital video recorders, connected TVs and 3D-ready TVs**



Source: Ofcom consumer research, October 2011

Base: All those who use the internet. Total sample size: UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

Q: Which of the following devices do you own and personally use?

### 3.3.4 Pay-television penetration

The popularity of pay-TV across comparator countries is influenced by a range of factors, including (i) the availability of free-to-view channels, (ii) the exclusive rights that pay-TV operators may have to particular programmes or types of content and (iii) the presence of publicly-funded television channels. Among the 17 comparator countries, six in ten homes (60%) paid for additional television channels in 2010, up by 3pp year on year and up by 14pp since 2005.

At least three patterns of pay-TV adoption have emerged among the comparator countries:

- **High and stable levels of take-up.** In North America, consumers have always been willing to pay for access to additional television channels, and take-up stood at 89% in 2010 – stable year on year and up by 5pp since 2005.
- **Moderate and stable penetration.** Among European countries, take-up of pay-TV has risen – by 7pp – since 2005, although more recently, the proportion paying for additional channels has remained flat, at around 55% of all homes. Within this figure, take-up varies substantially between European nations (see Figure 3.37).
- **Lower adoption levels, but rising.** In the developing economies of BRIC, pay-TV continues to grow in popularity (although this varies substantially by country). Take-up of pay-television rose by 4pp year on year and by 19pp since 2005.

**Figure 3.36 Take-up of pay television among groups of comparator countries**



Source: IDATE / industry data / Ofcom.

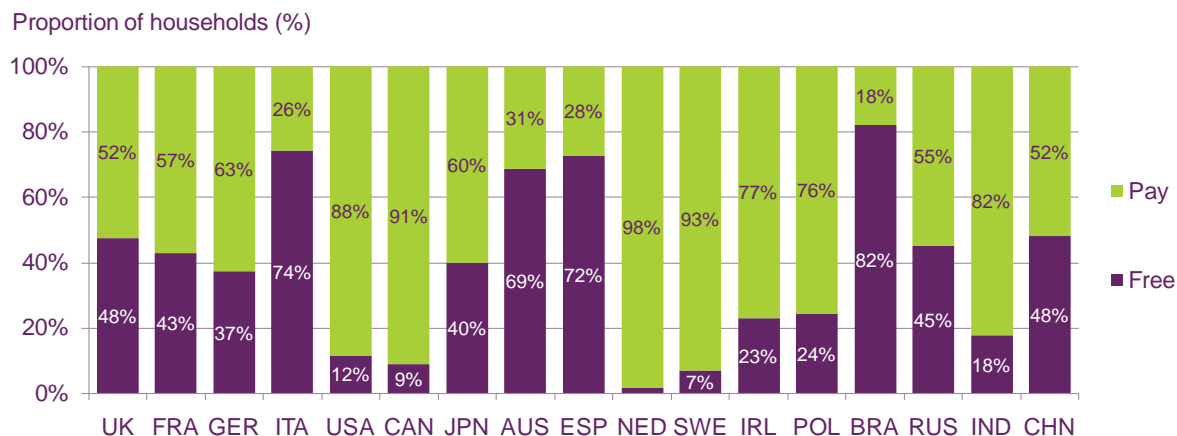
Note: 'Europe' in this context means those European countries within our comparator set. 'Total' in this context means the 17 countries in this report's comparator set.

By country, pay-TV take-up at the end of 2010 was highest in India (82%), the US (88%) and Canada (91%), alongside Sweden (93%) and the Netherlands (98%). However, the characteristics of pay-TV services differ from country to country. In the US and Canada, pay-TV services are similar to those in the UK (providing access to a large number of additional TV channels in exchange for payment). By contrast, the pay-TV fee for some cable packages in the Netherlands and Sweden is more akin to an 'access charge' in return for which consumers receive a limited number of television channels.

Among the remaining comparator countries, the free-to-view television model remained more popular. And in some countries, pay-TV was available in a far smaller proportion of

homes. For example, take-up in Brazil stood at just 18%, and in Italy just over a quarter of homes (26%) took pay-television; the comparable figure for Spain was 28% and for Australia 31%.

