



# International Communications Market Report 2012

## 1 The UK in context

# Contents

<b>1.1 The UK communications industry in context</b>	<b>15</b>
1.1.1 Introduction	15
1.1.2 Putting the global communications industry into context	15
1.1.3 Communications sector revenues	16
<b>1.2 The UK consumer in context</b>	<b>22</b>
1.2.1 Introduction	22
1.2.2 Take-up and use of services and media activities	22
<b>1.3 Changing nature of communications</b>	<b>28</b>
1.3.1 Key points	28
1.3.2 Introduction	28
1.3.3 Preferred methods of communication with friends and family	29
1.3.4 Frequency of using communication methods with friends and family	31
1.3.5 Communicating by sending greetings	35
1.3.6 Communicating with businesses and government	37
1.3.7 Summary of consumers' changing communications use	41
1.3.8 Four dimensions of change	43
<b>1.4 How consumers followed the London 2012 Olympic and Paralympic Games</b>	<b>50</b>
1.4.1 Key points	50
1.4.2 Introduction	50
1.4.3 Following the London 2012 Olympics and Paralympics	51
<b>1.5 News consumption: the international context</b>	<b>61</b>
1.5.1 Introduction	61
1.5.2 Digital news consumption – a comparative study	61
1.5.3 Platforms used as a main source of news	64
<b>1.6 A perspective on China</b>	<b>69</b>
1.6.1 Introduction	69
1.6.2 China as a country and a communications market	69
1.6.3 Our research methodology in China	71
1.6.4 Our research results in China	71
<b>1.7 International regulatory context and models</b>	<b>76</b>
1.7.1 Introduction	76
1.7.2 Key developments in the European regulatory and legislative framework	76
1.7.3 Helping communications markets work for consumers	77
1.7.4 Promoting effective and sustainable competition	81
1.7.5 Providing appropriate assurances to audiences on standards	83
1.7.6 Promoting the efficient use of public assets	85
1.7.7 Contributing to, and implementing, public policy defined by Parliament	87

# 1.1 The UK communications industry in context

## 1.1.1 Introduction

This chapter of the report provides a broad overview that places the UK communications sector in a global context.

- **The UK communications industry in context** (Section 1.1): We compare the size of the UK communications sector to that in other countries and look at relevant top-line revenues across our comparator countries.
- **The UK consumer in context** (Section 1.2): We compare take-up and use of different services and devices at a broad level across comparator countries
- **Changing nature of communications** (Section 1.3): We examine consumers' preferences for different communications services for communicating with different groups of people and look at which communications services consumers are using more, and which they are using less, than two years ago.
- **How consumers followed the London 2012 Olympic and Paralympic Games** (Section 1.4): We summarise key findings from new research into how people used communications services and devices to follow the Games in eight comparator countries.
- **News consumption: the international context** (Section 1.5): We look into digital news consumption, and summarise the key findings from the Reuters Institute *Digital News Report*, and present the findings of Ofcom's own consumer research which looks at which media platform consumers use as their main source for different types of news.
- **A perspective on China** (Section 1.6): This perspective considers the ICMR 2012 market research data on the communications market in China, bringing together our thinking on some of the reasons for differences in the data between China and other countries, and providing comparisons between China, the UK and the US.
- **International regulatory context and models** (Section 1.7): We highlight recent international developments in communications regulation to provide regulatory context to some of the topics in the report.

## 1.1.2 Putting the UK communications industry in context

In this section we discuss the revenue and expenditure of the communications sectors in the UK and globally.

Given the complexity and scale of the 'communications industries', there are many potential definitions of the 'communications sector'. These could, for example, include consumer electronics, network equipment, music, the film industry, online, software, games, newspapers, magazine and books, in addition to telecoms and broadcasting.

We focus primarily on the telecoms, television, radio and postal industries, to reflect Ofcom's regulatory remit.

## Key points

- The communications sector's total global revenues in 2011 were £1,322bn, growing by 3.7% (incorporating the telecoms, television, postal and radio sectors). Telecoms industries saw the largest absolute rise in revenues in 2011, which grew by £31bn to £936bn. In terms of percentage growth, television revenues grew fastest among the communications industries, by 6.6% in 2011 to £258bn.
- US telecoms revenues were £186bn in 2011, larger than the revenues of the entire communications sector in any other comparator country. Japan was the second-largest communications market by revenues, generating £138bn in 2011, while China was third largest at £86bn. Communications revenues in the UK were £47bn in 2011.
- Global advertising expenditure grew by 3.8% in 2011 to £298bn, the highest total spend since 2007. While expenditure on internet advertising grew at a compound annual rate of 16.0% between 2007 and 2011 to £48bn, that on newspaper advertising was -6.9%, falling to £60bn, while for magazines it was -6.8%, falling to £28bn.
- In the television and radio sectors, subscriptions generated the largest and fastest-growing proportion of total revenues in 2011. Television subscription revenues grew by 10.5% in 2011 to £133bn and at a compound annual rate of 9.0% between 2007 and 2011. Radio subscription revenues grew by 12.5% in 2011 to £2bn and at a compound annual rate of 8.5% between 2007 and 2011.

### 1.1.3 Communications sector revenues

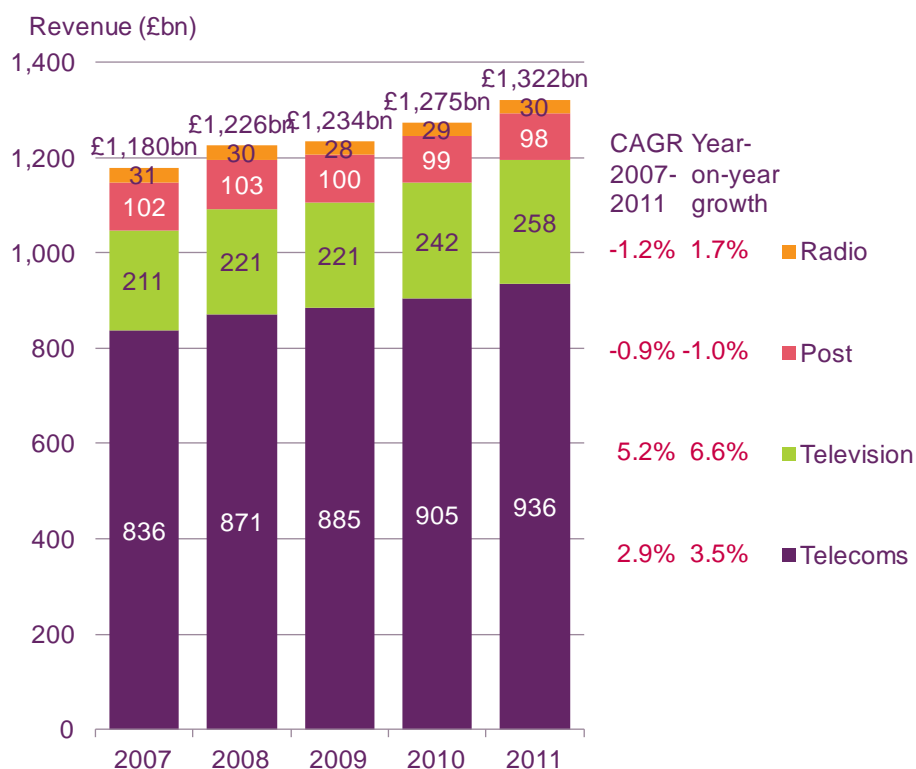
#### **The communications sector generated £1,322bn in revenues in 2011, an increase of 3.7% since 2010**

Between 2007 and 2011, global communications industries' revenues grew at a compound annual growth rate (CAGR) of 2.9%. Television, and particularly telecoms, revenues drove this growth. Between 2007 and 2011, the CAGR of telecoms revenues was 2.9% and in 2011 the industry generated £936bn worldwide, £100bn more than in 2007. Nominally, television revenues grew faster during this period, at a CAGR of 5.2%, amounting to £47bn more in 2011 than in 2007. In 2011, television revenues grew by 6.6% and telecoms revenues by 3.5%; in both cases a higher rate than each industry's compound annual growth over the previous four years.

We have taken postal revenues in our 17 comparator countries into account for the first time in assessing total global communications revenues. Post contributed £98bn to total global revenues of £1,322bn in 2011.

The radio industry, the revenues of which were smallest among these industries in every year between 2007 and 2011, grew by 1.7% in 2011. However, both radio and postal revenues declined between 2007 and 2011. In the countries for which we have data, postal revenues grew at a compound annual rate of -0.9% between 2007 and 2011 and -1.0% in 2011. The compound annual growth rate of radio revenues between 2007 and 2011 was -1.2%.

**Figure 1.1 Global communications revenues**



Source: Ofcom analysis based on data from PricewaterhouseCoopers Global Entertainment and Media Outlook 2012-2016 @ [www.pwc.com/outlook](http://www.pwc.com/outlook) for television and radio revenues. Broadcaster returns to Ofcom for UK radio revenues. UPU postal statistics database, regulatory reports and postal operators' annual reports for postal revenues. IDATE / industry data / Ofcom for telecoms revenues, which refer to retail revenues. Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used IMF 2011 average exchange rates in converting from local currency to GBP.

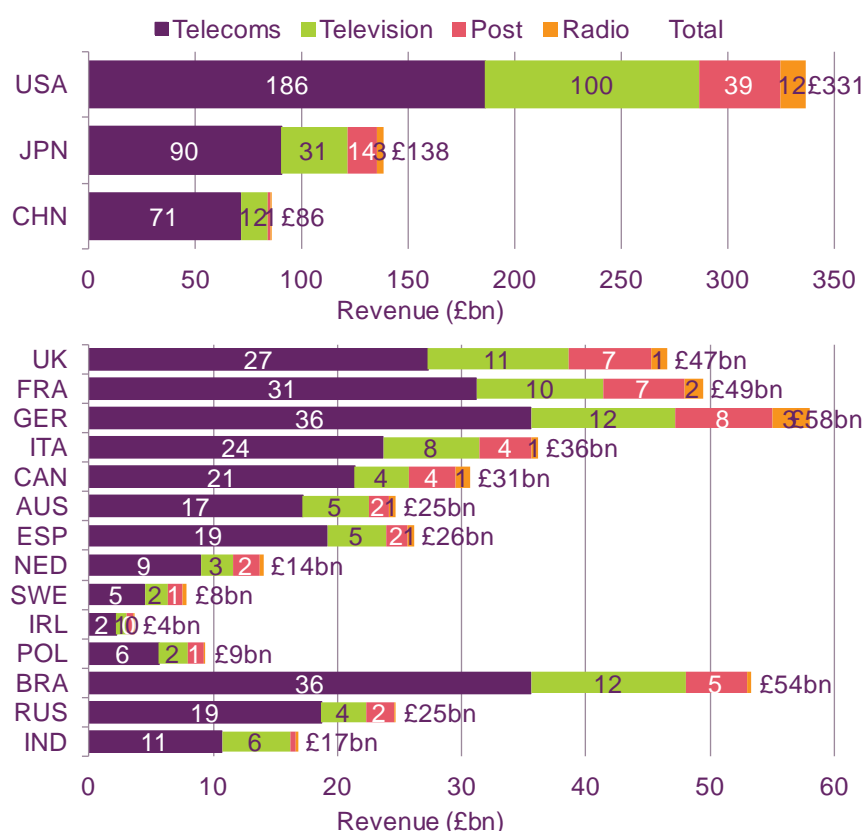
Note: Postal revenues are for our 17 comparator countries only.

**US telecoms revenues were £186bn, larger than the total communications revenues of any other country**

In 2011, as in 2010, the three largest communications markets in the world by revenues were the US (where revenues totalled £331bn), Japan (£138bn) and China (£86bn). Revenues from US telecoms alone (£186bn) were larger than the combined industries' revenues in any other country. The US also commanded the largest revenues among our comparator countries in television (£100bn), post (£33bn) and radio (£12bn).

Total UK communications sector revenues were £47bn in 2011, second only to Germany (£58bn) and France (£49bn) among our European comparator countries. The UK's telecoms revenues (£27bn) were lower than those in Germany and France (£36bn and £31bn respectively). However, the UK television sector's revenues (£11bn) and radio sector (£6.7bn) were both larger than those in France (£10bn and £6.5bn respectively).

**Figure 1.2 Communications sector revenues: 2011**



Source: Ofcom analysis based on data from PricewaterhouseCoopers Global Entertainment and Media Outlook 2012-2016 @ [www.pwc.com/outlook](http://www.pwc.com/outlook) for radio revenues. Broadcaster returns to Ofcom for UK radio revenues. UPU postal statistics database, regulatory reports and postal operators' annual reports for postal revenues. IDATE / industry data / Ofcom for television and telecoms revenues (telecoms revenues refer to retail revenues). Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used IMF 2011 average exchange rates in converting from local currency to GBP.

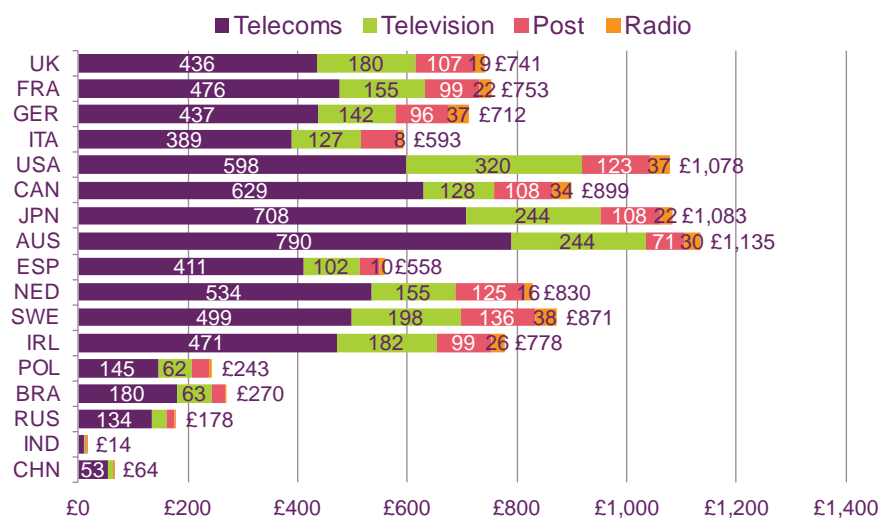
**In 2011, communications sector revenues per head were highest in absolute terms in Australia, at £1,135**

In 2011, the highest communications sector revenues per head among our comparator countries in absolute terms were in Australia (£1,135), Japan (£1,083) and the US (£1,078). We have also adjusted absolute revenues per capita to take account of comparative price levels (CPL) between the UK and our other comparator countries. When adjusted for CPL, communications sector spending was highest in the US (£1,369), Japan (£917) and Canada (£859). In the UK, communications revenues per head were £741.

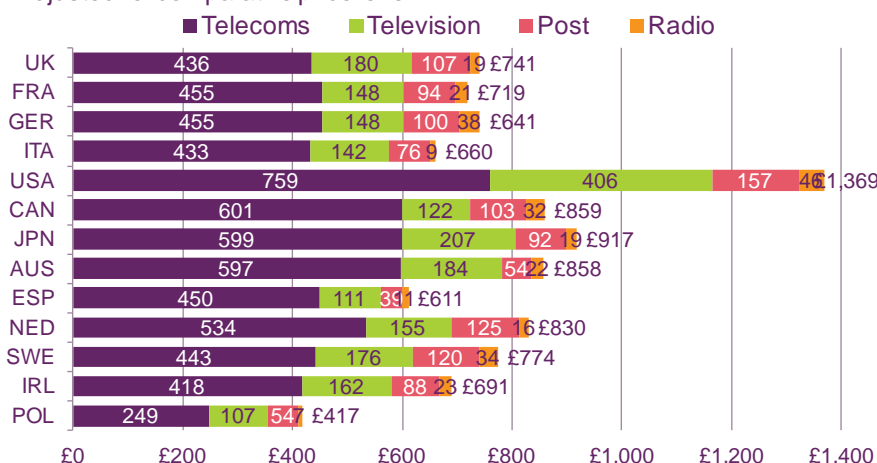
In 2011, the UK generated the lowest per-capita telecoms revenues among our European comparator countries (£436) when adjusted for CPL, with the exceptions of Poland (£249), Ireland (£418) and Italy (£433). In the UK, the weighted average prices of best-value stand-alone fixed-line and mobile services were cheapest among five European comparator countries (Figure 2.2 and Figure 2.5). By contrast, UK television per-capita revenues (£180) were highest among the European comparators when adjusted for CPL. Income from subscription fees is the main impetus behind growing UK television revenues per head (Figure 1.4).

Revenues per head in the US for telecoms services (£759), television (£406), radio (£46) and postal revenues (£157) were all highest among our comparator countries when adjusted for CPL.

**Figure 1.3 Communications sector revenues per capita: 2011**



Adjusted for comparative price level



Source: Ofcom analysis based on data from PricewaterhouseCoopers Global Entertainment and Media Outlook 2012-2016 @ [www.pwc.com/outlook](http://www.pwc.com/outlook) for radio revenues. Broadcaster returns to Ofcom for UK radio revenues. UPU postal statistics database, regulatory reports and postal operators' annual reports for postal revenues. IDATE / industry data / Ofcom for television and telecoms revenues (telecoms revenues refer to retail revenues). Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used IMF 2011 average exchange rates in converting from local currency to GBP and OECD August 2011 comparative price levels (CPL) to adjust for purchasing power parity (PPP). CPLs are ratios of PPP for consumption expenditure to exchange rates. They measure differences in price levels between countries by indicating the number of units of a common currency required to buy the same volume of products in each country.

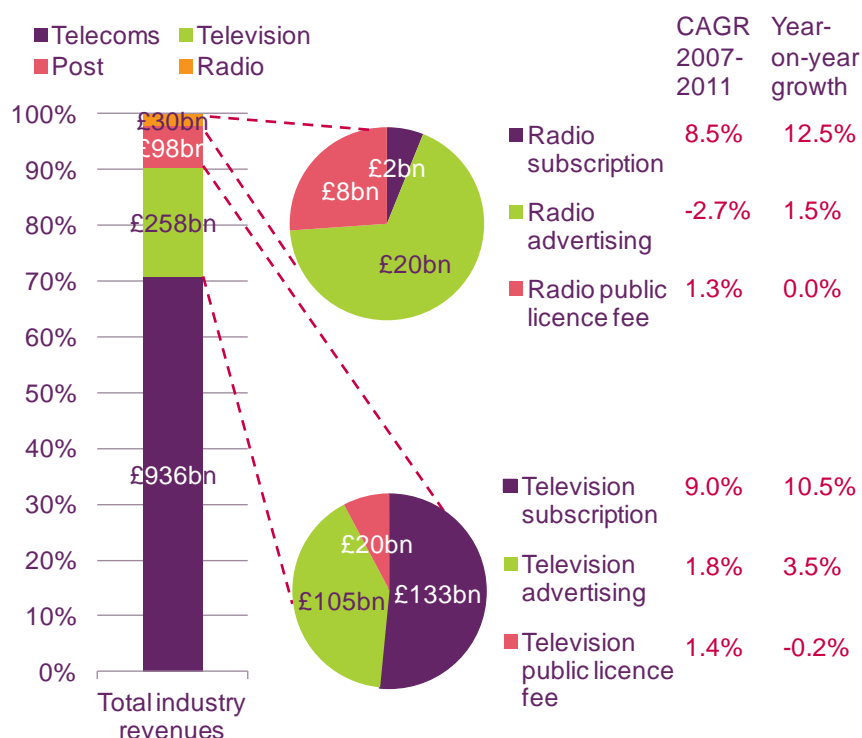
### In 2011, the fastest-growing element of television and radio revenues was subscriptions

Figure 1.4 displays the proportions of television and radio industry revenues that came from subscriptions, advertising and public licence fees in 2011. Of the £258bn that the television industry generated in 2011, subscription revenues contributed the largest and fastest-growing proportion of total revenues. Television subscription revenues grew at a CAGR of 9.0% to £133bn in the four years to 2011, and grew by 10.5% in 2011. Television advertising

revenues grew at a CAGR of 1.8% between 2007 and 2011, while the rate for television licence fee revenues was 1.4% in the same period. Television licence fee revenues fell by 0.2% between 2010 and 2011, and were flat for radio.

In 2011, the fastest-growing element of total radio revenues was radio subscriptions, which grew by 12.5% in 2011. However, radio subscriptions still contribute a small proportion of total radio revenues: £2bn of £30bn. Radio advertising revenues grew at a compound annual rate of -2.7% to £20bn between 2007 and 2011, although they increased by 1.5% in 2011.

**Figure 1.4 Sources of global revenue for radio and television industries: 2011**



Source: Ofcom analysis based on data from PricewaterhouseCoopers Global Entertainment and Media Outlook 2012-2016 @ [www.pwc.com/outlook](http://www.pwc.com/outlook) for television and radio revenues. Broadcaster returns to Ofcom for UK radio revenues. UPU postal statistics database, regulatory reports and postal operators' annual reports for postal revenues. IDATE / industry data / Ofcom for telecoms revenues, which refer to retail revenues. Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used IMF 2011 average exchange rates in converting from local currency to GBP.

Note: Postal revenues are for our 17 comparator countries only. Net TV advertising revenues for Russia have been calculated by discounting 15% of TV advertising spending to remove agency fees and production costs.

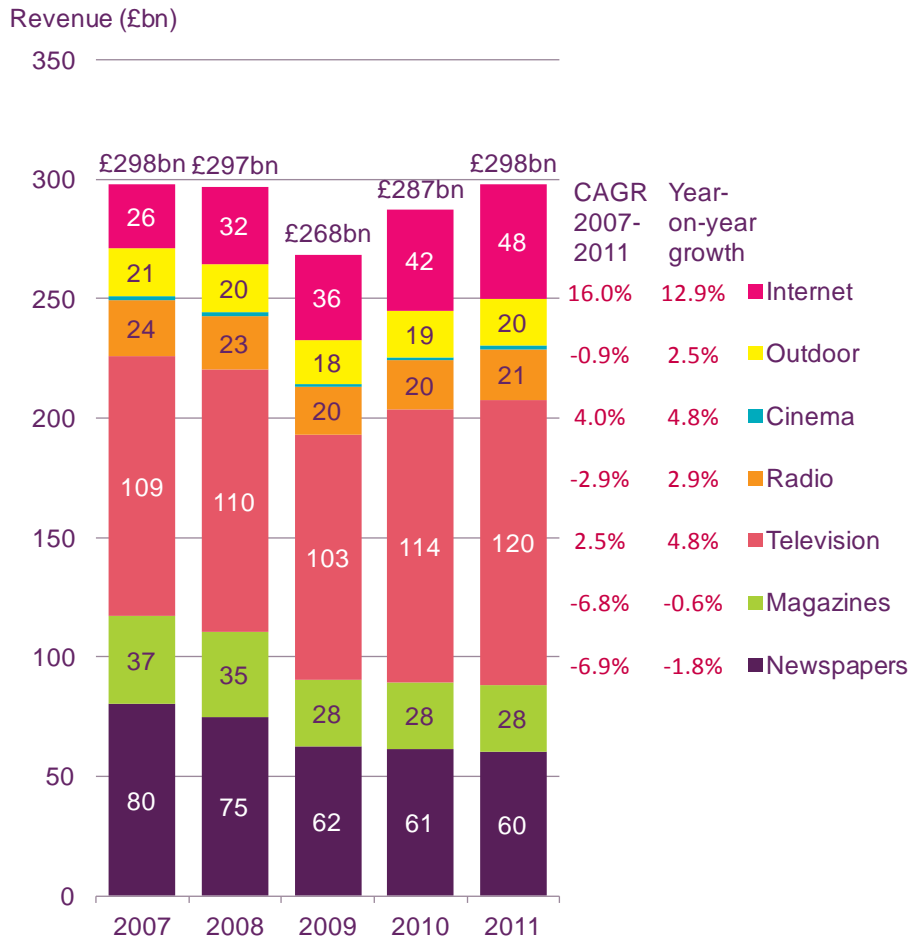
### Global advertising expenditure grew to £298bn in 2011, the highest total spend since 2007

In 2011, global advertising expenditure grew by 3.8% (£11bn) to £298bn. Expenditure on internet advertising grew fastest among the media depicted on Figure 1.5, at a compound annual rate of 16.0% in the four years to 2011 to £48bn. In the same period the compound annual growth rate of expenditure on newspaper advertising was -6.9% and on magazine advertising was -6.8%, suggesting that the growth of internet expenditure has been primarily at the expense of print advertising.



While radio revenues shrank at a compound annual growth rate of -2.9% between 2007 and 2011, in 2011 they grew by 2.9%. Equally, expenditure on television advertising grew by 4.8% in 2011, a higher rate than the compound annual average rate between 2007 and 2011 (2.5%).

**Figure 1.5 Global advertising expenditure, by medium**



Source: ZenithOptimedia. Interpretation and manipulation of data are solely Ofcom's responsibility. Ofcom has used an exchange rate of \$1.604 to the GBP, representing the IMF average for 2011.

# 1.2 The UK consumer in context

## 1.2.1 Introduction

In this section we examine and compare take-up and use of communications devices and services. We focus primarily on the UK but also on the other countries where we carried out consumer research in October 2012 (France, Germany, Italy, the US, Japan, Australia, Spain and China). The key findings are:

- **The number of fixed-line voice connections remains relatively resilient in the UK, with more fixed-line voice connections per 100 people than in the other markets covered.** Although this number fell between 2006 and 2011 in all of the countries which we surveyed, the fall in the UK was among the smallest.
- **The number of mobile connections per 100 people is high in the UK (130).** Of the countries surveyed, only Italy, Germany and Australia have more mobile connections per 100 people.
- **The number of broadband connections per 100 households among the countries which we surveyed is highest in France at 81, with the UK in second place.** With 77 connections per 100 households, the UK is slightly ahead of the US, where three-quarters of households have fixed broadband.
- **Spain has the highest proportion of digital television (DTV) homes per 100 TV households, with the UK in second place.** The UK has the second highest proportion of DTV homes across the countries where we carried out our research, second only to Spain - where 100% of TV households have DTV.
- **Smartphone ownership is high in the UK, at 58%.** The UK leads in digital radio ownership (31%) and DVR ownership (39%).
- **Tablet take-up among internet users is highest in Spain and Australia, both at 24%.** Italy and the US have the next-highest claimed ownership (23% and 20%) with the UK in fifth place at 19%.
- **Watching TV is the most popular communications activity in all the countries surveyed.** Over 90% of all respondents in all the countries claimed to watch TV regularly. The UK and Spain have the highest proportion of consumers who claim to watch TV regularly (95%).

## 1.2.2 Take-up and use of services and media activities

**Fixed-line voice remains relatively resilient in the UK, with the number of lines per 100 people higher than in the other markets covered**

In all the countries where we carried out our consumer research, the number of fixed-line connections per 100 people fell between 2006 and 2011 (Figure 1.6). The data – compiled by IDATE and Ofcom from industry data – shows that the fall in the UK (four connections per 100 people) was among the smallest in those nine countries. As a result, the number of connections per 100 people was higher in the UK than in the other countries.

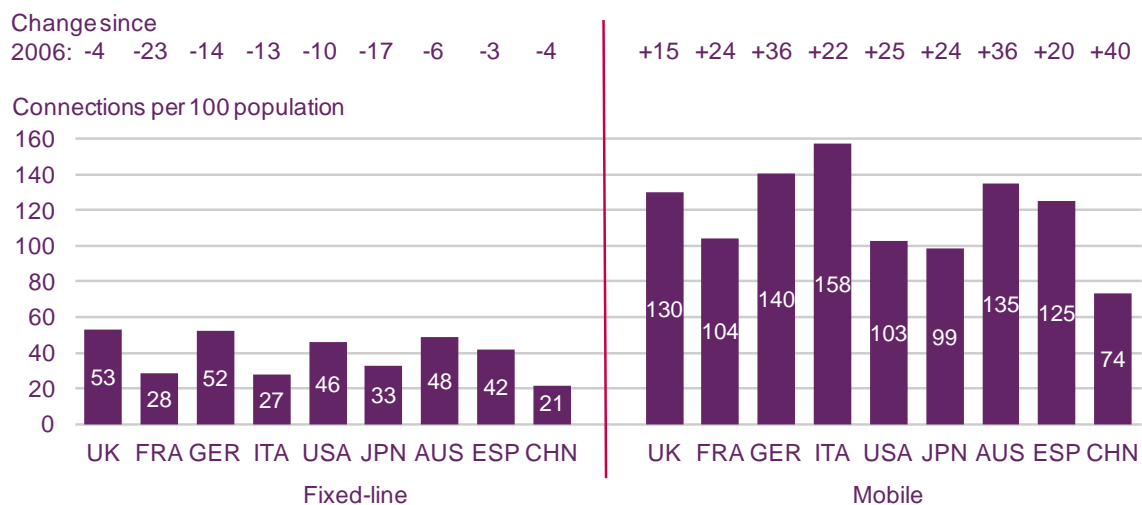
Second highest take-up was in Germany (52 lines per hundred people), closely followed by Australia (48) and the US (46). Take-up was lowest in China, where availability of fixed-line connections is low and mobile is the predominant form of telephony. France and Italy also have low take-up of fixed-line connections. In France, consumers are able to choose a

naked DSL service, which enables them to use broadband services (including VoIP) without a fixed-line analogue telephone connection.

