

# LIFE ONLINE

- For many indicators on **internet usage** there was a significant slowdown in growth in 2011 compared to previous years. Maintaining the pace of growth is becoming difficult as saturation levels are being reached in some cases and progress is more and more dependent on the catching up of lagging countries and specific socio-economic groups. This affects the number of non-users and regular users as well as the use of particular applications, services and e-commerce.
- Concerning the European Digital Agenda (EDA) target of increasing **regular internet use** to 75% of the population, the confident projections of last year's scoreboard have been reviewed -- the 75% target will most likely be reached in 2014 and not in 2013, although still ahead of the EDA target year of 2015.
- The target on **cross-border e-commerce** will not be met, while for the overall use of e-commerce, estimates are much more positive. The low use of cross-border e-commerce by individuals is matched by the limited number of enterprises selling electronically.
- Despite the increasing number of internet connected devices per households, there was a decline in 2011 in the number of **individuals buying software, magazines, music or films** online from a peak in 2010.

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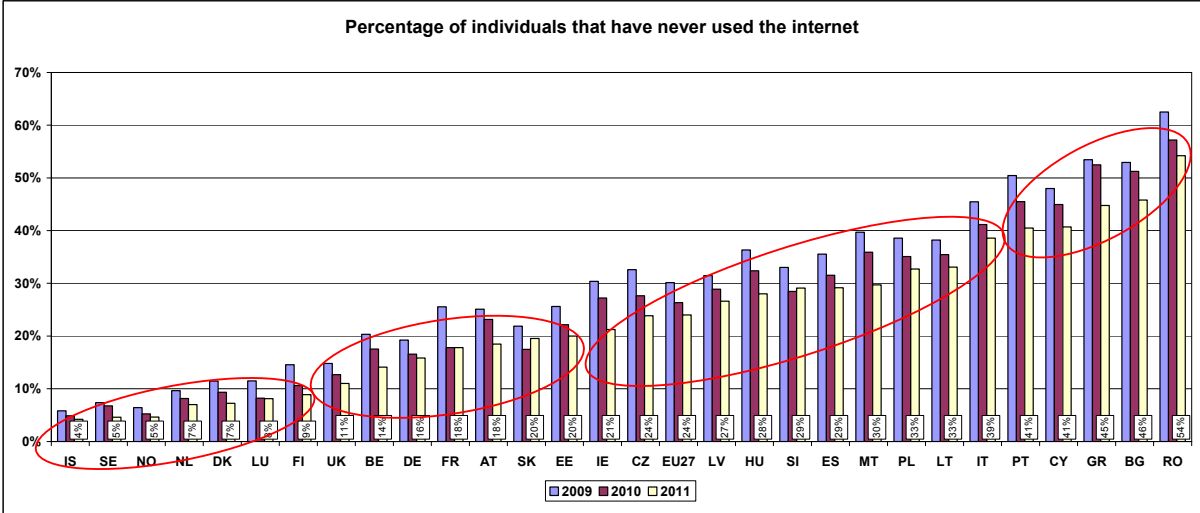
This chapter analyses the latest developments in the use of the internet in the EU. It provides insights into the frequency of use by several socio-economic groups and the kind of services most used by EU internet users.

- European Digital Agenda. Key performance targets on digital inclusion:
1. Halve the proportion of the population that has never used the internet by 2015 (to 15%)
  2. Increase regular (at least once a week) internet use from 60% to 75% by 2015 and from 41% to 60% for disadvantaged people.

**1.1. Population that has never used the internet**

The Digital Agenda for Europe calls for a halving of the proportion of the population that has never used the internet (to 15%) by 2015. There continues to be a decrease in the number of people who have never used the internet, falling to 24% of the EU population, a drop of 2 percentage points. This decrease contrasts with 2010, when the average reduction was 4 percentage points (Figure 1).

**Figure 1**



Source: Eurostat

Around 120 million European citizens have never used the internet. Romania, Bulgaria, Greece, Cyprus and Portugal have the highest rates of non-users but together these five countries have just 25 million people (a figure similar only to Italy with 23 million non-users) that have never used the internet. While Greece experienced the largest reduction rate (-8 percentage points) and Bulgaria and Portugal also had significant reductions (-5), Cyprus (-4) and Romania (-3) had reductions only slightly above the EU average.

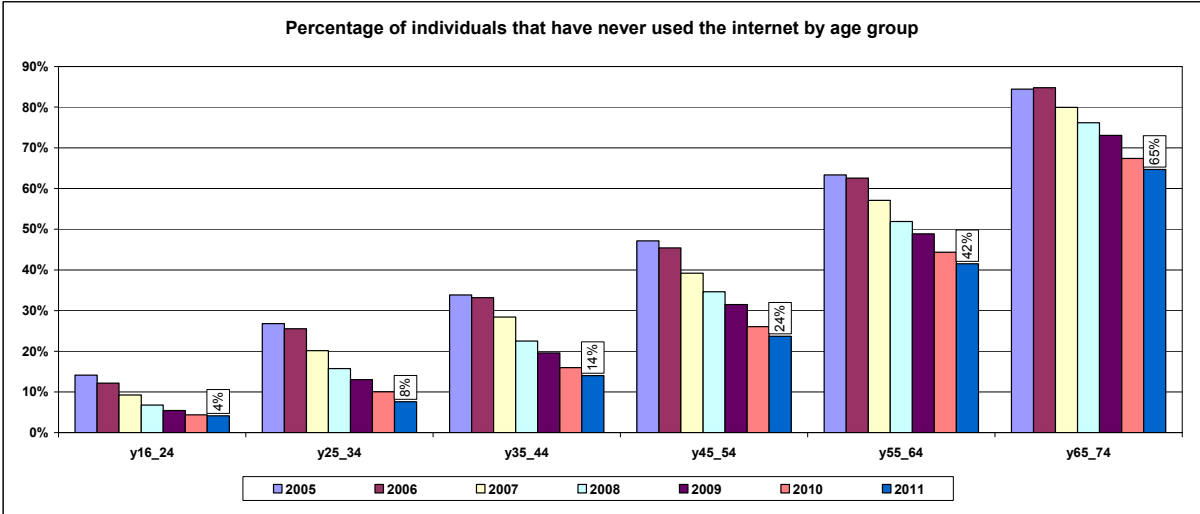
Conversely, the proportion of the population that has never used the internet is almost marginal in the most advanced countries where the number of non-users is below 10% of the population. Despite these small levels, most of these advanced countries also managed to reduce their numbers of non-users, in some cases in the same proportion as the EU average. Although the gap between Member States in the number of non-users is closing, progress in the last year has slowed down.

Situations are uneven across the largest Member States, which influence the EU average, with the UK over-performing (only 11% of its population has never used the internet), while in Italy, Poland and Spain between 30-40% of the population declare that they have never used

the internet (this equates to 49 million people). Germany has reduced its rate by one percentage point to 16%, while in France it appears that no further progress has been made. Altogether, the six largest countries account for 80 million out of the total 120 million inexperienced citizens.

For non-users, age is the principal factor with around two thirds of Europeans aged 65-74 and about half of those aged 55-64 having never used the internet (Figure 2). When asked about their reasons for not having an internet connection, lack of interest is the most cited reason (cfr. chapter on skills) and this may be linked to age. Of all households that declared a lack of need to have internet access at home because the content was not useful or not interesting, the largest rates come from households with just one or two adults. Many national policies aim to increase efforts to promote the benefits of the internet for elderly people. In stark contrast, for the population aged between 16 and 44 years the internet has become a daily tool either for studies, work, leisure or social relations. Only 4% of people aged 16 to 24<sup>1</sup> and just 15% of people aged between 25 and 54 declared that they have never used the internet.

Figure 2

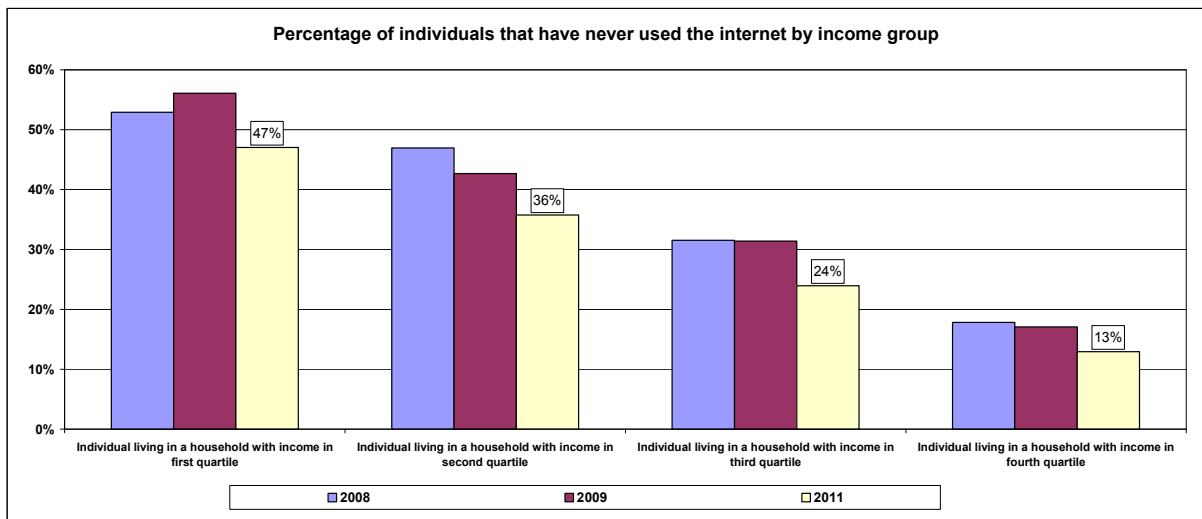


Source: Eurostat

Beyond lack of interest and of skills, equipment and access, costs are the main reasons declared by European households for not having access to the internet. Only 13% of individuals living in a household with income in the fourth quartile have never used the internet against 45% in households with income in the first quartile (Figure 3). This situation has given rise to a discussion on the need to give stimulus to the take-up of internet access by low-income families through special tariffs<sup>2</sup> for internet access, not only in the EU but also in the United States. Yet, the overall expenditure in information technologies by the EU represented only 2.4% of European GDP in 2008, far beyond the 2.8% of Japan and the 3.3% of the United States.

<sup>1</sup> Only the population aged between 16 years and 74 years is sampled in the statistics on Internet use.  
<sup>2</sup> In France the Autorité de la concurrence "welcomes a social tariff for broadband Internet access", [http://www.autoritedelaconcurrence.fr/user/standard.php?id\\_rub=389&id\\_article=1663](http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=389&id_article=1663). In the US the FCC plans to modernize the low-income broadband Internet access program. <http://www.fcc.gov/document/fact-sheet-genachowski-addresses-smart-govt-and-reforms-lifeline>

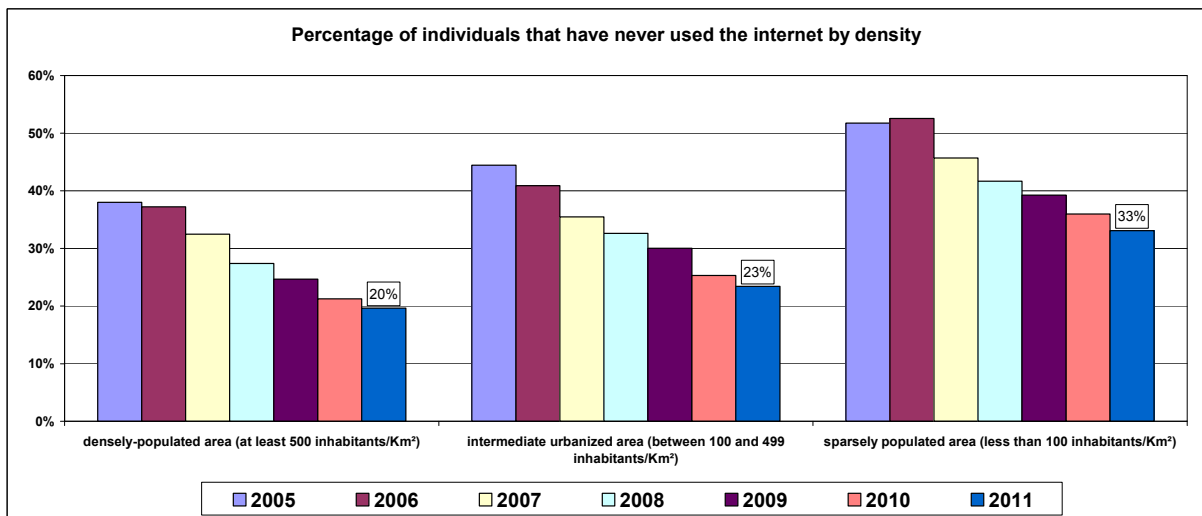
**Figure 3**



Source: Eurostat

Population density is also a factor to consider, although differences are less strong here. There are basically no differences between densely populated and intermediate urbanised areas, which account for about a quarter of non-users. Sparsely populated areas account for 35% of the non-users (Figure 4). Reduction rates in the last years are comparable in all three types of areas.

**Figure 4**

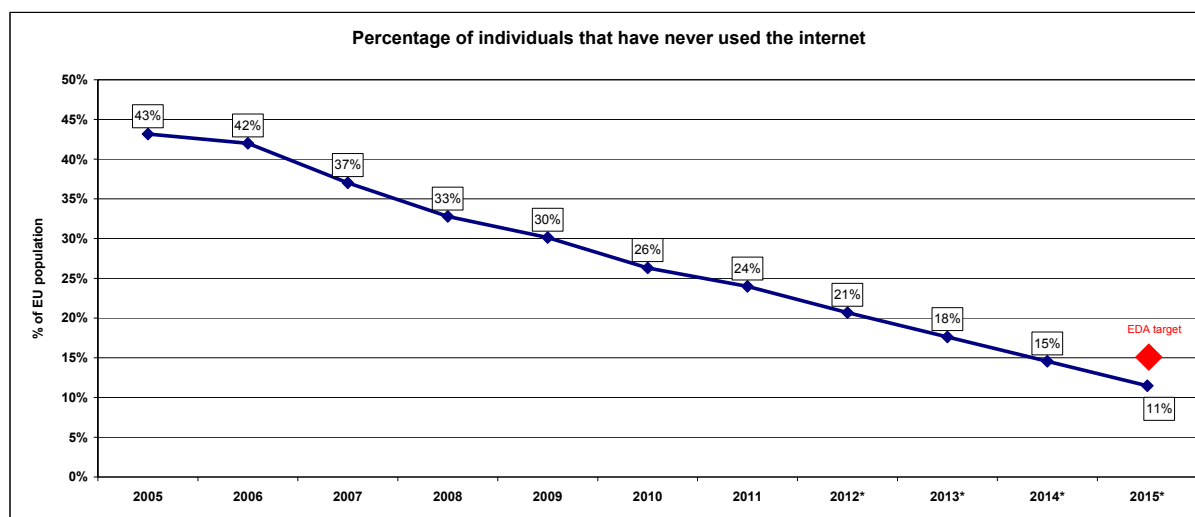


Source: Eurostat

As reported under pillar 4, broadband networks nowadays are widely available in Europe. As a result, non-availability is no longer a reason for not having access to the internet at home at the EU27 level and the problem is concentrated in the sparsely populated areas of a handful of Member States. Similarly, privacy or security concerns are not referred to as a reason for not having internet at home; privacy emerges as more of a concern when it comes to specific uses of the internet such as interaction with public authorities.

Overall, based on the reduction rates of the last three years and if no further slow down is considered, the EDA target could be achieved in 2015 and even earlier if countries lagging behind and some large Member States make an effort to lower the number of non-users (Figure 5).