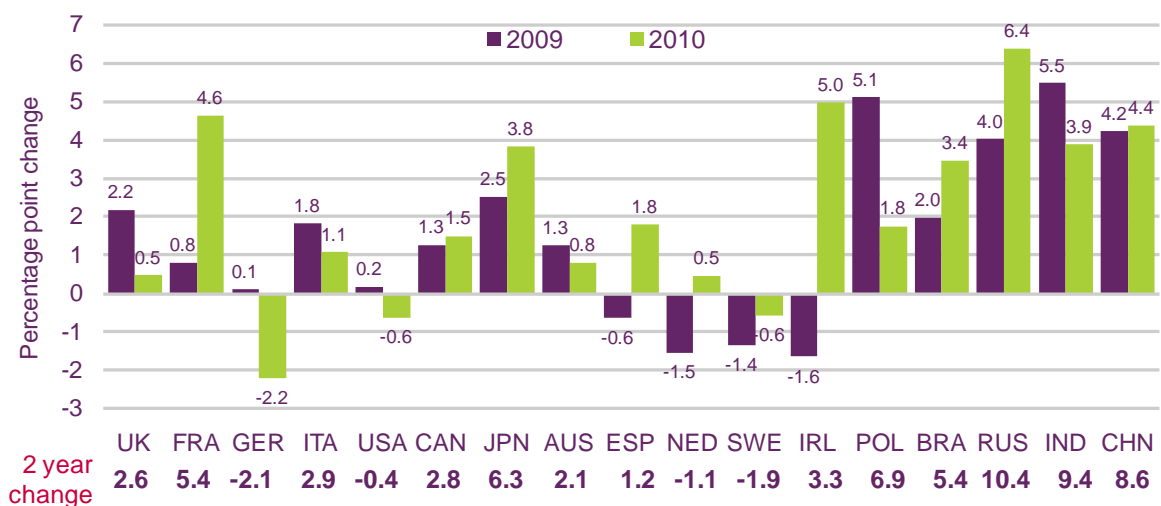
**Figure 3.37 Take-up of pay and free-to-air television: end-2010**



Source: IDATE / industry data / Ofcom.

Year-on-year trends in the adoption of pay-TV varied substantially across our comparator countries, as well as between 2009 and 2010. Growth in pay-TV take-up was most substantial during 2010 in Russia (up by 6.4pp) and the Republic of Ireland (up by 5pp). There was a modest contraction of 2pp in pay-television take-up in Germany. In the UK, take-up in 2010 rose by 0.5pp, following a 2.2pp increase in the previous year.