The relative resilience of fixed-line take-up in the UK is perhaps due in part to the necessity of having a fixed-line telephone connection in order to receive DSL broadband.

With the exception of Japan and China, the number of mobile connections exceeds the number of people in all the countries surveyed. In all of the countries shown in Figure 1.6, the number of mobile connections per head of population grew between 2006 and 2011, with the largest growth occurring in China. Italy has the highest number of mobile connections (158 per 100 people), reflecting high levels of multiple pre-pay SIM ownership.

**Figure 1.6 Fixed-line voice and mobile connections per head: 2011**



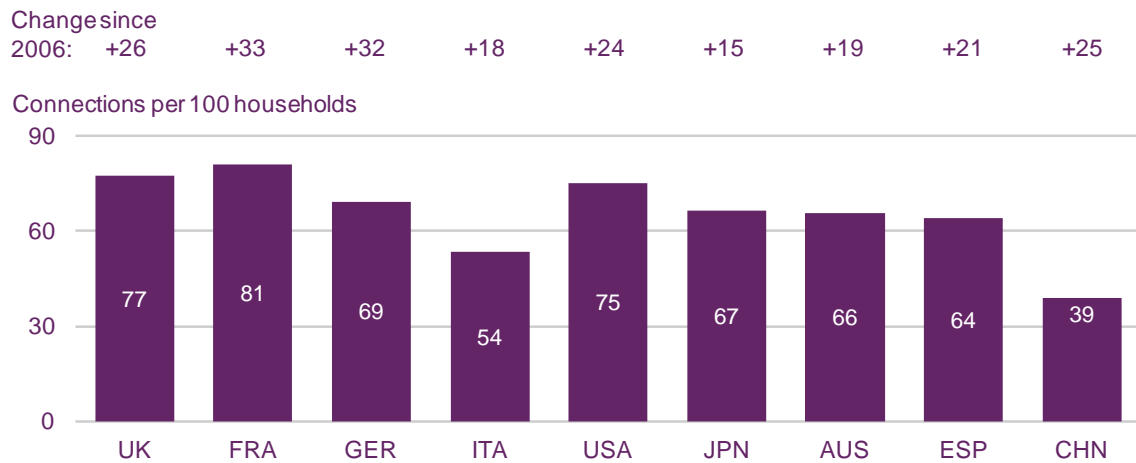
Source: IDATE / industry data / Ofcom

**Broadband connections per 100 households among the countries surveyed is highest in France at 81, with the UK in second place at 77**

The number of broadband connections per 100 households is highest in France at 81 subscriptions per 100 households. With 77 subscriptions per 100 households, the UK is slightly ahead of the US, where three-quarters of households have fixed broadband, as Figure 1.7 shows.

Among the European countries, the number of broadband connections per 100 households was lowest in Italy (54 connections per 100 households). Looking at all of the countries surveyed, the number of connections per 100 households was lowest in China, as coverage is focused on relatively small geographical areas in the highly-populated cities.

**Figure 1.7 Fixed broadband connections per 100 households: 2011**



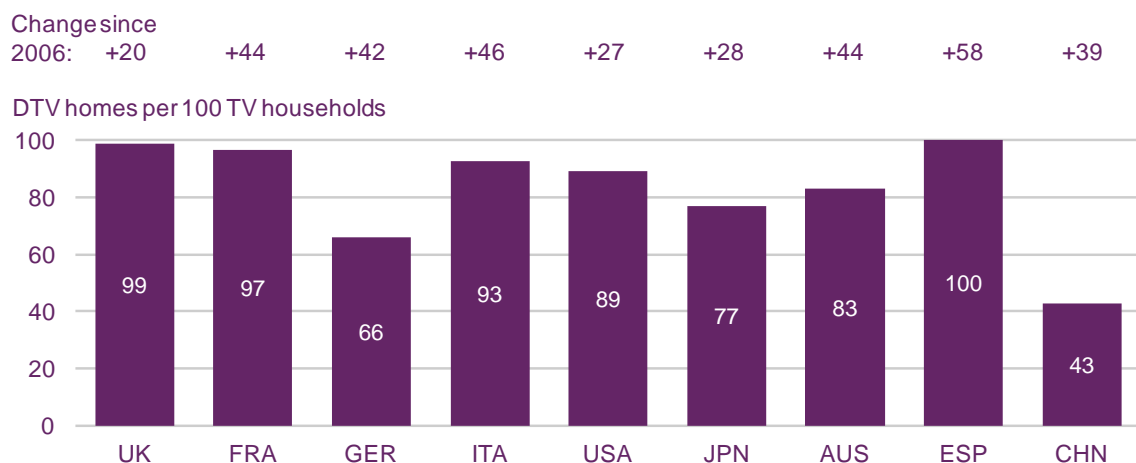
Source: IDATE / industry data / Ofcom

Note: Broadband connections include business connections

**Spain has the highest proportion of digital television (DTV) homes per 100 TV households, with the UK in second place**

The UK has the second highest proportion of DTV homes per 100 TV households across the countries where we carried out our research, second only to Spain - where 100% of households with TV have DTV. France was third highest with 97 DTV homes per 100 TV households, followed by Italy (93). The number of DTV homes per 100 households was low in Japan (77), Germany (66) and China (43). (Figure 1.8)

**Figure 1.8 DTV homes per 100 TV households: 2011**



Source: IDATE / industry data / Ofcom

For further information on the penetration of specific communications services across all our comparator countries, please see the relevant section of this report.

## **Tablet take-up among internet users is highest in Spain and Australia, with the UK in fifth place at 19%**

As part of our consumer research we asked respondents about their ownership and personal use of a range of devices. This research was carried out online, which means that results are derived from a different sample to other Ofcom consumer research and direct comparisons cannot be made.

For all of the devices listed in Figure 1.9, the UK is frequently among the highest levels of claimed ownership and personal use. The only two devices for which the UK leads in terms of take-up are digital radio sets (31%) and digital video recorders (DVR) (39%), which have relatively low take-up in the other European countries. About a third of consumers (32%) claim to own and personally use DVRs in the US.

Tablet take-up is highest in Spain and Australia, both at 24%. Italy and the US have the next highest claimed ownership (23% and 20% respectively), with the UK in fifth place at 19%. The reasons for differences in levels of ownership and use of different communications devices and services are multiple and complex, and may relate to cultural factors, differences in affordability and local market structures.

The figure (30%) for ownership and use of smartphones in Japan is the lowest of all our comparator countries. Reasons for this include:

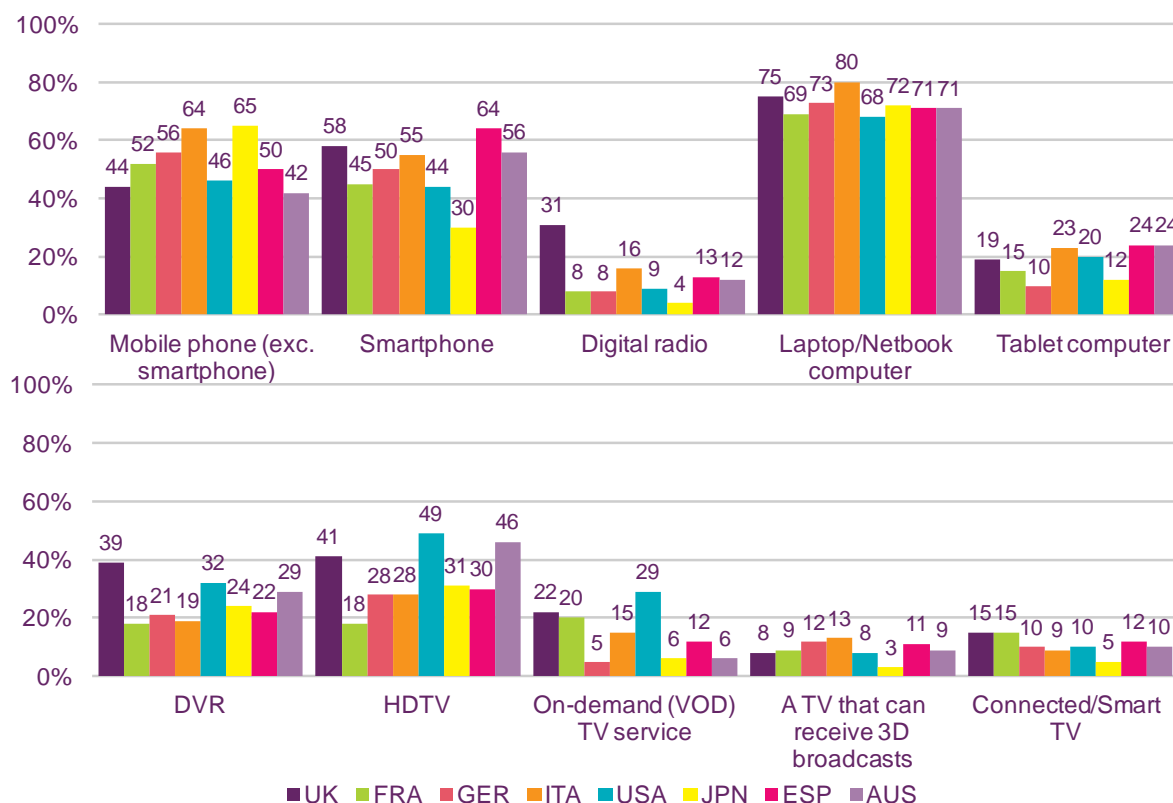
- Early adoption of advanced services: Consumers in Japan have been using email on mobile phones for much longer than consumers in most other countries. Email applications on mobile phones are considered to be the preserve of smartphones in most countries, but phones offering email in Japan are often considered as standard mobile phones in that country. This leads to lower smartphone penetration figures that might otherwise be expected;
- Handsets: many leading handset manufacturers have found it more difficult to win large market share in Japan than in other Asian countries. This may be attributed to the popularity of local manufacturers – leading mobile network operators offer a broad range of handsets from Japan-headquartered manufacturers under original equipment manufacturer and operator brands - and also the different needs<sup>5</sup> of Japan's consumers compared with other countries, partly linked to the early adoption of mobile technology. Because the type of handsets used are different in Japan, the definition of what constitutes a smartphone tends to differ compared with other countries;
- Different services: Linked to both the above reasons, Japan's consumers have been used to consuming a different range of services to consumers in other countries, and this has led to different definitions of smartphones. One example of such a service is i-mode, which is widespread in Japan but deployed rarely in other countries<sup>6</sup>. i-mode allows consumers to access the internet and email on their mobile devices.

---

<sup>5</sup> "Cell phone culture here unlike any other", The Japan Times, Sept 2 2009, <http://www.japantimes.co.jp/text/nn20090902i1.html>

<sup>6</sup> Telefonica O2 deployed the service in the UK, but switched it off in 2009 because of a limited range of handsets appropriate for the UK market. See [http://service.o2.co.uk/IQ/SRVS/CGI-BIN/WEBCGI.EXE?New,KB=Companion,T=i-mode,question=ref\(User\):str\(RelatedHelp\),CASE=9521#](http://service.o2.co.uk/IQ/SRVS/CGI-BIN/WEBCGI.EXE?New,KB=Companion,T=i-mode,question=ref(User):str(RelatedHelp),CASE=9521#)

**Figure 1.9 Ownership and personal use of devices**



Source: Ofcom consumer research, September 2012

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Spain=1001, Australia=1007

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

**Watching TV is the most popular communications activity in all of the countries surveyed, with 95% of UK consumers claiming to engage in this activity on a weekly basis**

Figure 1.10 charts the levels of regular use of selected communications services (with regular use defined as at least once a week). Our research was conducted among online panellists, who may be more likely than average to use selected communications services, so data should be treated with this caveat in mind.

The UK and Spain have the highest proportion of consumers who claim to watch TV regularly (95%). This is by far the most popular activity in the UK, and 8pp ahead of the 87% who access the internet with a computer or laptop.

Claimed radio listening in the UK is 69% - on a par with Australia but lower than the US and the other European countries surveyed.<sup>7</sup> This figure may be particularly low because our research was conducted among internet users, and it is possible that some radio listeners are non-internet users who were excluded from our research. Claimed radio listening was lowest in Japan, at 37%.

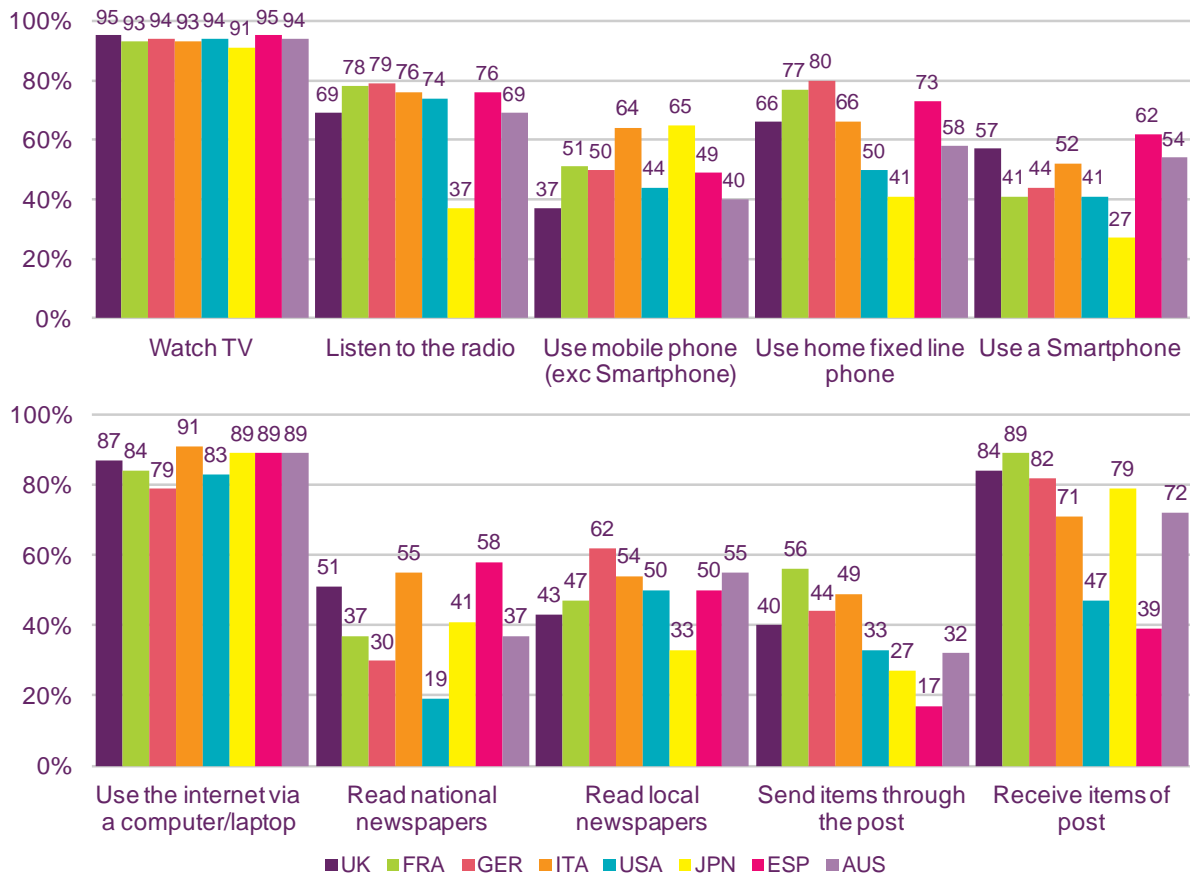
In all countries, consumers receive post more frequently than they send it. We know from other research that this is due to the high proportion of mail which is generated by

<sup>7</sup> According to the Radio Joint Audience Research Bureau (RAJAR), 90.8% of the UK population listened to radio in an average week in 2011

businesses and sent to consumers, including bills and statements, advertising and the fulfilment of online and other distance shopping.

Among all of the countries surveyed, receiving items of post regularly is lowest in Spain (39%). Industry data also show that online shopping is less popular in this country than elsewhere. Internet retailing is discussed further in the *Internet and web based content* and *Post* chapters of this report.

**Figure 1.10 Regular use of selected communications services / media**



Source: Ofcom consumer research, September 2012

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Spain=1001, Australia=1007

Q: Which of the following do you regularly do (at least once a week)?

# 1.3 Changing nature of communications

## 1.3.1 Key points

Across our comparator countries, consumers are fundamentally changing the way they communicate:

- **Despite the increase in use of internet-based communications, face-to-face remains the preferred way of communicating with friends and family, for all countries except Japan.** The country with the strongest preference for face-to-face communication was the UK, with 48% of survey respondents picking face-to-face as their preferred means of communicating with friends and family.
- **In seven out of eight comparator countries, consumers have reduced face-to-face communication with friends and family.** In contrast, preferences for online communications have increased, particularly in the UK and Italy, which showed large increases in the use of email and social networking.
- **Use of postal services has declined in all eight comparator countries, with the clear majority of consumers indicating that they prefer to send messages over the internet instead.** These trends are strongest in Spain and Italy.
- **Every comparator country saw an increase in the use of email and social networking.** This was most pronounced in Australia, followed by the UK (email) and for the US, followed by Australia (social networking).
- **Use of text-based communications exceeded the use of voice-based communications in all countries except Germany.** This difference was greatest in Japan.
- **Time spent making telephone calls declined the most in the UK:** the volume of fixed and mobile calls made per person was down 6.3% year on year in 2011. In contrast, UK consumers sent nearly 17% more text messages per person than in 2010.

## 1.3.2 Introduction

The way that consumers are choosing to communicate is changing, although the pace and type of change varies between countries.

In this section, we first (in sections 1.3.3 to 1.3.6) present data on consumers' preferences for different communications services when communicating with different groups of people – family and friends; businesses and government, and when sending greetings. We also examine the frequency of use of the various methods of communication.

Secondly (in section 1.3.7), we look at which communications services consumers are using more, and which they are using less, compared with two years ago.

Thirdly (in section 1.3.8), we present four dimensions of change: comparing data on:

- face-to-face versus online communications;
- the increasing use of email and social networking as platforms to communicate;
- post versus online communications; and



- phone calls versus text messaging and online communications.

We note that UK consumers are at the forefront of change, evolving their communications consumption from verbal communication to written communication originating on connected devices (such as mobile devices or PCs) more rapidly than most of our comparator countries. They are making fewer telephone calls, sending less post and having fewer face-to-face meetings with friends and family. They are also making greater use of the internet and mobile devices to communicate using email, social networking and text messaging.

We consider a range of industry and consumer metrics, with the latter being gathered by Ofcom's online research in eight countries (the UK, France, Germany, Italy, the US, Japan, Australia and Spain) in September 2012. In each country approximately 1,000 adults<sup>8</sup> aged 18+ were interviewed. Because the survey was conducted online, results may differ from other consumer research, including Ofcom's *Communications Market Report*, which is published each summer.

We present in this section the key figures, with further data and analysis in the relevant sections later in the report.

### 1.3.3 Preferred methods of communication with friends and family

**For most countries, face-to-face remains the preferred way of communicating with friends and family**

With the exception of Japan, all countries surveyed have broadly similar preferences for communicating with friends and family. Meeting face-to-face is the preferred means of personal communication with friends and family, despite the rising use of digital communications, and is most popular with consumers in the UK (48%), Australia (47%) and Germany (47%).

The most preferred method of communicating with friends and family in Japan is email (41%), followed by calls on a mobile phone (29%). Fourteen per cent of consumers in Japan prefer to communicate with friends and family face to face.

Just over one in ten (12%) UK consumers prefer to communicate with friends and family by calling on a fixed phone – a lower proportion than in Germany (25%) (where use of landlines dominates, discussed in more detail in the *Telecoms and networks* chapter of this report), France (22%), Italy (17%), and Spain (17%). The preference for making calls using a fixed line is lower in the UK than in all other countries except Japan. UK consumers also have the joint-lowest preference for contacting friends and family by calling on a mobile phone (7%). This finding comes as the UK has experienced its first fall in mobile call volumes – down 1% year on year in 2011.

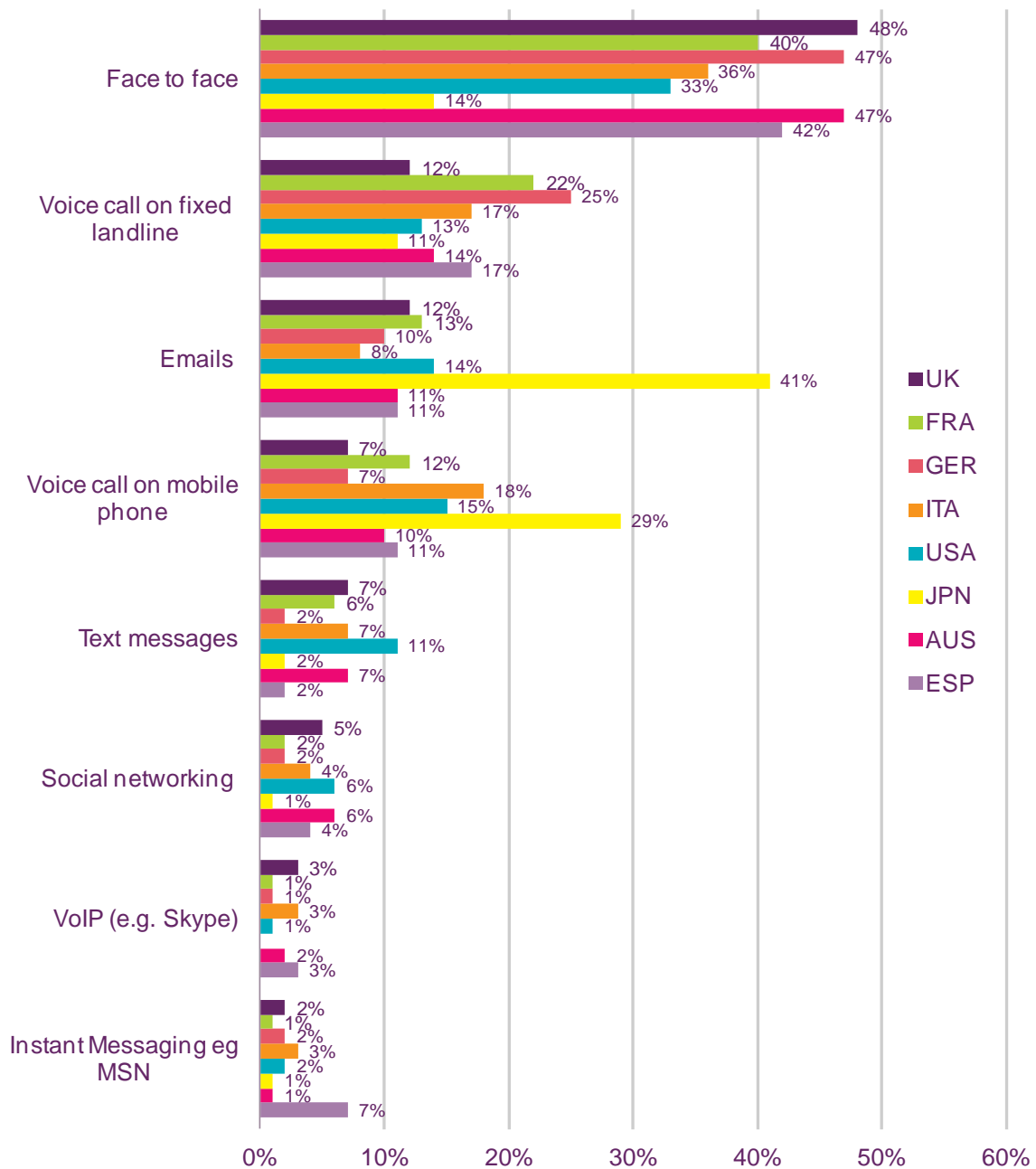
In all countries, preference for contacting friends and family by social networking sites, VoIP and instant messaging is low, with less than one in ten preferring these methods.

Respondents were asked the reason for their preferred method of communications. Convenience and immediacy were the top two reasons for consumers' preference in Japan, while among all other countries the main reason for the preferred choice was the personal nature of face-to-face communications.

---

<sup>8</sup> Sample sizes: UK= 1,065; FRA = 1,016; GER= 1,024; ITA= 1,015; USA= 1,010; JPN= 1,004; AUS= 1,007; ESP= 1,001

**Figure 1.11 Preferred method of communication with friends and family**



Q5a: If you had to pick one method of communicating with friends and family which one would it be?

Source: Ofcom research, 2012

Base: All who make any sort of contact with: friends and family, n: UK=1059; FRA= 1,006; GER= 1,015; ITA= 1,011; USA= 1,004; JPN= 996; AUS= 1,002; ESP= 996

Note: other mentions by 2% or fewer included: post, micro blogging sites, free/paid-for e-cards through a website, picture messaging

### **1.3.4 Frequency of using communication methods with friends and family**

#### **In most countries email is the most-used method for daily communication with friends and family**

Respondents were asked which methods they used at least once a day to communicate with friends and family.

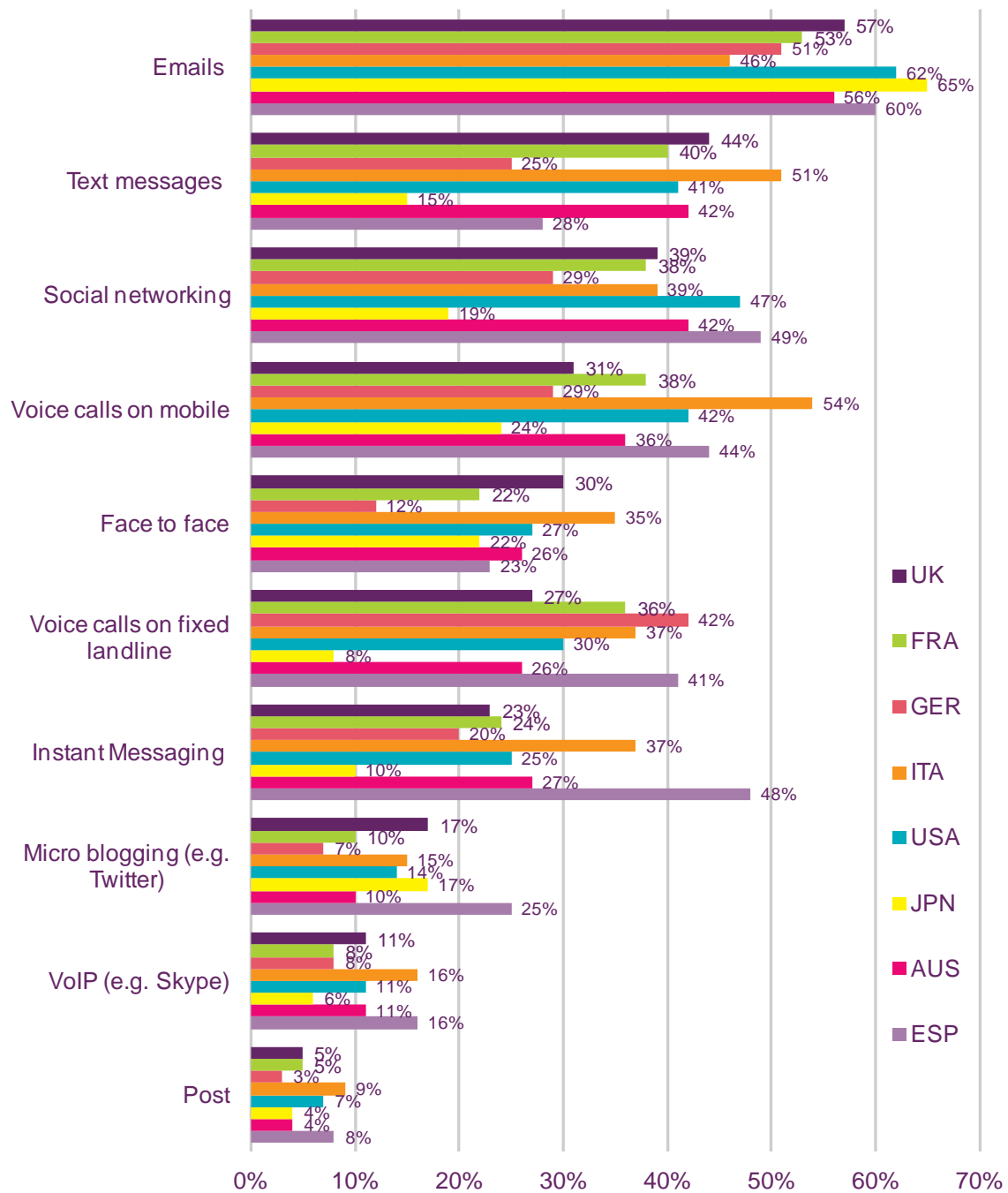
Figure 1.12 shows that with the exception of Italy, in all of the countries surveyed email is the single most popular method of daily communication with friends and family. Consumers in Japan (65%), the US (62%) and Spain (60%) were the most likely to send emails to friends and family on a daily basis, and almost six in ten (57%) UK consumers say that they use email to communicate with friends and family at least once a day.

For consumers in Italy, voice calls on a mobile phone are the most frequently-used method of daily communication with friends and family (61% and 54% respectively). This is unsurprising, given the growth in mobile use this country; between 2006 and 2011, the volume of mobile calls made in Italy has risen by an average annual growth rate of 11.8%.