Figure 5



Source: Eurostat. \*: Projection

## 1.2. Regular use of the internet

An increasing number of Europeans use the internet regularly. As the percentage of regular users is relatively high, the increase is slowing down and was lower in 2011 than in previous years. Large disparities still persist between EU countries and between different socio-economic groups.

In 2011, 76% of the EU population had used the internet at least once, an increase of just 2 percentage points from 2010. At a global level, the EU27 is the second largest region behind Asia by number of internet users, with more than 380 million users (Table 1). Relative to its population, the number of internet users is similar to that of the US (78%) and well ahead of other regions. Despite the important rates of use in developed economies, worldwide only 33% of the population is estimated to use the internet.

Table 1- WORLD INTERNET USAGE, December 2011

World Regions	Population ( 2011 Est.)	Internet Users 2011	Penetration (% Population)
Africa	1,037,524,058	139,875,242	13.5%
Asia	3,879,740,877	1,016,799,076	26.2%
EU27	501,000,000	380,760,000	76.00%
Rest of Europe	315,426,346	119,963,686	38.03%
Middle East	216,258,843	77,020,995	35.6 %
North America	347,394,870	273,067,546	78.6 %
Latin America / Carib.	597,283,165	235,819,740	39.5 %
Oceania / Australia	35,426,995	23,927,457	67.5 %
WORLD TOTAL	6,930,055,154	2,267,233,742	32.7 %

Source: Internet World Stats

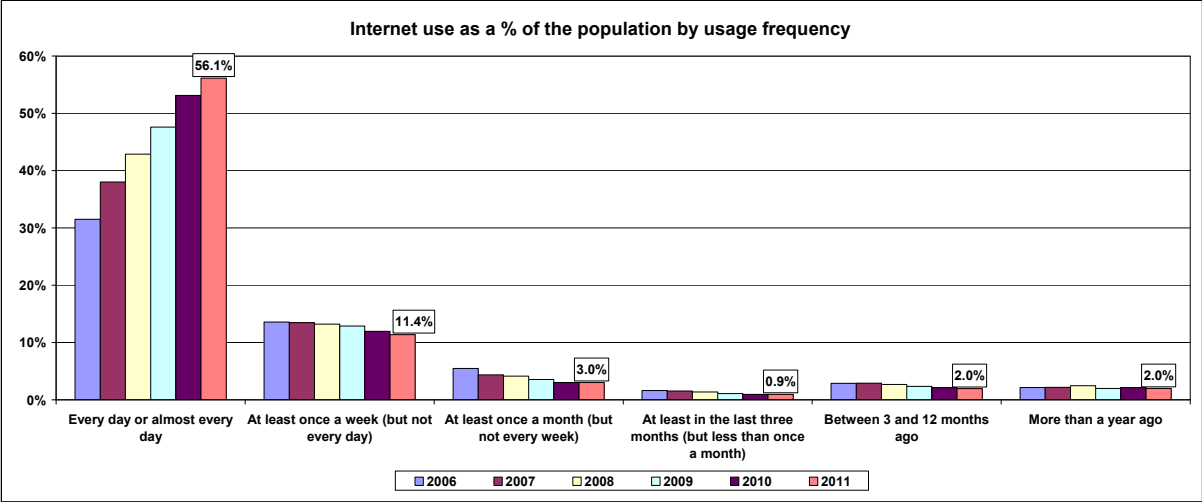
The slow increase in the number of new users in Europe is accompanied by a slower growth in frequency of use. Regular internet users<sup>3</sup> currently represent 67.5% of the population, only 2.4 percentage points up from 65% in 2010 (Figure 6). This sluggish growth rate contrasts with the average of the previous five years (around 5 percentage points up per year). This also means that the confident projections of last year's scoreboard<sup>4</sup> may not be realised and that the

<sup>3</sup> Regular internet users are defined as those that use the internet at least once a week.

<sup>4</sup> [http://ec.europa.eu/information\\_society/digital-agenda/scoreboard/docs/scoreboard.pdf](http://ec.europa.eu/information_society/digital-agenda/scoreboard/docs/scoreboard.pdf)

European Digital Agenda target of increasing regular internet use to 75% of the population will not be reached in 2012 but more likely in 2014, although still ahead of the target year of 2015. These new data corroborate the analysis of the 2011 DAE scoreboard which indicated that maintaining the pace of growth would not be easy as saturation levels were being reached in some cases and progress more and more depends on the catching up of lagging countries and socio-economic groups.

Figure 6

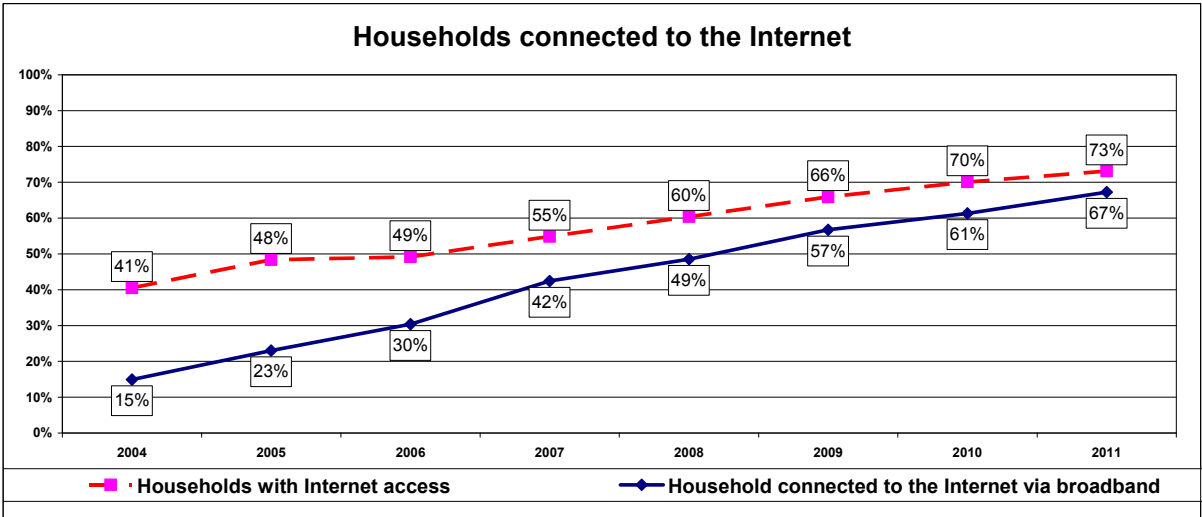


Source: Eurostat

Source: Eurostat Community Survey on ICT Usage by Households and by Individuals

The above slowdown also matches the deceleration in the number of new broadband lines and of households connected to the internet. Seventy-three percent of all EU households are connected to the internet, 3 percentage points up from 2010 (Figure 7). Already 67% of all EU households connect to the internet via broadband.

Figure 7



Source: Eurostat

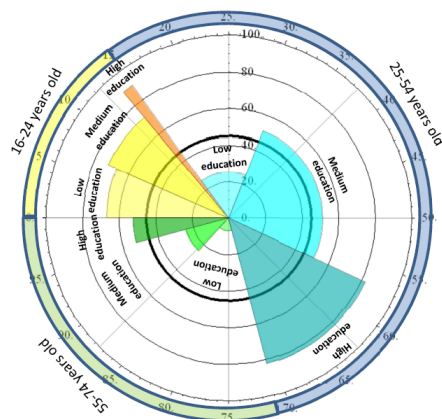
With regard to the regular use of the internet by disadvantaged people<sup>5</sup>, data for 2011 show that the rate has increased to 51% from 48% in 2010. There has, nonetheless, been a

<sup>5</sup> For the measurement of the Digital Agenda target, disadvantaged people include three main groups of individuals: those over 55 years of age, the low educated (ISCED 0-2), and those that are out of the labour market (the inactive, retired and unemployed). While other socially

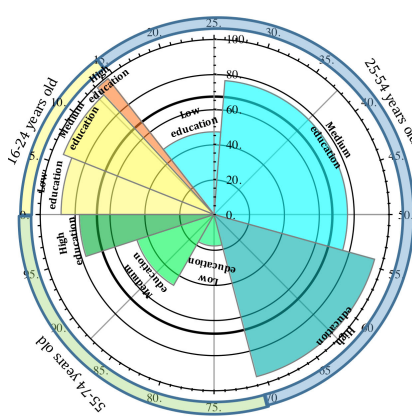
slowdown in progress, meaning that the target will be achieved later than announced in the DAE 2010 scoreboard, although arguably still before 2015.

As for people who have never used the internet, age is a primary factor in determining the probability of using the internet regularly as well as using ICT in general. Education is another important factor (Figure 8 and 9).

**Figure 8 Regular internet users in the EU27 in 2006 – breakdown by age-education groups**



**Figure 9 Regular internet users in the EU27 in 2011 – breakdown by age-education groups**



Source: Commission services on the basis of Eurostat Community Survey on ICT Usage by Households and by Individuals. The amplitude of each sector represents the demographic weight of each age-education group in the total EU27 population while its height represents the percentage of regular Internet use for that group.

Among the youngest users, differences due to educational attainment have tended to disappear in the last years and in 2011 almost all people aged 16-24 with high formal education and with medium formal education were regular users (98% and 93% respectively) while 88% of the low educated in this age group were regular users.

The evidence that the internet has become an indispensable tool for studying and working is the narrowing gap between regular (i.e. once a week) and daily internet access, which is only 5 and 8 percentage points for the most educated people in the 16-24 and 25 to 54 age cohorts, down from around 15 percentage points in 2008 and 22 in 2004. However schools or universities are not the main location from which the internet is used, since just around 40% of young people declare that they have used the internet at that place; rather between 95% and 90% of young people access the internet primarily from home depending on their educational level.

Among 25-54 year olds, education continues to make a great difference with almost all highly educated people (96%) being regular users compared to 76% for medium education and 47% for low education. However, the latter group has registered the highest growth in 2011 with a 4 percentage point increase in one year.

As indicated above, older people (55-74 years old) is the segment with the lowest adoption rates and this is also reflected in the average frequency of regular use, with just 49% of individuals aged 55 to 64 being frequent users, a figure that falls drastically to 28% for the

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disadvantaged groups such as the disabled, those on low incomes, people living in thinly populated areas and women are also the target of eInclusion policy, these three groups constitute those which have been shown to be most disadvantaged in terms of their access and use of the internet and taking these three groups we are able to cover a large proportion of the eExcluded, as individuals often belong to more than one disadvantaged group.

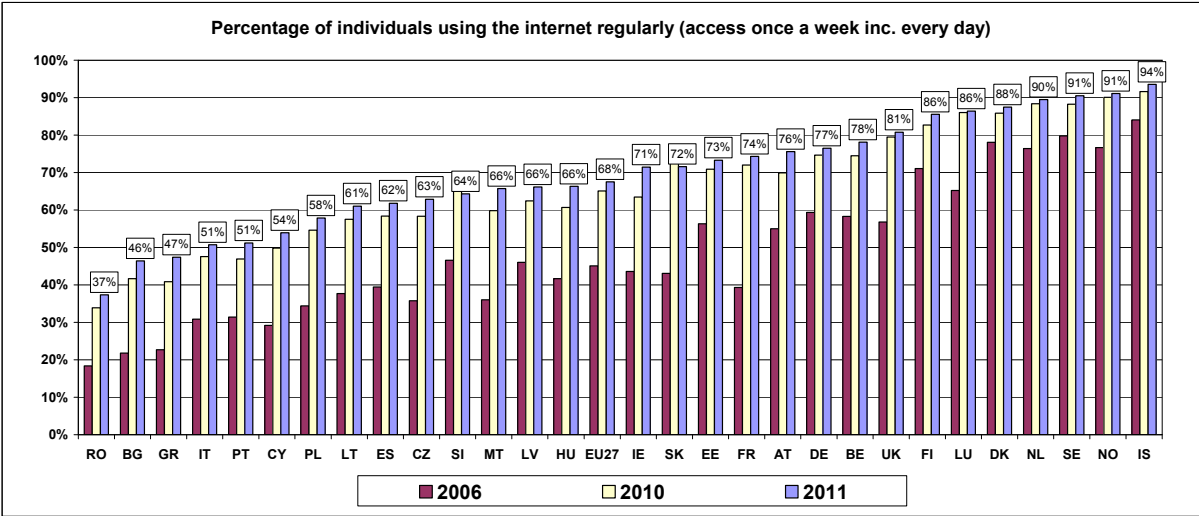


people aged between 65 and 74. The impact of educational attainment is much more visible in this age group as 77% of older people with higher levels of education are regular users compared to just 18% of the less educated ones. Progress over the last year has been similar in the three categories, regardless of the educational level.

Data on internet access and use by third-country nationals (people born in a country outside the EU), albeit from a limited number of countries, show that the rate of internet use is very similar across the two groups. For example, in 2011 68% of migrants in the countries reported that they had used the internet in the last 3 months, compared to 70% of the native born. Rate of frequency of use are also fairly similar, as well as skills levels. The main difference relates to the place where the internet is accessed. Native born use more the home and the place of work than migrants, who tend to use other places more to access the internet, for example public internet access points.

Looking at regular internet use by country, very significant differences still persist. Two non-EU countries, Iceland and Norway, have the highest rankings in Europe, followed by Sweden and Denmark. The gap within EU countries is still very high (54 percentage points, albeit down from 62 points in 2006) despite the impressive increase in regular use by many of the less developed economies since 2006. Over the last year, Ireland was the country that experienced the fastest growth (8 points), followed by Greece, Malta, Austria and Hungary. The gap will get smaller in the future as in the most developed countries there are not many possibilities for further growth (Figure 10). More worrying is the apparent regression in Slovenia and Slovakia and the slowdown in the UK.

Figure 10



Source: Eurostat

1.2.1. Place of internet access and access by device and age of internet users

Age also has an impact on the places and the devices used for accessing the internet. Access from home is the most typical way, regardless of age, for all users (93%) in the last three months. As can be expected, most elderly internet users aged 65 to 74 (79%) access the internet from home only; a situation shared by 53% of users aged 55 to 64. The figure declines for younger people (32% of those aged 25 to 34 and 24% for the youngsters aged 16 to 24).

However, differences are more visible when it comes to accessing the internet from other places in addition to the home: obviously the place of work and education would appear to be the natural secondary places for accessing the internet. Around half of users of working age

also access the internet at their place of work. The number of students accessing the internet in a place of education is slightly lower than this. Interestingly, around one quarter of the people who used the internet in the last three months also accessed it from another person's home. This figure has been stable over the last years.

In addition to these two places, the internet can be accessed anywhere away from home via a mobile and/or wireless connection, typically through a wifi hotspot<sup>6</sup>. Seventy-seven percent of European households are equipped with a personal computer, either desktop or laptop, with the latter representing around 70% of the PC market<sup>7</sup>. This, along with the rapid spread of mobile handsets and especially smartphones over the last two years, has resulted in 43% of internet users accessing the internet wirelessly away from home or work. With larger and better resolution screens, smartphones have become a sort of multifunctional device, used both for working and entertainment while still being used for making voice calls, although the latter seems to depend on the level of development of the mobile market<sup>8</sup>. Between 35 and 40% of users aged 16 to 34 access the internet using these devices away from home or work. The use of mobile phones for accessing the internet is not that widespread for older people and clearly not for the elderly. Only 18% of internet users in the last three months aged 45-54 connect to the internet from mobile devices and only 11% of users aged between 55 and 74 do so (Figure 12).

Despite the rapid rise of smartphones, mobile connectivity through portable computers (mainly laptops and tablets more recently) is still popular and on many occasions both types of equipment are used. Portable computers still seem to be preferred over smartphones by the more mature population of working age (35 to 54).