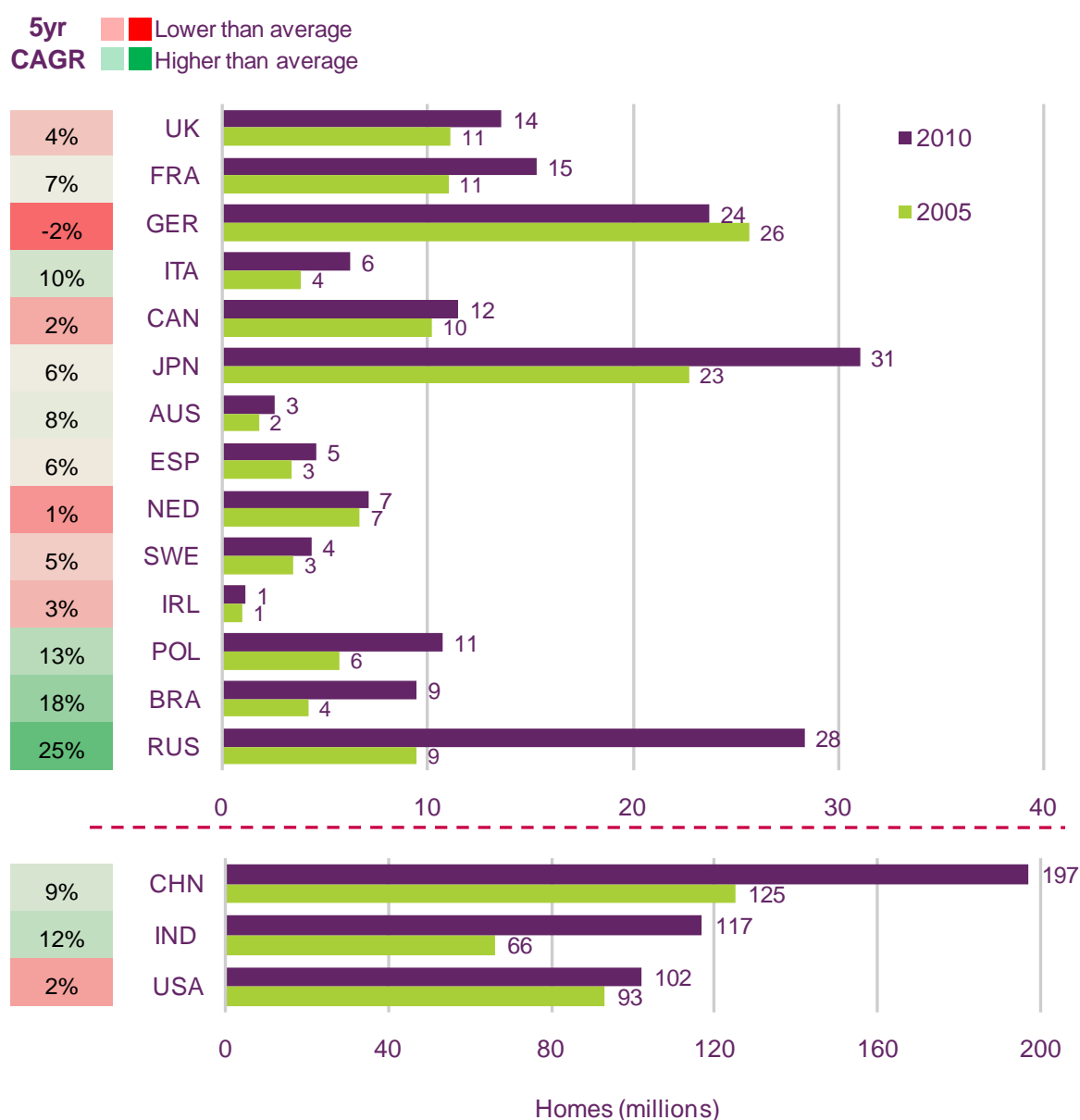
**Figure 3.38 PP increases in pay television take-up: 2009 – 2010**



Source: IDATE / industry data / Ofcom.

Over a five-year time period, the most substantial increases in the take-up of pay-TV were found in Russia (where the five-year annualized average growth rate stood at 25%). In the UK, pay-TV homes rose, on average, by 4% between 2005 and 2010.

**Figure 3.39 Pay television take-up in 2005 and 2010, millions of homes**



Source: IDATE / industry data / Ofcom.

### 3.3.5 Consumption of broadcast television services

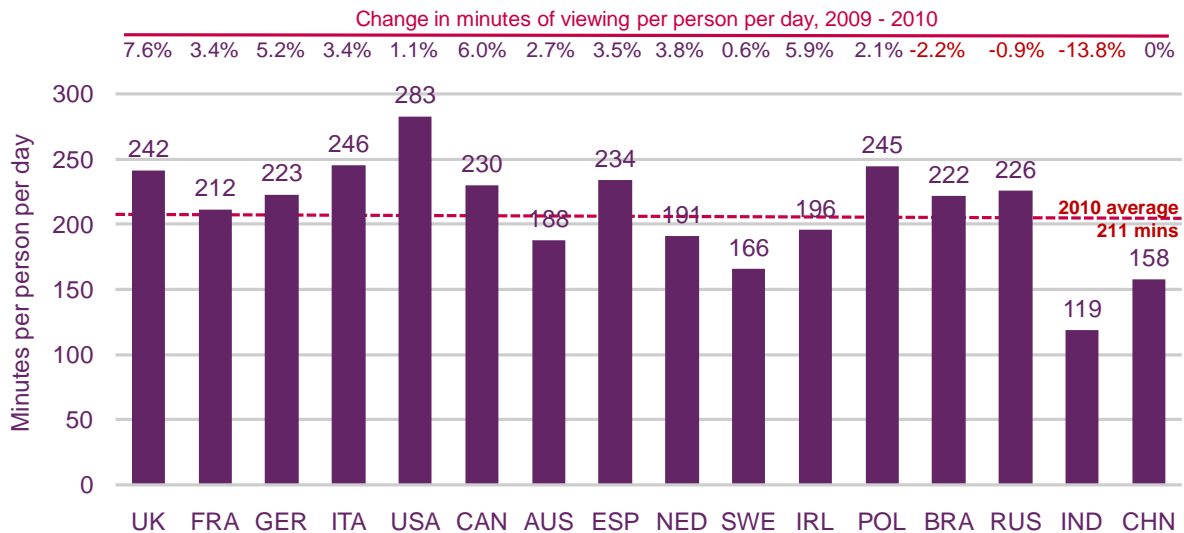
#### Television viewing per head rose in many countries during 2010 – and was highest in the US, Italy, Poland and the UK in 2010