Daily communication with friends and family via voice calls on a fixed landline or mobile phone is lower in the UK than in many other countries: at 27%, daily voice calls via a landline is lower in the UK than in Germany, France, Italy and Spain, and at 31%, communicating via a voice call on a mobile phone is lower than in all countries except Japan. Landline use in the UK has now been shrinking each year for more than five years, with volumes falling 10% in 2011.

Compared to other countries, daily use of instant messaging is relatively high in China (54%), Spain (48%) and Italy (37%).

**Figure 1.12 Methods used at least once a day to communicate with friends and family**



Source: Ofcom research, 2012

Q2a: How often do you use x to communicate with friends and family?

Base: Adults who use communication methods aged 16+, n: UK=1,065; FRA= 1,016; GER= 1,024; ITA= 1,015; USA= 1,010; JPN= 1,004; AUS= 1,007; ESP= 1,001

**On a weekly basis, email is the most-used method for communicating with friends and family**

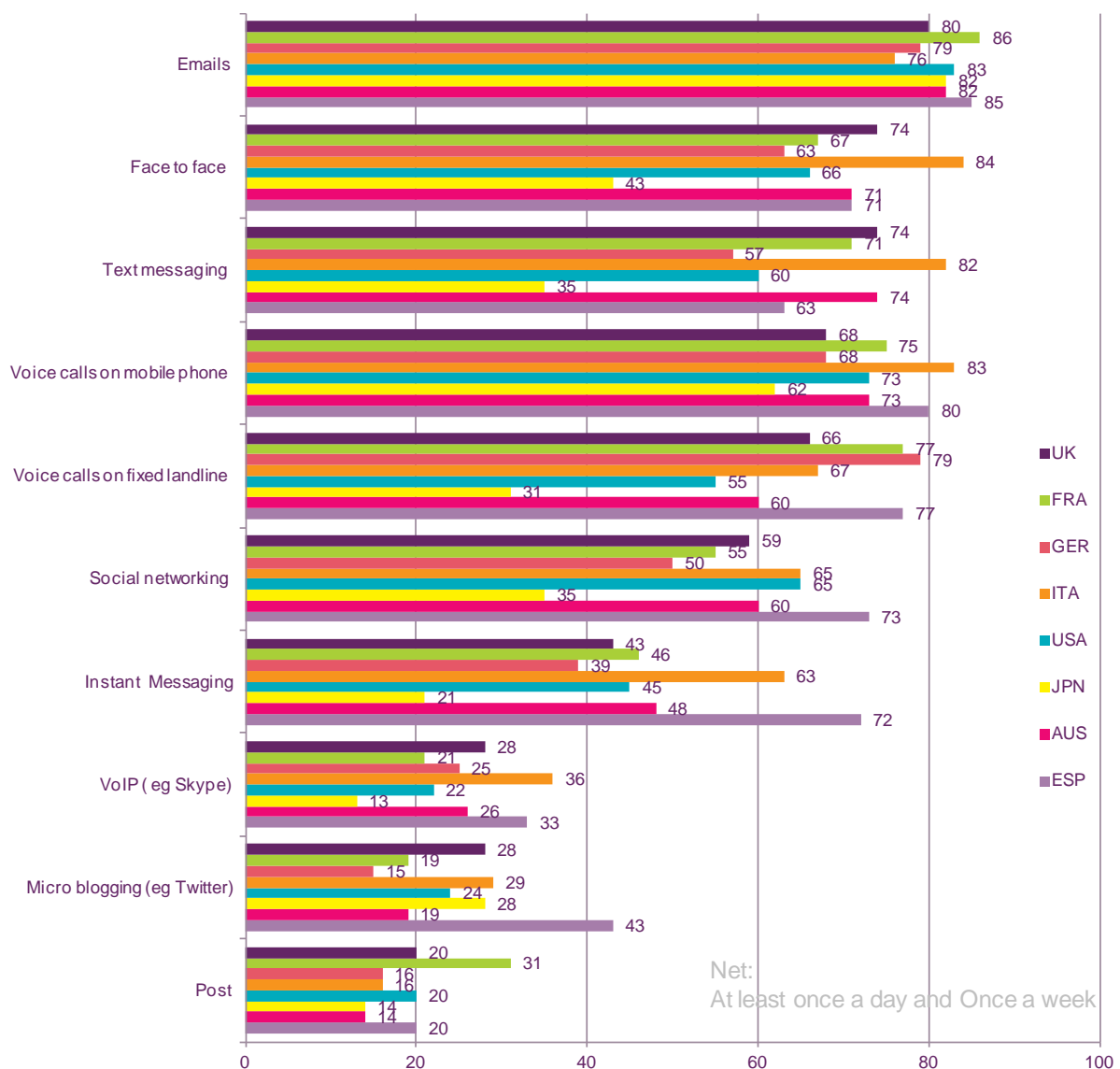
Figure 1.13 shows that when the timeframe is extended to ‘at least once a week’ email remains the most common way of communicating with friends and family (as with daily communications), in most countries except Italy. Four in five consumers in the UK communicate with friends and family at least once a week by email; only consumers in Italy

are less likely to do this (76%). With the exception of Japan, voice calls (fixed or mobile) are the next most popular methods followed by text messaging.

More than four in five (82%) respondents in Japan communicate by email (despite the high cost; for more, see the *Telecoms and networks* section of this report) and almost two in three (62%) communicate by mobile. The next most-used weekly communications method in Japan is face to face (43%), and just under a third (31%) make weekly voice calls on a fixed landline.

Consumers in France are more likely than those in other countries to use post on a weekly basis to communicate with friends and family, with one in three (31%) in France doing so, compared to between 14% and 26% of consumers in other countries.

**Figure 1.13 Methods used at least once a week to communicate with friends and family**



Source: Ofcom research, 2012

Q2a: How often do you use x to communicate with friends and family? (NETT figures)

Base: Adults who use communication methods aged 16+, n: UK=1,065; FRA= 1,016; GER= 1,024; ITA= 1,015; USA= 1,010; JPN= 1,004; AUS= 1,007; ESP= 1,001

## **Text-based communication is more popular than voice-based communication**

Taking all text-based communication and voice-based communications as a whole, we can see that the use of text-based communication has overtaken voice-based communication.

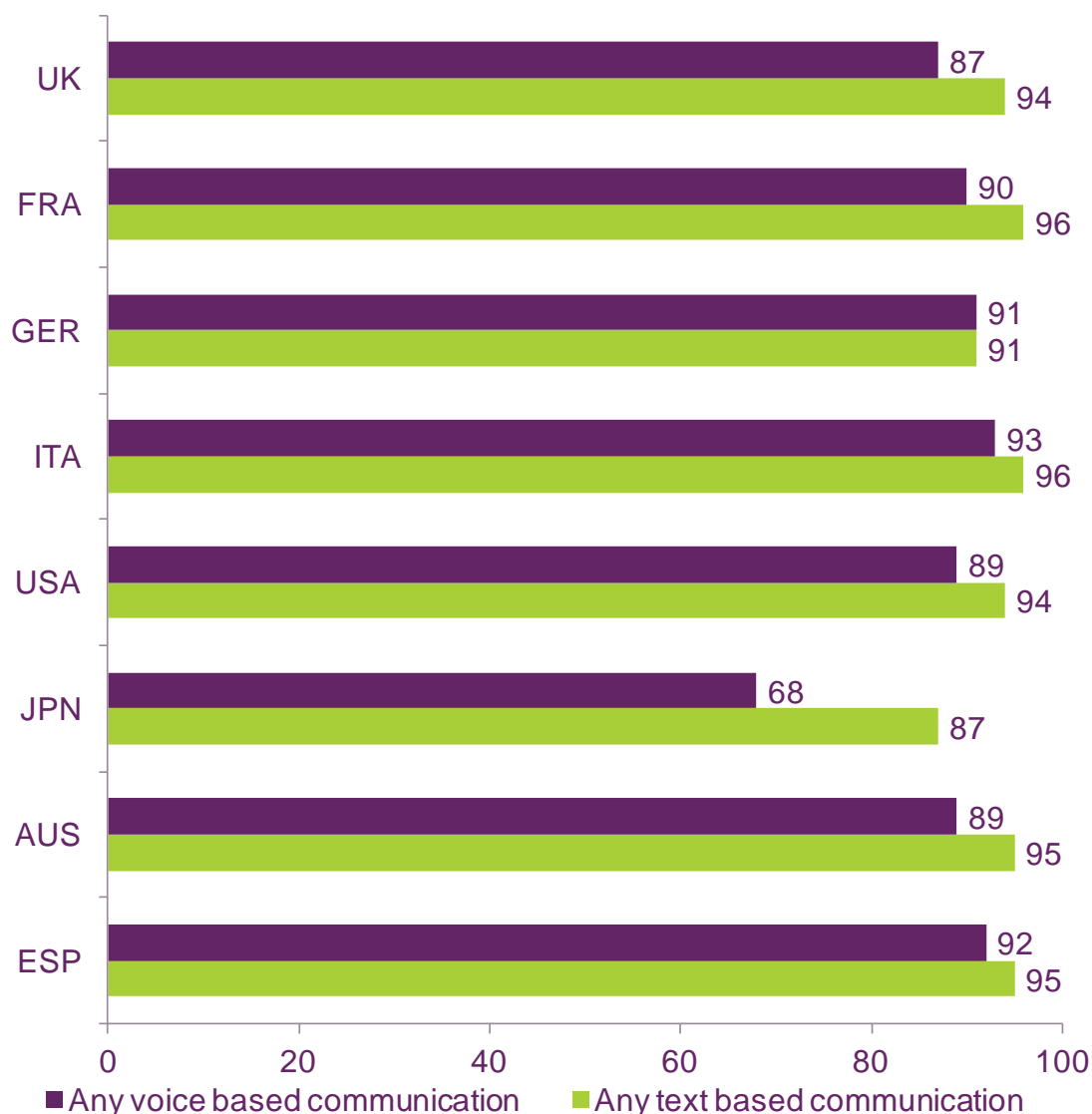
In all the countries surveyed except Germany, where there is no difference, consumers use text-based communications, including text messages, email, micro-blogging, social networking, post and instant messaging, to communicate with friends and family on a weekly basis more than they use voice-based communications such as mobile phones and fixed landline telephones.

Consumers in Japan communicate using voice (fixed landline or mobile phones) much less than those in any other country. Sixty-eight per cent in Japan use voice-based communication weekly, compared to 87% in the UK and at least nine in ten in all other countries.

The use of text-based communications is high across all countries; between 87% and 97% do this across all countries surveyed.

The chart below compares the cumulative weekly use of voice-based communication with text-based communication across the countries surveyed.

**Figure 1.14 Net weekly voice-based communication and text-based communication**



Source: Ofcom research, 2012

Q2a: How often do you use x to communicate with friends and family?

Base: Adults who use communication methods aged 16+, n: UK=1,065; FRA= 1,016; GER= 1,024; ITA= 1,015; USA= 1,010; JPN= 1,004; AUS= 1,007; ESP= 1,001

### 1.3.5 Communicating by sending greetings

#### Non-digital methods of communication are the most used for birthdays and other greetings

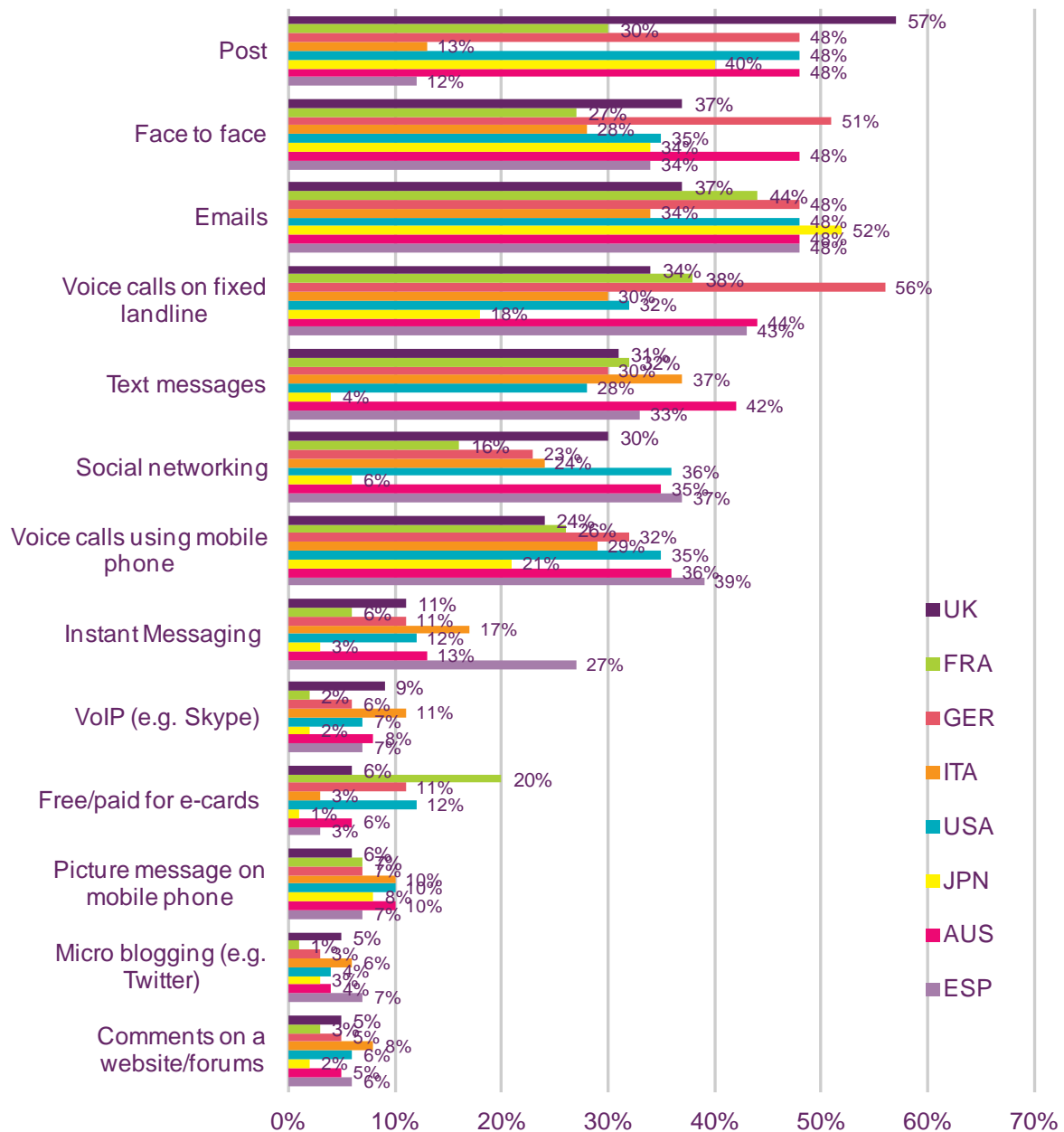
Figure 1.15 shows methods of communications used to send greetings on occasions such as birthdays and other life events.

A higher proportion of consumers in the UK use the postal service for sending such greetings than in the other countries surveyed: almost six in ten (57%) people in the UK use the postal service for these occasions, making it the single most popular method of sending such greetings in the UK. This is followed by face-to-face and email (both at 37%).

Post is less important for sending greetings in other countries. While just under half (48%) of consumers in Germany, the US and Australia use the post to send greetings, in the US and Australia, email is equally as popular. In Germany, voice calls on a fixed landline phone are used by the highest proportion of consumers (56%).

In France, Japan and Spain, greetings are sent most by email, and for these countries the use of post is significantly lower in than the other countries surveyed. For sending birthday and other greetings in Japan and Spain, post is used less often than voice calls (fixed or mobile), face-to-face, social networking and text messaging.

**Figure 1.15 Communication methods ever used to send greetings (e.g. birthdays)**



Source: Ofcom research, 2012

Q3a: ...which of these methods do you ever use to send greetings for occasions such as birthdays, get well, congratulations etc

Base: All who make any sort of contact with: friends and family, n: UK =1059; FRA= 1,006; GER= 1,015; ITA= 1,011; USA= 1,004; JPN= 996; AUS= 1,002; ESP= 996



### 1.3.6 Communicating with businesses and government

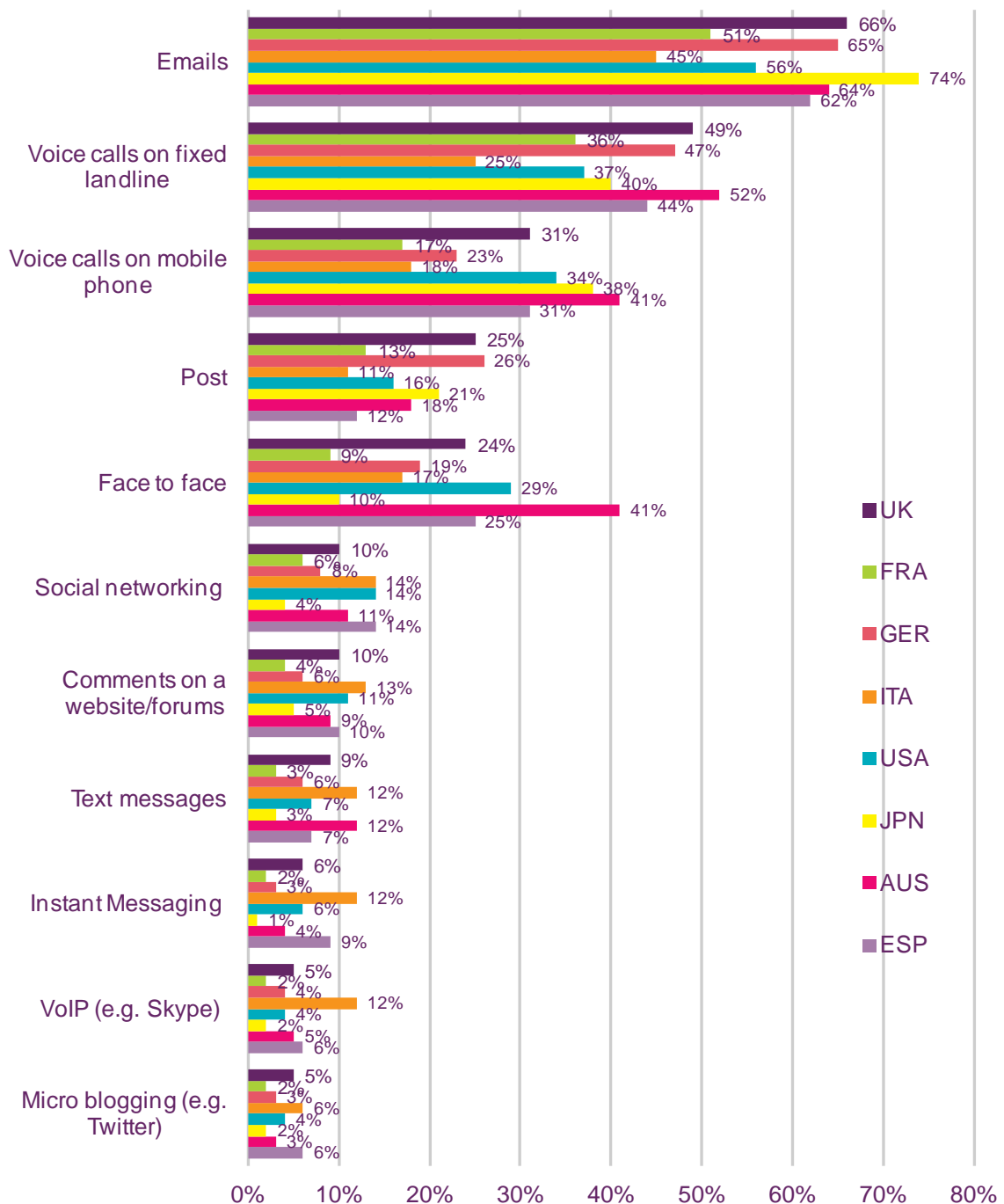
#### Email is widely used for communications with businesses

Figure 1.16 shows that for all countries, the most popular method of interacting with businesses is email. Consumers in Japan are most likely to use email for these communications (74%), followed by consumers in the UK (66%), France (65%) and Australia (64%). Although in Italy email is the most widely-used way of communicating with businesses, at 45%, Italian consumers are less likely than those in other countries to do this. Across all countries, phone calls (either landline or mobile) are the next most widely-used way of communicating with businesses, although consumers in Italy are again less likely than consumers in other countries to communicate with businesses in this way.

Use of the postal service for business communications is strongest in the UK (25%) and Germany (26%).

Compared to other countries, consumers in Italy have relatively high usage of newer technologies, such as instant messaging and VoIP, when communicating with businesses.

**Figure 1.16 Communications methods ever used to communicate with businesses and services**



Source: Ofcom research, 2012

Q3a: ...which of these methods do you ever use to communicate with business about goods and services

Base: All who make any sort of contact with: friends and family, n: UK=1059; FRA= 1,006; GER= 1,015; ITA= 1,011; USA= 1,004; JPN= 996; AUS= 1,002; ESP= 996

**Email and voice calls on a fixed landline are widely used for communications with governments and organisations**

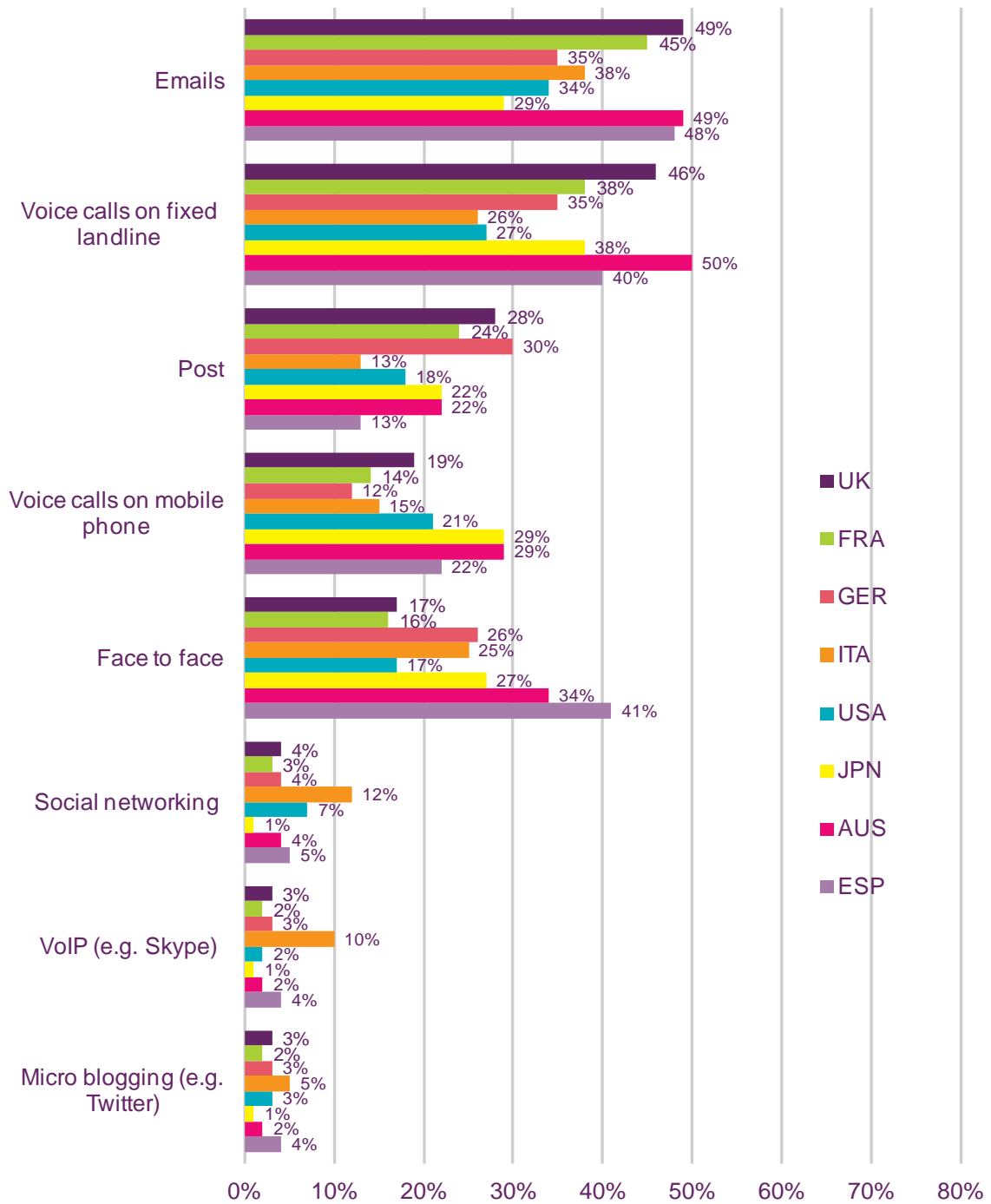
In the UK, Germany and Australia, both email and voice calls on a fixed landline are the most widely-used methods of communicating with the government and organisations, with

around half of all consumers in all three countries using these methods. In the UK, the use of fixed lines rather than mobiles to contact organisations may be partly due to pricing: UK organisations often use 'Special Services numbers' (such as 0845 and 0870) that are sometimes more expensive to call on mobile tariffs.

Email is the most frequently-used method of communicating with government and organisations in France (45%), Italy (38%), the US (34%) and Spain (48%), followed by voice calls on a fixed line. In Japan, voice calls on a fixed landline are the most widely-used method (38%).

With the exception of Italy, less than one in ten consumers in each country communicate with government organisations by social networking or VoIP.

**Figure 1.17 Communications methods ever used to communicate with government and organisations**



Source: Ofcom research, 2012

Q3a: ...which of these methods do you ever use to communicate with government organisations about formal matters (e.g. councils, tax, public services).

Base: All who make any sort of contact with: friends and family, n: UK =1059; FRA= 1,006; GER= 1,015; ITA= 1,011; USA= 1,004; JPN= 996; AUS= 1,002; ESP= 996

### **1.3.7 Summary of consumers' changing communications use**

This section examines which communications services are being used more, and which are being used less, compared with two years ago. The data (see Figure 1.18 and Figure 1.19) are from Ofcom's consumer research.

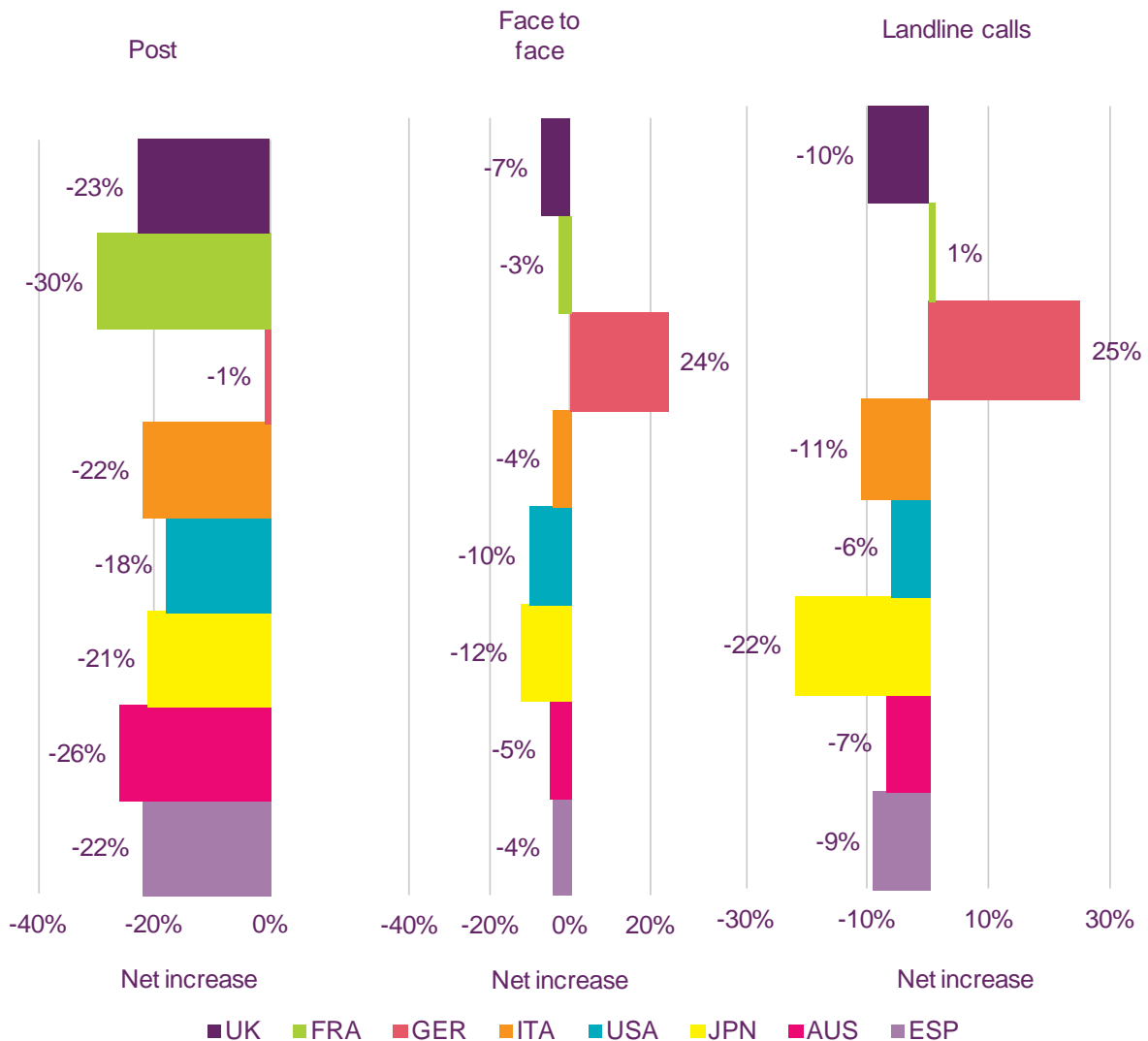
#### **Post, face-to-face and landline calls have diminished in use over the past two years**

Consumers in all countries except Germany claim to have significantly decreased their use of more 'traditional' communications methods: post, face-to-face and landline telephony in the past two years. Germany stands out for its consumption of post and telecoms services: in 2011; its post volumes declined only slowly, and a large number of consumers in Germany continued to take fixed-line telecoms services, resulting in the highest volume of landline calls per head of all the 17 comparator countries featured in this report. These metrics are discussed in more detail in the Telecoms chapter.