Since the appearance of tablets in the market two years ago, the boundaries between smartphones and portable computers are blurring and it is very likely that the future will be marked by a coexistence of handsets, tablets and devices halfway between these two. It is estimated that at global level, media tablets sales to end users totalled 63.6 million units in 2011, a 261.4% increase from 2010 sales of 17.6 million units, and sales are forecast to reach between 285 million and 326.3 million units by 2015<sup>9</sup>.

With regard to mobile phones and smartphones, analysts estimate (Figure 11) that smartphones represented 41% of the handset market in 2011 in Western Europe, up from 11% in 2007, and that by 2015 the smartphone share of the handset market will rise to 71%<sup>10</sup>.

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<sup>6</sup> Notwithstanding the fact that a large share of mobile phone usage takes place in the home. In 2011 there were around 125 million connected devices in Western Europe and this number is expected to increase to around 285 million by 2015, of which only 25% will be PCs (Source: IHS ScreenDigest). In an effort to alleviate data traffic overload from its mobile networks, operators have started implementing traffic offload strategies, primarily through WiFi and femtocells at home.

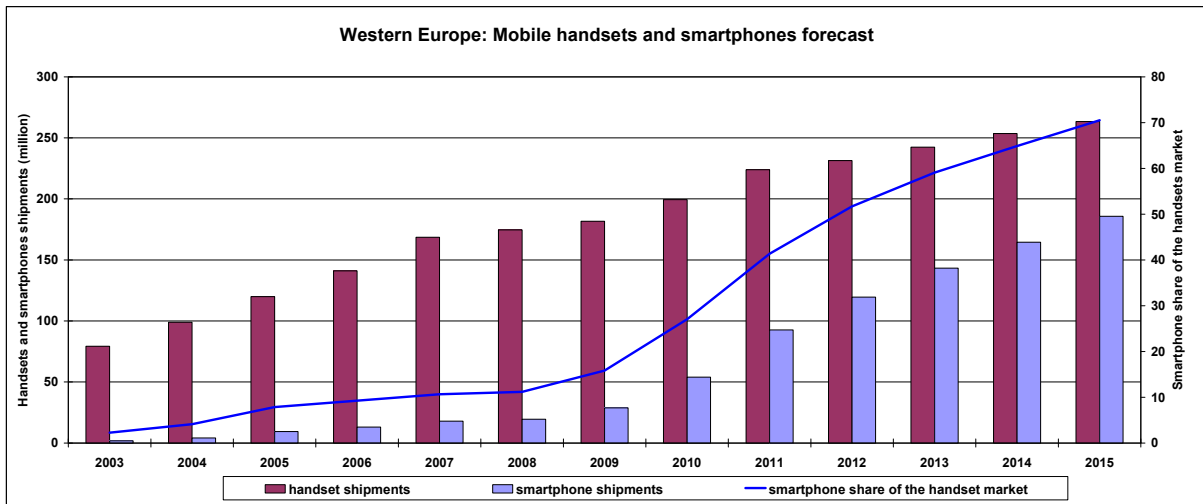
<sup>7</sup> EITO 2011.

<sup>8</sup> A recent survey in South Korea showed that 42.4 percent of smartphone and tablet PC users aged between 12-59 cited the Internet and mobile apps as their main purpose of smartphone use, while voice calling and text messaging make up 39.3 percent and 18.3 percent, respectively.

<sup>9</sup> Gartner's "*Gartner Reveals Top Predictions for IT Organizations and Users for 2012 and Beyond*", HIS iSuppli's "*Apple set to regain media tablet market share with release of new iPad model*"

<sup>10</sup> For instance at the end of 2011, 250m Android devices had been activated and there had been 11 billion application downloads cumulatively from the Android Market. Currently there are around 700,000 Android device activations a day.

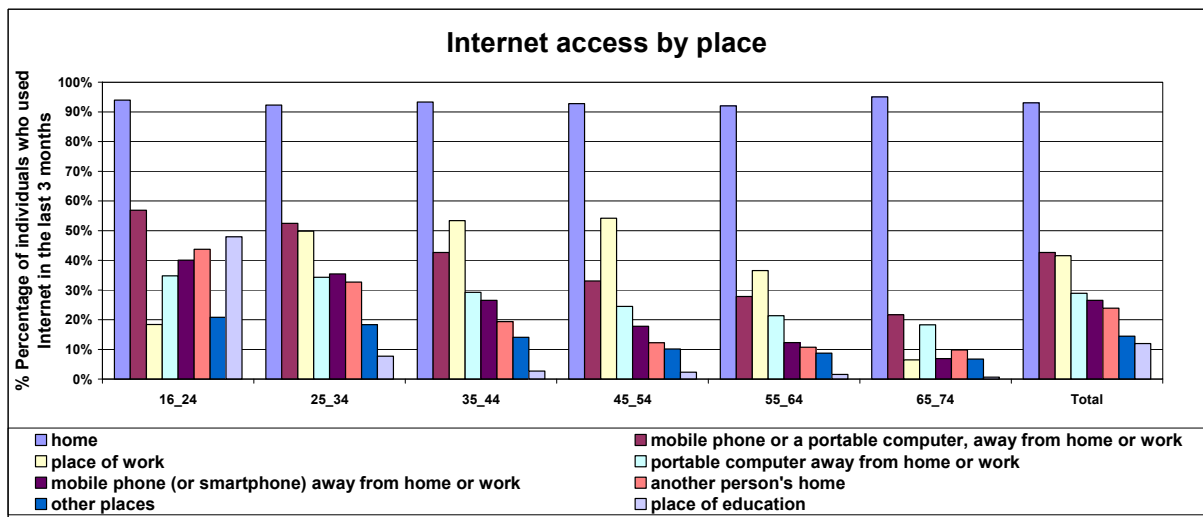
Figure 11



Source: ScreenDigest

Finally, other places are used as well to access the internet, and again the main determinant is age, since the lower the age, the higher the propensity to access from many other places (Figure 12).

Figure 12



Source: Eurostat

### 1.2.2. Most popular services.

Finding information about goods and services was by far the most popular service of those activities included in the 2011 survey, with 79% of people who used the internet in the last 3 months (Figure 20). Use of the internet for finding information grew between 2004 (73% of users) and 2007 when it reached a plateau (81% of users). Since then the rate has stabilized at around 80% of users. Data confirm that search engines are a function used by many users; the main entry gate in many cases with 71% of people<sup>11</sup> having used a search engine to find information at any time in the past, up from 51% in 2005.

The internet continues to be an important source of news and general information. Reading and downloading online newspapers and news is the second most popular service (56% of

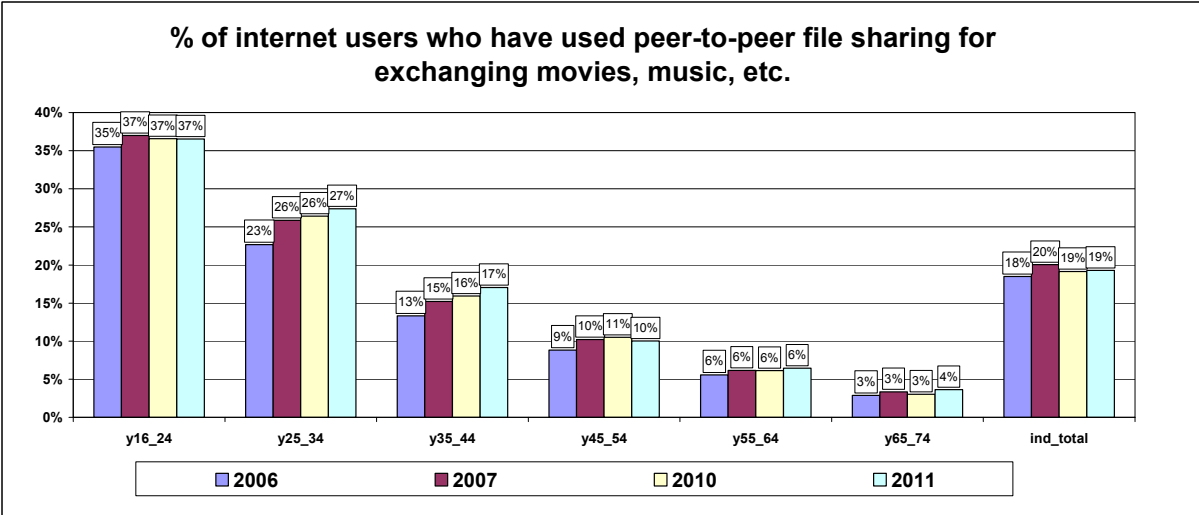
<sup>11</sup> Percentage of individuals that have used the internet, ever

users) with many users subscribing to news services and products such as RSS. This is closely followed by the search for information on health, general knowledge (i.e. consulting wikis such as Wikipedia) and travel and accommodation (54% of users in all three cases).

While the aforementioned services are rather passive and unidirectional, participation in social networks has risen over the last years to similar levels of take-up, with 53% of internet users having a profile and posting messages and content to social networks such as Facebook or Twitter. By contrast, professional networks do not yet seem to appeal to many users as only 10% are active in these kind of networks. Social networking is used as much as internet banking (52% of internet users) and e-commerce. Within this latter category the internet is mostly used as a purchasing channel as only 23% of users sold goods or services through it (cfr. section on e-commerce below).

Peer-to-peer (P2P) file sharing for exchanging movies and music is used by 19%<sup>12</sup> of internet users and this figure has been stable over the last four years despite the reduction in the proportion for the youngest users, aged 16 to 24. One in every three users at this age exchange multimedia files through peering techniques (Figure 13). This stable rate of P2P users is explained by the sustained increase in the use of P2P by older people: 27% of users aged 25 to 34 now exchange files through P2P, up from 19% in 2005, and up to 17% of people between 35 and 44 years old.

Figure 13



Source: Eurostat

Much caution should be applied regarding the figures on the use of P2P as this practice is associated by many with illegal content. Indeed, according to the music industry<sup>13</sup>, 28% of internet users globally access "unauthorised" services on a monthly basis and around half of these are using P2P networks. According to this same source, in the US in 2010 only 35 per cent of P2P users paid for music downloads but an amount that on average was a third of the amount paid by those who subscribe to a music service.

Uploading content (images, films or music) or gaming is another typical use of the internet by younger people, although here there also seems to be a spread of this use to other ages. Almost two thirds (56%) of 16-24 year old people have engaged in this activity.

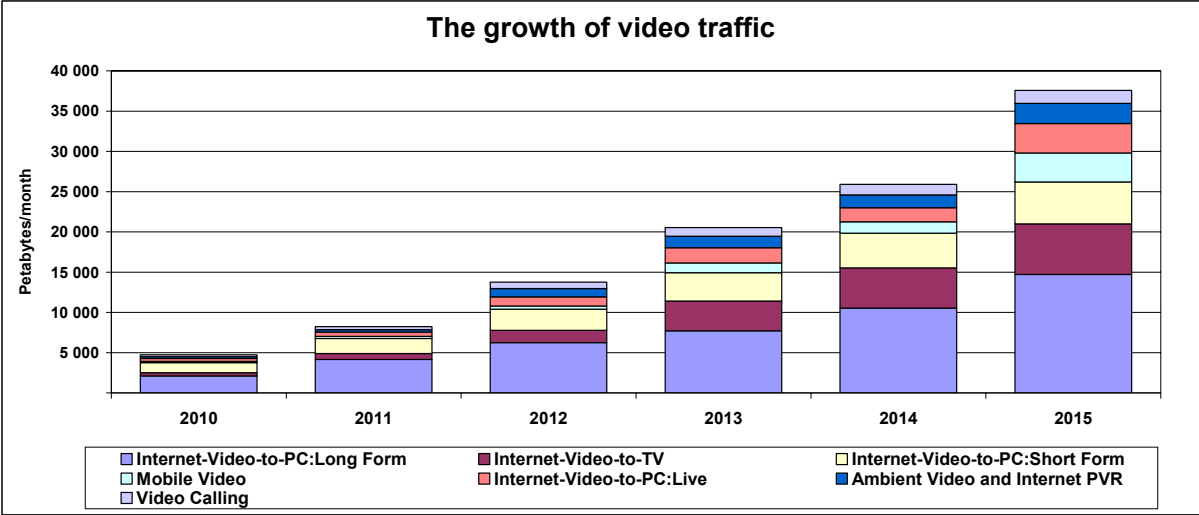
<sup>12</sup> Users that have ever carried out such activity

<sup>13</sup> IFPI's Digital Music Report 2012

Interaction with public administration is also a very popular way of using the internet, although for the first time in four years there has been a stall in the number of e-Gov users: 41% interacted in the last 12 months, the same figure as in the previous year, and 35% obtained information from public authorities web sites, two points below the 2010 figure.

Data also show that the internet is transforming the way in which people communicate. The rapid rise of social networking, together with texting, has meant that traditional communication services such as voice telephony are shrinking, with 71% of households having a traditional fixed telephone access, down from 73% in 2009<sup>14</sup>. Meanwhile, internet telephony and video calls continue to grow at a slightly faster pace than in 2010. Availability of faster broadband access will arguably boost this type of service and high quality teleconference is often cited as one of the services that, together with the "connected TV" (cfr. infra), will boost the number of users communicating in this way. Video calling is predicted to take almost 5% of internet video traffic in 2015<sup>15</sup> (Figure 14).

Figure 14



Source: EC services based on CISCO

Besides classic e-mails (89% of users in 2010), internet users are increasingly adopting social networks as a means to communicate with their friends and family. Much has been said about the use of social networks as a major driver of news, but recent research in the US<sup>16</sup> has shown that this is not the case as only 9% of adults get news very often through social networks and the large majority of them still go to news websites, use keyword search or get news through a news organising web site or application.

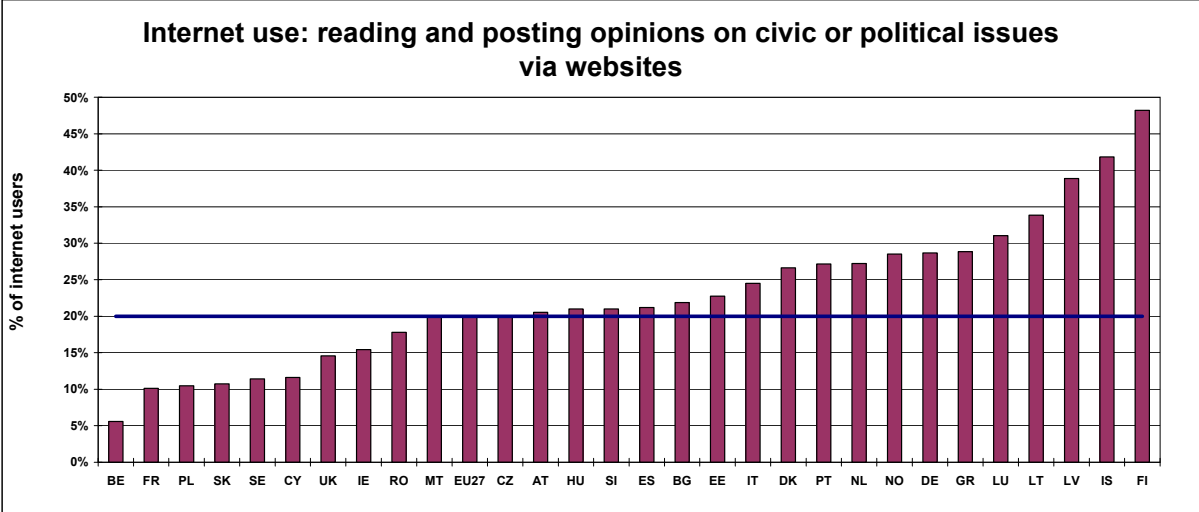
Where the internet seems to be not yet fully exploited by citizens is as a tool for civil and political participation. Ironically, in the year of the 'indignados', the 'social power' driven by 'leaderless movements' and the Arab spring, only 20% of users declare that they have read and posted opinions on civic or political issues via websites (e.g. blogs and social networks) and only 10% took part in online consultations or voted to define civic or political issues (e.g. urban planning or signing a petition). This contrasts significantly with the spread of social networks. But this 10% figure could also be seen as a very positive development if one considers that recent research has demonstrated that still many decision makers doubt the representativeness, surplus value and quality of the input of the new channels and that only a

<sup>14</sup> E-Communications Household survey 2011  
<sup>15</sup> Cisco, Visual Networking Index, 2011  
<sup>16</sup> 2012 State of the News Media Report, Pew Research Center Project for Excellence in Journalism,.

few decision makers are prepared to accept the direct inroads of e-participation on their decisions<sup>17</sup>. That 10% of users have engaged in this type of service means that in some Member States, public authorities have started using online channels in their policy decision making process.