Despite the growing adoption of a wide range of digital media devices and services, viewing of linear television output continues to be popular among consumers – and minutes of viewing per head per day has risen year on year in several comparator countries.

TV viewing was most popular in the US, where it reached 283 minutes per viewer per day, up by 1.1% year on year and over a third higher than the average across all the countries. In Italy, the comparable figure was 246 minutes (up by 3.4% over the year, and 17% higher than average), and in Poland 245 minutes (2.1%, 16% higher than average). The equivalent figure for television viewing in the UK was 242 minutes – up by 7.6% and 15% higher than the average of 211 minutes per head per day.

Year-on-year growth in viewing rose furthest in the UK (by 7.6% over the year), although the BARB panel composition was adjusted during the period, which may explain at least some of the increase. Viewing per head grew by 6.0% in Canada, by 5.9% in the Republic of Ireland, and by 5.2% in Germany. Among the BRIC countries, viewing contracted – by 13.8% in India (which may be explained by the rising numbers of households with televisions, and perhaps by lower levels of viewing among those who are new to the technology).

**Figure 3.40 Daily TV viewing, per head: 2009 – 2010**



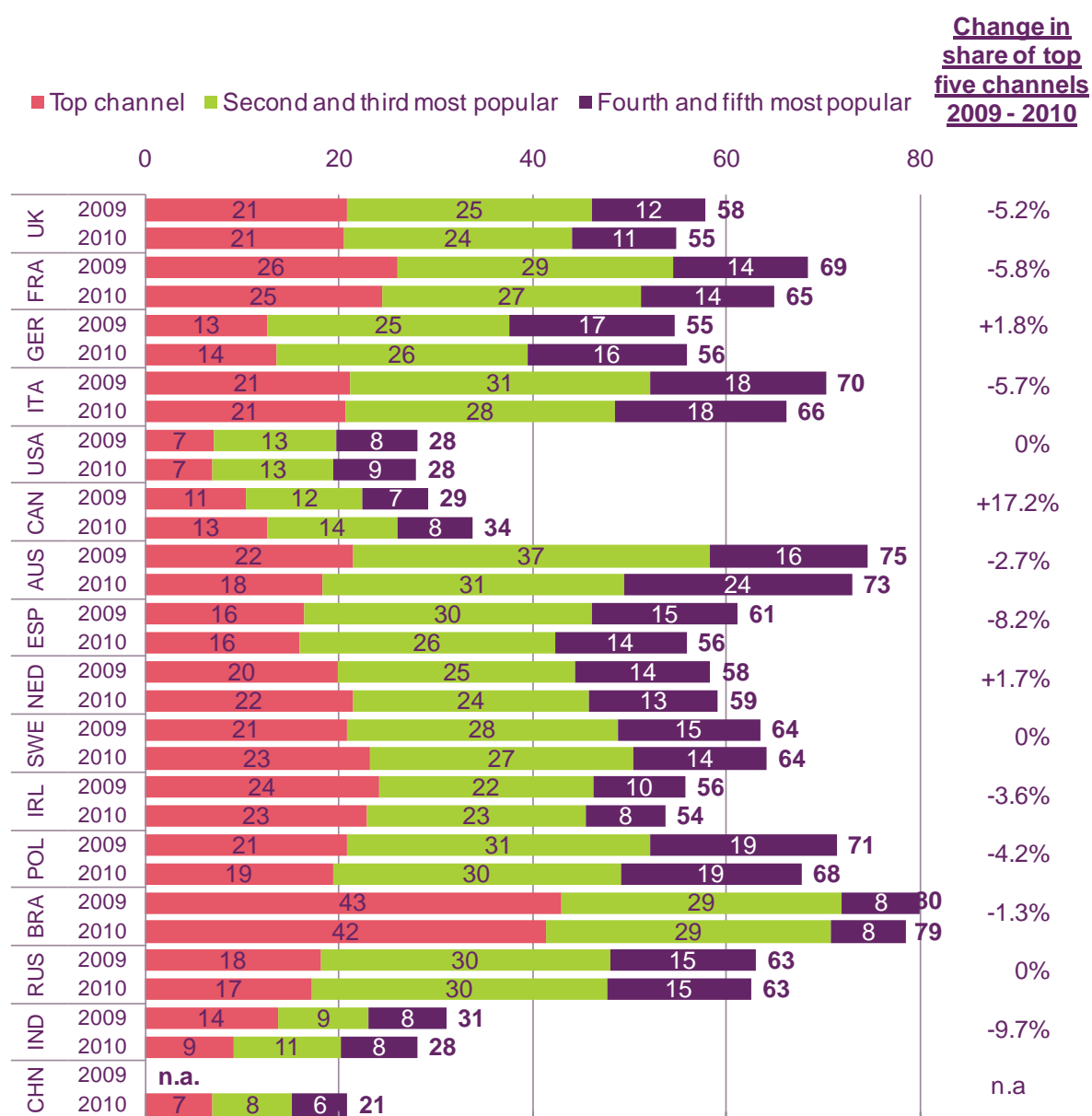
Source: Mediametrie, Eurodata TV Worldwide. The figure for Canada relates to viewing in non-Quebec households.