For all countries, the largest decrease was in the use of the postal service, with claimed use declining by between -30% (France) and -1% (Germany). Face to face communications have declined by between -12% (Japan) and -3% (France) and landline communication has declined by between -22% (Japan) and -6% (USA).

In contrast, consumers in Germany claim to have increased their use of face-to-face and landline communication by about a quarter (24% and 25% respectively) over the past two years.

**Figure 1.18 Net claimed changes in communications methods used: past two years – negative changes**



Source: Ofcom consumer research, September 2012.

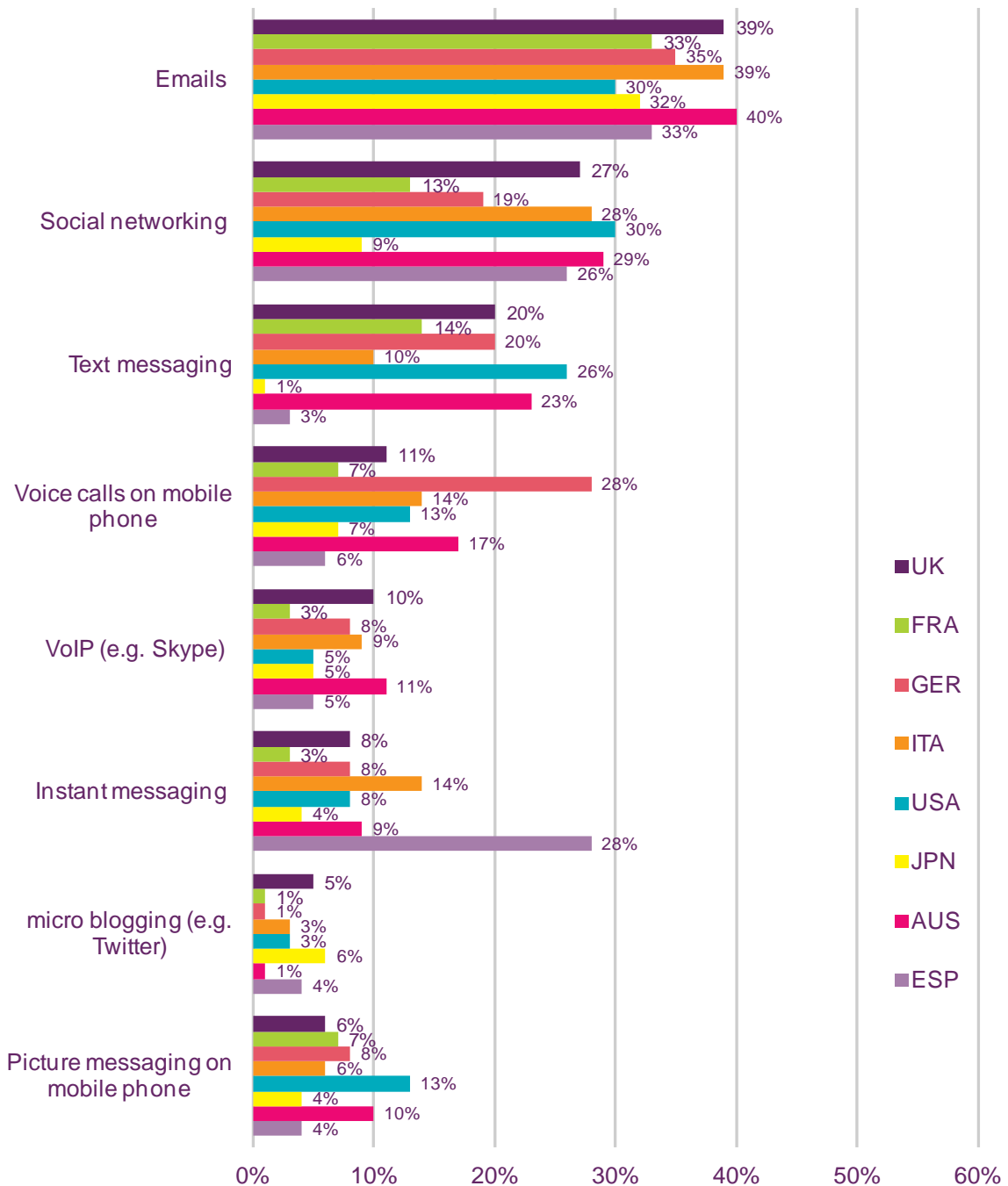
Question: Which, if any, of these methods do you use to communicate MORE than you did two years ago? And which of them do you use to communicate LESS than you did two years ago? Note: the net change figures give the percentage of respondents who selected MORE minus the percentage of respondents who selected LESS.

### Email, social networking, text messaging, voice over IP and messaging have increased in use

Across all the countries we surveyed, the use of digital methods of communication has increased. In the UK the largest increases in communications methods used in the past two years were in the use of email (39% net claimed increase), followed by social networking sites (+27%) and text messaging (+20%).

A similar trend can be seen in other markets, with email experiencing the greatest growth over the past two years in every country except the US (where there was equal growth in social networking). Almost three in ten (28%) consumers in Spain claim to have increased their use of instant messaging over the past two years.

**Figure 1.19 Net claimed changes in communications methods used in past two years – positive changes**



Source: Ofcom consumer research, September 2012.

Question: Which, if any, of these methods do you use to communicate MORE than you did two years ago? And which of them do you use to communicate LESS than you did two years ago? Note: the net change figures give the percentage of respondents who selected MORE minus the percentage of respondents who selected LESS.

### 1.3.8 Four dimensions of change

Section 1.3.7 examined the increased and decreased use of specific communications services. But looking at each service in isolation does not reveal the full picture of how

consumers' communications use is changing. To do this, we can present the data to show the apparent substitution of some services for others. We examine four trends that have become apparent:

- Face-to-face communication has declined in favour of online communications
- Email and social networking are key elements of increased internet use
- Use of post has declined amid a strong preference for communicating online
- Growth in the volume of phone calls was low or negative, while text and online messaging was popular
- We now consider each of these trends, or dimensions, in turn.

### **Dimension one: face-to-face communication declines in favour of the internet**

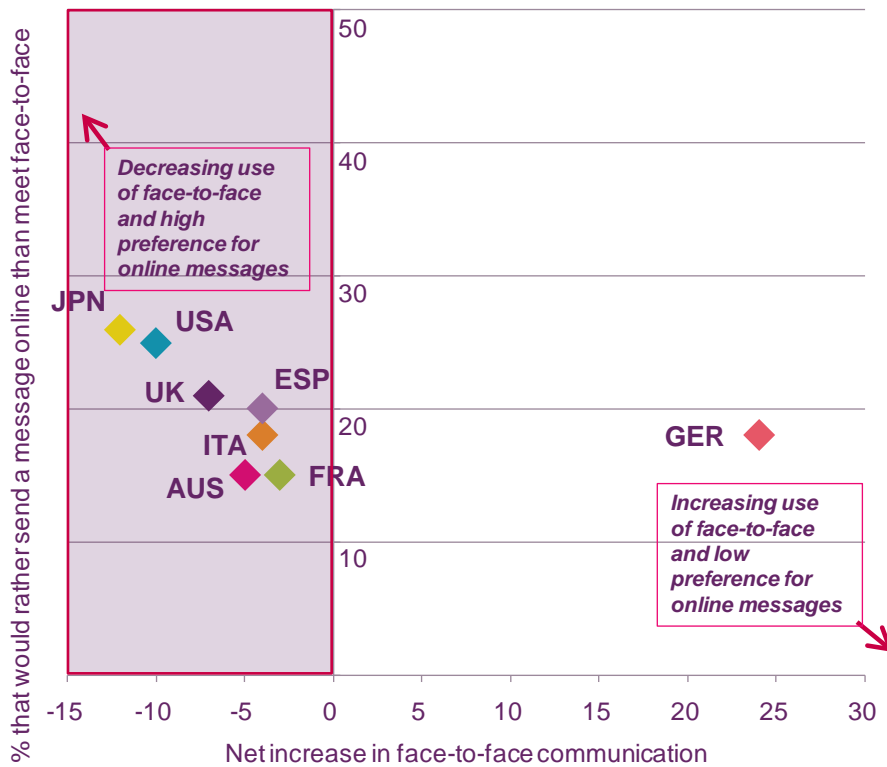
In seven of our eight comparator countries, more consumers reduced their face-to-face contact with their friends and family, than increased it, over the past two years.

This reduction in face-to-face contact was largest in Japan, followed by the US, with a net reduction (the difference between those who said face-to-face contact had decreased and those who said it had increased) of 12% and 10% respectively. In the UK, the net reduction was 7%; the third highest. Only in Germany did face-to-face contact increase over the past two years.

We also asked consumers their preference for sending a message online instead of meeting face-to-face. The options for sending a message online included social networking and email. Between 15% and 26% of respondents in each country said that they preferred to send a message online, rather than meet face-to-face. Japan was the country most likely to reject face-to-face contact in favour of sending a message online, followed by the US and the UK (see Figure 1.20).



**Figure 1.20 Change in preference levels: face-to-face communication vs. sending a message online**



Source: Ofcom consumer research, September 2012.

Question (x-axis). Which, if any, of these methods do you use to communicate MORE than you did two years ago? And which of them do you use to communicate LESS than you did two years ago?

Note: the net increase is the percentage of respondents who selected MORE minus the percentage of respondents who selected LESS.

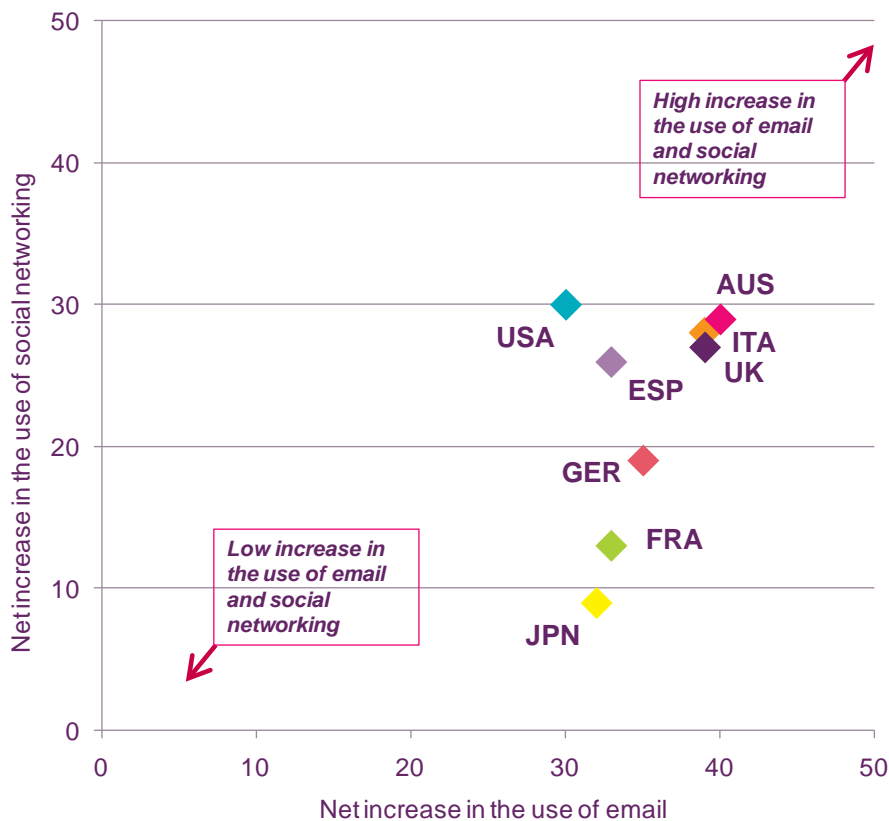
Statement (y-axis): I would rather send someone a message online than meeting them face-to-face.

Note: figures show the percentage of respondents who said the statement 'applied' or 'totally applied' to them.

**Dimension two: email and social networking increased markedly**

We also found net increases in the use of both email and social networking in every comparator country; that is, an increase in the number of respondents who said they used the service more than two years ago, minus the number of respondents who said they used the service less than two years ago. In Australia, the UK and Italy, the net increase was around 40% for email. In the US, Australia, Italy, the UK and Spain, the net increase for social networking exceeded 25% (see Figure 1.21).

**Figure 1.21 Change in preference levels: the use of email vs. social networking**



Source: Ofcom consumer research, September 2012.

Question for each axis: Which, if any, of these methods do you use to communicate MORE than you did two years ago? And which of them do you use to communicate LESS than you did two years ago? Note: the net increase is the percentage of respondents who selected MORE minus the percentage of respondents who selected LESS.

### Dimension three: use of post declined amid strong preference for communicating online

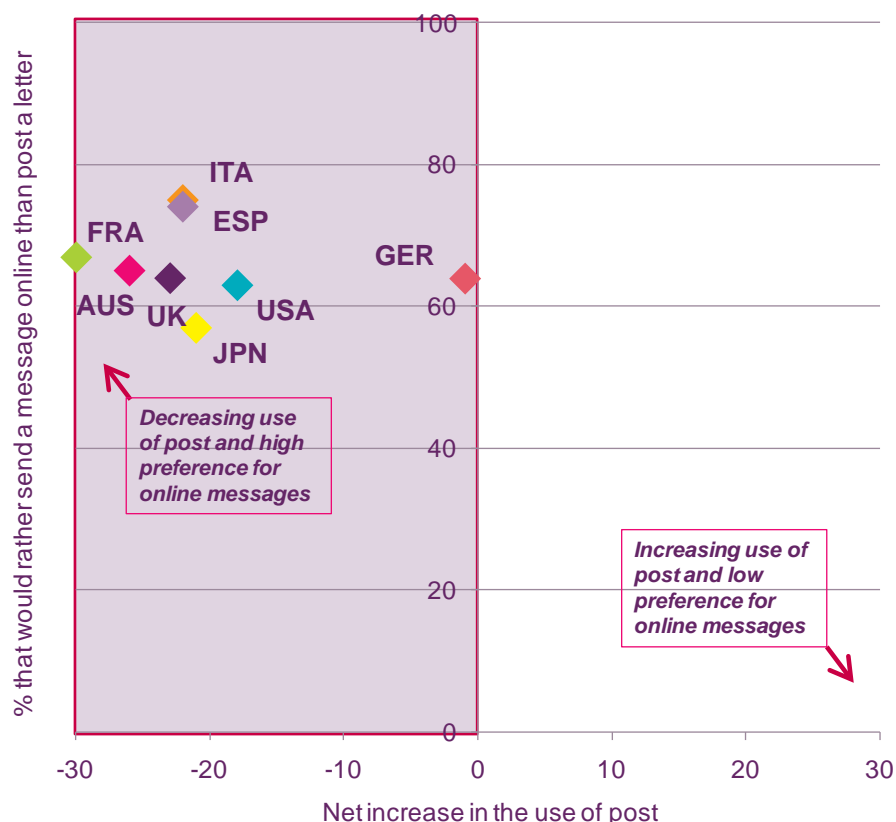
Across the eight comparator countries, use of postal services declined. There also appeared to be a considerable preference for sending messages by email or over the internet rather than by post. These trends appear to be particularly strong in Spain and Italy (see Figure 1.22).

According to industry data, mail volumes declined by 18% between 2006 and 2011 across our comparator countries. The largest declines were in Spain (25.4%), Italy (25.1%), the UK (24.5%) and Poland (23.7%). However, the majority of mail volumes comprise commercial mail, so these figures are not necessarily a reflection of consumers' changing use of post. More details can be found in the Post chapter of this report.

Ofcom's market research sheds more light on consumers' use of post. In all countries, more consumers said they used post *less* than they did two years ago, than said they used post *more* than two years ago. The difference was highest in France, where 30% more respondents said they used post *less* than said they used post *more* than two years ago. Australia (26%) also had a large difference. In marked contrast, Germany showed just a 1% difference. This may be partly because stamp prices – particularly for smaller letters – are relatively inexpensive in Germany.

The research aimed to try to identify the extent to which postal services are being replaced by internet-based alternatives. It asked respondents if they preferred to send messages via email (or over the internet), rather than sending post. In all countries, over half of the respondents said the statement applied, or totally applied, to them. This preference to send messages over the internet rather than by post was strongest in Italy (where 75% said the statement applied, or totally applied) and Spain (74%). For the UK, the figure was 64%.

**Figure 1.22 Change in preference levels: using post vs. sending messages online**



Source: Ofcom consumer research, September 2012.

Question (x-axis). Which, if any, of these methods do you use to communicate MORE than you did two years ago? And which of them do you use to communicate LESS than you did two years ago?

Note: the net increase is the percentage of respondents who selected MORE minus the percentage of respondents who selected LESS.

Statement (y-axis): I prefer to send a message via email or over the internet rather than post a letter.

Note: figures show the percentage of respondents who said the statement 'applied' or 'totally applied' to them.

#### **Dimension four: text messaging increased, while the volume of phone calls fell in the majority of countries**

In contrast to the preceding charts, which are based on findings from Ofcom's consumer research, this section is based on industry data provided by IDATE, and covers 11 of the 17 comparator countries in the *International Communications Market Report*.

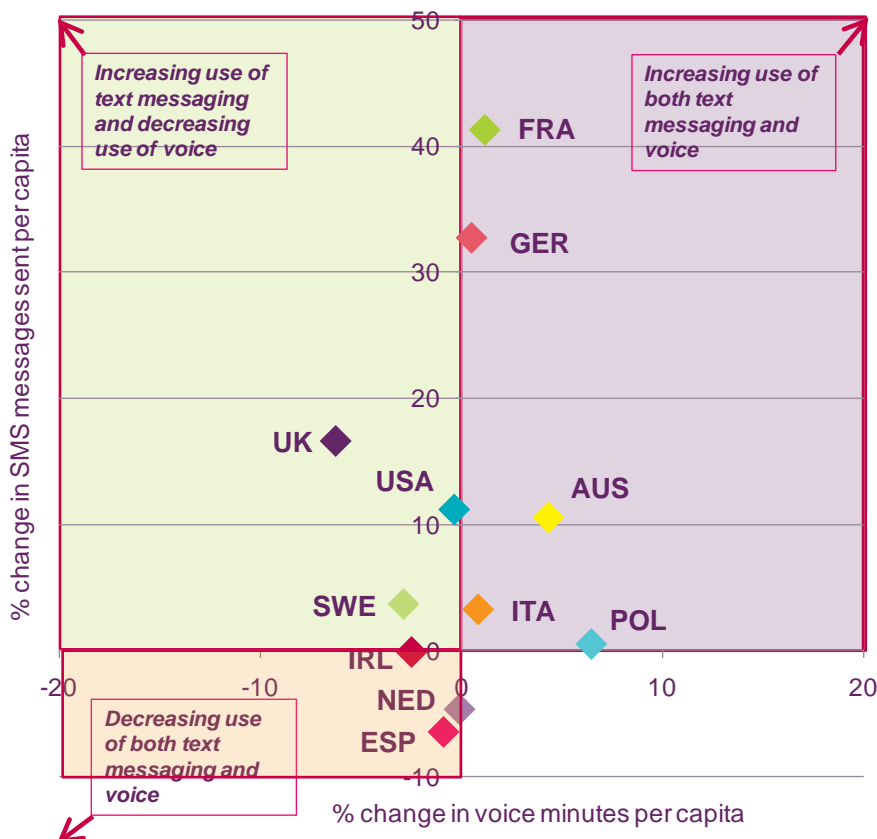
These data show that, in 2011, the UK spent 6.3% fewer minutes per head making phone calls (total fixed and mobile) than in 2010. This was the largest decrease of all the comparator countries. The volume of minutes declined in five other countries (the US, Spain, the Netherlands, Sweden and Ireland) and increased in five countries (the largest increase was in Poland, with a 6.4% increase).

It is likely that some of these voice calls have been replaced by text messaging, and some by internet-based communications, including email and social networking. However, the rate of substitution varies between countries.

In the UK, the rate of substitution appears to be one of the highest of our comparator countries: as well as having the largest decline in the volume of voice calls per person, the number of text messages sent per head in the UK increased sharply (up by 16.6% between 2010 and 2011). This is illustrated in Figure 1.23; the UK is positioned clearly in the upper-left quadrant, indicating that many UK consumers are text messaging in preference to making phone calls. This change may have been driven by the fact that most UK mobile tariffs now include a large number of bundled text messages.

There are only two other countries – Sweden and the US - where voice volumes have fallen but text message volumes have risen, although both changes were lower in magnitude than for the UK. In five countries, the volume of both voice and SMS increased in 2011. However, in these countries – such as France with a 1.1% increase in voice and a 41.3% increase in SMS – there may nevertheless have been some substitution of SMS for voice calls.

**Figure 1.23 Change in voice minutes per head vs. change in SMS messages sent per head, year-on-year change in 2011**



Source: IDATE/Ofcom/operators. Shows the total number of minutes made from fixed-line and mobile phones. Figures for USA and Canada include incoming mobile calls.

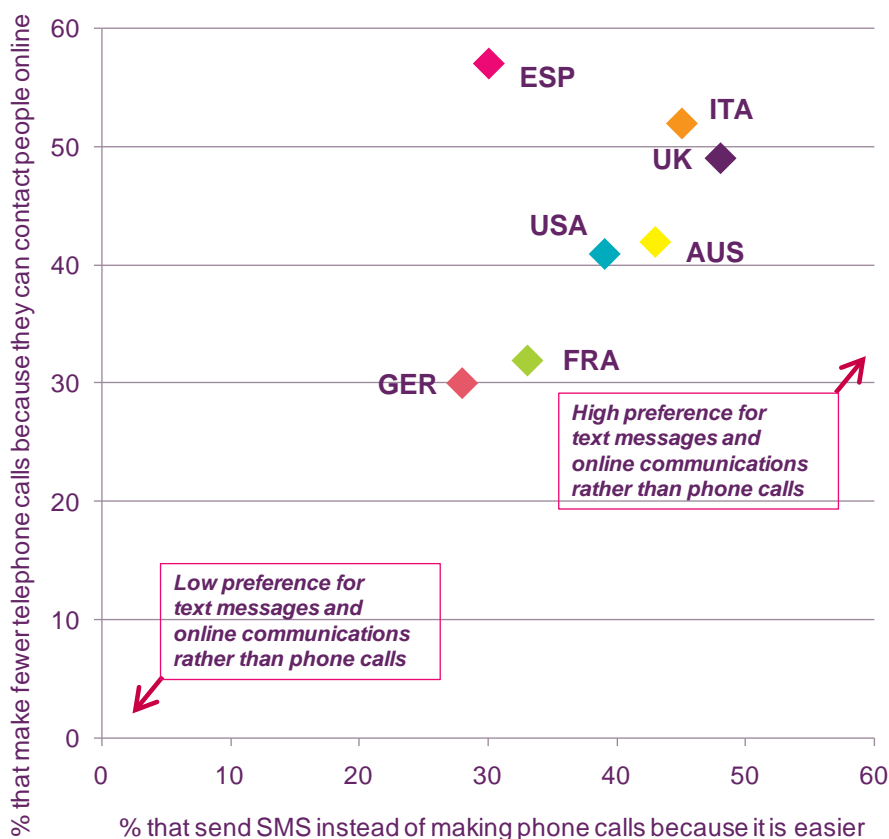
Returning to Ofcom’s market research, there is some evidence of the extent to which consumers prefer to send text messages rather than make phone calls. The ease of use with which they can do this – particularly with smartphones – appears to be a major driver. In the UK, nearly half of the respondents (48%) said the statement that they: ‘send SMSs instead

of making phone calls because it is easier' applied, or totally applied, to them. This was the highest figure of the comparator countries.

UK consumers also appeared to be among the most keen to contact their friends and family online instead of calling them: 49% said that the statement that they: 'make fewer telephone calls because they contact people online' applied, or totally applied, to them. Only in Spain (57%) and Italy (52%) were the figures higher (see Figure 1.24). Methods of contacting friends and family online include email and social networking.

The decline in voice volumes is discussed in more detail in the *Telecoms and networks* chapter.

**Figure 1.24 Percentage who expressed preference for communicating by SMS and online messaging instead of phone calls**



Source: Ofcom consumer research September 2012

Statement (x-axis): I send SMS (text messages) instead of making phone calls because it's easier

Statement (y-axis): I make fewer telephone calls because I can just contact people online.

Note: figures show the percentage of respondents who said the statement 'applied' or 'totally applied' to them.

# 1.4 How consumers followed the London 2012 Olympic and Paralympic Games

## 1.4.1 Key points

- **A higher proportion of respondents watched or listened to coverage of the London 2012 Olympic and Paralympic Games ('the Games') several times a day in the UK (28%) than in any other comparator country.** Twenty-six per cent did so in Japan. The US had the largest proportion of respondents who did not follow the Games at all (29%).
- **In every comparator country, a higher proportion of respondents watched the Games at least weekly on scheduled television than on any other medium.** The UK had the highest proportion of respondents who watched the Games on scheduled TV at least once a week (89%).
- **The most-cited reasons for watching the Games on scheduled TV were its convenience or quality, in every comparator country except Italy,** where respondents cited the low cost of watching TV most often (32%). In the UK, a higher proportion of respondents than in any other comparator country cited the quality of pictures and the viewing experience of scheduled TV as the reason they chose to watch it.
- **The availability of coverage at any time of day was the most-cited reason for watching the Games on a PC, in every comparator country.** In the UK, Italy and Spain the availability of coverage at any time of day was also the most-cited reason for watching the Games on catch-up / recorded TV.

## 1.4.2 Introduction

The 2012 Olympic and Paralympic Games were held in London (and other UK venues) between July and September 2012. The 26-sport event offered 8.8 million tickets for those attending in person, but the number of people who followed the Games remotely using a TV, PC, tablet, mobile phone or print publications dwarfed this figure. The International Olympic Committee estimated that the potential audience of the Games was 4.8 billion people in more than 200 countries.<sup>9</sup>

Using data from online consumer research in eight countries, the aim of this section is to examine: on which devices consumers followed the Games remotely, why they made those choices, and how often they followed the Games. The consumer research was conducted by Populus on behalf of Ofcom in September 2012, using an online base of 9152 respondents.<sup>10</sup> Because the research was carried out online, the results are based on a different sample to that used in other Ofcom consumer research, and should not therefore be compared. And the fact that the respondents were all internet users may mean that the results overstate the use of some devices used to follow the Games. The research followed Ofcom and Kantar Media's survey of how UK respondents *expected* to consume Games coverage, which took place in May 2012.<sup>11</sup>

---

<sup>9</sup> <http://www.olympic.org/news/a-window-for-the-world-london-2012-olympic-games-prepare-to-set-broadcasting-milestone/169896>

<sup>10</sup> Sample sizes: UK = 1,065, Japan = 1,004, Germany = 1,024, France = 1,016, Italy = 1,015, Spain = 1,001, USA = 1,010, Australia = 1,007.

<sup>11</sup> See Ofcom, *The Communications Market Report*, 2012.

Our research found that the Games was a truly international viewing experience: at least 70% of respondents watched it at least once in every comparator country. It also showed that scheduled TV was the most popular means of watching the Games in every comparator country, and that the most-cited reasons for doing so were convenience and the quality of the coverage.