Despite the high adoption of social networks and the perception by many users that these networks are a good way for political expression and participation due to their open nature and intrinsic transparency, it seems that many Europeans still have concerns about them as a tool for political participation. Obviously consumers are becoming more and more aware of the double-sided nature of these sites, i.e. anyone can use them as a channel to convey their messages but anyone can use it as a tool to know what others think and say. Privacy therefore came as a hot topic on the agenda of many service providers, consumer associations and national governments in 2011. In several countries around the world, national authorities decided to shut down social networks in 2011 to avoid protests and similar actions were discussed within the EU as well<sup>18</sup>.

Figure 15



Source: Eurostat

There is not any clear pattern among the countries where the internet is used for political or civic participation (Figure 15). Finland seems to have the highest number of cyber activists relative to its internet users (almost half of these), followed by Iceland, Latvia and Lithuania. But the proportion of users active in political cyber discussions is similar in countries such as Germany, Greece, the Netherlands or Portugal, and very low levels of activism are found in Belgium, France and Poland.

1.2.3. The use of social networks in Europe

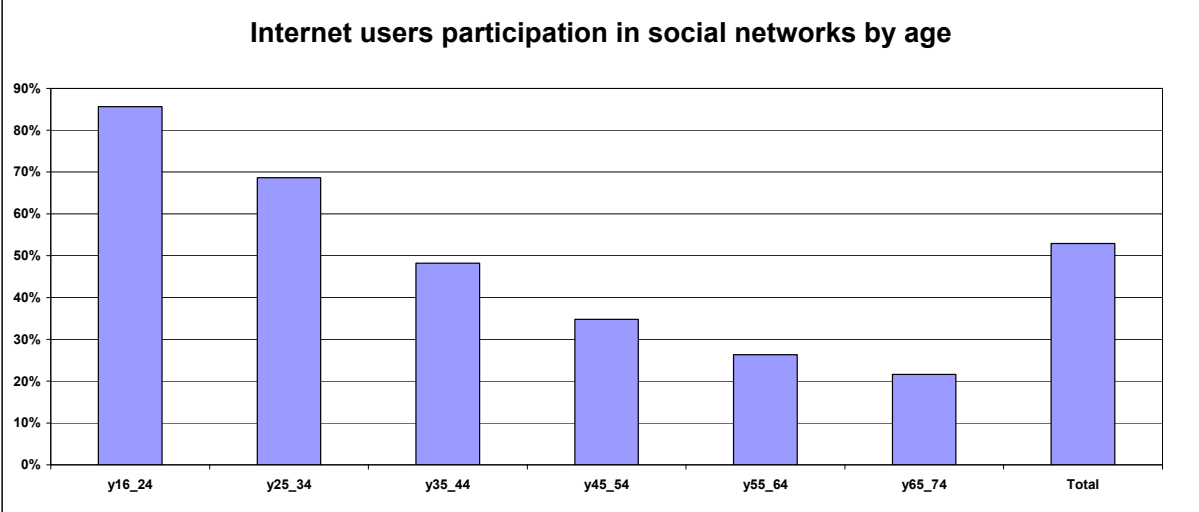
Social networks are predominantly used by young people and as many as 86% of internet users aged 16 to 24 and 69% of 25 to 34 year-olds participate in social networks (Figure 16). Although use is less widespread as age increases, already almost half of regular users aged

<sup>17</sup> Universität Siegen, Fachbereich Wirtschaftsinformatik und Neue Medien, et al. "Study on the Social Impact of ICT", available at [http://ec.europa.eu/information\\_society/europe/i2010/docs/eda/social\\_impact\\_of\\_ict.pdf](http://ec.europa.eu/information_society/europe/i2010/docs/eda/social_impact_of_ict.pdf)

<sup>18</sup> For some experts, the shutdown in Egypt in January 2011 was unprecedented in the history of the web. During the riots in London in August 2011, public authorities noted that rioters had used social media and networking services to organise their gatherings and there was a debate about the possibility of ordering the network to be closed down. Police acknowledged having intercepted messages on BlackBerry Messenger after confiscating phones from arrested troublemakers.

35-44 (48%) and 35% of 45-54 year-olds have participated in social networks in the last three months, demonstrating the increasing popularity of social networking. In connection to this, content uploading is also a typical use of the younger cohorts, although differences according to age tend to be lower for this second usage. Users, especially young people, upload to social networking sites significant amount of personal information and contents, including their photos (57%), activities (43%) and preferences (36%)<sup>19</sup>.

Figure 16



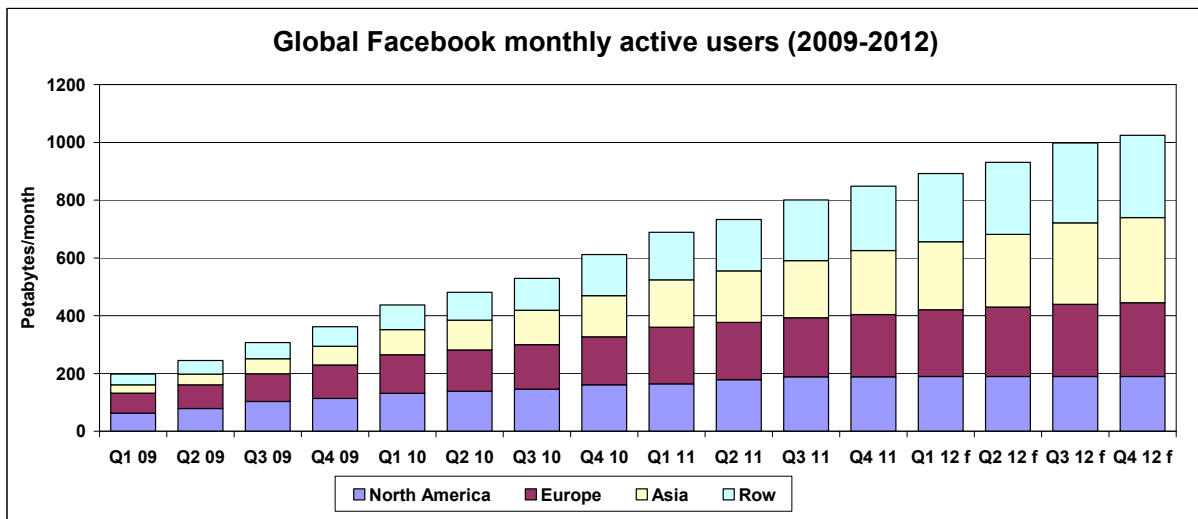
Source: Eurostat

Social networking has rapidly become the primary online activity, accounting for 1 in every five online minutes<sup>20</sup>. According to the same source, there will be around 1.2 billion users of social networks around the world at the end of 2011. Facebook appears to be the most popular network in the world, with 843 million monthly active users at the end of Q4, and it certainly is the most popular network in Europe with its 229 million active users as of December 2011, equivalent to almost half the entire EU population, Europe is Facebook’s largest market worldwide (Figure 17). Other large local networks are preferred in other countries, for instance Renren and Weibo in China, VKontakte in Russia and Orkut in Brazil.

<sup>19</sup> JRC Scientific and Policy Report EUR 25295 EN 'Pan-European Survey of Practices, Attitudes and Policy Preferences as regards Personal Identity Data Management' (May 2012).

<sup>20</sup> COMScore's Report: "It's a Social World: Top 10 Need-to-Knows About Social Networking and Where It's Headed", [http://www.comscore.com/Press\\_Events/Press\\_Releases/2011/12/Social\\_Networking\\_Leads\\_as\\_Top\\_Online\\_Activity\\_Globally](http://www.comscore.com/Press_Events/Press_Releases/2011/12/Social_Networking_Leads_as_Top_Online_Activity_Globally)

Figure 17



Source: IHS ScreenDigest

In addition to Facebook and other major global networks such as Twitter (300 million users) and the professional network LinkedIn (120 million), there are many other very popular social networks with strong take up in the EU countries, be it based on national characteristics or on particular interests (general purpose, chat rooms, dating, universities, photo sharing, music, books, travels, etc.).

Data also show that the trend is towards a more regular use of social networks since the share of daily use over monthly use is rapidly increasing (almost 65% at the end of 2011 from 50% in three years<sup>21</sup>).

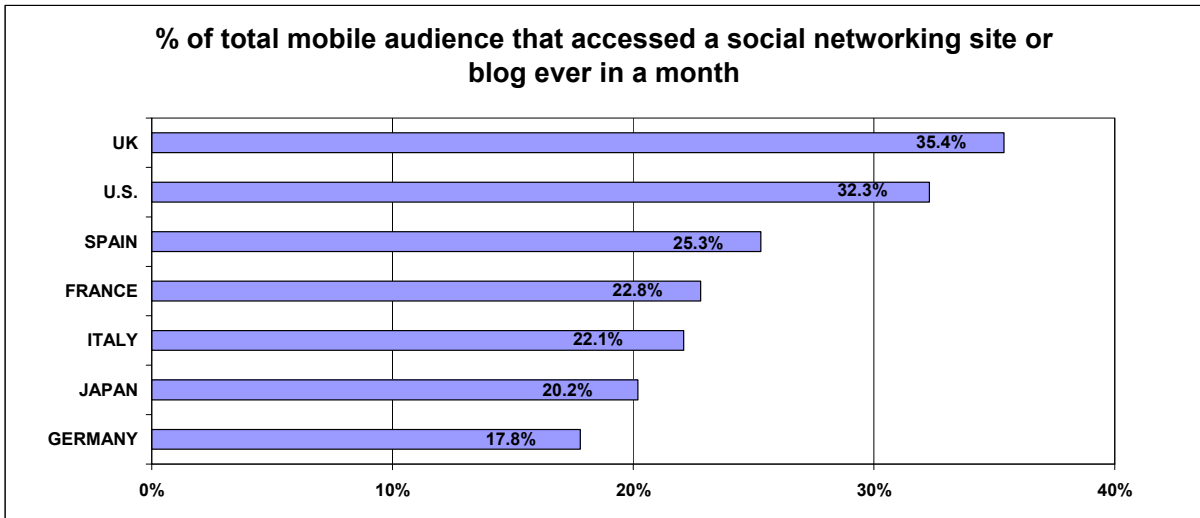
Access to social networks is more and more taking place from mobile networks<sup>22</sup> (Figure 18); users check their friends' feeds, upload photos and disclose their location. Indeed some telecom operators in 2011 claimed that their wireless consumer operations were hit by consumers dropping traditional mobile phone and text messaging services in favour of connecting via social networks. The most popular uses of social networks, in addition to comment posting and sharing, include location-based services, coupons, news feeds and live events. This trend has prompted many mobile handset manufacturers to integrate social network applications into their operating systems.

<sup>21</sup> Source: IHS Screen Digest

<sup>22</sup> comScore's Report: "It's a Social World: Top 10 Need-to-Knows About Social Networking and Where It's Headed: ..." "Across five leading European markets (France, Germany, Italy, Spain, United Kingdom), nearly a quarter (24 percent) of the total mobile population reported engaging with their social networks on their mobile devices." According to Twitter chief executive Dick Costolo, "40% of all tweets are banged out on mobile devices".

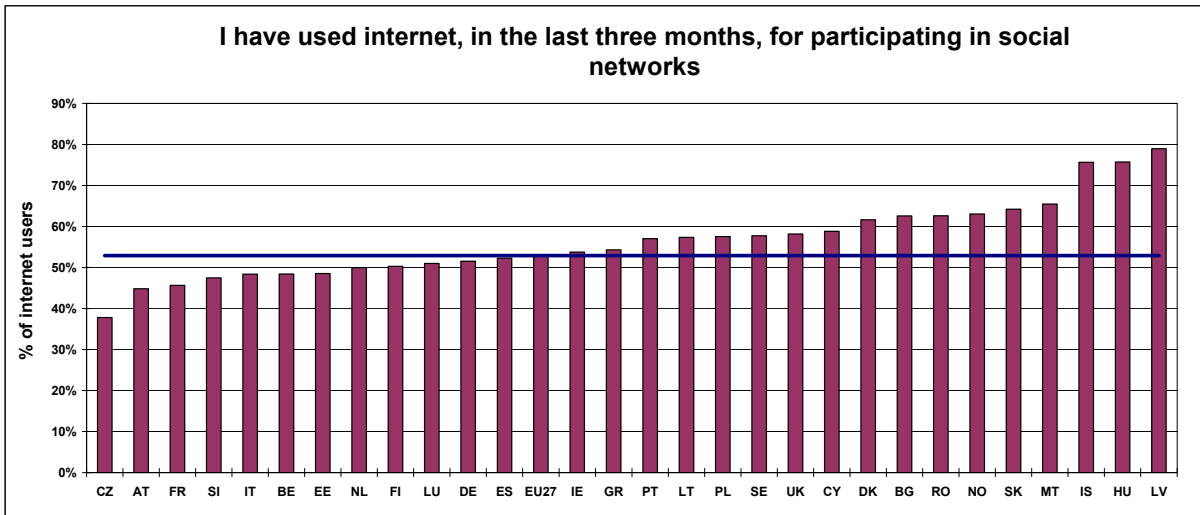


Figure 18



Source: IHS ScreenDigest

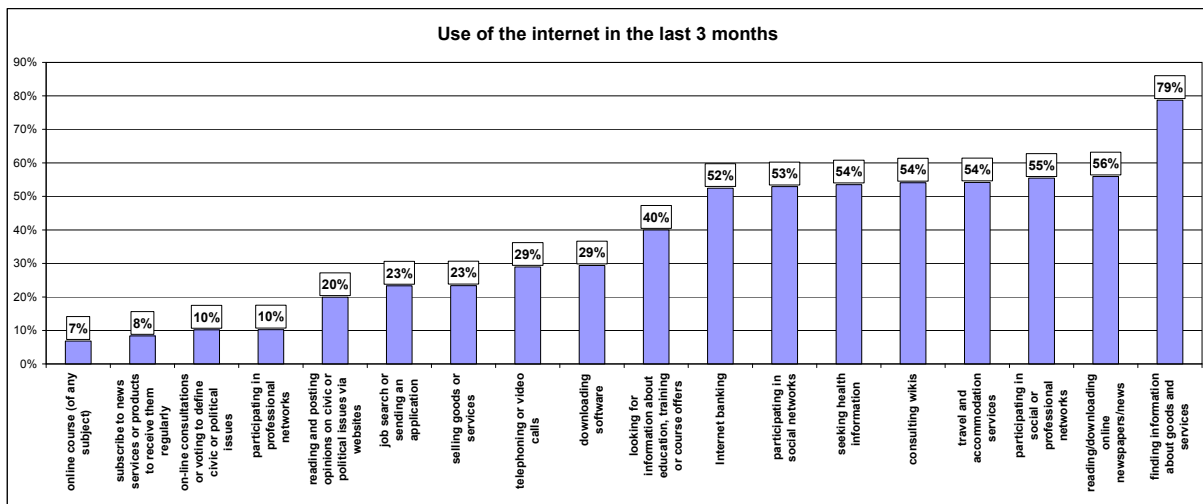
Figure 19



Source: Eurostat

Social networks are also becoming an important sales channel for many companies, as they can address their messages to an interested audience based on a deeper knowledge of the personal interests of each user. Also, many public authorities and interest groups are using social networks to communicate with their constituencies and stakeholders.