Figure 3.41 sets out the share of viewing commanded by the top one, three and five TV channels across countries, during 2009 and 2010.

It shows that patterns of viewing were most highly concentrated among households in Brazil, where the top rated channel, Globo, commanded a 42% share of viewing – by far the highest share for a single channel among the comparator countries. By comparison, BBC One in the UK commanded a viewing share of 21% in 2010. Viewing of the most popular TV channel was least concentrated in the US, where CBS commanded a 7% share.

Viewing patterns were also most concentrated in Brazil, when the shares of the top five channels are accounted for – making up nearly 8 in 10 (79%) of all viewer hours during 2010. This was explained in part by the high market share commanded by Globo. In the UK, the comparable figure was 55% - accounting for BBC One, BBC Two, ITV1, Channel 4 and Channel 5.

**Figure 3.41 Patterns of viewing among the top five TV channels**

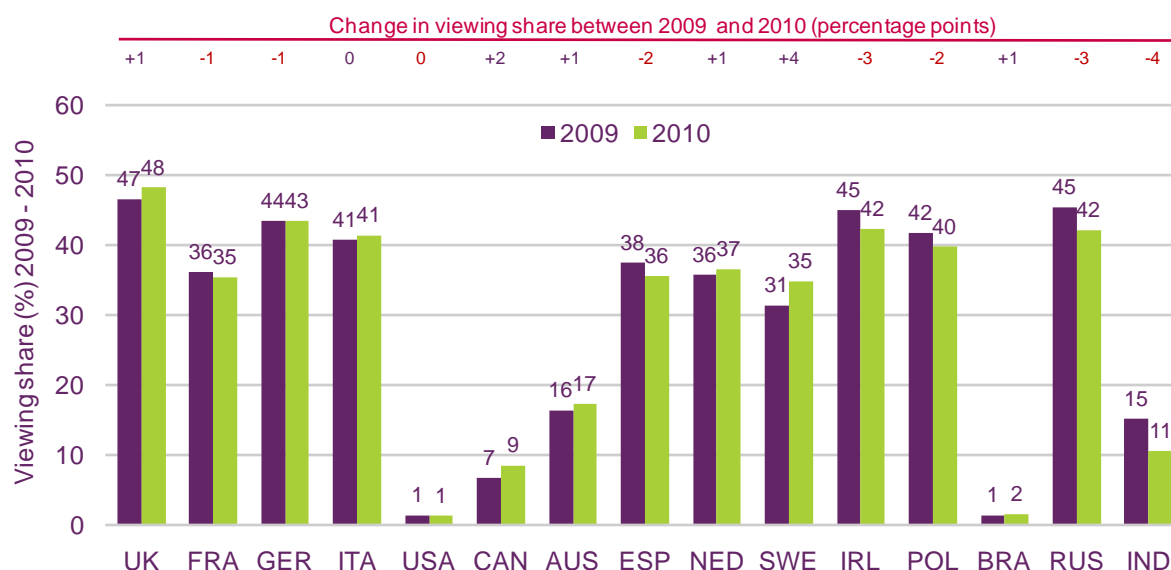


Source: Mediametrie, Eurodata TV Worldwide. The figure for Canada relates to viewing in non-Quebec households.