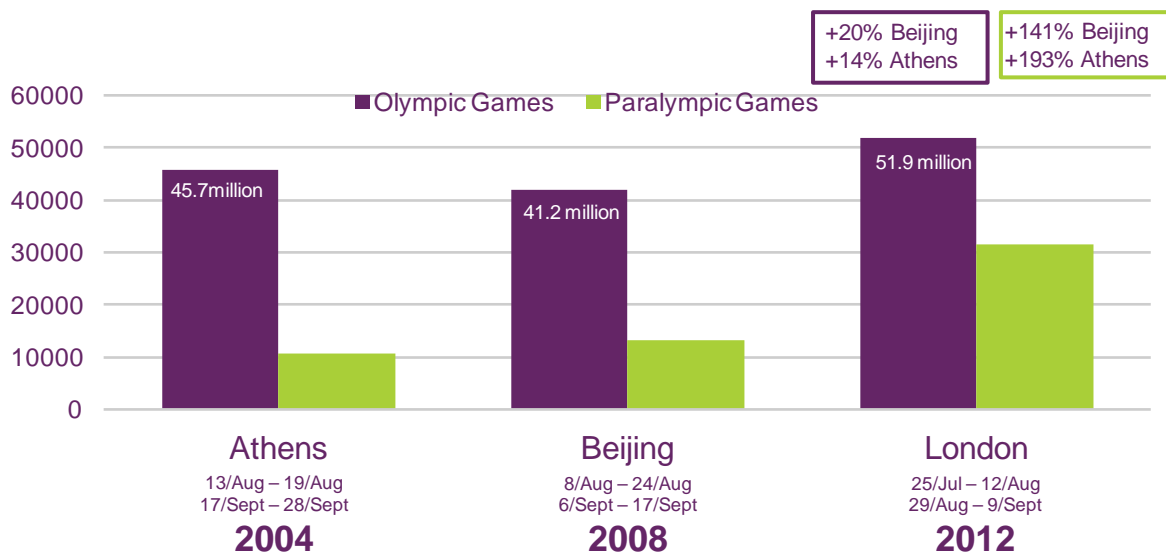
This section also incorporates research into the Games' TV scheduled audience in the UK to contextualise the scale of national television audiences.

### 1.4.3 Following the London 2012 Olympics and Paralympics

#### More than 51 million UK viewers watched coverage of the Olympic Games, and 32 million watched coverage of the Paralympic Games, on TV

London 2012 achieved the highest UK viewership of any Olympic Games, with over 51 million viewers watching at least 15 continuous minutes of Olympics coverage. This was 20% more people aged 4+ than watched the Beijing Games and 14% more than the Athens Games. At 31 million people, the Paralympics attracted 141% more UK viewers than the Beijing Games and 193% more than the Athens Games.<sup>12</sup>

**Figure 1.25 Viewers of more than 15 consecutive minutes of the Games on scheduled TV: 2004, 2008 and 2012**



Source: BARB / Infosys+ / Ofcom. Individuals aged 4+.

#### Both the opening and closing ceremonies for the Olympic Games 2012 attracted peak audiences of around 27 million viewers

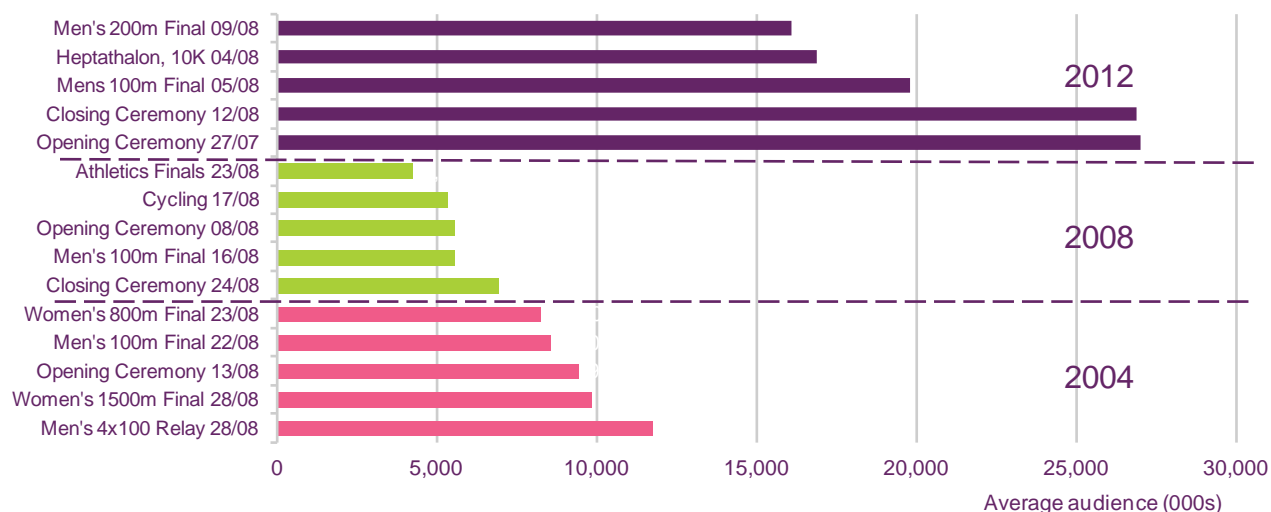
The opening and closing ceremonies of the Olympic Games achieved the largest audiences, each peaking at around 27 million viewers. The closing ceremony attracted 35% more viewers than the next-highest audience in 2012: the men's 100m final, at 19.8 million viewers.

<sup>12</sup> Ofcom, *Ofcom and the London 2012 Olympic and Paralympic Games*, to be published December 2012.

All of the top five half-hour slots for number of UK viewers outperformed the top five slots of the last two Games. The smallest audience of the 2012 top five (the men's 200m final) had 35% more viewers than the highest audience in 2004 (the men's 4x100 relay).

Large audiences also watched the Games on scheduled TV in other comparator countries: 8.7 million watched the opening ceremony in France and 7.6 million in Germany.<sup>13</sup>

**Figure 1.26 Top five Olympic Games half-hour slots, by average audience**



Source: BARB / Infosys+ / Ofcom. Individuals aged 4+.

### UK respondents watched the Games more frequently than they predicted they would

UK respondents caught up with coverage of the Games more frequently than they predicted they would. In May 2012, just 7% of people thought they would watch the Games several times every day.<sup>14</sup> In our research conducted in September, four times as many respondents (28%) stated that they had done so. Whereas 39% predicted they would watch the Games at least once a day before they began, 56% reported doing so afterwards. As people watched the Games more often than they had predicted, the proportion of people who watched coverage on 'most days' during the duration of the Games (12%) was considerably lower than the proportion who predicted that they would watch 'most days' (20%).

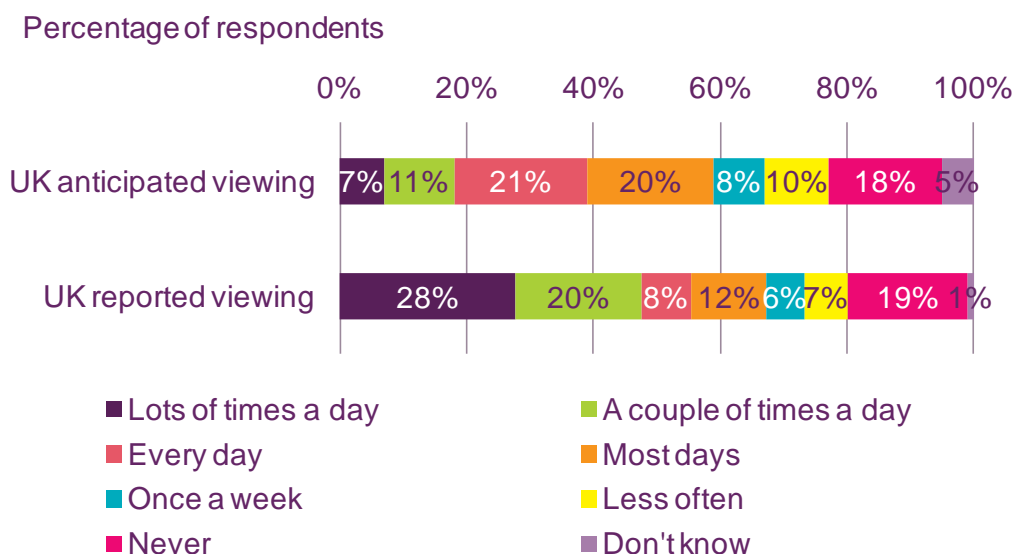
However, the proportion of people who predicted that they would not follow the Olympics at all, on television, radio or online (18%), in May 2012 was comparable to the proportion who reported having never watched the Games in September. This indicates that the same proportion of respondents who anticipated that they would follow the Games did follow the Games – but they did so more often than they expected.

<sup>13</sup> Eurodata TV Worldwide / Médiametrie / GfK.

<sup>14</sup> *Ibid.*



**Figure 1.27 Anticipated and reported frequency of following coverage of the Games using television, radio or online in the UK**



Sources: Ofcom consumer research, May 2012

Q7 Approximately how often do you think you will access coverage of the Olympic or Paralympic Games, either through watching television coverage, listening to radio coverage or accessing coverage online? Base: All respondents (n = 1803). Respondents aged 16+.

Ofcom consumer research, September 2012

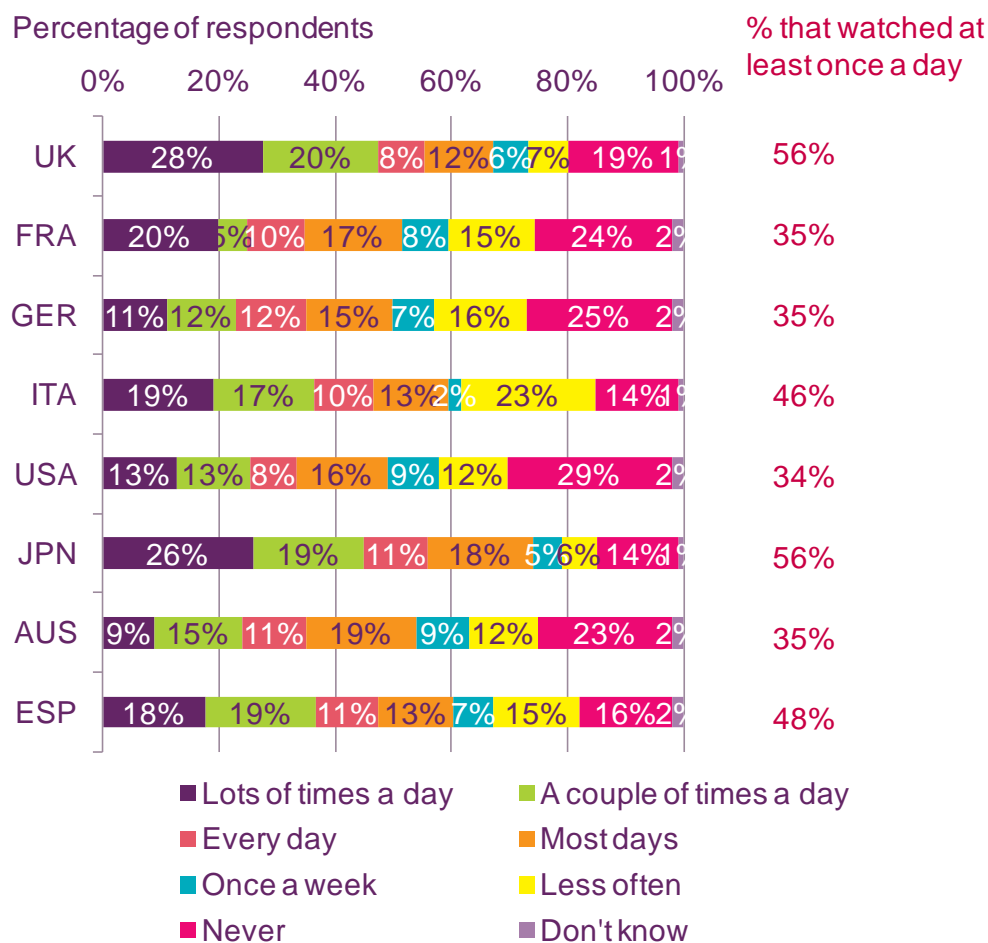
Q.G3 Approximately how often did you follow coverage of the Olympic and/or Paralympic Games, either through watching television coverage, listening to radio coverage or accessing coverage online via any of your devices? Base: All respondents (n = 1065). Respondents aged 18+.

### Viewers in the UK and Japan followed coverage of the Games most frequently

Of the countries we surveyed, respondents in the UK and Japan followed coverage of the Games most frequently. In the UK, 28% of respondents watched or listened to it several times every day, and 26% did so in Japan. In both countries, 56% of respondents watched or listened at least once a day. Many respondents also watched or listened to coverage several times every day in Italy (19%) and Spain (18%).

Respondents were least likely to watch or listen to any Games coverage in the US (where 29% did not follow it), and in Germany (25%), France (24%) and Australia (23%). Japan and Italy had the smallest proportions of respondents who did not follow the Games at all (14%).

**Figure 1.28 Frequency of following coverage of the Games using television, radio or online**



Source: Ofcom consumer research, September 2012  
 Q.G3 Approximately how often did you follow coverage of the Olympic and/or Paralympic Games, either through watching television coverage, listening to radio coverage or accessing coverage online via any of your devices?  
 Base: All respondents (n = 9152)

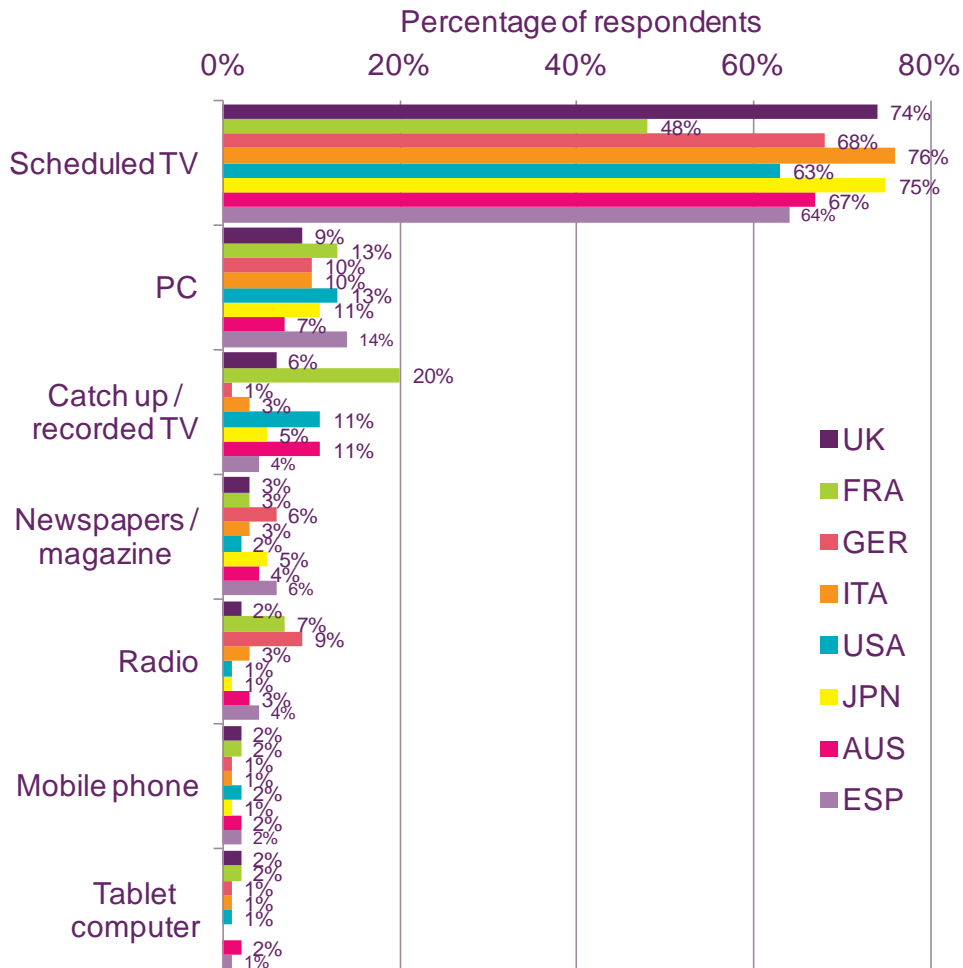
**Scheduled TV was the most common means by which people watched the Games in every comparator country**

In all of our comparator countries, over 60% of respondents used scheduled TV more than any other device to watch the Games, with the exception of France (48%). We explore the reasons why people chose to watch the coverage on scheduled television in Figure 1.31.

- In France, 20% of respondents watched the Games on catch-up or recorded TV. IPTV penetration, including catch-up and recorded TV services, is higher in France than in any other of our comparator countries (Figure 3.7). In the UK, just 6% of respondents watched the Games primarily using catch-up or recorded TV, although the UK has the highest DVR penetration among the comparator countries for which we have data (Figure 3.10). The PC was the most common means of watching the Games for 9% of UK respondents, a smaller proportion than in any other comparator country except Australia.

- Germany had the highest proportions of respondents who followed the Games primarily through radio coverage (9%) and newspapers and magazine (6%) among our comparator countries.

**Figure 1.29 Most common means of accessing Olympics / Paralympics coverage**



Source: Ofcom market research, September 2012

Q.G5 which one method of accessing Olympics and/or Paralympics coverage did you use the most?

Base: All respondents who watched any Olympic or Paralympic coverage (n = 7405)

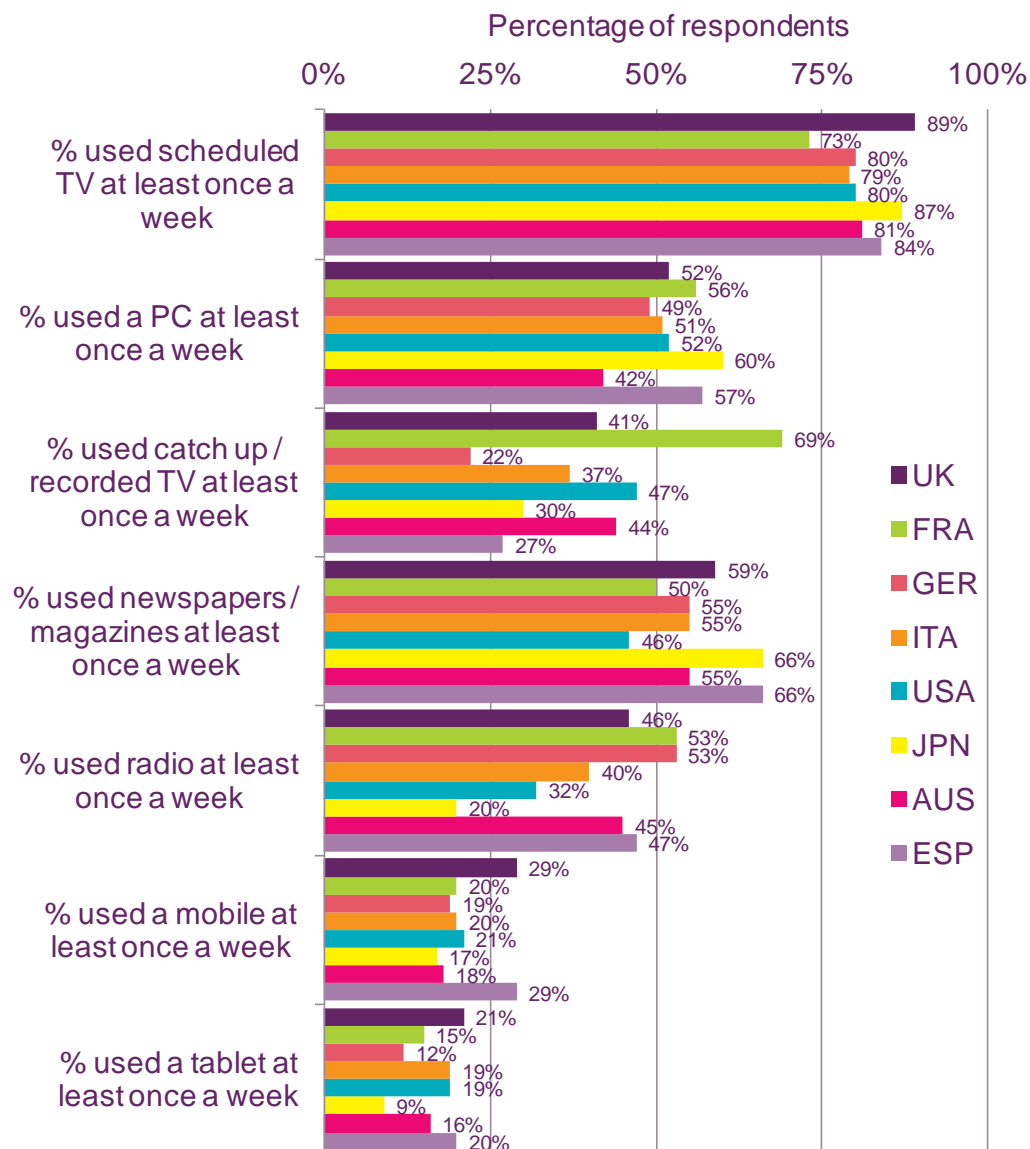
**More people watched the Games on scheduled TV at least once a week in the UK than in any other comparator country**

In the UK, 89% of people who followed Games coverage did so using scheduled TV at least once a week – a higher proportion than in any other comparator country. In Japan, 87% watched the Games on scheduled TV at least once a week and 84% did so in Spain. Respondents in France were least likely to have watched the Games on scheduled television at least once a week (73%).

A higher proportion of respondents used a tablet at least once a week to watch the Games in Spain (20%) than in any other comparator country. With Spain, the UK had the largest proportion of respondents who watched them at least weekly on a mobile (29%). The highest proportion of respondents who used catch-up or recorded TV to watch the Games at least once a week was in France (69%).

Newspapers and magazines were the second most popular way of keeping up to date with the Games in Japan (where 66% read them weekly), followed by Spain (66%), the UK (59%), Germany (56%), Italy (55%) and Australia (55%). Respondents were less likely to have used newspapers and magazines to follow the Games in the US (46%) and in France (50%).

**Figure 1.30 Use of devices at least once a week to watch the Games**



Source: Ofcom consumer research, September 2012

Q.G5 which one method of accessing Olympics and/or Paralympics coverage did you use the most?  
 Base: All respondents who watched any Olympic or Paralympic coverage (n = 7454)

**The most-cited reasons for watching coverage of the Games on scheduled TV were convenience or quality, in every comparator country except Italy**

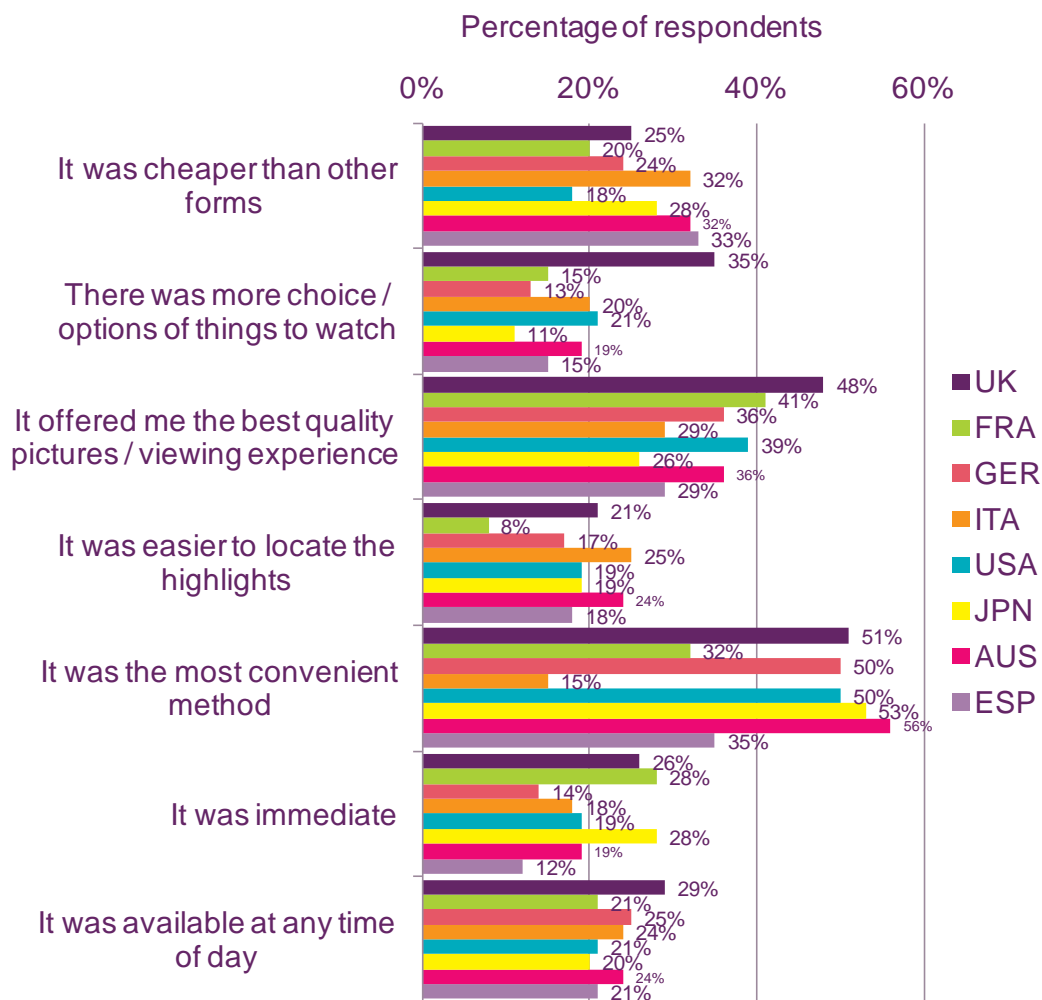
Respondents who followed the Games on scheduled TV were asked why they did so. Above all, these viewers cited the convenience of watching coverage on scheduled TV: 56% of respondents did so in Australia, 53% in Japan, 51% in the UK and 50% in Germany and the US. As scheduled TV incorporates both live coverage and highlights, audiences could watch

the Games at an hour suitable to their time zone. However, in Italy just 15% of viewers considered its convenience a reason to watch it.

In the UK, 48% of respondents cited the quality of scheduled TV's pictures, and the viewing experience, as the reason they chose to watch it, as did 41% of viewers in France, 39% in the US and 36% in Germany and Australia. Audiences may have valued the quality of scheduled TV pictures for watching a shared, live event like the Games.

Italy was the only country where the low cost of watching scheduled TV was the most-cited reason for choosing its coverage (by 32% of respondents). In Spain, 33% of respondents stated that the low cost of scheduled TV was a reason why they followed the Games in this way, although 35% also stated that it was the most convenient method of watching the Games.

**Figure 1.31 Reason for choosing to watch the Games on scheduled television**



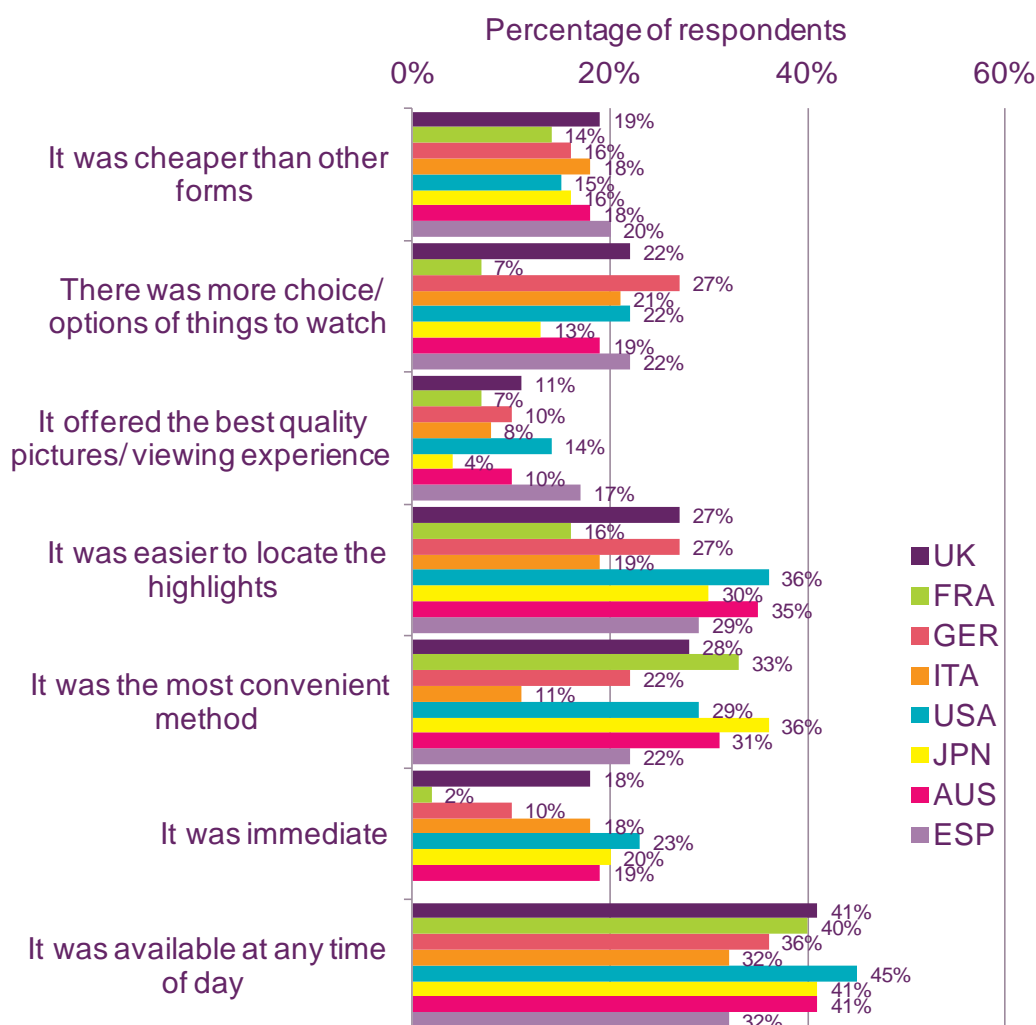
Source: Ofcom market research, September 2012  
 Q.G6 Why did you choose to follow the Games using this method? Through scheduled television  
 Base: All respondents who watched any Olympic or Paralympic coverage using this method (n = 6925)

**The availability of Games coverage at any time of day was the most-cited reason for watching it on a PC in every comparator country**

Over 40% of people who watched the Games on a PC in the US (45%), the UK (41%), Japan (41%) and Australia (41%) did so because this coverage was available to them at any time of day. The significant time zone differences between the UK and the US, Japan and Australia help to explain the importance of availability. However, as a comparable number of respondents in the UK mentioned the same factor, the convenience of watching coverage at any time of day seems to have been valuable even within the Games' time zone.