**Figure 20**



Source: Eurostat

### 1.3. The use of e-commerce by individuals

Targets:

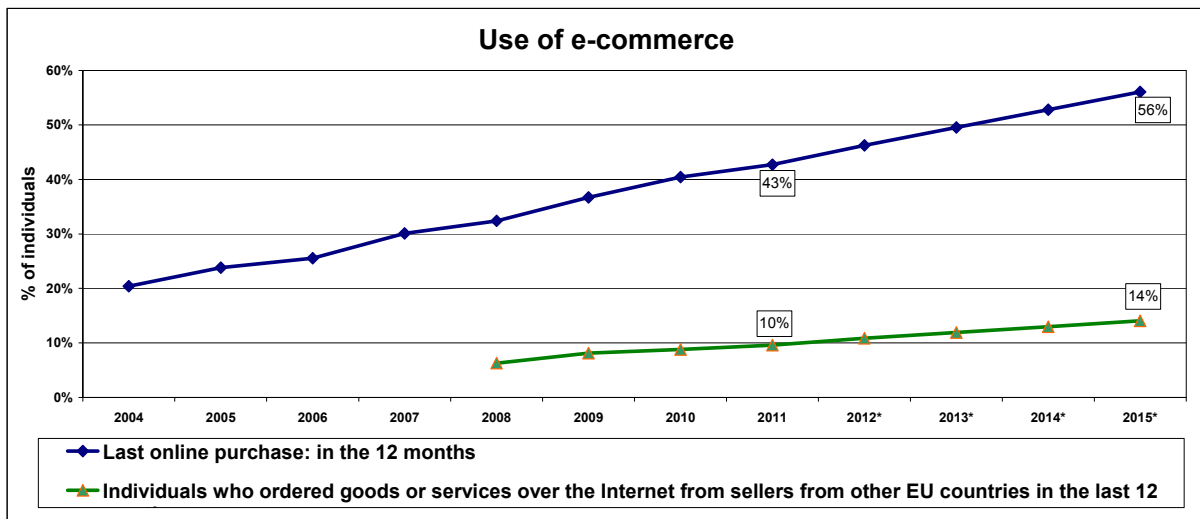
Promoting e-commerce: 50% of the population should be buying online by 2015.

Cross-border e-commerce: 20% of the population should buy cross border online by 2015

As with the regular use of the internet, use of e-commerce also progressed in 2011 at a slightly lower pace than in previous years. E-commerce in the last twelve months was used by 43% of the EU population aged 16 to 74 years, 2.3 percentage points above 2010, and just 34% of Europeans used e-commerce in the three months before being surveyed. With regard to cross border e-commerce within the European Union, progress was similar to 2010, which means that the increase was very low - less than one percentage point - and only 10% of the total EU population ordered goods or services from sellers from other EU countries.

At this pace, a pure linear projection based on progress since 2004 shows that by 2015 it can be expected that 56% of the EU population will have made an online purchase in the last 12 months, six percentage points above the EDA target. With regard to cross-border e-commerce, the second target will not be met as only 14% of people will have carried out this activity.

Figure 21



Source: Eurostat

All EU countries except for France (2010: 54%, 2011: 53%) showed positive developments, although with very uneven distribution (Figure 22). The number of e-buyers surged in Malta by 7 percentage points, Ireland (6) and Belgium (5) placing these three countries above the EU average (3 p.p.). Luxembourg and Sweden also increased their rates by five points. Greece and Lithuania each managed to grow 5 points, although they are still laggards because all other countries above them already had many more e-commerce users in 2010 and in 2011 experienced growth rates of between two and four points. A similar situation occurs in Hungary, a country that despite a healthy increase of 4 points does not change its ranking. Romania and Bulgaria, at the lower end of the ranking with just 6% and 7% of the population buying online, did not progress much, a situation that also occurred in Italy, bringing this country to the third lowest place with 15% of the population.

Figure 22



Source: Eurostat

The number of users engaging in cross-border online commerce increased in all countries except Denmark, France (with a slight decrease), and the UK and Poland, where there was no variation (Figure 23). It is worrying that the more developed countries in cross border e-commerce are progressing much faster than the less developed ones, creating an ever wider gap: Luxembourg, Malta and Austria saw growth rates of three percentage points; these

leaders were closely followed by a group of four countries that had the largest increases in 2011 (Finland had the largest increase with over 6 percentage points, followed by Belgium, Ireland and Sweden with around four points). Conversely, the countries with the lowest number of cross-border online buyers (Romania, Poland and Bulgaria) experienced very slow progress. The gap in cross-border online commerce has therefore increased from 52 to 55 percentage points. It is also significant that in many countries where this indicator is below the EU average, progress was very slow with countries such as Italy, Portugal, Latvia or Germany displaying growth rates close to or below one percentage point.

The European Commission has launched a study<sup>23</sup> to estimate the value of online cross-border trade in the EU and quantify the importance of drivers and barriers in online cross-border trade.

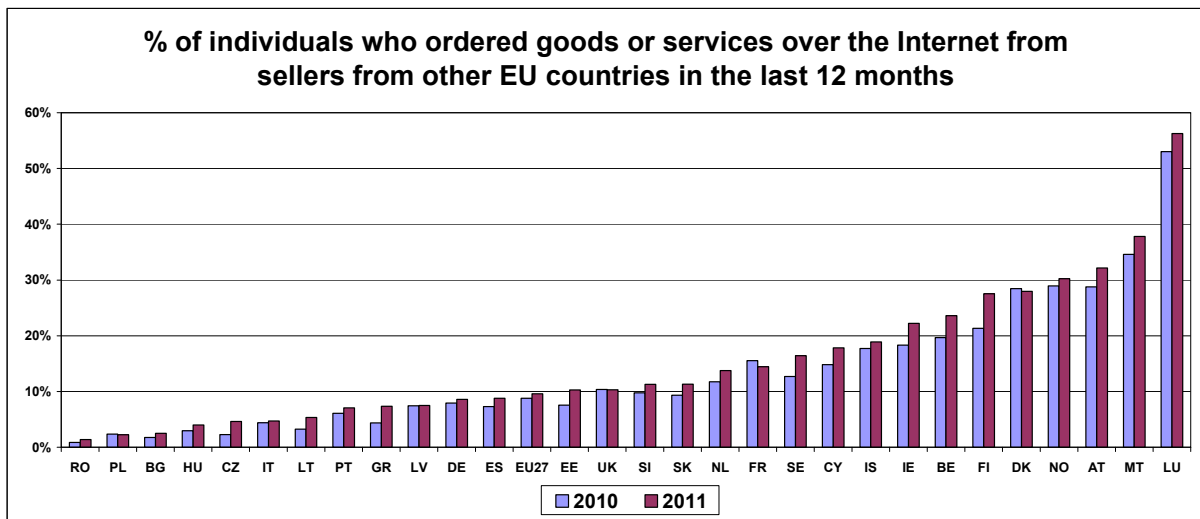
The low use of cross-border e-commerce by individuals is matched by the limited number of enterprises selling electronically. In 2010, while almost all enterprises making electronic sales (15%) reported that they sold to markets in their own countries (14%), only 6% of enterprises made e-sales to other EU countries (Figure 24). In particular, the potential for cross-border e-commerce sales to other EU countries was not fully exploited. While 28% of enterprises in Denmark made e-sales — ranking it first among the EU countries — only 8% of enterprises reported selling to customers in other EU countries. A similar phenomenon can be observed in Sweden where 26% of enterprises made e-sales but only 9% sold to other EU countries.

Concerning e-purchases, while almost all enterprises making electronic purchases (35%) reported purchasing from their domestic markets (32%), only 10% of enterprises made e-purchases from other EU countries. The biggest differences can be observed in Norway and Germany. In Norway, 61% of enterprises made e-purchases, while 15% purchased electronically from suppliers in an EU country. Similarly, in Germany 5 out of 10 enterprises made e-purchases, while only 1 in 10 made e-purchases from another EU country. Across all countries, the highest percentage of e-purchases from other EU countries was reported in Austria.

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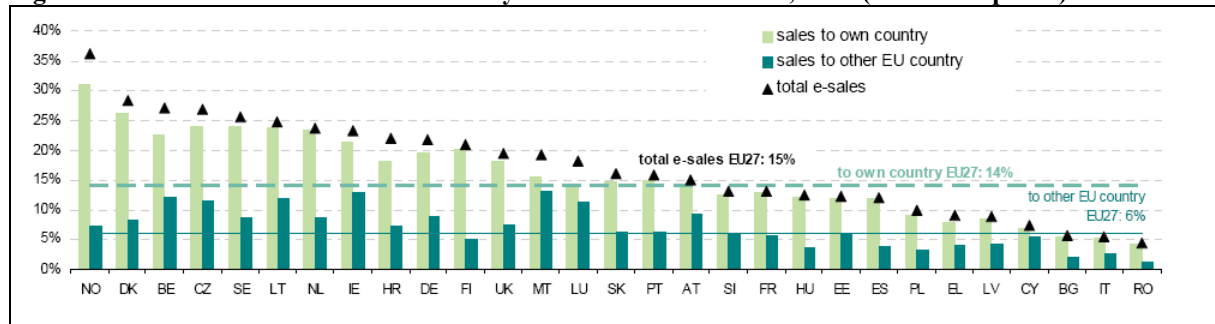
<sup>23</sup> Drivers and impediments for online cross-border trade in the EU, Study by DG INFSO and IPTS. According to another study by eBay (Enabling Traders to Enter and Grow on the Global Stage), *"tying countries closer together in a trade union, such as the EU with its (political, social and economic) internal market, has significant effects on trade between those countries: membership of the EU increases crossborder eBay trade by 40.5%"*. [http://www.ebaymainstreet.com/sites/default/files/eBay\\_Enabling-Traders-to-Enter-and-Grow-on-the-Global-Stage.pdf](http://www.ebaymainstreet.com/sites/default/files/eBay_Enabling-Traders-to-Enter-and-Grow-on-the-Global-Stage.pdf).

Figure 23



Source: Eurostat

Figure 24: E-commerce sales to own country and other EU countries, 2010 (% of enterprises)

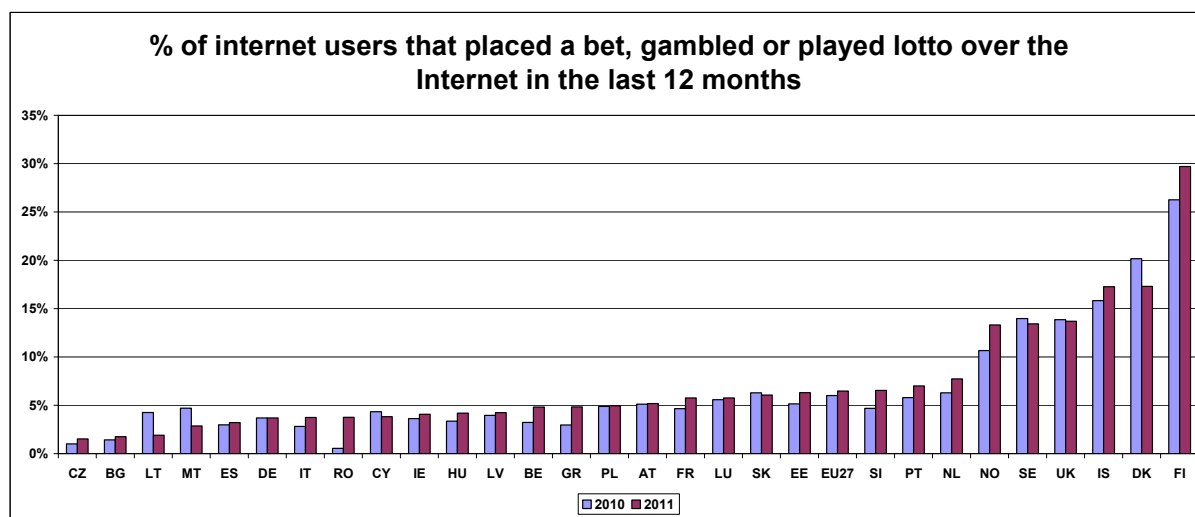


Source: Eurostat

### 1.3.1. Online gamblers

An interesting indicator on e-commerce refers to the number of online gamblers and lotto players (Figure 25). Annual revenues were estimated to exceed EUR 6 billion in 2008 and are expected to double by 2013. Betting platforms such as Betfair manage more daily electronic transactions than the New York stock exchange. There is no clear correlation between the number of users of e-commerce and the number of online gamblers. Finns are well ahead other countries, with as many as 30% of internet users in the past 12 months gambling or playing lotto online. This use seems also very popular within the Nordic countries and the UK, with usage rates around 15%. All the other countries have similar, much lower rates, between four and six percent of internet users, with only the Netherlands, Portugal and Slovenia going beyond the 6% EU average.

Figure 25



Source: Eurostat

### 1.3.2. Connectivity and online entertainment

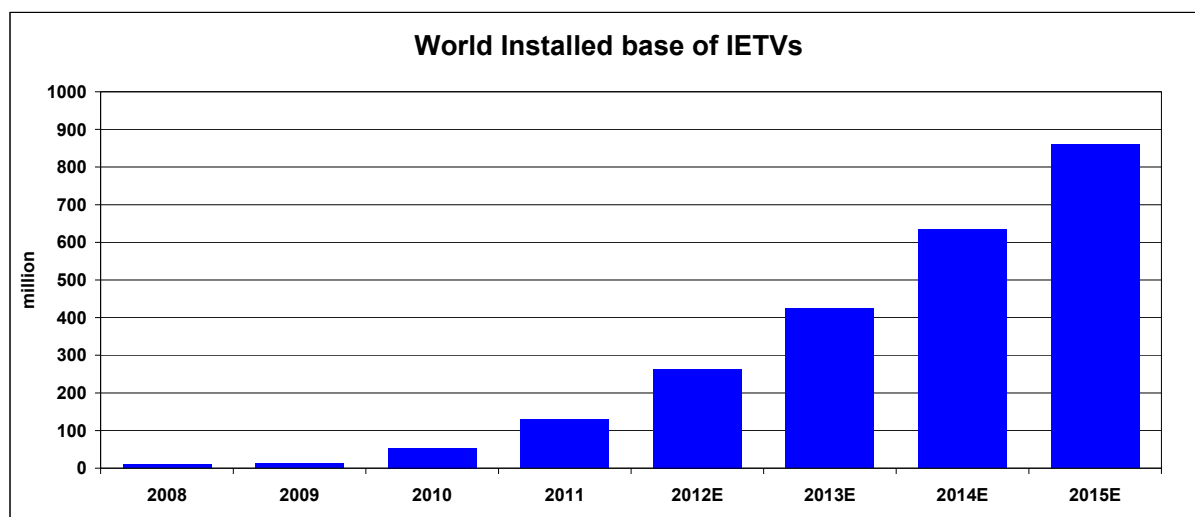
After information on goods and services has been searched on the internet, half of the people who ordered goods or services over the internet for private use in the last twelve months did it to acquire three major types of items: entertainment and educational material (films/music or books/magazines/e-learning material or computer software) (57% of online buyers) (Figure 27), travel and holiday accommodation, and clothes and sport goods (52%). Household goods and tickets for events are another popular e-commerce purchase (38% and 37% of online buyers, respectively). Food and groceries, medicines and financial/insurance services are acquired through the internet by a much lower number of citizens, between 15 and 10% of online buyers.