### Channels drawing on public funding grew in popularity, in the main, during 2010

Viewing of publicly funded channels was most popular in the UK, commanding a 48% share of all viewer hours (up by one percentage point in 12 months). The largest increase in viewing share – 4 pp – was experienced by SVT in Sweden. From a low base, Brazil's publicly-funded services' share doubled in 2010, rising by 1pp. Among those countries, where the viewing share of publicly funded channels fell, the reduction was most substantial in India and Russia (down by 4pp and 3pp respectively).

**Figure 3.42 Viewing of publicly-funded channels**



Source: Mediametrie, Eurodata TV Worldwide. The figure for Canada relates to viewing in non-Quebec households.

### Longest-established TV channels continued to experience falling multichannel share

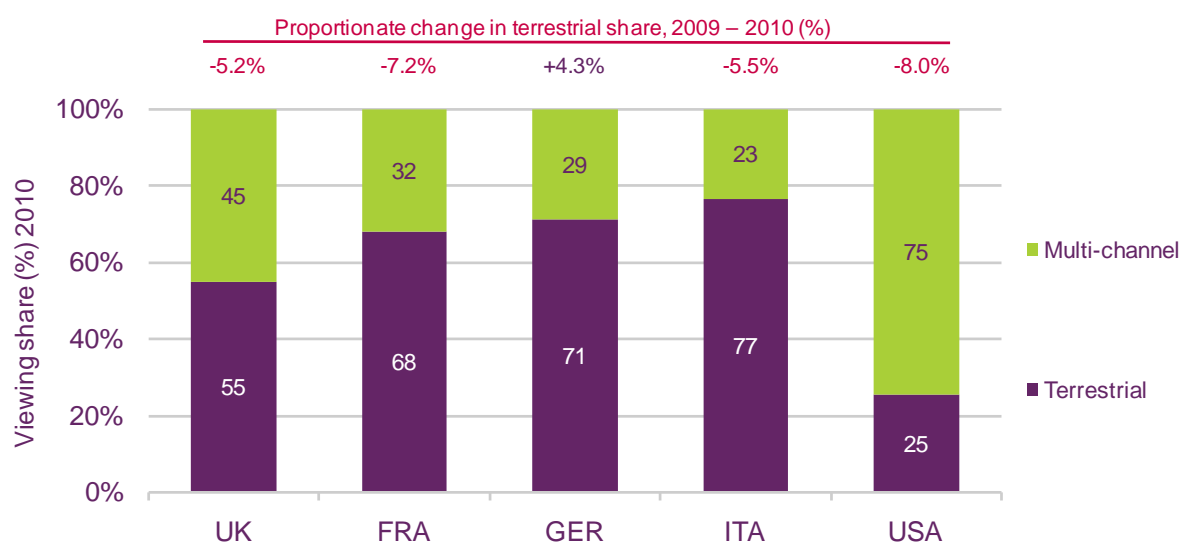
In many of our comparator countries, a small number of channels (all free to view) commanded a monopoly of viewing for many years. Confining the analysis to multichannel homes only, these longer-established television services mostly lost ground during 2010.

The exception to this pattern was Germany, where ARD1, ZDF, P7, Sat1 and RTL's share of viewing rose by 4% to 71% of all multichannel viewing. Otherwise, the most pronounced reductions in viewing of terrestrial services was among viewers in the US, where ABC, NBC, CBS, Fox and PBS' share dropped by 8% to a quarter (25%) of all viewer hours. This reduction comes despite the long-established nature of multichannel services in the US (for example, HBO launched in 1972) – which might otherwise point to the possibility of a more settled and stable market share for the oldest free-to-view services.

In the UK, the terrestrial channels (BBC1 /BBC2 /ITV1 /Channel 4 /Channel 5) commanded a multichannel share of 55%, down by 5% during 2010. In France, TF1, France 2, France 3, France 5, Canal+ and M6's collective share fell by 7% over the period to 73%. In both countries, digital terrestrial switchover is approaching and these reductions in share may be explained by the expansion in channel choice in homes that have recently migrated to a digital television platform.