The convenience of watching coverage on a PC was the second most-cited factor for doing so in Japan (36%), France (33%) and the UK (28%). A large proportion of people also cited this reason in Australia (31%) and the US (29%). The convenience of watching on a PC might extend from the availability of highlights on IPTV at any time of day, as explored above, although it also suggests that PC viewers considered this coverage a viable alternative to that on other devices.

**Figure 1.32 Reason for choosing to watch the Games on a PC**



Source: Ofcom market research, September 2012  
 Q.G6 Why did you choose to follow the Games using this method? Through scheduled television  
 Base: All respondents who watched any Olympic or Paralympic coverage using this method (n = 6925)

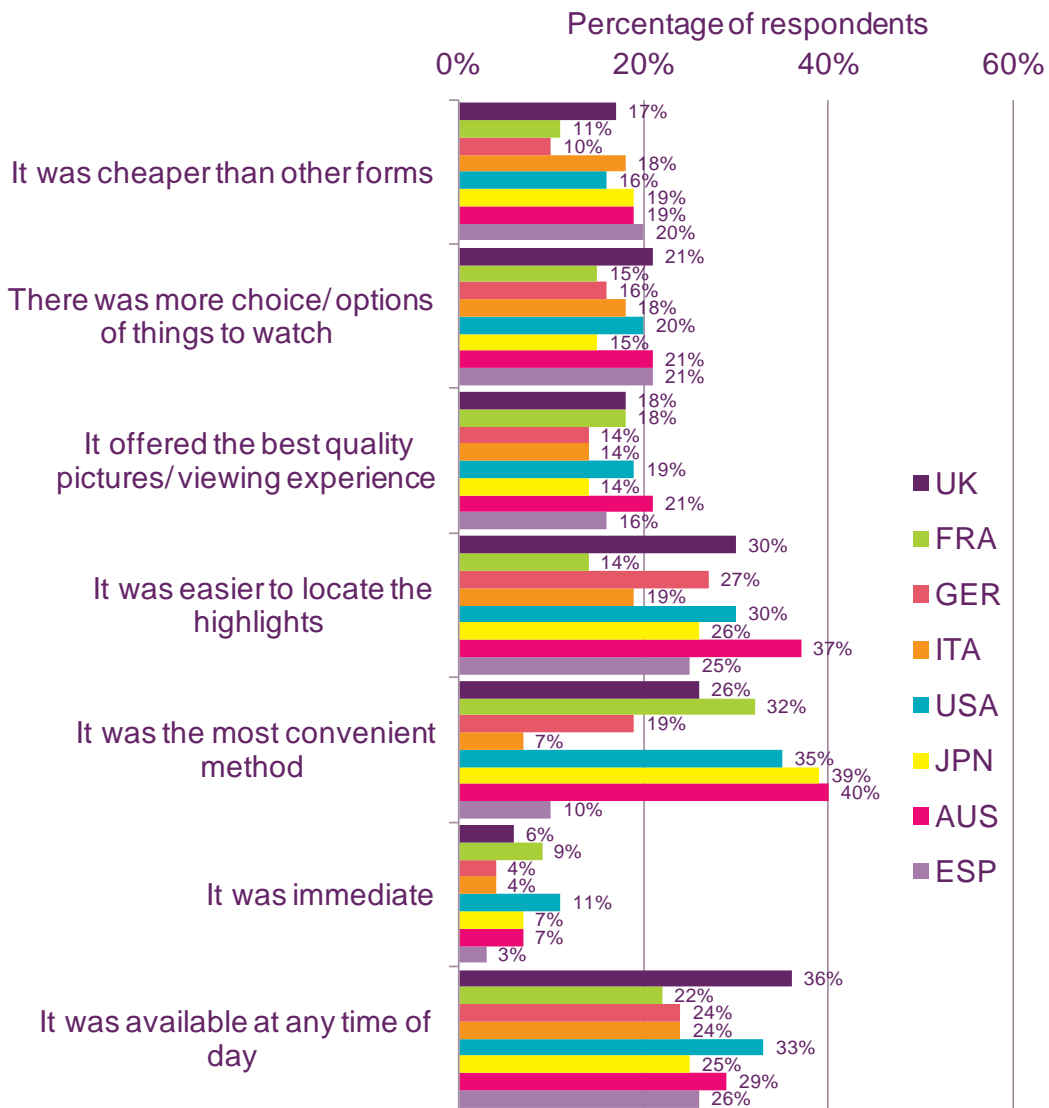
**A larger proportion of respondents watched the Games on catch-up TV because it was available at any time of day in the UK than in any other comparator country**

In the UK, 36% of those who watched the Games on catch-up or recorded TV did so because it was available at any time of day, a higher proportion than in any other comparator country. They did so despite the fact that the Games were taking place within their time zone.

In France, 69% of respondents watched the Games on catch-up or recorded TV at least weekly (Figure 1.30). The predominant reason for doing so was its convenience, cited by 32% of those who followed the Games using catch-up or recorded TV. IPTV penetration on primary TV sets is higher in France than in any other comparator country (Figure 3.7), perhaps helping to explain this, although the ability to re-watch events easily may also have contributed.

In Australia, Japan and the US, convenience was the overriding reason why respondents used catch-up or recorded TV, cited by 40% in Australia, 39% in Japan and 35% in the US.

**Figure 1.33 Reason for choosing to watch the Games on catch-up / recorded TV**



Source: Ofcom market research, September 2012

Q.G6 Why did you choose to follow the Games using this method? Through catch-up/recorded TV

Base: All respondents who watched any Olympic or Paralympic coverage using this method (n = 4069)



# 1.5 News consumption: the international context

## 1.5.1 Introduction

This section looks into the consumption of news. The first part of this section focuses on digital news consumption, and presents a summary of the key findings from the Reuters Institute *Digital News Report*, which was published in July 2012. The second part presents the findings of Ofcom's consumer research and looks at which platform consumers use as their main source for different types of news. The key findings include:

- **There are significant differences in the type of platform consumers use for news on an 'at least weekly' basis.** Weekly consumption of news on the internet among online users of news in four comparator countries is highest in the US (86% of respondents). In Germany, consumption of news by TV is highest (87% of respondents).
- **Users of news online in the US are the most likely to comment on a news story on a social network, and most likely to engage in a one-to-one online conversation about a news story.** Twenty-seven per cent of respondents claimed the former, and 30% the latter. Online users of news in the UK are far less likely to engage in the same way, with 14% of respondents claiming that they comment on a news stories on social networks.
- **Consumers with the internet are more likely to use TV as their main source of national news.** When asked about their main source for national news, the platform named most often across our comparator countries was TV, followed by the internet. In the UK, almost half (48%) selected TV as their main source of national news. Respondents in France were more likely to state that they used TV as their main source of national news; here, almost six in ten (58%) selected TV as their main source of national news and 26% selected the internet.
- **In the UK, France, the US and Japan, TV is the main source of local news** with more than four in ten (between 41 and 46%) selecting TV in those countries. In Italy and Spain the main source for local news is the internet, while in Germany, newspapers and magazines are used more than any other platform for this purpose.

## 1.5.2 Digital news consumption – a comparative study

This section provides a summary of key findings from the Reuters Institute *Digital News report*, published in July 2012.<sup>15</sup> Ofcom, along with the BBC, City University, and YouGov, provided support for the project. The research provides comparisons between the UK, the US, France, Germany and Denmark. For reasons of consistency, this summary focuses on the first four countries only.

The report shows how news is perceived quite differently across countries, and how consumption habits differ considerably in a number of areas, particularly in relation to social media.

---

<sup>15</sup> Available at:

[http://reutersinstitute.politics.ox.ac.uk/fileadmin/documents/Publications/Other\\_publications/Reuters\\_Institute\\_Digital\\_Report.pdf](http://reutersinstitute.politics.ox.ac.uk/fileadmin/documents/Publications/Other_publications/Reuters_Institute_Digital_Report.pdf)

The survey was completed by an online panel of 2173 UK news users for YouGov in April 2012. YouGov also conducted online surveys in France (1011), Germany (970), the US (814) and Denmark (1002). In this section, we refer to these people as “online users of news”, which means they have online access, and said that they had used any form of (offline or online) news in the previous month. For further methodological details please see [http://reutersinstitute.politics.ox.ac.uk/fileadmin/documents/Publications/Other\\_publications/Digital\\_Report\\_Methodology.pdf](http://reutersinstitute.politics.ox.ac.uk/fileadmin/documents/Publications/Other_publications/Digital_Report_Methodology.pdf).

## Interest in news

Figure 1.34 sets out the relative levels of interest that online users of news have in various types of news. In the UK, the sample are more likely to say they are interested in entertainment and celebrity news, and sports news, than the other countries, and are distinctly less likely to nominate news about politics. That said, the UK is more likely than the other comparator countries listed here to be interested in general domestic news.

Respondents in Germany are more likely to be interested in news about their region, as might be expected, given the Länder system of government, and in international news. Respondents in France are less interested than the other countries in local news, and more interested in cultural news. Respondents in the US are least likely to be interested in international news, or general domestic news, or news about their region, although they are far more likely than those in the UK to be interested in political news.

**Figure 1.34 Levels of interest in types of news**

	UK	FRA	GER	USA
Domestic news	74%	66%	61%	53%
International news	48%	54%	64%	44%
Local news about my town or city	50%	36%	50%	56%
News about my region	42%	46%	62%	28%
Business and financial news	19%	11%	17%	22%
News about the economy	42%	33%	34%	52%
Entertainment and celebrity news	21%	14%	14%	16%
Health and education news	27%	27%	26%	27%
Arts and culture news	10%	19%	8%	11%
Sports News	37%	24%	33%	24%
News about country politics	37%	57%	55%	63%
Science and Technology	23%	21%	28%	27%

Source: Reuters Institute / YouGov online research April 2012

Q: Which of the following types of news is most important to you? Choose up to five.

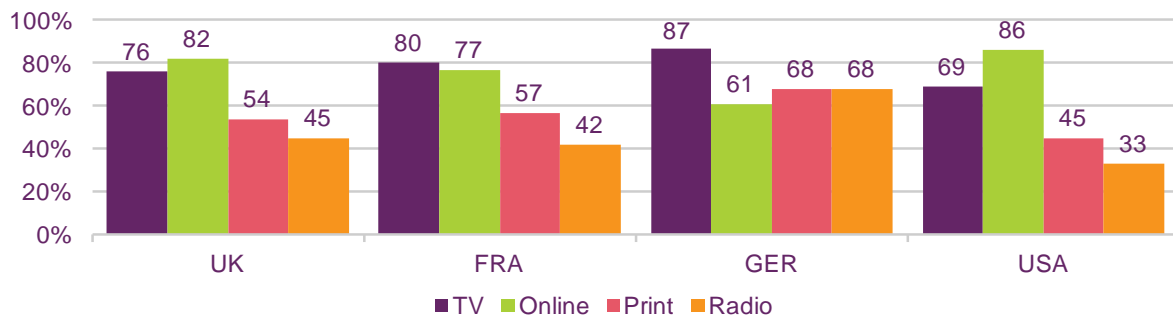
Base: UK (n=2173) FRA(n=1011) GER (n=970) USA (n=814)

## Weekly access to news by platform

Across the countries in the sample, there are clear differences between the platforms preferred for news among the sample of weekly consumers of news online. In the UK, online (82%) followed by TV (76%) are most popular media for online news users, with just over half saying they access print news, and just under half accessing radio news, in any given week. The differential between TV (69%) and online (86%) is greater in the US. But online users of news in Germany are less likely to access online news (61%), and more

likely to use print (68%) and radio (68%) sources. Germany also has the most respondents saying they watch TV (87%); confirming that traditional sources of news are more prevalent.

**Figure 1.35 Weekly access to news, by platform**

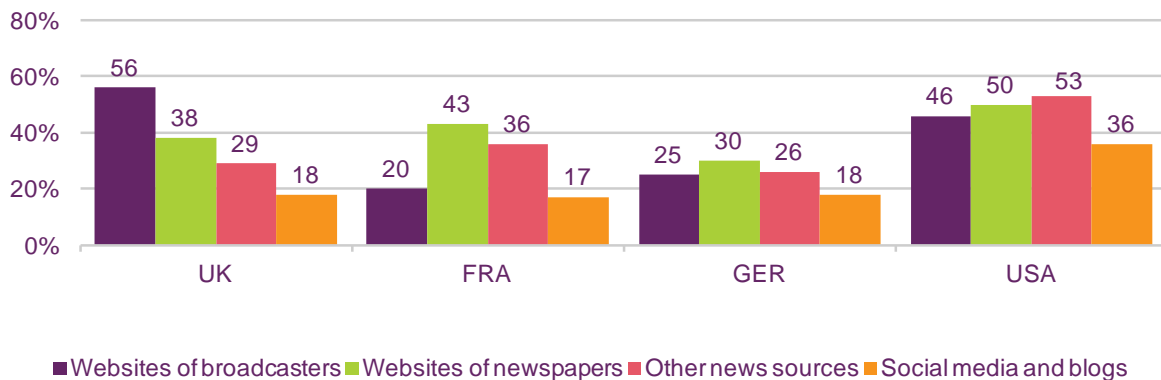


Source: Reuters Institute / YouGov online research April 2012  
 Q: Which of the following news sources have you used in the last week?  
 Base: UK (n=2173) FRA (n=1011) GER (n=970) USA (n=814)

**Types of online news used**

There are also differences by country in the types of online news that are consumed. As Figure 1.36 shows, in the UK broadcasters’ websites are far more likely to be used for online news than are other types of website. In the US and Germany, there is a more even split between press sites, TV sites, and other news sources, although levels of use in Germany are lower than in the US. In France, newspaper websites are the most likely to be used, and TV news sites much less so.

**Figure 1.36 Online news source, by type**

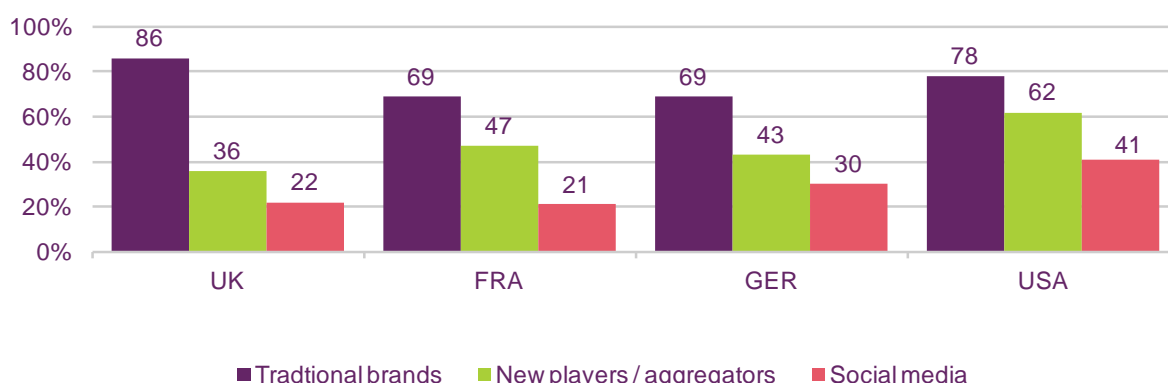


Source: Reuters Institute / YouGov online research April 2012  
 Q: Which of the following have you used to access the news in the last week?  
 Base: UK (n=2173) FRA (n=1011) GER (n=970) USA (n=814)

**Types of online source used**

When asked about the types of news provider used in the past week, respondents in the UK are less likely than those in the other countries to turn to new players/aggregators, as Figure 1.37 shows. Respondents in the US are twice as likely as those in the UK to use social media for news, and also more likely more likely than respondents in other countries to use new players or aggregators.

**Figure 1.37 Traditional brands compared to aggregators and social media**



Source: Reuters Institute / YouGov online research April 2012

Q: Which of the following news sources have you used in the last week?

Base: UK (n=2173) FRA (n=1011) GER (n=970) USA (n=814)

### Types of digital participation

Figure 1.38 sets out various ways in which it is possible to engage online. It shows that the UK and Germany are least engaged, in various ways. Around one in five say they vote in online polls during an average week, compared to around two in five in the US and France. Respondents in the US are far more likely than those in the other countries to carry out these types of activities regularly, although levels of participation in France are also high in relation to the UK and Germany. Around one in seven (14%) of respondents in the UK say they comment on a news story on social networks, and one in ten comment on a news story on a website, in a typical week.

Overall, 69% of US online news users say they participate in any of these ways on a weekly basis, compared to 60% in France, 42% in the UK and 41% in Germany.

**Figure 1.38 Types of digital participation**

	UK	FRA	GER	USA
Vote in an online poll	19%	40%	18%	41%
Comment on a news story on Social Networks	14%	21%	12%	27%
Engage in a one-to-one conversation about a news story (e.g. social media, instant messenger)	13%	15%	23%	30%
Comment about a news story on a website	10%	16%	9%	25%
Post or send a news-related picture or video to a Social Network site	5%	11%	5%	15%

Source: Reuters Institute / YouGov online research April 2012

Q: During an average week in which of the following ways do you share or participate in news coverage?

Base: UK (n=2173) France (n=1011) Germany (n=970) USA (n=814) Denmark (n=1002)

### 1.5.3 Platforms used as a main source of news

The following analysis uses data from Ofcom's own consumer research. Respondents were asked which platform they used as their main source for different types of news: national, international, sports, and celebrity news. The platforms comprised TV, the internet, the radio, newspapers and magazines and 'getting news from other people'.

The survey was undertaken online, with at least 1000 respondents in each nation. Because the research was carried out online, results use a different sample to other Ofcom consumer research and direct comparisons cannot be made. The research methodology is discussed in detail in Appendix A.

### Online consumers in the UK are less likely to use the internet as a main source of national news than those in Italy and Spain

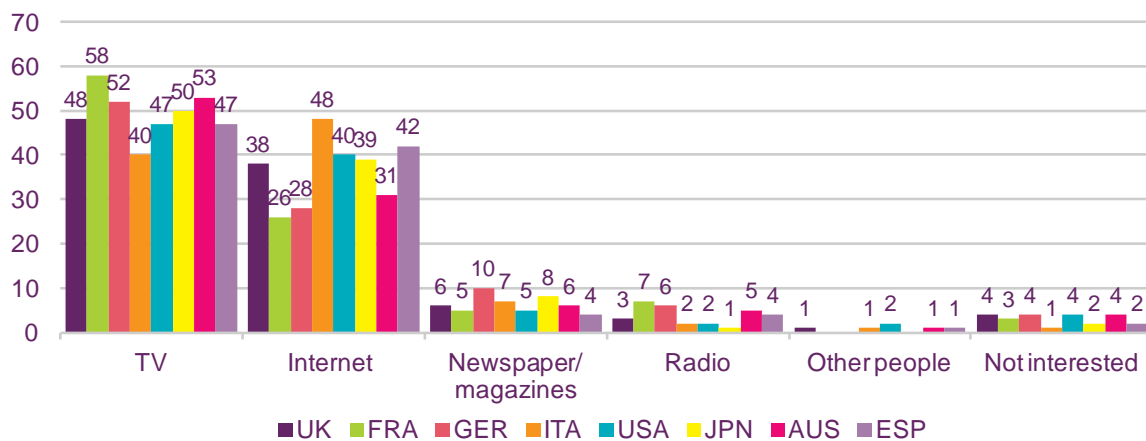
Across all the countries analysed, TV is the main source of most types of news except celebrity news/ gossip, where respondents are more likely to use the internet as their main source. The report shows a similar pattern across countries, and consumption habits are similar in a number of areas, particularly related to TV and internet.

Although the most-cited main sources of news for online users generally are TV and the internet, across the countries in the sample there are subtle differences in consumption patterns.

When asked about their main source for national news, the platform named most often was TV, followed by the internet. In the UK, almost half (48%) selected TV as their main source of national news. Respondents in France were more likely to state that they used TV as their main source of national news, where almost six in ten (58%) selected TV as their main source and 26% selected the internet.

A similar picture emerges in Australia, where 53% mainly access national news on TV and 31% via the internet. This contrasts with Italy where the internet is more likely to be used as a main source of national news, with 48% of respondents using this platform, compared to 40% naming TV.

**Figure 1.39 Platforms used as a main source of news: national news**



Source: Ofcom research, September 2012

Q: Which if any of these is your main source for the following? National news

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Australia=1007 Spain=1001

### In the UK, France, Germany and Australia, TV is the main source of international news. The internet is the main source in Italy

This pattern is the same for accessing international news. In the UK, 51% of consumers use the TV as their main source of international news and just over a third (36%) use the internet. Online consumers in the UK are more likely than those in France and Germany to

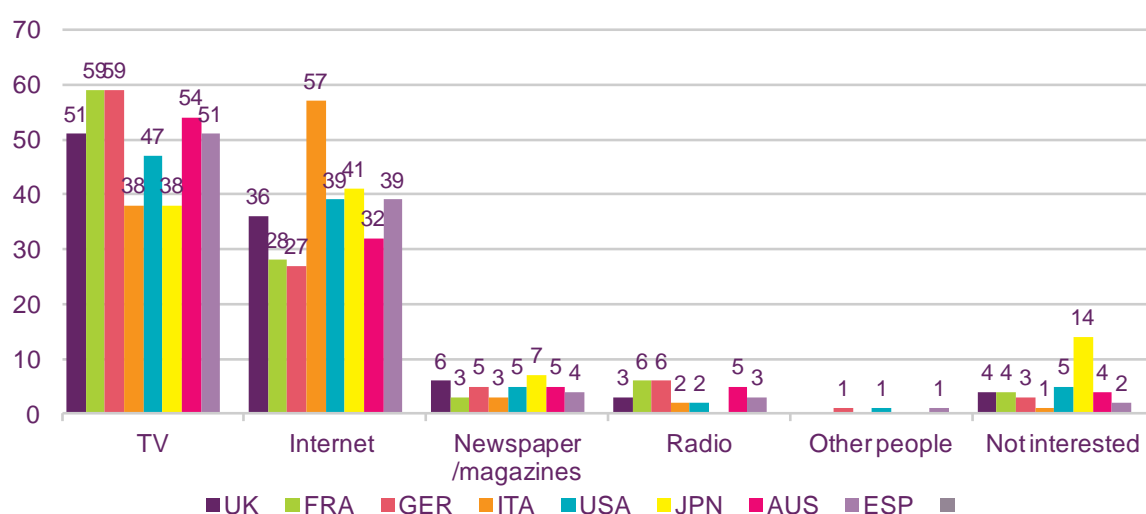
access international news on the internet, whereas French and German online consumers are more likely to watch TV for this type of news.

In Italy, the internet is more widely used than any other medium as a main source of international news, with 57% of respondents stating that they do this. The comparable figure for the UK is 36%. TV is used less as a main source of international news in Italy, with only 38% naming TV as a main source of international news compared to 51% in the UK.

Fourteen per cent in Japan said that they are not interested in accessing international news stories.

Radio and newspapers and magazines are not widely used as a main source for international news by respondents in any of the countries analysed.

**Figure 1.40 Platforms used as a main source of news: international news**



Source: Ofcom research, September 2012

Q: Which if any of these is your main source for the following? News about the world

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Australia=1007, Spain=1001

### In the UK, France, the US and Japan, TV is the main source of local news

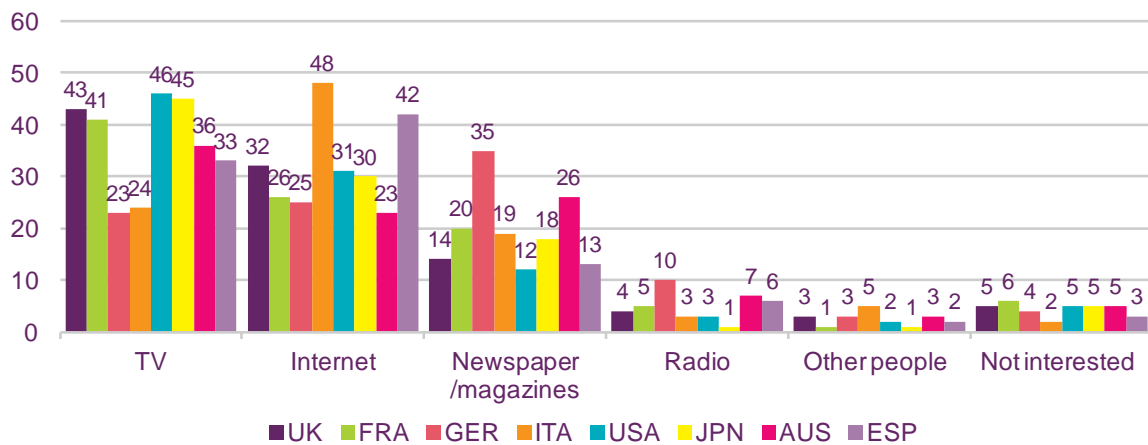
The picture changes when online users are asked about their main sources of information about their locality or region. TV and internet remain main sources of news for most, but more people also use newspapers and magazines as a main source of local news.

In the UK, France, the US and Japan, TV is the main source of local news, with more than four in ten (between 41% and 46%) selecting TV in those countries. In Italy and Spain the main source for local news is the internet, while in Germany, newspapers and magazines are used more than any other platform for this purpose. Thirty-five per cent of respondents in Germany claimed that they read newspapers and magazines for this, far more than the one in four (25%) who used the internet and the 23% who used the TV as their main source of local news. Respondents in Germany were also more likely to use radio as a main source of local news, with 10% claiming that they do this, more than in any of the other countries analysed.

Another country where newspapers and magazines are widely used is Australia. Just over a quarter (26%) of consumers in Australia (compared to 14% in the UK) use newspapers and

magazines as a main source of regional and local news. This is slightly more than the 23% who use the internet for this purpose in Australia.

**Figure 1.41 Platforms used as a main source of news: regional / local news**



Source: Ofcom research, September 2012

Q: Which if any of these is your main source for the following? Regional/local news

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Australia=1007, Spain=1001

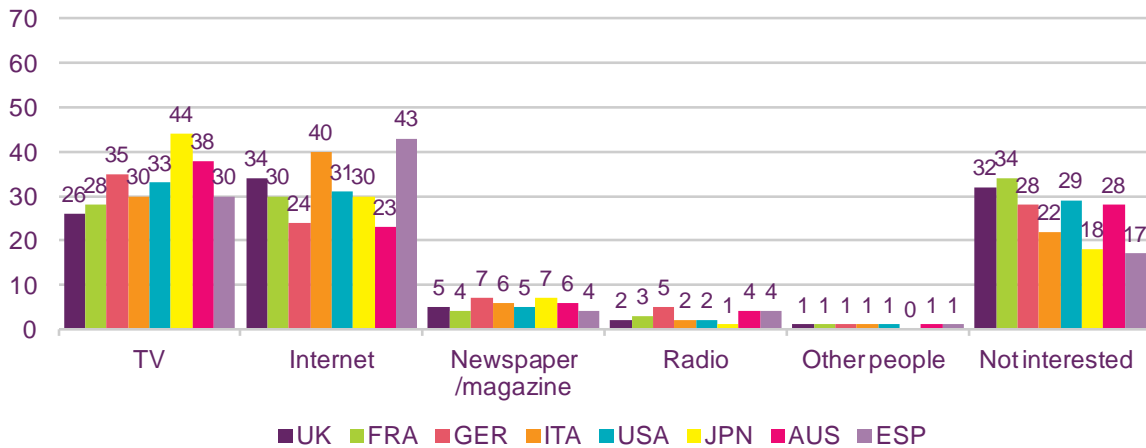
### A third of respondents in the UK are not interested in sports news

Respondents were asked about their main source of sports news. They were also asked about their main sources of celebrity news.

As with other types of news, TV and internet remain the main sources. However, a large proportion of people across most countries reported that they are not interested in these types of news. Perhaps most surprising are the 32% in UK and 34% in France who reported that they are not interested in accessing sports news, and almost three in ten in Germany, the US and Australia who are not interested.

In the UK a third (34%) use the internet as their main source of sports news (the figure is 40% in Italy).