Obviously, digital goods and services that can be delivered on-line, i.e. streamed or downloaded, have a natural advantage and there are signals that in the future online delivery will have a more significant role in the distribution of these types of goods<sup>24</sup>. The massive advent of the smart or connected TV will arguably accelerate this trend; it is estimated that more than 13 million smart or hybrid TVs will be sold in 2012, making up 24% of total TV shipments in 2012 in the EU25, up from 4% in 2009 and 11% in 2010<sup>25</sup>. At world level, the number of connected TVs will also explode, with more than 250 million units in 2012 and 860 million units in 2015 (Figure 26).

<sup>24</sup> Netflix, a US provider of online streaming service, was founded as a mail order DVD rental business in 1998. In 2007 it launched its online service, which has now become the main consumption channel. DVD-only rental subscriptions fall from 6.3 million immediately before the launch of online streaming in 2007 to 2.3 million by the end of Q3 2011. (Source: Enders). In 2012 it is expected that US consumers will buy 3.4bn movies online, which represents 1.04bn more movies per year than are consumed on DVD and Blu-ray combined and a year-on-year growth in online consumption of 135 per cent (Source: HIS Screen Digest).

<sup>25</sup> EITO 2011

Figure 26



Source: IHS ScreenDigest

The increasing number of internet connected devices per households is expected to have an obvious positive impact on the music, movies, software and games markets (cfr. infra on games).

Despite these expected developments, 2011 saw a general decline of 3 percentage points in the number of individuals buying software, magazines, music or films online from a peak in 2010 (Figure 27). The decline affects all categories of services, being stronger in purchasers of computer software and games, less marked in films and music and almost stable in e-learning material.

Eurostat data do not indicate whether content is downloaded or streamed but market data show a clear trend towards online streaming of music and films in parallel to a lower year-on-year growth in the number of downloads of this type of content. More and more consumers use and/or subscribe to online services that do not require the physical saving of files in computers or storage devices at home; content is rather streamed on demand from commercial sites or stored in the cloud and accessed from any connected device.

A detailed analysis of the figures show that books, magazines and e-learning material are the most demanded goods with 38% of individuals who ordered goods or services over the internet in the last year (Figure 34). Films and music are the second most demanded service/good (Figure 28), as music and movies can either be downloaded or streamed and many services offer different subscription models that often combine the two options. Computer software (excluding games), with one in four e-commerce users, was the next category. Fewer e-commerce users (15%) purchase video games software (Figure 37).

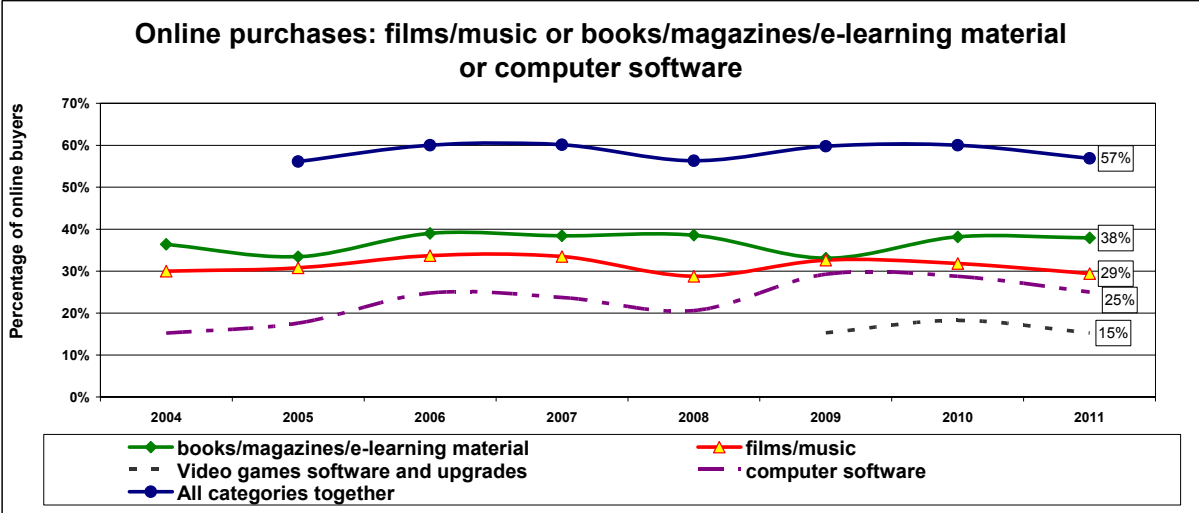
Paradoxically, the question arises as to whether enhanced connectivity automatically brings more online buyers and more online commercial transactions of these types of goods and services or whether it is driving rather a further exchange outside commercial online channels and also offline. One typical example is that of teenagers exchanging music files between their mobile handsets using bluetooth communication. As indicated above, use of peer-to-peer techniques is increasing in all age cohorts. Indeed, in the case of online purchase of music and movies, (cfr. infra), in 17 Member States there was a decrease in the number of people buying these products online and a similar situation occurred in 14 countries with computer software.

Market data offer a mixed view as, on the one hand, it is expected that there will be an increase in the number of transactions, both in music and movies, in the short term through

physical distribution and downloads and, ultimately, in the volume of files streamed from the cloud. It should also be considered that many online music and movie platforms are not yet available in all EU Member States<sup>26</sup>. However, according to these same data, the number of European online music subscribers reached its peak in 2009 and it is actually declining since that year, while it is expected that the number of online movie subscribers will continue increasing.

The conclusion therefore is that enhanced connectivity is bringing up sales of music and movies, while users of online music and movies platforms are consuming more content online.

Figure 27



Source: Eurostat

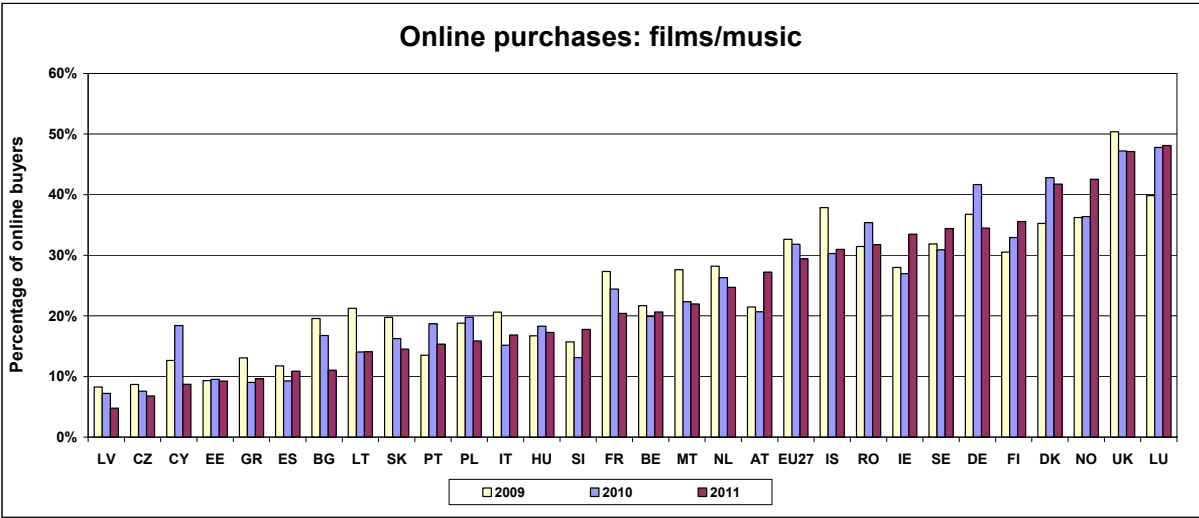
1.3.3. The online music market

Luxembourg and the UK are the countries with the highest number of online purchasers, acquiring online music or films in the last three years (Figure 28). A second group is made up of the Nordic countries plus Germany, Ireland and Romania, all of them above the EU average. The third group of countries is characterised by a number of buyers slightly below the EU average (Austria, Netherlands, Malta, Belgium and France), while in the remaining countries the percentage of online buyers of music and movies ranges from between five to less than twenty per cent. At the EU level there was, as indicated, a slight decline from 32% to 29%.

<sup>26</sup> On 9 January 2012 Netflix launched its first European services in the UK and Ireland.



Figure 28

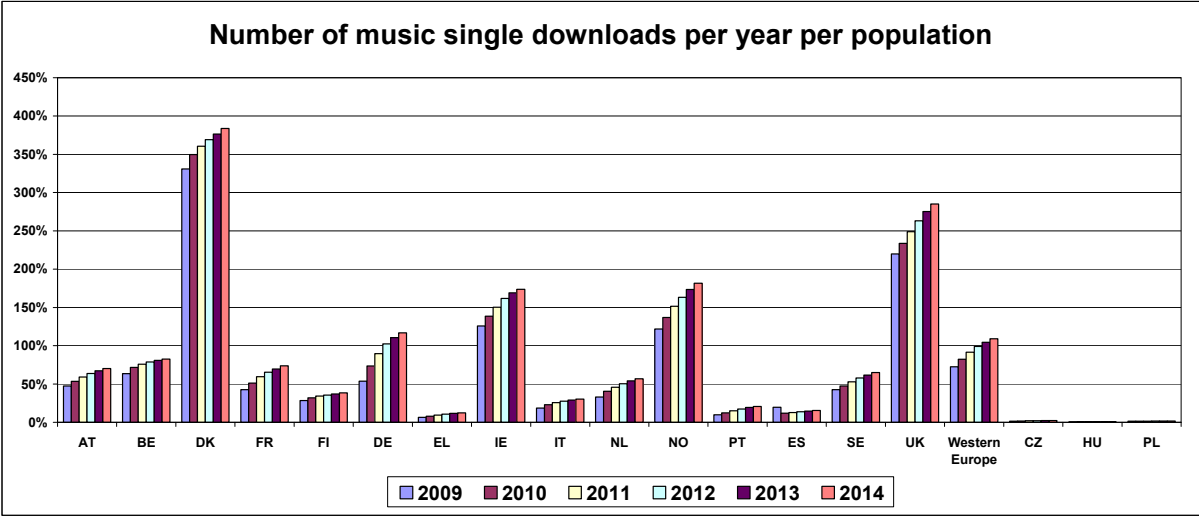


Source: Eurostat

Market data on music single (Figure 29) and album (Figure 30) downloads per population somehow correlate with the above figures and in countries such as the UK, Ireland or Norway the number of downloads is very high. Denmark is a special case as the number of single downloads represents almost four times the population of this country, while with regard to albums the country is more in line with other countries. In addition to good levels of broadband penetration, the high take up of online music purchases in these countries may be related to the availability of online music platforms, which in many cases are only available in a number of EU countries<sup>27</sup>. The case of Sweden is significant because the low level of downloads seems to be driven by the widespread take up of music subscription services – according to IFPI, subscription accounted for 84 per cent of digital revenues in the first ten months of 2011, boosted by Spotify. In many other countries, data point to similar levels of single downloads but in Greece, Portugal and Spain, levels do not correspond to what could be expected and in the Czech Republic, Hungary and Poland volumes are just marginal. Regardless of the level of download, the trend is similar for all countries, i.e. there was a sustained increase over the past two years and this increase is expected to continue in the next two to three years, albeit at slower rates.

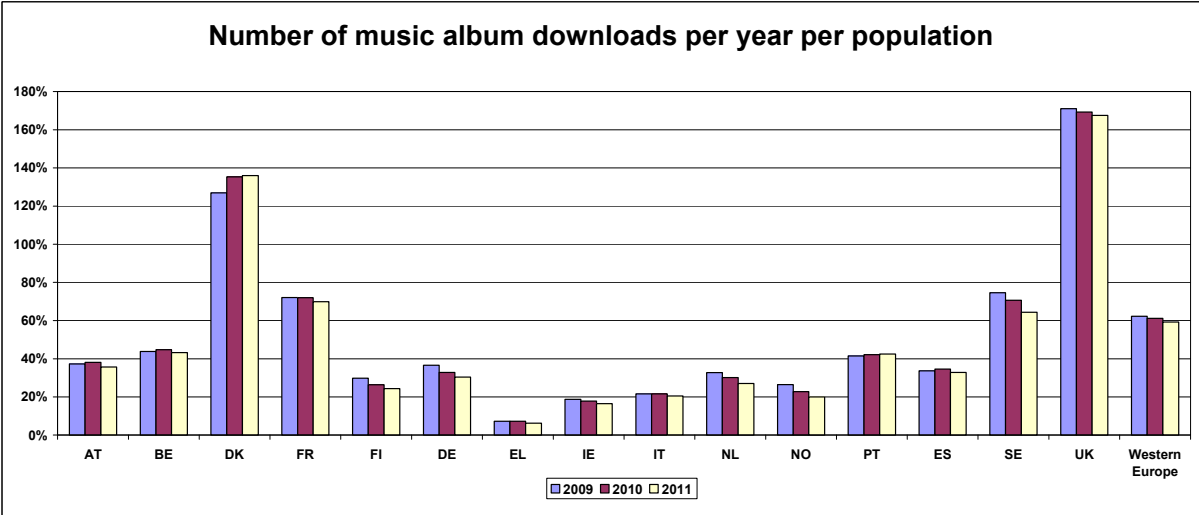
<sup>27</sup> According to IFPI's " Digital Music Report 2012 ", at the start of 2011 the biggest digital music services were present in 23 markets and today they are present in 58 markets; iTunes opened for business in 28 new markets in 2011, including all members of the EU and 16 countries in Latin America; Spotify launched in the US and four European countries and is now present in 12 countries; Deezer has launched in 25 countries in Europe; Sony's Music Unlimited is now available in 13 countries and rara.com announced a new streaming service in 20 countries in December 2011.

Figure 29



Source: EC services based on IHS ScreenDigest

Figure 30



Source: EC services based on IHS ScreenDigest

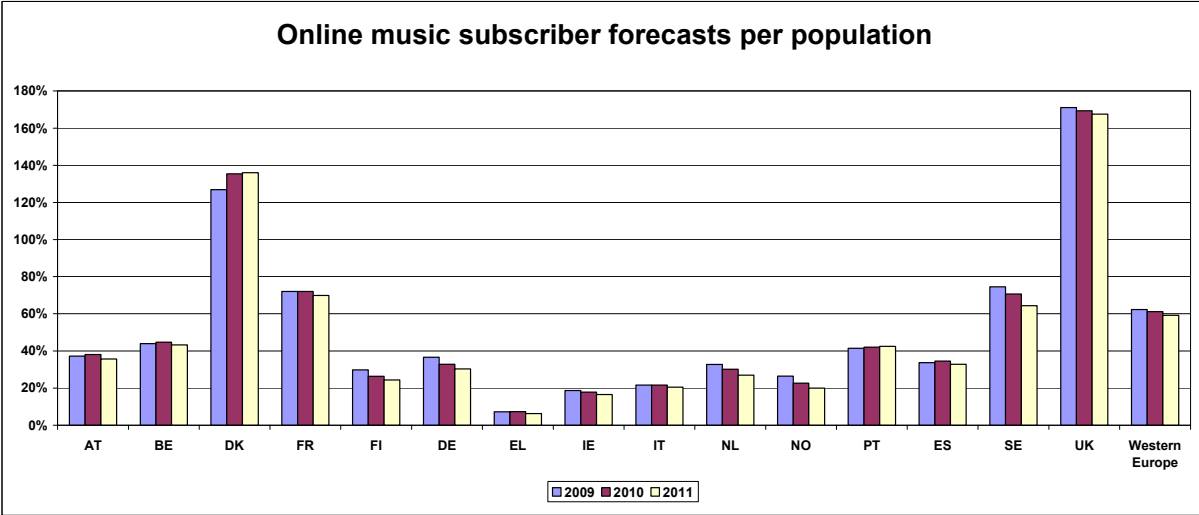
It is significant that despite the strong differences in the number of single or album downloads per country, the average price per single or per album download does not differ very much from one country to another. For a single music download, the average 2011 price in Denmark was EUR 1.20 -- 20% more expensive than the cheapest average price, which can be found in France. However, on average, the price in most Member States where data are available was around EUR 1.15. Prices were much cheaper in the Czech Republic, Poland and Hungary (between 62 and 90 cents) but the volume of the market in these countries is not yet comparable. The price level in the latter countries is similar to that of the US and Canada.