**Figure 3.43 Terrestrial versus multichannel share**



Source: Mediametrie, Eurodata TV Worldwide.

### 3.3.6 Use of video-on-demand services

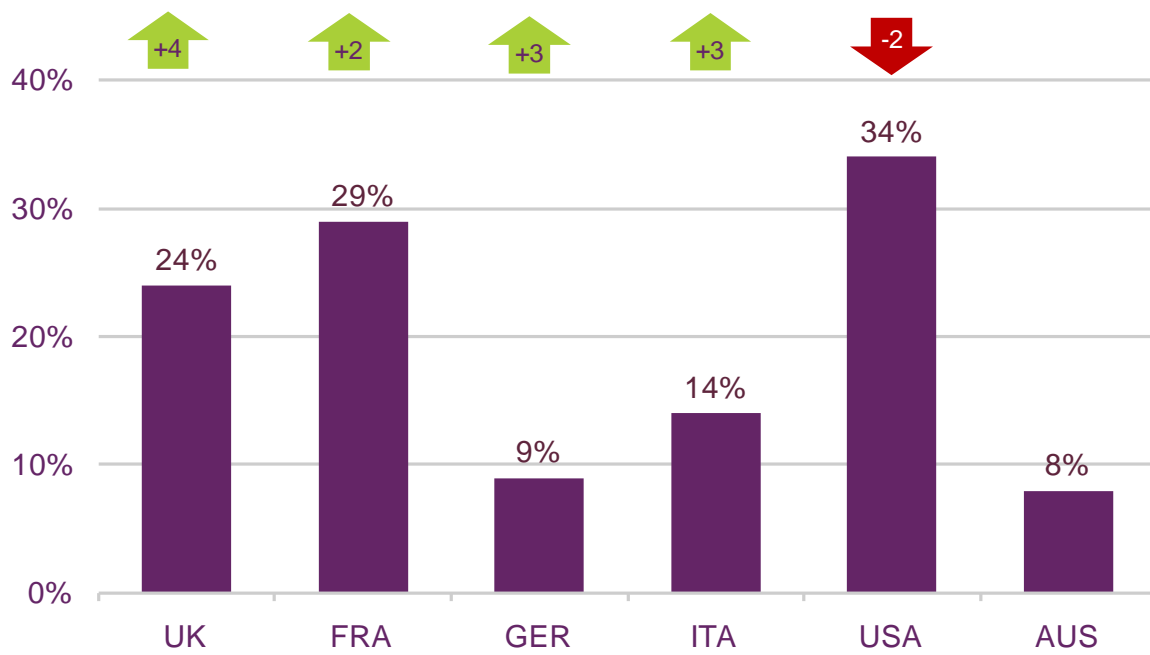
#### Consumers' claimed use of VoD services stood at 34% in the US; 29% in France

Viewers now have a variety of platforms over which they can get access to audio-visual content on an on-demand basis. This includes devices that connect directly to the internet (see Section 3.1.5 for an analysis of those who access TV content over the internet) and delivery of content over cable or IPTV infrastructure. The content they can access includes that which is available through free catch-up services, alongside those which are paid for.

In some countries, viewers are now accustomed to accessing on-demand content. In the US, over a third (34%) of consumers claim to personally use a service of this type, while the comparable figure in France is 29%. Just under a quarter (24%) of UK consumers make the same claim. Taken together, consumers in these three countries are far more likely than any other to claim they personally use video-on-demand services. In Italy, the comparable figure in 2011 stood at 14%; 9% in Germany and 8% in Australia.

Over time, the popularity of video-on-demand services rose furthest, by 4pp in the UK to 24% of all consumers. In France, from a comparatively high base, the increase was 2pp. Growth was, however, far higher in those countries where use of video on demand has yet to reach a mainstream audience – rising by a third in Germany and in Italy.

**Figure 3.44 Use of video-on-demand services, and changes in use over time**



Source: Ofcom consumer research, October 2011

Base: All those who use the internet. Total sample size: UK=1015, France=1014, Germany=1014, Italy=1045, US=1002, Australia=1012

Q: Which of the following devices do you own and personally use?

Note: Australia not included in 2010 research