**Figure 1.42 Platforms used as a main source of news: sports news**



Source: Ofcom consumer research, September 2012

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Australia=1007, Spain=1001

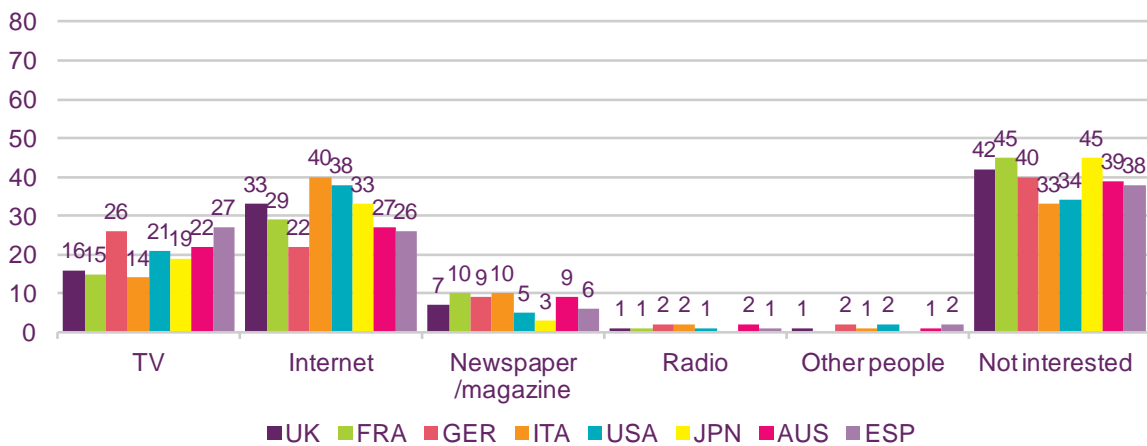
Q11: Which if any of these is your main source for the following? Sports news

**A third of respondents in the UK use the internet as their main source of gossip/celebrity news**

As with sports news, significant proportions of respondents did not express any interest in accessing celebrity news and gossip. Between 33% - 45% in all the countries had no interest in accessing celebrity news.

Sixteen per cent in the UK access celebrity news on the internet and 7% do so by reading newspapers and magazines. Forty-two per cent are not interested.

**Figure 1.43 Platforms used as a main source of news: celebrity news/gossip**



Source: Ofcom research, September 2012

Base: All respondents, UK=1065, France=1016, Germany=1024, Italy=1015, USA=1010, Japan=1004, Australia=1007, Spain=1001

Q11: Which if any of these is your main source for the following? Celebrity news/gossip



# 1.6 A perspective on China

## 1.6.1 Introduction

For the *International Communications Market Report*, Ofcom commissioned online research to identify consumer consumption and attitudes in nine countries: the UK, France, Germany, Italy, the US, Japan, Australia, Spain and China. Some of the data from China contained notable differences compared with the other eight countries. In the *TV and audio-visual*, *Radio and audio*, *Internet and web-based content*, *Telecoms and networks* and *Post* chapters of this report, we explain those differences in the context of the respective communications sector.

The *UK in Context* chapter of the ICMR is different in that it presents cross-sector themes. Furthermore, in the metrics covered by this chapter there were a greater proportion of cases of outlying data on China. To try to explain these differences and reduce repetition within the chapter, we have produced this perspective on China. The aim of the perspective is to bring together our thinking on some of the reasons for the differences in the China data, with four graphs (one from each topic in the *UK in Context* chapter). In these graphs, we compare China with the US, the largest communications market, and with the UK.

The differences can be summarised as being of two types, with each covered below:

- Differences in sampling in China, compared with other markets, itself partly a result of demographic, economic and infrastructure reasons (section 1.6.2 and section 1.6.3)
- Differences in consumer behaviour, lifestyle and attitudes (section 1.6.4)

## 1.6.2 China as a country and a communications market

### Demographic and economic factors

China is the world's most populous country, with 1.3 billion<sup>16</sup> people. The population of China is therefore very diverse – there are 56 recognised ethnic groups<sup>17</sup> and 14 main languages, with many more dialects spoken<sup>18</sup>. China is large and geographically diverse, with 31 provinces, autonomous regions and municipalities.

Economic and social development varies greatly across the country, with the eastern provinces (including the cities of Beijing, Shanghai, Tianjin, Guangzhou and Shenzhen) accounting for a greater share of employment (48.5%) and gross domestic product (53.1%) than the central, western and north-eastern provinces, which have smaller centres of population. Half of China's population live in rural areas.<sup>19</sup>

Household income also varies by region. PPP-adjusted GDP per capita<sup>20</sup> is \$8,400 (£5,300) for China as a whole, but this covers a large disparity. Annual income is around 2.5 times higher for citizens in urban areas than rural areas, and China is ranked 27<sup>th</sup> highest out of

---

<sup>16</sup> <http://data.worldbank.org/indicator/SP.POP.TOTL>

<sup>17</sup> <http://www.china.org.cn/e-white/20050301/index.htm>

<sup>18</sup> <http://www.omniglot.com/chinese/spoken.htm> and

[http://www.ethnologue.com/show\\_country.asp?name=China](http://www.ethnologue.com/show_country.asp?name=China)

<sup>19</sup> National Bureau of Statistics of China, *China Statistical Yearbook 2011*,

<sup>20</sup> GDP, or gross domestic product, measure the value of products and services produced by a country in a given year, and is a measure of the income of a country. Adjusted for purchasing power parity. <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>

136 countries using the Gini index<sup>21</sup>, compared with the US in 42<sup>nd</sup> and the UK in 91<sup>st</sup>. A higher ranking equates to a more unequal distribution of income. Across the country as a whole, more than one in eight citizens (13.4%) are below the poverty line<sup>22</sup>.

### Service availability and take-up

The divide between richer and poorer citizens is partly reflected in the availability of communications services. In areas of lower income, there is less incentive for operators to invest in communications infrastructure. This lack of infrastructure is often compounded by the fact that areas of lower income - such as some mountainous and desert-like Western provinces - are often more rural and therefore more expensive to provide the communications service to. This acts as a further inhibitor to infrastructure investment.

Fixed network infrastructure in China therefore varies considerably by region. In the large cities, the major operators (including China Telecom, China Unicom and China Mobile) are rolling out fibre-optic broadband. However, the majority of broadband connections are much slower, and are based on DSL<sup>23</sup>. In some rural regions, broadband is not available to all citizens.

Many of China's citizens do not own a PC and less than two in five citizens access the internet at all<sup>24</sup>. At the end of 2011, there were just 136 million rural internet users, suggesting that 82% of the rural population in China do not use the internet. Figures from the China Internet Network Information Centre state that rural internet users make up only 26.5% of the online population, despite making up the majority of citizens by number.<sup>25</sup>

Correspondingly, China's take-up of broadband is low: there are only 39 fixed broadband connections for every 100 households in China (compared to 76 connections per 100 households in the US and 77 connections per 100 households in the UK).

Low broadband take-up in China is in some cases due to a lack of a phone line – this varies across China. In some western and central provinces, there are fewer than 70 telephone connections per 100 people (both fixed and mobile), while the equivalent number for China as a whole is 86.<sup>26</sup>

It is worth noting that China's consumers are particularly mobile-centric, compared to other countries. 291 million mobile handsets<sup>27</sup> were shipped in China in 2011, and there were 986 million mobile connections in China at the end of that year, a compound annual growth rate of 17.3% for the period 2006-2011. Ninety-seven per cent of phone calls by volume originate from a mobile<sup>28</sup> in China. This contrasts heavily with the more fixed-oriented nature of the UK, where 52% of phone calls by volume originate from a mobile.

---

<sup>21</sup> <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>

<sup>22</sup> <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>

<sup>23</sup> Digital subscriber line.

<sup>24</sup> Computer Network Information Center, July 2012

<sup>25</sup> China Internet Network Information Centre, *Statistical Report on Internet Development in China*

<sup>26</sup> National Bureau of Statistics of China, *China Statistical Yearbook 2011*, <http://www.stats.gov.cn/tjsj/ndsj/2011/indexeh.htm> [accessed 21 November 2012]

<sup>27</sup> Data from IHS.

<sup>28</sup> Includes incoming mobile calls. This is discussed in more detail in the *Telecoms and Networks* chapter.

### 1.6.3 Our research methodology in China

Because of the large and diverse population, conducting survey research<sup>29</sup> in China is extremely challenging and our research results have some limitations. For example, our questionnaire was translated into Chinese Mandarin, so approximately 30% of the population (those who do not speak Mandarin<sup>30</sup>) are likely to have been excluded.

We conducted research in China among internet users only. When making comparisons with findings in other nations it is important to note that, because internet penetration is relatively low in China, comparisons with other nations should not be treated as like-for-like.

Internet users in China are predominantly urban-based with higher incomes<sup>31</sup> and are likely to be early adopters of technology. Eighty-nine per cent of our consumer research base in China were under 45 years of age. Unlike the data collected from other nations, the respondents in our sample in China are not 'typical' of the wider population.

Because of this, some of the findings from China appear quite different from the other nations we have researched, as highlighted in the examples below.

### 1.6.4 Our research results in China

We now consider four charts – one from each of the sections in the Market in Context chapter that contain consumer research – to illustrate some of the differences between the consumer research in China, the UK and the US.

#### Example one: device ownership

Figure 1.44 shows that the proportion of smartphone (81%), laptop (78%) and tablet computer (41%) owners are all higher in China than in the UK or the US. However, given that internet penetration in the UK and the US is higher than in China, if the data were re-based on *all* consumers, it would show that take-up levels of these devices in China were substantially lower (if we assume that ownership of these devices among those who do not have an internet connection is negligible).

The consumer research may reflect a voracious appetite for the latest consumer devices among the young, urban, wealthier segments of China's population. China is now the second largest market by revenue<sup>32</sup> for Apple – the manufacturer of the iPhone smartphone and the iPad tablet. The installed base of connected TVs in China has also increased rapidly – up 678%<sup>33</sup> year on year, albeit from a small base.

---

<sup>29</sup> More details on our consumer research, including demographics, can be found in the report annexes.

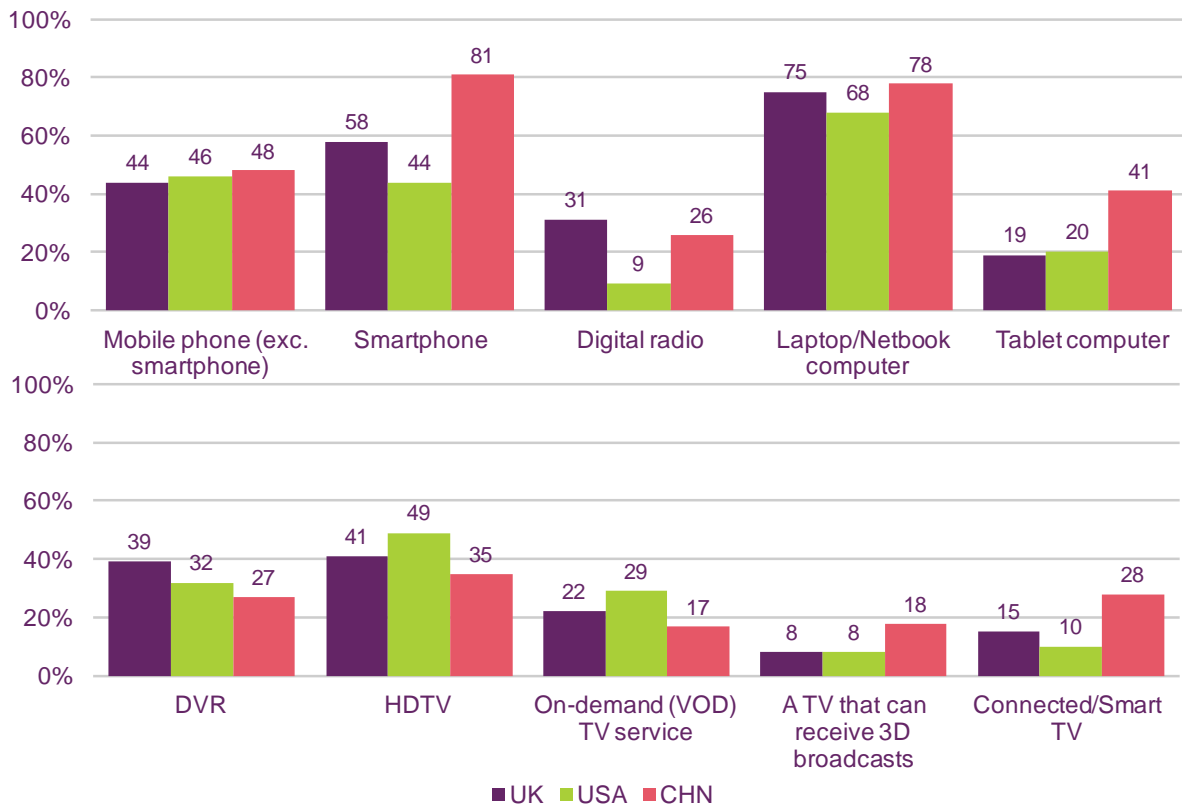
<sup>30</sup> <http://www.thecim.org/3857/?=7-reasons-cantonese-dying-mandarin-king/>

<sup>31</sup> China Internet Network Information Centre, *Statistical Report on Internet Development in China*, January 2012, <http://www1.cnnic.cn/IDR/ReportDownloads/201209/P020120904421720687608.pdf> [accessed 21 November 2012]

<sup>32</sup> <http://techcrunch.com/2012/04/24/apples-iphone-sales-in-china-are-up-by-fivefold-from-a-year-ago/>

<sup>33</sup> IHS data

**Figure 1.44 Take-up of communications devices among internet owners in the UK, the US and China**



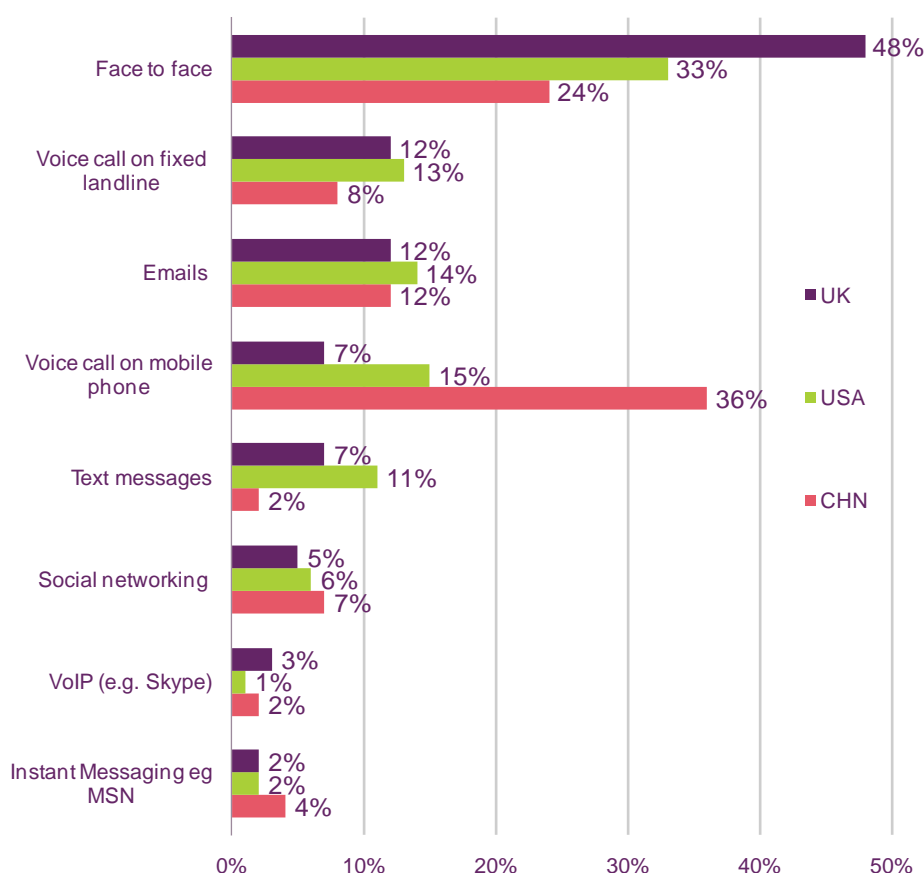
Source: Ofcom consumer research, September 2012  
 Base: All respondents UK=1065, USA=1010, CHN=1010  
 Q: Which of the following devices do you own and personally use?

**Example two: preferred method of communication**

Figure 1.45 shows that in China, voice calls on a mobile phone are the most popular method for communicating with friends and family. This contrasts with the UK and the US, where face-to-face communication is more popular.

This difference might be partly explained by cultural differences and preferences. But another likely explanation is the age of our respondents. Younger respondents had a greater preference for mobile telephony across the countries in which we conducted consumer research. Furthermore, mobile coverage is higher in urban areas (where China’s internet users more commonly live), which might encourage mobile phone use.

**Figure 1.45 Preferred method of communication with friends and family**



Source: Ofcom consumer research, September 2012

Base: All who make any sort of contact with: friends and family, n: UK=1059; USA= 1,004; CHN= 1,010 Q5a: If you had to pick one method of communicating with friends and family which one would it be? Note: other mentions by 2% or fewer included: post, micro blogging sites, free/paid for e-cards through a website, picture messaging

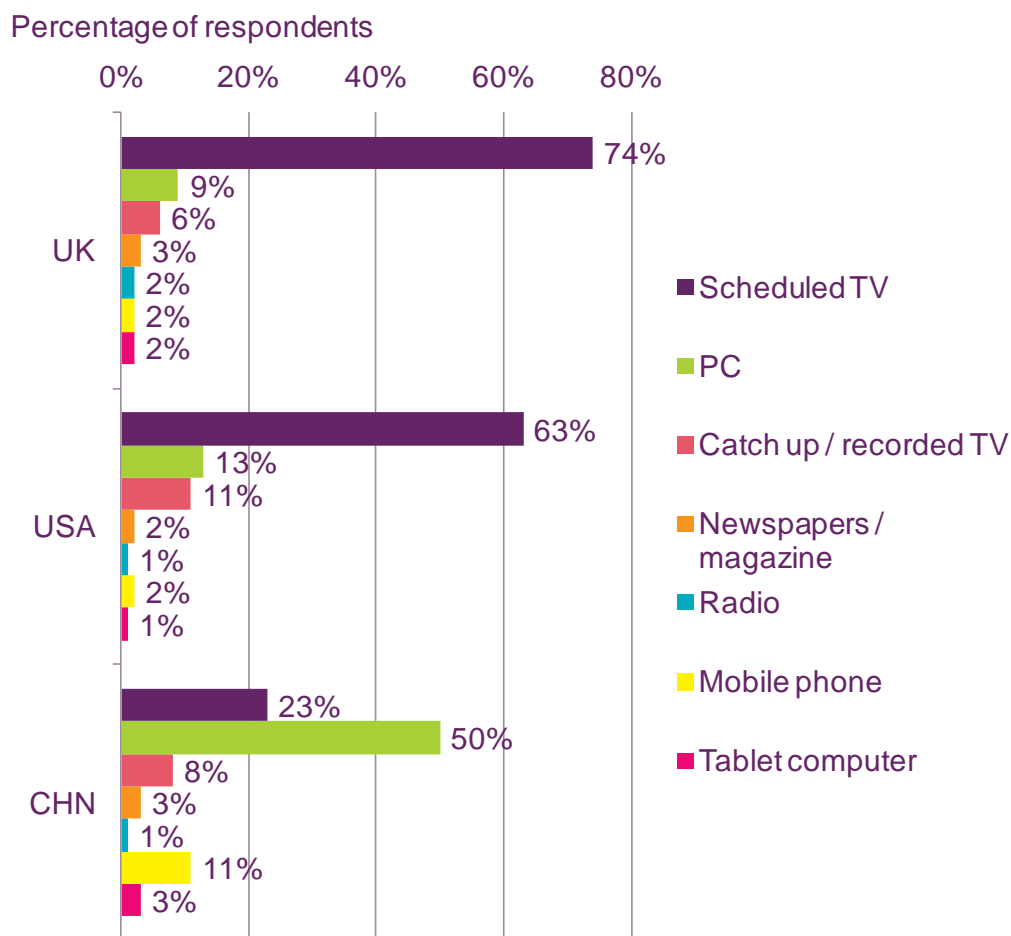
### Example three: coverage of the London 2012 Olympic and Paralympic Games

The research data displayed in Figure 1.46 suggests that consumers in China primarily used PCs to access coverage of the Olympic and Paralympic Games. Less than a quarter of China's respondents claimed that scheduled television was the medium that they used the most.

Again, the differences between our comparator country samples seem to provide an explanation for the disparities between consumption of the Games in China and elsewhere. In our survey sample from China, there is likely to be a high concentration of consumers who are both early adopters of the internet and more enthusiastic about using newer technologies, such as mobile phones (as 11% did) and tablet computers (3%) to follow the Games.

However, time of day may also affect viewing habits of live global events like the Olympic Games: in China, many of the events happened during the night, local time, so consuming content online the following morning may have been preferable for some consumers than watching live coverage.

**Figure 1.46 Most common means of accessing Olympics / Paralympics coverage**



Source: Ofcom market research, September 2012

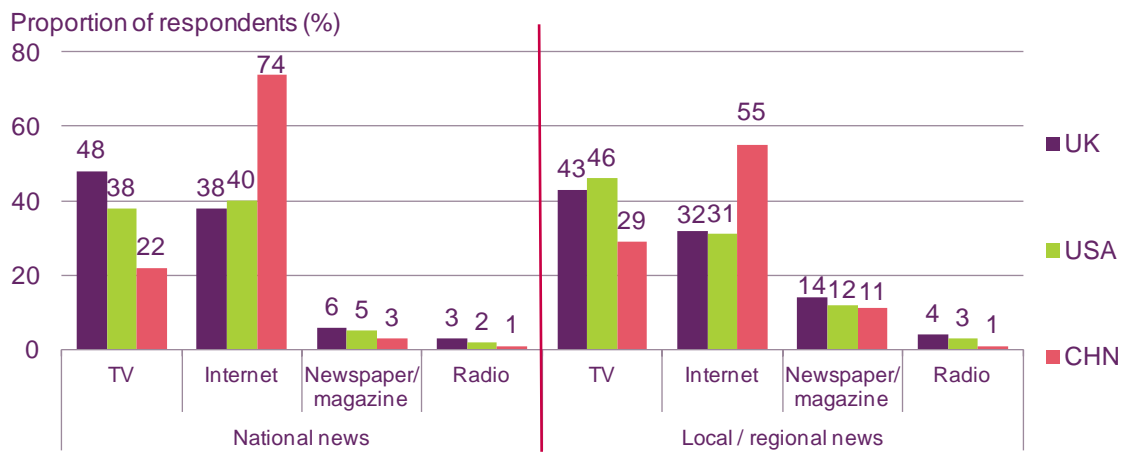
Q.G5 which one method of accessing Olympics and/or Paralympics coverage did you use the most?  
 Base: All respondents who watched any Olympic or Paralympic coverage (n = 7405)

#### Example four: consumption of news by platform

A similar observation can be made about the claimed main source of news in China (Figure 1.47). According to our consumer research, the internet seems to be a more important source in China than it is in the UK or the US, and television appears to be less important. Again, this could be related to the make-up of the sample, with a higher proportion of younger people and technology enthusiasts likely to be present in the sample. There is also some evidence<sup>34</sup> of a greater preference to consume news online in China: four of the top five news websites in China are online-only entities, rather than newspapers, broadcasters or news agencies that have diversified online. In the US, three online-only entities appear in the top five news websites, and only one in the top five in the UK. Reflecting the fact that most UK respondents to our survey said that TV was their main source of news, the BBC is the most-used news website in the UK.

<sup>34</sup> International Online News Consumption, Communications Chambers, January 2012

**Figure 1.47 Claimed main sources of news, by platform**



Source: Ofcom, consumer research, September 2012

Base: All respondents, UK=1065, USA=1010, CHN=1010

Q: Which, if any, is your main source of news for the following information?

# 1.7 International regulatory context and models

## 1.7.1 Introduction

This section provides regulatory context to the analysis of the international communications market elsewhere in the report. In particular it covers the background of the EU communications framework and the Digital Agenda, the new EU roaming regulation, recent national and EU initiatives on net neutrality, the establishment of the European Regulators' Group for Post, next generation access, assurances to audiences on audio-visual standards, online protection of minors and radio spectrum policy. It does not aim to be a comprehensive examination of regulatory frameworks across the comparator countries, but presents an overview of the main regulatory and policy developments internationally over the past year.

## 1.7.2 Key developments in the European regulatory and legislative framework

### The EU electronic communications framework

The EU electronic communications framework applies to all electronic communications networks and services, retail and wholesale, as well as associated facilities and services. It aims to ensure effective competition and consumer protection as well as constituting the basis for a consistent regulatory environment across the communications markets of all 27 member states.

The framework was revised in 2009 to ensure that it continues to serve the best interests of consumers and industry, and it reflects the major developments of this fast-changing sector, such as growth in VoIP and take-up of television services via broadband. The revised framework aims at enabling citizens to benefit from better and cheaper communication services, and to achieve this, the revised EU rules aim:

- to strengthen consumer rights, giving consumers more choice by reinforcing competition between telecoms operators;
- to promote investment into new communication infrastructures, in particular by freeing radio spectrum for wireless broadband services; and
- to make communication networks more reliable and more secure, especially in case of viruses and other cyber-attacks.

The majority of member states, including the UK, transposed the revised framework by the 25 May 2011 deadline.

The Commission continues to monitor the timely and correct implementation of the EU rules and is monitoring member states' progress towards achieving the targets set out in the Digital Agenda.

The [Digital Agenda](#) is one of the seven flagship initiatives proposed by the European Commission in its Europe 2020 Communication (the successor to the Lisbon strategy) which outlines Europe's general economic strategy for 2010 to 2020.

It sets out the main policies for the information and communication technologies (ICT) sector between 2010 and 2015, and seeks in particular to promote investments in high-speed broadband networks, to create an online single market, to ensure online trust, security and



net neutrality as well as to stimulate the development of innovative services and applications. It consists of 101 action points, including more than thirty legal proposals.

The four priority objectives of the Digital Agenda relevant to the telecommunications, audio-visual media and e-commerce sectors are:

- to guarantee universal availability of broadband and foster Next Generation Access Network (NGA) deployment;
- to create a true single digital market;
- To ensure public trust in networks and services; and
- To ensure interoperability.

To implement the Digital Agenda and monitor its progress, the Commission has set up a 'Digital Agenda governance cycle'. This foresees an internal coordination mechanism within the Commission, in cooperation with member states; the annual publication of a scorecard in May each year, including socio-economic developments based on key performance indicators, selected for their relevance to the main policy goals; and an update on all the identified policy goals. An annual Digital Assembly takes place in June each year and brings together member states, EU Institutions and stakeholders, to assess progress and emerging challenges.

The overall structure of national regulatory authorities (NRAs), regional frameworks and authorities in the report remains broadly unchanged from last year.

### **1.7.3 Helping communications markets work for consumers**

#### **International mobile roaming**

In the European Union, the Council and Parliament reached agreement in May 2012 on the 2012 EU Roaming [Regulation](#) that took effect from 1 July 2012 when the previous regulation expired, following the presentation of initial proposals by the Commission in June 2011.

The new Regulation extended the anti-bill shock and transparency mechanisms to EU roamers travelling beyond the EU's borders, and introduced retail caps for data for the first time. It also established a downward trajectory for retail and wholesale caps until 2014, a requirement for the future decoupling of roaming from domestic services, from 1 July 2014, and provisions to allow for local data breakout (LBO), so as to enable data alone to be the subject of a separate contract with an alternative provider while roaming.

In particular:

- the new wholesale caps for voice, SMS and data took full account of the latest BEREC<sup>35</sup> data for estimated maximum wholesale costs in 2014, communicated to the legislators at the end of February 2012;
- the new retail caps established a downward glide-path with headline reductions in caps from 35 euro cents (currently) to 19 euro cents for voice (calls made), from 11 euro cents to 6 euro cents for SMS, and from 70 euro cents to 20 euro cents per MB of data, all by 1 July 2014; this glide path will result, even at the caps, in substantial reductions in roaming tariffs for consumers - until now, prices have stayed close to the caps;

---

<sup>35</sup> The Body of European Regulators for Electronic Communications

- the Regulation does not specify what technical solution(s) should be used for separating domestic and roaming services; it provides specifically for the possibility of roamers solely accessing local data services when abroad, while retaining their domestic provider for voice and SMS ("local data breakout" or LBO);
- the Regulation will be applied through Implementing Acts by the Commission, complemented by subsequent BEREC guidelines on the recommended technical solution(s) to separate roaming from domestic services;
- there are clear provisions for wholesale access, which include specific criteria for an access reference offer, to be published by 1 January 2013, conditions for responding to access requests and provisions for NRA intervention should the reference offer be judged inadequate;
- the timescale for review of the Regulation by 2016 allows sufficient time to make an initial assessment of the success of the technical solution(s) to facilitate competition through decoupling roaming from domestic services, and in bringing down roaming prices to be close to domestic tariffs.

The new Regulation required the Body of European Regulators for Electronic Communications (BEREC) to produce and publish guidance on wholesale roaming access, including the content of the reference offer that was published on 27 September 2012, and to publish guidelines on the implementation of decoupling measures to separate roaming from domestic mobile services.

There were other notable international developments on mobile roaming in 2012:

In January 2012, the International Telecommunications Union (ITU) published a draft recommendation which proposed measures to empower consumers to benefit from efficient competition and regulation, so that they have the information and transparency to take appropriate actions; to identify measures for improving the way the market works; and proposals for regulatory actions, which might include measures to lower rates.