In the case of album downloads the situation is less homogeneous, with the difference between the cheapest and the most expensive prices being more than one third: the lowest average price of around EUR 9 was found in France and the UK, while in Ireland or Germany consumers paid EUR 12.30. Where differences are less significant is in the case of the

average annual cost of online music subscription where prices fluctuate from EUR 154 in the UK and EUR 166-168 in most other countries<sup>28</sup>.

As indicated above, market data predict a slow decline in the absolute number of online music subscribers from a peak of 251 million in 2009; the total number of subscribers could go down to 202 million in 2014<sup>29</sup> (Figure 31).

Figure 31



Source: EC services based on IHS ScreenDigest

The growth of downloads is matched by data from the music industry on digital music revenues to record companies. These revenues grew by 8% globally in 2011 to an estimated 3.95 billion euro<sup>30</sup>. This compares to growth of 5% in 2010 and represents the first time the year-on-year growth rate has increased since IFPI started measuring digital revenues in 2004.

According to the IFPI, around 3.6 billion downloads were purchased globally in 2011, an increase of 17% (combining singles and albums downloads). In some markets like the US (52%) and South Korea (53%) more than half of their revenues derive from digital channels, which now account for an estimated 32% of record company revenues globally, up from 29% in 2010. Digital sales were also higher than CD sales in Sweden and Norway in 2011. IFPI says that many major markets had positive growth both in single track download sales and albums and that the global number of paying subscribers for music services grew by 65% from an estimated 8.2 million in 2010 to over 13.4 million in 2011.

1.3.4. Online movies

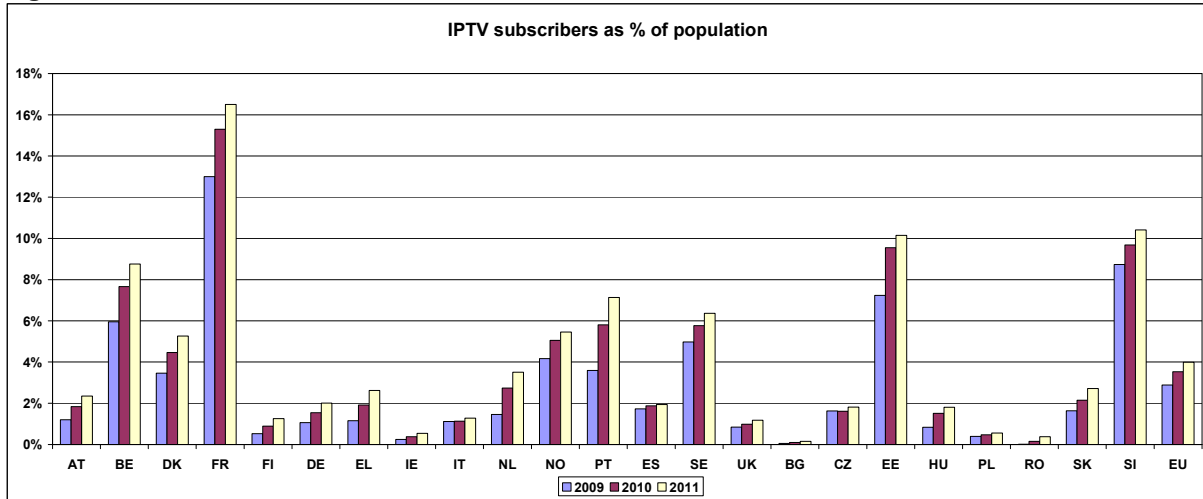
Compared to the online music market, the market for online movies has developed more slowly due, among other factors, to the need for faster broadband connections and the more limited availability of commercial platforms offering access to this type of content. Another element is the availability of IPTV, which has developed in Europe along with the increasing presence of broadband bundles combining internet access, fixed telephony and television. Many of the IPTV offerings include premium services that offer thematic channels.

<sup>28</sup> Source: IHS ScreenDigest. Data on annual cost of online music subscriptions only include Austria, Belgium, France, Germany, Ireland, Italy, the Netherlands, Spain, Sweden and the UK.

<sup>29</sup> These figures refer to online-only subscribers (i.e exclude cross-platform subscribers).

<sup>30</sup> IFPI Digital Music Report 2012

**Figure 32**



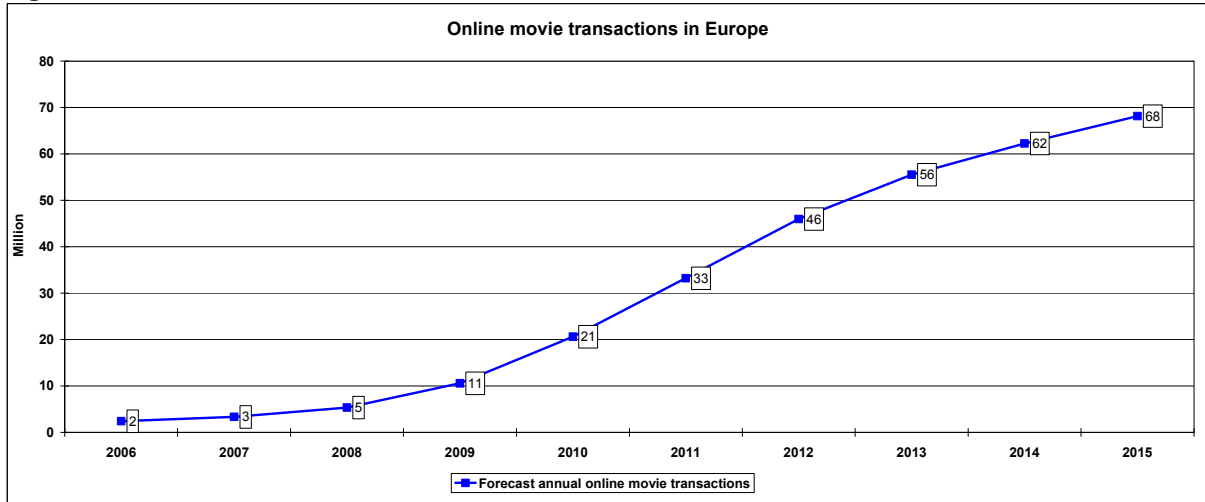
Source: EC services based on IHS ScreenDigest

It is estimated that in 2011 there were almost 20 million IPTV subscribers in the EU. France is by far the leading country by subscribers with half of the EU total followed by Germany with 8% of the total. Relative to its national population, France is also the most advanced country, with 16 IPTV subscribers per 100 people; Slovenia and Estonia follow with a 10% penetration, and Belgium, Portugal and Sweden make a third group, with rates between 8 and 6 percent. In many other countries the IPTV market still has to develop, and at the EU level the penetration rate in 2011 was estimated at just 4% of the population, which seems a very low figure compared to the broadband penetration rate of 27.8% and especially the increasingly higher speeds available. It is, however, expected that online television (understood as video to TV) will be one of the fastest growing segments in the next years (cfr. Figure 14) and that it will represent 17% of all video traffic by 2015. As of March 2011, around 11% of fixed broadband products in the EU were made of bundles of internet access and IPTV.

Another non-negligible factor is the fact that despite the availability of new delivery channels, these are not yet having a clear impact on consumer patterns and linear TV remains by far the most common way of TV viewing in Europe.

Market data thus show a steady but not impressive growth in the number of online movie transactions, with the highest increases occurring between now and 2013. The UK (30%), France (22%) and Germany (19%) are expected to take the largest shares of this market.

**Figure 33**

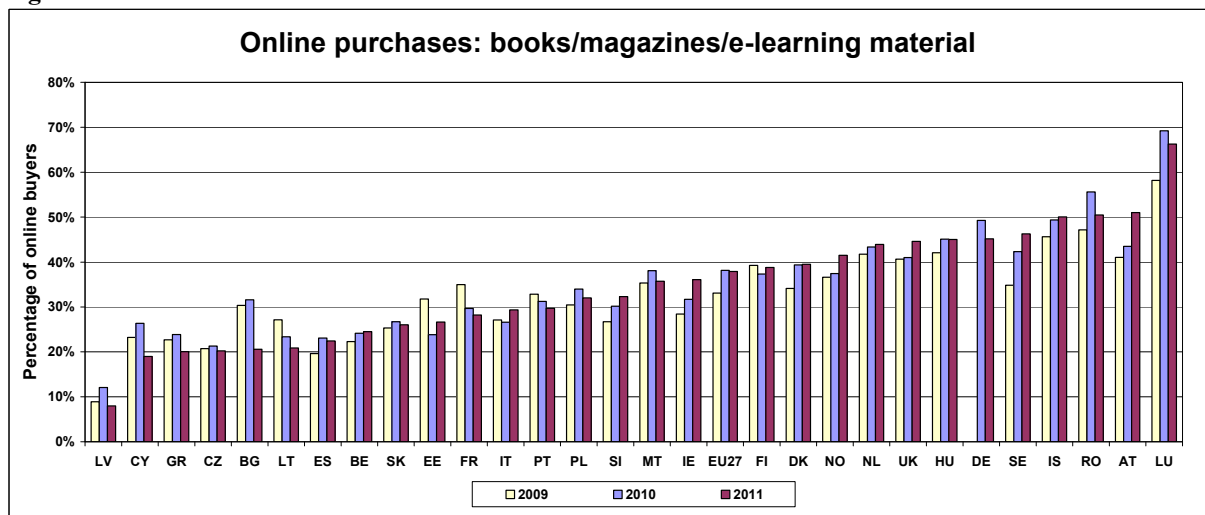


Source: IHS ScreenDigest

### 1.3.5. Books, magazines, newspapers (including e-books)

Downloads of books, magazines and newspapers follow some different patterns to other products: differences between Member States are less contrasted and there is a different distribution in terms of countries with the highest number of users. Luxembourg is clearly ahead of the other countries with 66% of e-shoppers purchasing these products (Figure 34), followed by Austria and Romania with half of e-buyers declaring that they have bought books, magazines and e-learning material. Almost forty percent of European e-buyers said they had purchased a book, a magazine or any kind of e-learning material in the last twelve months, with no real change since 2010. This figure is similar to that in the US. There are very different patterns among countries, with a few countries having experienced growth (Austria, Sweden, the UK, Norway and Ireland), while in most other countries growth was flat or negative.

**Figure 34**



Source: Eurostat

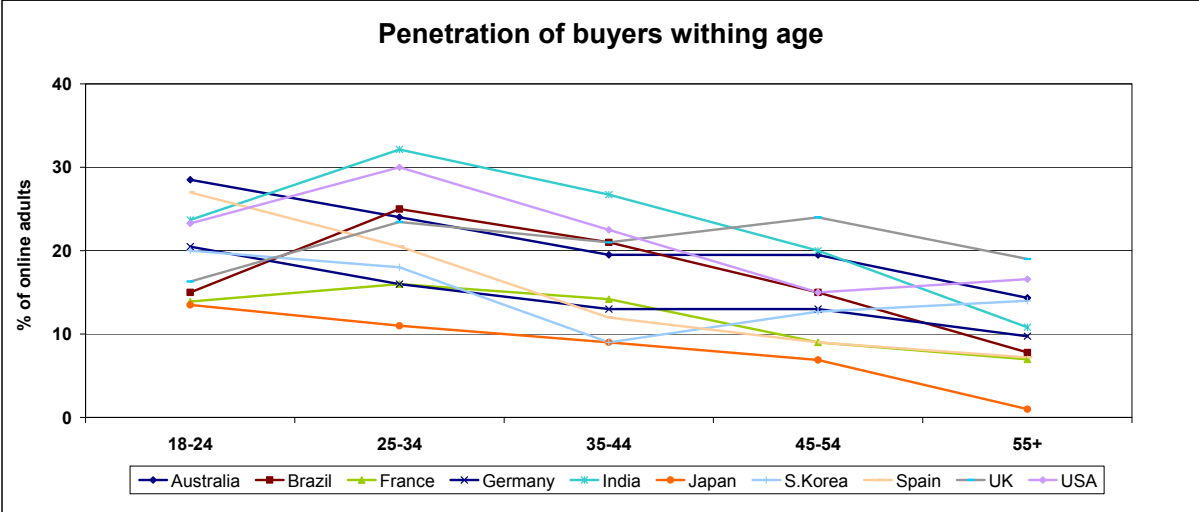
In 2011, there was a significant boost in the e-book market with a 67% increase in the shipment of e-book readers. According to EITO there were 2.0 million e-readers sold in the

EU in 2011 and a double-digit growth is expected in 2012. Tablets should be added to these as the main devices for reading electronic books to have a clear idea on the penetration of these devices.

Yet this increase does not appear to have driven a corresponding growth in the number of e-books downloaded by consumers. The Digital book market in the US was worth EUR 482 million; in Denmark, the UK, France, Spain and Italy combined, it was EUR 350 million in 2010<sup>31</sup>. In the US it is estimated that around one fifth of adults have read an e-book in the last twelve months<sup>32</sup> and that the e-book market grew from 0.6 % of the total market share in 2008 to 6.4% in 2010<sup>33</sup>. Outside the US, figures suggest that e-book sales still make up an insignificant proportion (around 1% in 2010) of book sales in most OECD countries: for France, e-books are estimated to represent 0.5% of overall sales, and figures below 1% are estimated for Germany or Italy.

Some recent research has found that only about one fifth of consumers have actually downloaded and paid for an e-book, a low figure that contrasts with the high level of awareness about the possibility of buying e-books (Figure 36). As with many other digital devices, content and applications, adoption of e-book readers seems to be driven by the youngest cohorts (Figure 35)<sup>34</sup>.

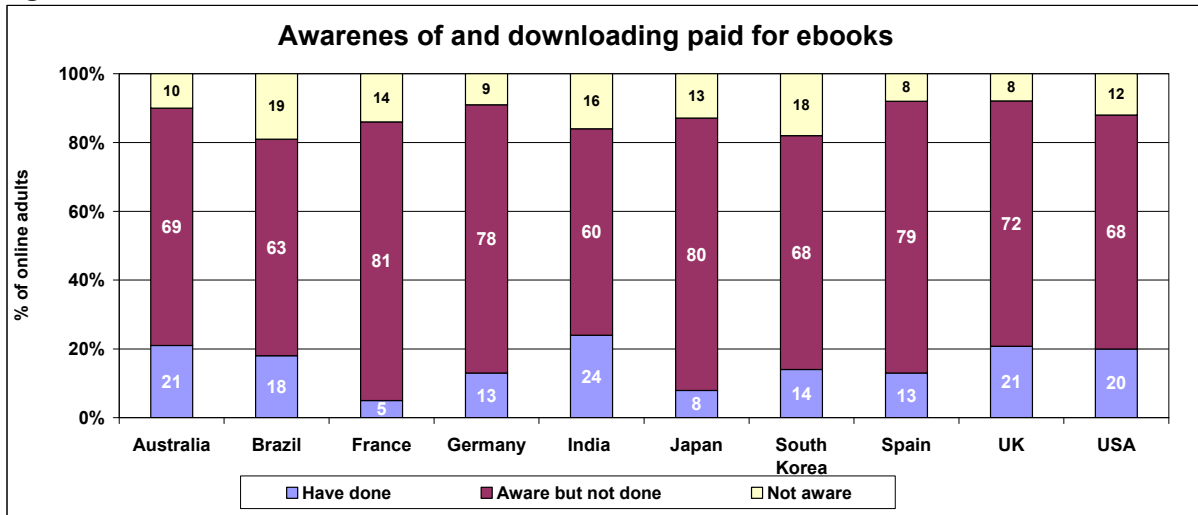
Figure 35



Source: Bowker

<sup>31</sup> Idate DigiWorld Yearbook 2011  
<sup>32</sup> Pew Internet Research, *The rise of e-reading*, April 2012.  
<sup>33</sup> OECD, *E-Books: Developments and Policy Considerations*. In May 2011 Amazon announced that since April its sales of ebooks had overtaken sales of all forms of print books combined. Starting in April it had sold 105 ebooks for every 100 print books.  
<sup>34</sup> Despite the figures currently available, the launch at the end of 2010 and during 2011 of dedicated e-reader devices as well as of major selling platforms that sell e-books in local languages could bring a significant change in the e-book market.