In February 2012, the Organisation for Economic Cooperation and Development (OECD) released a [recommendation on international mobile roaming charges](#)<sup>36</sup> which says that promoting transparent information on roaming prices would protect consumers and businesses, and that a financial limit for data roaming services would also help. The OECD considered it essential to remove barriers that prevent mobile virtual network operators (MVNOs) from having access to wholesale mobile services on local conditions and on fair and reasonable terms. If such measures were not effective, the OECD concluded that governments should consider price regulation for roaming services, including at wholesale level through bilateral or multilateral wholesale agreements, with mutually-established price caps.

In August 2012, the Australian and New Zealand governments released a [draft report](#)<sup>37</sup> following a joint investigation into trans-Tasman mobile roaming charges. The report found that government action was required to enable prices for international roaming between New Zealand and Australia to continue to fall. The report puts forward a number of options to address the problem, including regulation, requiring operators to enable roamers to use a local phone number without having to swap SIM cards, and price caps.

<sup>36</sup> OECD, *Recommendation of the Council on International Roaming Services*, 16 February 2012

<sup>37</sup> New Zealand Ministry of Business, Innovation and Employment & Australian Government Department of Broadband, Communications and the Digital Economy, *Trans-Tasman roaming*, August 2012

## Traffic management and net neutrality

The 'net neutrality' debate (whether, and where, there should be a principle of non-discrimination of internet traffic across networks) has continued to occupy regulators across the world, with focus particularly on questions of discrimination and transparency. Guidelines and rules have been adopted in various countries in recent years - the [Canadian](#) and [Norwegian](#) regulators both set out guidance in 2009, the US Federal Communications Commission adopted open internet rules in December 2010 and the Singapore regulator, the IDA, published a net neutrality policy framework<sup>38</sup> in 2011.

This is an ongoing debate and it was again a dominant issue in Europe in 2012. The revised EU Regulatory Framework identified net neutrality as a policy objective, in that end-users should be able to access and distribute information or run applications and services of their choice. Transposition of the revisions into national laws in 2011 introduced requirements for greater transparency and gave NRAs a discretionary power to impose "a minimum quality of service on the internet".

Net neutrality was a major priority for BEREC in 2012, with a number of activities undertaken to foster a harmonised understanding and approach to net neutrality and the new Framework powers, while leaving NRAs to use their knowledge of their own markets to intervene appropriately at the national level. Following its December 2011 [transparency guidelines](#), BEREC's 2012 activities encompassed:

- [guidelines on minimum quality of service requirements](#);
- a conceptual framework to understand [differentiation practices and competition issues](#);
- a report into [IP interconnection and net neutrality](#); and
- [a joint investigation into traffic management practices](#), which found that a majority of ISPs offer internet access services with no application-specific restrictions, but that there are specific practices, such as blocking or throttling of peer-to-peer traffic or VoIP, which could create concerns for end-users.<sup>39</sup>

In response to these outputs, the [European Commission announced](#) that it would draw up further EU guidance to address a lack of effective consumer choice, with a focus on switching, and on transparency around traffic management and broadband speeds. The guidance is expected in early 2013, following a July 2012 [public consultation](#).<sup>40</sup>

There have also been developments at the national level. The French regulator, ARCEP, published [a report](#) detailing actions it has taken to ensure that net neutrality is upheld, and urging caution against any overly-prescriptive new laws which would be difficult to implement in a fast-moving market. The report also sought new powers for ARCEP to enable it to carry out independent measurements of the quality of internet access services.

In the UK, [Ofcom set out](#) in November 2011 the steps it expects ISPs to take to ensure transparency for consumers about how internet traffic is being managed on their networks.

---

<sup>38</sup> IDA, *Decision issued by the Info-Communications Development Authority of Singapore: Net Neutrality*, 16 June 2011

<sup>39</sup> All of the documents which outline BEREC's activities are available on the BEREC website, <http://berec.europa.eu/> [accessed 30 November 2012]

<sup>40</sup> European Commission, *On-line public consultation on "specific aspects of transparency, traffic management and switching in an Open Internet"*, July 2012

## International postal activities

The Commission Decision of 10 August 2010 established the [European Regulators' Group for Post \(ERGP\)](#), enabling the creation of a body of regulatory knowledge and advice for use by NRAs or by the Commission. This Decision established four tasks for the ERGP:

- To advise and assist the Commission in consolidating the internal market for postal services.
- To advise and assist the Commission on any matter related to postal services within its competence.
- To advise and assist the Commission in the development of the internal market for postal services and on the consistent application in all member states of the regulatory framework for postal services.
- To consult, in agreement with the Commission, extensively and at an early stage, on its expert work with market participants, consumers and end-users in an open and transparent manner.

Over the past two years, subgroups of the ERGP have worked on the following topics:

- The allocation of postal operator costs.
- The Universal Service net cost calculation and evaluation of a reference scenario.
- End user satisfaction and monitoring of postal markets.
- Cross border services.
- Access to the postal network and to elements of postal infrastructure.

So far, the Group has produced final reports on quality of service and end-user satisfaction, on indicators for postal markets, on common cost allocation and on the net cost of USO calculation and the evaluation of a reference scenario.

As well as the recently-formed ERGP, a number of other international bodies are active in the postal sector. The [Universal Postal Union \(UPU\)](#), a UN body, is the primary forum for cooperation between member states concerning postal services, with a particular focus on operational standards and remuneration of delivery costs for international mail through the terminal dues system. The UPU has 189 member countries, and aims to ensure a network of up-to-date products and services, fulfilling an advisory and liaison role and giving technical assistance where needed.

In 2012, the UPU held its 24th Congress in Doha, Qatar, at which the Doha four-year Postal Strategy was adopted, elections were held and decisions were taken on the terminal dues arrangements for remuneration of the delivery of cross-border mail in developed and developing countries.

The [Committee of European Postal Regulators \(CERP\)](#) brings together representatives from the regulatory authorities from 64 states, including EU Member States, candidate countries, the EEA and other eastern European countries. It has two working groups, one dealing with postal policy and the other working on UPU issues.

## 1.7.4 Promoting effective and sustainable competition

### Next-generation access networks

Telecoms operators in Europe, Asia and the US continue to face a common challenge of upgrading networks to make use of more efficient technologies, including fibre, and migrating from traditional transmission standards designed in the world of the public switched telephony network (PSTN) to standards used to route data via internet protocol (IP). Many operators have now migrated their backbone to next generation networks (NGNs) by overlaying and upgrading their legacy backbone PSTN networks with a single IP-based network. Developments in regions such as Latin America, Africa and the Arab States, have been slower but are following a similar trend. The introduction of next generation access (NGA)<sup>41</sup>, typically although not universally based on fibre-optic technology, has been more uneven.

In Europe, Asia and the US, there is a broad consensus that the accelerated roll-out of NGA networks is a desirable goal, but there are a variety of approaches to reaching that goal.

In the EU, NGA policy is underpinned by the European Commission's ambitious Digital Agenda targets - by 2020, every EU citizen should have access to 30 Mbps, and 50% should have access to 100 Mbps. In 2012, the Commission has continued to look at how to encourage increased NGA investment, setting out its thoughts on increasing regulatory consistency and certainty for the sector, particularly focusing on areas such as NGA costing methodologies and non-discrimination. Accordingly, the Commission's policy approach stresses the importance of alternative operators being treated on the same terms as the incumbents. As well as focusing on wholesale pricing regulation, the Commission is looking at non-discrimination obligations, such as the time it takes to repair faults on the network, and other qualitative elements of the delivery of wholesale broadband. The Commission aims to provide further guidance in these two areas in the form of a recommendation which will complement the [2010 NGA Recommendation](#) (to be adopted in the first half of 2013).<sup>42</sup>

BEREC agrees that regulatory certainty and consistency are crucial in order to foster a competitive environment for long-term investment in NGA. As well as providing advice to the Commission, BEREC is currently in the process of reviewing its broadband common positions (CPs)<sup>43</sup>, originally adopted in 2006/2007, to reflect both technological (such as the roll-out of NGA networks) and regulatory developments (including revisions to the European framework in 2009). The draft revised CPs will be finalised in December 2012 following a public consultation.

In order to promote increased NGA investment, governments around the world have also looked at various funding mechanisms. In Europe, public funding of NGA has been provided by regional and local authorities to cover specific regions. These schemes have had to be carefully tailored to satisfy European state aid rules, and are therefore generally based on arguments around market failure and digital inclusion.

---

<sup>41</sup> NGA can be understood as new physical infrastructure relying on new access network technologies enabling a significant improvement in the broadband experience for end-users, through combinations of: higher bandwidths; more equal upstream and downstream bandwidths; and more reliable, higher quality services

<sup>42</sup> Official Journal of the European Union, *Commission Recommendation of 20 September 2010 on regulated access to Next Generation Access Networks* (2010/572/EU)

<sup>43</sup> Common positions are a type of legal act which lay down the EU's approach to specific issues of a geographic character or concerning specific subjects. Member states must then adapt their national policies to the common positions.

- The Commission's state aid guidelines for broadband networks expired in September 2012 and the Commission [consulted in June 2012 on proposed revisions](#) to take better account of technical development in NGA and increased volumes of state aid to the telecoms sector. The new rules aim to facilitate the public funding of telecoms networks, in exchange for tighter constraints on beneficiaries and the greater involvement of NRAs.<sup>44</sup>
- In addition to state aid funding, the Commission has proposed €9.2bn to stimulate investment in fast and very fast broadband networks, and pan-European digital services, through the Connected Europe Facility (CEF) initiative<sup>45</sup>. This initiative may stimulate further investment in broadband in two or three years' time once the proportion of funds to be allocated for this purpose has been decided. Potentially, the new investment will touch 45 million households and over 100 million Europeans, and could therefore play a key role in helping Europe reach its fast and very fast internet targets.

With regard to approaches being taken in other parts of the world, many governments have published national broadband plans, as detailed in the 2011 [OECD report on National Broadband Plans](#).<sup>46</sup> Most of these include targets related to levels of geographic coverage, adoption, and minimum or average transmission speeds.

In Australia, Brazil, Luxembourg, New Zealand, Singapore and South Africa, the government has created a new state-owned operator in order to participate directly in the construction of broadband networks. Singapore aims to be one of the first to deliver a metropolitan fibre network to the home, with speeds of up to 1GB by the end of 2012, and is likely to be the first country in the world with nationwide NGN coverage by early 2013.

Some countries, such as Chile and Norway, have used public-private partnerships (PPPs) as an appropriate vehicle for interventions. Most OECD countries, however, have chosen not to become involved in the direct supply of telecommunications, preferring to set the regulatory framework and to provide targeted economic support through a variety of forms of public investment.

Australia and New Zealand have both reconsidered their legal and regulatory frameworks in order to meet their NGA goals. The Australian Parliament passed the Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act in November 2010, to facilitate the achievement of its national broadband network (NBN) project. Construction of the NBN began in 2010, with completion of the FTTP roll-out planned by June 2021, along with completion of the fixed wireless and satellite roll-out by 2015. In New Zealand, a number of measures have been introduced by the government and by the Commerce Commission to support the deployment of fibre to the premises, including the continuing use of operational separation.

The Japanese and South Korean governments have developed national strategies for the provision of high speed broadband, involving nationwide NGA roll-out. These involve a mixture of incentives for operators, including some public support such as seed funding and soft loans. They have also encouraged infrastructure-based competition, which has been particularly successful in South Korea, where there are now three competing providers of broadband internet with nationwide NGN / NGA networks. However, other circumstances

<sup>44</sup> European Commission, *EU Guidelines for the application of state aid rules in relation to the rapid deployment of broadband networks (Draft)*, 1 June 2012

<sup>45</sup> [http://ec.europa.eu/information\\_society/newsroom/cf/item-detail-dae.cfm?item\\_id=7430](http://ec.europa.eu/information_society/newsroom/cf/item-detail-dae.cfm?item_id=7430)

<sup>46</sup> OECD, *Working Party on Communication Infrastructures and Services Policy: National Broadband Plans*, 15 June 2011

and characteristics of the Japanese and South Korean markets have proved very favourable to NGA roll-out, including population density and favourable planning rules.

### **1.7.5 Providing appropriate assurances to audiences on standards**

In Europe, the [Audiovisual Media Services \(AVMS\) Directive](#) is the common framework for the regulation of television and video-on-demand (VOD) content (but not for radio). The Directive sets out common minimum rules for television content, with a focus on the protection of minors, incitement to hatred, advertising, and the promotion of European works. It also ensures that pan-European broadcasters have to comply only with a single set of rules; those of the country in which they are established (the country of origin).

Regulators in Europe continue to work on implementation at national level, and to co-operate regionally in a number of fora, for example at the European Platform of Regulatory Authorities (EPRA). EPRA meets twice a year to consider key issues for content regulators; for example, the scope of the AVMS Directive in relation to VOD, and how regulators determine jurisdiction in cases where services are received in one country but regulated elsewhere (in the EU or beyond).

In Europe and elsewhere in the world, the two key challenges for public authorities in terms of content regulation are the online protection of children and the convergence between traditional broadcast content and content delivered over the internet (connected TV).

#### **Connected TV and convergence**

A connected TV is a television that is broadband-enabled to allow viewers to access internet content.<sup>47</sup> It may offer a closed environment, allowing users to access certain internet applications only, or an open environment, allowing users to access the whole internet.

Connected TV and convergence have been high on the policy agenda in Europe throughout 2012. The advent of connected TV raises many questions for regulators because, in this environment, different types of content are subject to different regulatory regimes, but the consumer may no longer distinguish between them. In this context, questions arise about the best way to protect consumers, both from potentially harmful content, and in terms of their data security, and how to regulate material originating from outside national jurisdictions. Broadcasters, meanwhile, focus on issues such as ensuring non-discriminatory access to infrastructure, technical standards, and new forms of advertising and content funding.

At the start of the year, the European Commission announced that it would publish a policy paper on connected TV, which is expected to be consultative and ask a number of questions covering areas such as: viewer expectations and audience protection, European works, competition between players, scope and jurisdiction, copyright and network capacity. The paper is due to be published in December 2012.

France, Germany and the UK have been very active throughout the year in assessing the development of the connected TV market, and considering how best to address the above challenges.

In the UK, Ofcom has commissioned in-depth research into the connected TV market to understand how it is developing and what regulatory challenges it may pose in the future, and the topic remains high on the agenda for policy development.

---

<sup>47</sup> Ofcom CMR 2012 definition: Connected TV includes a number of developing technologies that use a broadband connection to deliver catch-up, on-demand and over-the-top content, as well as applications and interactive features, to television screens.

In France, the government asked five experts to analyse the challenges raised by connected TV, which resulted in a report published in December 2011, presenting connected TV as a source of innovation that could change the cultural and economic landscape in a significant and unpredictable manner. As proposed in the report, the French audiovisual regulator, CSA, set up in February 2012 a committee comprising representatives of public authorities and industry, which will report on key connected-TV issues at the end of 2012.

Beyond Europe, one of the most interesting developments this year has been the publication of the [Convergence Review](#) in Australia.<sup>48</sup> The review proposed radical reform of Australian content and broadcast regulation, including abolishing the broadcast licence system and focusing regulation on media concentration, promoting Australian-originated content and content standards regulation, and introducing a cross-platform classification system.

There are signs that several other countries are also turning their attention towards convergence and its impact on regulation, such as the US, Singapore, South Korea and Canada.

### **Online protection of minors**

In recent years, child online protection<sup>49</sup> has moved higher up the international policy-making and regulatory agenda. There is an emerging debate about self-regulatory models, media literacy,<sup>50</sup> and the role that various participants in the internet value chain should be asked to play in preventing access to harmful activities, and in creating a safer and better online offering for children. The discussions are increasingly linked to the questions around the convergence of broadcast and online content technologies, a notable example being a report published in 2012 by the CSA in France, on the protection of minors in a converged environment, proposing the creation of a single authority across all media, and promoting the use of age-based rating systems, parental control tools, and media education and awareness.

The European Commission continues to pursue approaches to protecting children online through a number of measures, including initiatives such as the [Safer Internet Programme](#). In May 2012, the Commission published a Communication setting out a [European Strategy for a Better Internet for Children](#), containing eight key policies and outlining the steps that the Commission, Industry and member states should take to help achieve them.<sup>51</sup>

In parallel, the 'Coalition to make the Internet a better place for kids', made up of industry stakeholders, established working groups to deliver five objectives: simple and robust reporting tools for users; age-appropriate privacy settings; wider use of content classification; wider availability and use of parental controls; and effective take-down of child abuse material. The Coalition published its [first progress report](#) at the end of July 2012.<sup>52</sup>

Meanwhile, the ITU continues to implement its Child Online Protection initiative, which was launched in 2008. In [its latest phase](#), the ITU has set up a group (SG17) to investigate the

---

<sup>48</sup> Australian Government Department of Broadband, Communications and the Digital Economy, *Convergence Review*, 30 March 2012

<sup>49</sup> The term child online protection in this case relates to the protection of minors (traditionally meaning, in regulatory terms, broadcast content-related rules for the protection of young viewers) in the online space. In many countries, the broadcast related rules for minors are only applicable to broadcast-like services online and not all video and content services online.

<sup>50</sup> Ofcom defines media literacy as: "the ability to access, understand and create communications in a variety of contexts".

<sup>51</sup> European Commission, *European Strategy for a Better Internet for Children*, 2 May 2012

<sup>52</sup> *Report of mid-term review meeting of the CEO coalition to make the internet a better place for kids*, July 2012



possibility of developing international telecommunications standards to protect children from online threats.

### Media literacy

Focus in 2012 in the US has moved towards privacy, with the FTC proposing amendments to the Children's Online Privacy Protection Rules, to [significantly tighten the regulations](#) on what data can be collected on children.<sup>53</sup>

In Australia the regulator ACMA has won multiple awards this year for its Cybersmart [Tagged](#) online training resource for teenagers. Cybersmart is an online training and education resource for parents and children.

In the UK in October 2012 [Ofcom published new research](#) on children and parents' media use and attitudes online, as part of its media literacy research programme.<sup>54</sup>

### Online parental controls

the UK: In June 2012 Ofcom submitted evidence into children and parents' media use and attitudes online to the Department of Education in response to its Consultation on Parental Controls.

Germany: Providers of content that is potentially harmful to minors are subject to protection obligations under the German regulations, which can be met by providing parental controls. In February 2012, KJM, the co-regulator for the protection of minors, approved two such filters: systems provided by Jusprog and Deutsche Telekom.

Italy: In 2012, the Italian NRA, AGCOM, adopted [interpretative guidelines](#) on the application of a co-regulatory code on parental controls, clarifying the application of the film rating system and the access control mechanisms for linear and non-linear services offered by pay-TV channels. The code requires opt-out controls using a PIN, and information to be provided about the controls and content classifications. In October, the AGCOM Council set up a new technical board to define the technical requirements for the protection of minors on VOD services.

France: Having adopted an age classification system for VOD content in December 2010, with associated scheduling restrictions and signing, the CSA strengthened these rules in 2012, outlining additional locking requirements for access to programmes prohibited to under-18s.

### Preventing access to child abuse images

The European Parliament adopted in late 2011 the [Directive on Sexual Exploitation of Children](#), which contains one provision whereby Member States can take measures to block access to websites with child abuse content, subject to safeguards.

## **1.7.6 Promoting the efficient use of public assets**

The use of spectrum, in delivering critical services across a diverse range of users and consumers, continues to increase. The pressures on this finite resource are ever more apparent in today's information-hungry society. As the use of spectrum does not recognise international borders, there exists a formal framework of co-operation between countries. This minimises cross-border interference between an increasing range of wireless

<sup>53</sup> *Federal Register*, Vol. 77, No. 151, 6 August 2012

<sup>54</sup> Ofcom, *Children and parents: media use and attitudes report*, 23 October 2012

applications, including mobile telephony, broadcasting, maritime and civil aviation. This can help countries achieve seamless use of wireless services at a European, or even global, level. In addition, the harmonisation of spectrum can help to create economies of scale which translate to lower prices for citizens and consumers.

Three key international structures co-ordinate spectrum at the European and international levels:

- the European Union, supported by the [Radio Spectrum Committee](#)<sup>55</sup> and the [Radio Spectrum Policy Group](#)<sup>56</sup>;
- the [CEPT/ECC](#),<sup>57</sup> which has a broader membership (than the EU) with 48 member states; and
- the [International Telecommunications Union \(ITU\)](#)<sup>58</sup>, which defines the global framework for spectrum use in the Radio Regulations. This is a UN treaty, revised approximately every four years at the [World Radiocommunications Conference](#)<sup>59</sup> (WRC).

In 2012 there were two major developments in global and European spectrum policy.

### **Radio Spectrum Policy Programme**

At the European level, an important pieces of spectrum policy was implemented; the Radio Spectrum Policy Programme (RSPP) was formally adopted in March. This is the result of at least two years of negotiation between EU member states, the European Commission, the European Council of Ministers and the European Parliament, and it sets out some fundamental spectrum policy objectives across all 27 EU member states. It calls for concrete actions to meet the objectives of EU policies; for example, contributing to the functioning of the internal market for wireless technologies and services. A number of these RSPP actions will contribute to the goal set out in the European Commission's Digital Agenda programme of high speed broadband for all by 2020. Delivery of wireless broadband will also form an important part of that programme.

More immediate actions detailed within the RSPP are for member states to authorise the use of the following frequency bands, by specific dates, all of which have been allocated for high-speed electronic communication services in the EU. These bands will be critical for the delivery of wireless/mobile broadband across member states;

- Harmonised bands at 900/1800 MHz, 2.5-2.69 GHz, 3.4-3.8 GHz, by the end of 2012; and the 800 MHz band, by 1 January 2013, except in case of individual derogation obtained before that date.

Additional specific actions, by 2015, by the Commission and through consultation with member states, include:

- ensuring that at least 1200 MHz of harmonised spectrum be identified for wireless data traffic by mid 2013 at the latest, defining the details for the EU's radio spectrum

---

<sup>55</sup> [http://ec.europa.eu/information\\_society/policy/ecomm/radio\\_spectrum/eu\\_policy/rsc/index\\_en.htm](http://ec.europa.eu/information_society/policy/ecomm/radio_spectrum/eu_policy/rsc/index_en.htm)

<sup>56</sup> <http://rspg.groups.eu.int/>

<sup>57</sup> <http://www.cept.org/ecc>

<sup>58</sup> <http://www.itu.int/ITU-R/>

<sup>59</sup> <http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=wrc&lang=en>

inventory to allow for an analysis of the efficiency of spectrum use, particularly in the 400 MHz to 6 GHz range;

- the wider adoption of spectrum trading throughout the EU;
- harmonised spectrum for the development of the internal market for wireless safety services and civil protection;
- spectrum access opportunities for wireless innovation, through the use of spectrum sharing;
- the use of wireless innovations so that Europe can contribute to a low-carbon society; and
- finding appropriate spectrum for wireless microphones and cameras (PMSE).

### **World Radiocommunications Conference (WRC)**

Between January and February, a record number of more than 3000 participants, representing over 150 countries, participated at [WRC-12](#)<sup>60</sup>. Participants focused on a wide range of spectrum harmonisation decisions, including:

- discussions on future proposals for broadcasting and mobile services in the 700 MHz band;
- agreement on a new item to address the spectrum requirements for mobile broadband;
- streamlining satellite regulations to clarify the international rules;
- spectrum identified for the safe operation of unmanned aircraft systems;
- protection of the new European global navigation system (GALILEO); and
- a new allocation for the amateur service.

The UK, which was aligned to the European common positions (ECPs) on all of the items under discussion, signed the Final Acts of the Conference. This indicated the UK's agreement with the decisions taken.

CEPT continues its programme of work on a wide range of spectrum areas. This will include responding to specific tasks, that it will be mandated to undertake, to assist in the delivery of the actions detailed in the RSPP. Finally, CEPT has recently started a programme of work to deliver its European common positions for the next WRC, which is scheduled for late 2015.

### **1.7.7 Contributing to, and implementing, public policy defined by Parliament**

#### **Online copyright infringement**

The creation and distribution of online content and the associated regulatory challenges are at the forefront of debates on content regulation in many countries. Tackling online copyright infringement is a particularly major challenge.

---

<sup>60</sup> <http://www.itu.int/ITU-R/index.asp?category=conferences&rlink=wrc-12&lang=en>  
Ofcom is not responsible for the content of external websites

At the EU level, the European Commission has various initiatives in this area. In May 2011, it published a comprehensive [IPR Strategy](#),<sup>61</sup> which outlined plans to create a single market for intellectual property through a series of measures to be taken forward over the next few years. The Strategy included a number of proposals related to online copyright infringement, the key one being a potential review of the IPR Enforcement Directive (IPRED). The Commission is currently preparing a questionnaire to consult stakeholders on the issue, which is part of an evidence-gathering process, on the basis of which it will decide whether or not to review the Directive.

In addition, the Commission and the European Parliament are pursuing a number of other initiatives in the field of intellectual property. A proposed 'orphan works Directive', which imposes new copyright rules for works by 'missing' authors, was approved by the EU Parliament in June and will come into force, provided that it is approved by the Council of Europe, with a vote expected soon. The Commission also unveiled a proposed new Directive on collective rights management in July.

At a multilateral level, the [Anti-Counterfeiting Trade Agreement \(ACTA\)](#) has been signed by Australia, Canada, Japan, Morocco, New Zealand, Singapore, South Korea and the US. Although the EU signed the treaty, it was subsequently rejected by the EU Parliament, meaning that it cannot come into force in the EU. At the time of writing, Japan, the treaty's depository nation, was the only country to have ratified it. For ACTA to become a valid international agreement, six more ratification documents need to be deposited to the Japanese government.

In parallel, a number of national legislative and non-legislative initiatives have focused on online copyright infringement.

**UK:** the Digital Economy Act (DEA) 2010 requires Ofcom to make an 'Initial Obligations' Code to regulate the process by which ISPs will notify subscribers when somebody using their IP address appears to have infringed copyright. In June and July 2012, Ofcom consulted both on [the draft Code](#)<sup>62</sup> and the implementation of the government's [Costs](#)<sup>63</sup> Sharing Order, which requires Ofcom to set fees payable to ISPs and Ofcom by rights holders who wish to take advantage of the notification scheme. Following any resulting changes, the draft Code will go to Brussels for a review under the Technical Standards Directive, before being laid before Parliament alongside the costs sharing order in 2013.

**France:** two 2009 laws<sup>64</sup> establish a 'graduated response' programme targeting online copyright infringement, administered and enforced by an independent public body, HADOPI (High Authority for the Dissemination of Works and the Protection of Rights on the Internet). HADOPI is currently being reviewed as part of a wide public consultation project which will result in a package of measures known as "act II of the French cultural exception", which will aim to complement copyright enforcement with measures to improve the online market for legal cultural offerings.

---

<sup>61</sup> European Commission, *A Single Market for Intellectual Property Rights Boosting creativity and innovation to provide economic growth, high quality jobs and first class products and services in Europe*, 24 May 2011

<sup>62</sup> Ofcom, *Online Infringement of Copyright and the Digital Economy Act 2012*, 26 June 2012

<sup>63</sup> Ofcom, *Online Infringement of Copyright: Implementation of the Online Infringement of Copyright (Initial Obligations) (Sharing of Costs) Order 2012*, 26 June 2012

<sup>64</sup> Law promoting the dissemination and protection of creations on the internet ('HADOPI I') June 2009 and Law on the criminal protection of literary and artistic property on the internet ('HADOPI II'), Sept. 2009

**Italy:** A proposed administrative regulation to protect online copyright, drafted by communications regulator AGCOM, was put on hold in May, as the authority is awaiting government clarification of its competence to legislate in this area.

**Spain:** the March 2011 Sustainable Economy Law created an Intellectual Property Commission within the Ministry of Culture. The IP Commission is empowered to order the suspension of a website or the withdrawal of infringing website content, as well as to conduct dispute resolution between ISPs, rights-holders and broadcasters. It was formally established in March 2012 and has begun the process of assessing complaints from rights holders. The first cases referred to the courts by the IP commission are currently under way, with resolutions expected in the near future.

**United States:** There have been a number of recent attempts to introduce new legislation. The most notable were the Protect IP Act (PIPA) and the Stop Online Piracy Act (SOPA), which were proposed in May and October 2011 respectively. Both draft pieces of legislation were ultimately rejected by Congress, and attempts to reform copyright enforcement legislation were not expected to resume until after November's presidential election. In a separate voluntary initiative, copyright owners and six ISPs have agreed a 'six strikes' graduated response scheme.

**New Zealand:** the Copyright (Infringing File Sharing) Amendment Act, which provides for a 'three strikes' graduated response scheme, came into effect in September 2011. The Copyright Tribunal, to which rights holders can submit complaints against users who continue to infringe after receiving three notices, has recently launched its first three cases.

**South Korea:** Changes to the Korean Copyright Law in 2009 introduced a three-strikes-based notice and take-down scheme that targets commercial websites offering unauthorised content as well as individuals who egregiously upload infringing content to these sites.

**Canada:** Bill C-11, or The Copyright Modernisation Act, which adds new rights and exemptions to the Canadian Copyright Act, received royal assent in June 2012.