Figure 36

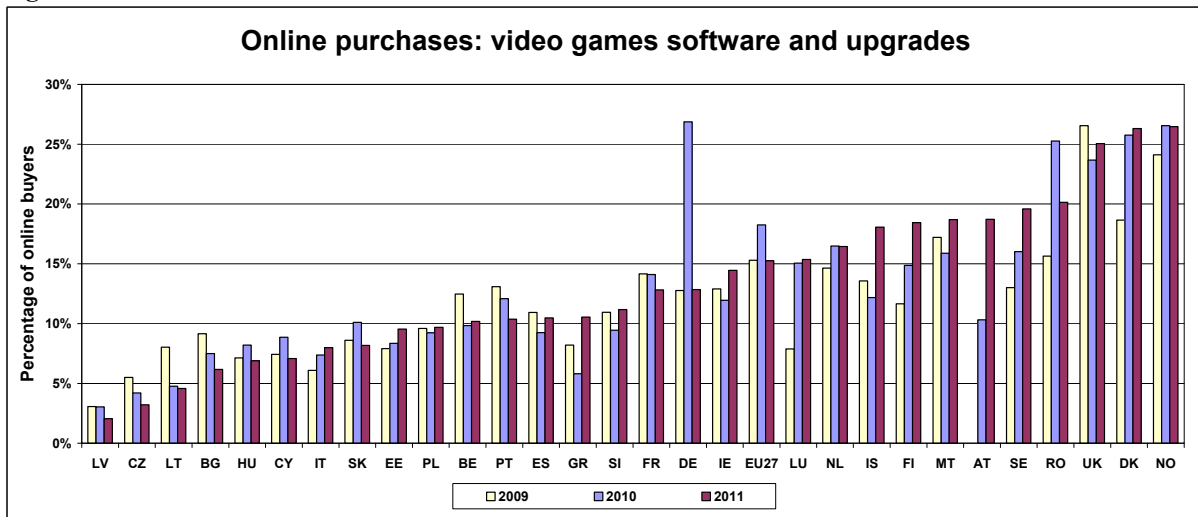


Source: Bowker

### 1.3.6. Video games software and upgrades

One quarter of users bought video games online in Norway, Denmark and the UK in 2011 and approximately one in five users in Romania, Sweden, Austria, Malta, Finland and Iceland. At the EU level, 15% of internet users purchased video games in the last twelve months (Figure 37). Although this level is lower than in the case of online music and movies or books and magazines, it is a very high level considering the unit price level of many video games. It is estimated that out of the total expenditure on various entertainment content in 2010, games took the second position after Pay TV and ahead of video and cinema with around 36.5 billion euro, i.e. 16% of the total<sup>35</sup>.

Figure 37



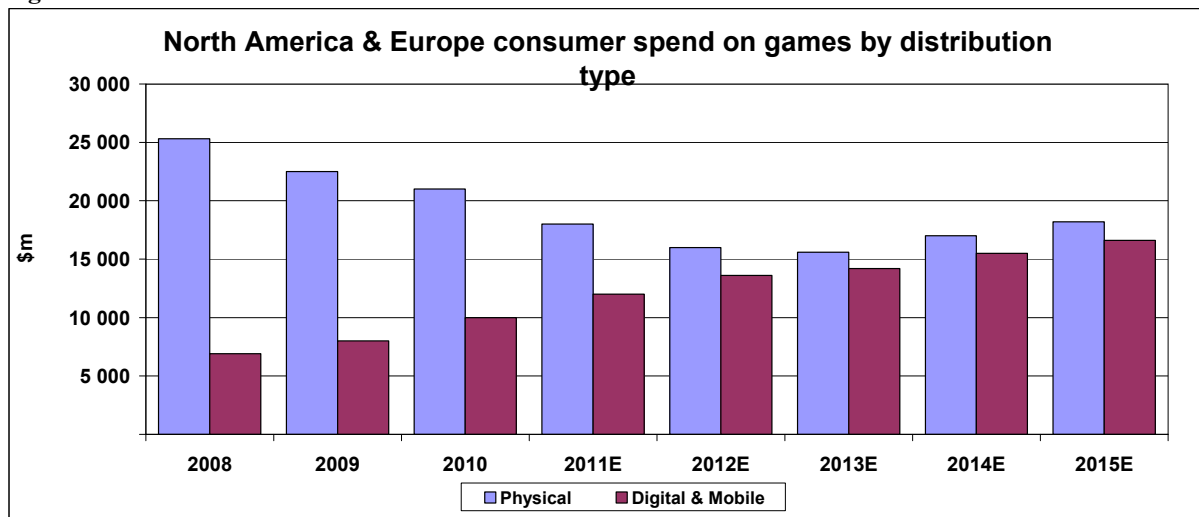
Source: Eurostat

As indicated above, the software and games segment is one of the best examples of the transition in delivery modes from physical to purely online distribution. Figures on sales of packaged games for personal computers and video streamed games on demand in Western Europe confirm this trend: from a peak of 69 million physical units sold in 2004, sales are expected to reach just 35 million in 2015; conversely, video streamed games are expected to

<sup>35</sup> IHS ScreenDigest

jump from 0.36 million transactions in 2011 to 7.7 millions in 2015<sup>36</sup> and sales of downloadable core PC games will also increase from 2.14 millions in 2007 to 27.13 million in 2015. According to market analysts, these segments will experience the biggest growth in the games business, while distribution of physical media games will continue to fade.

Figure 38



Source: IHS ScreenDigest.

Mobile games are another market segment poised to grow significantly in the near future, linked to the explosion of smartphones and tablets. In 2010, the value of the market for games delivered by mobile applications stores was estimated at EUR 0.9 billion, a figure expected to reach almost six billion in 2015 with free and social mobile applications having a growing share of the market.

#### 1.4. The use of e-commerce by enterprises

Target: 33% of SMEs should conduct on-line purchases/sales by 2015

The share of turnover from e-commerce, i.e. the trading of goods or services over computer networks such as the internet, was stable at 14% in 2009 and 2010. E-commerce continues to be a small part of the business model of enterprises, complementing their conventional commercial activities for selling and buying and aimed at enhancing their performance.

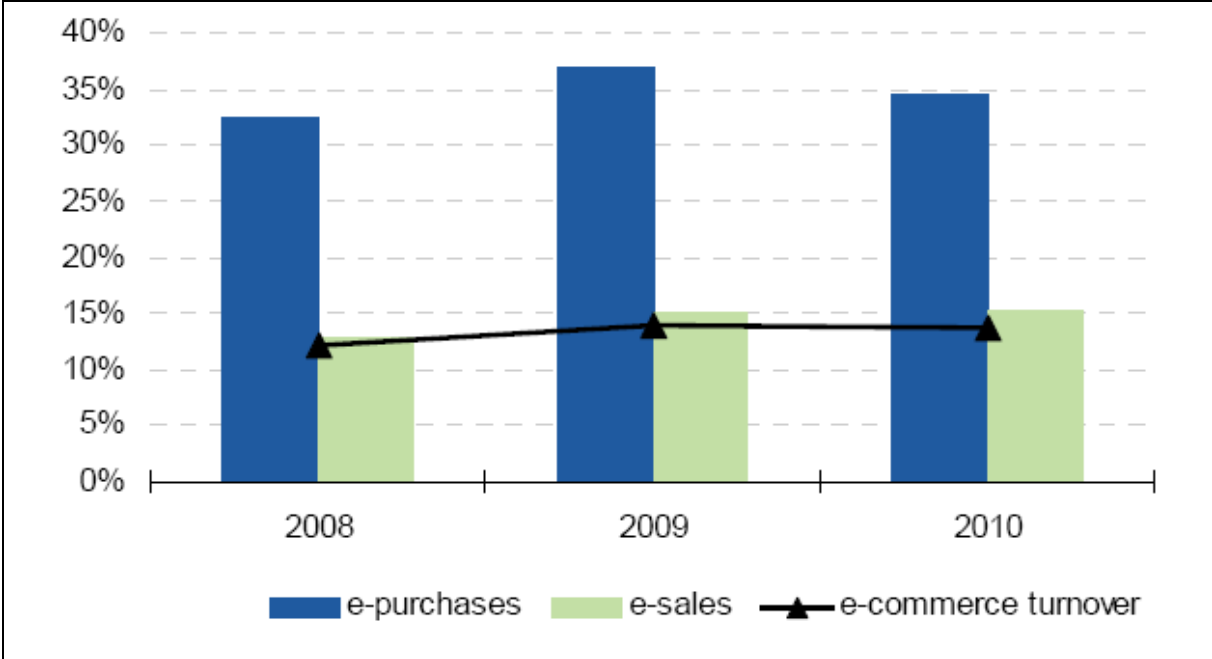
In 2010, more than twice as many enterprises engaged in e-commerce purchases than in e-commerce sales. As shown in Figure 39, during 2010, 35% of enterprises in the EU27 made purchases electronically – e-purchases. In the same period, only 15% of enterprises made electronic sales – e-sales.

The percentage of turnover on e-sales amounted to 14% of the total turnover of enterprises with 10 or more persons employed in the EU27.

<sup>36</sup> IHS ScreenDigest. Video streamed games on demand include only fully streamed games services that do not require any downloading.



**Figure 39; E-commerce sales and purchases, turnover from e-commerce, 2008 to 2010, EU27, (% of enterprises, % total turnover)**

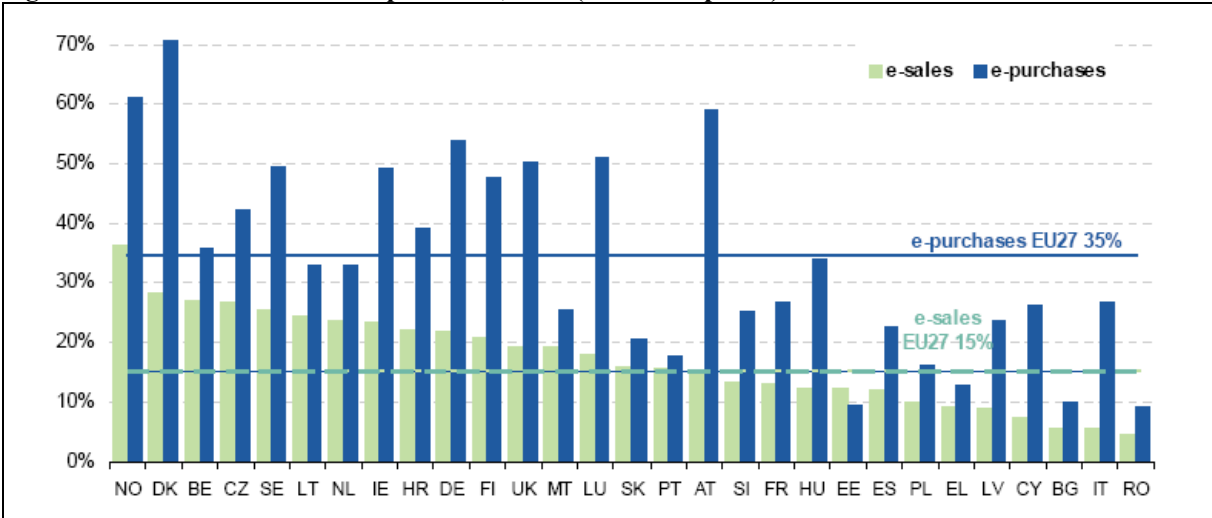


Source: Eurostat

Thirty-seven percent of large enterprises made e-sales, corresponding to 19% of total turnover in this size class. Similarly, 23% of medium sized enterprises made e-sales, corresponding to 10% of total turnover in this size class. By contrast, 13% of small enterprises engaged in e-sales, corresponding to only 4% of the turnover of such enterprises. In the EU27, during the period 2008 to 2010, there was a small increase in the percentage of enterprises that had purchases or sales electronically (both +2 percentage points), and also in the percentage of turnover on e-commerce sales (+2 percentage points). Changes were more noticeable depending on the size of enterprises.

Among all countries, the percentage of enterprises making purchases electronically varied widely from country to country, ranging from 9% in Romania to 71% in Denmark. Similarly, the percentage of enterprises with e-sales ranged from 4% in Romania to 36% in Norway, followed by Denmark (28%), Belgium and the Czech Republic (both 27%).

**Figure 40: E-commerce sales and purchases, 2010 (% of enterprises)**



Source: Eurostat

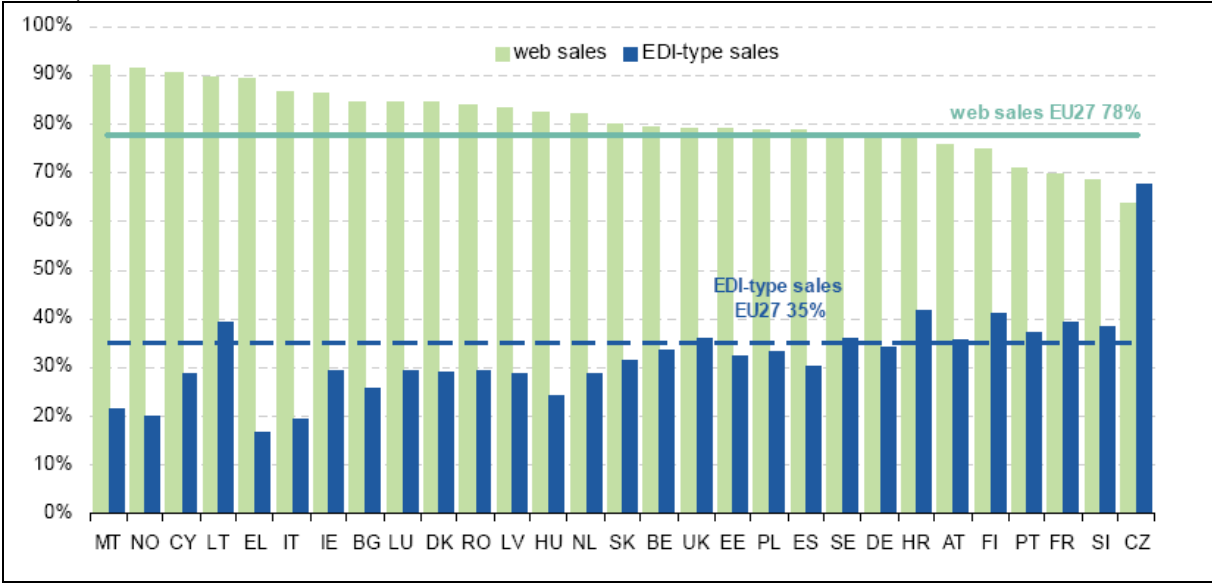
In 2010, the percentage of turnover from e-commerce ranged from 1% in Cyprus to 25% in the Czech Republic, followed by Finland (20%), Sweden and Hungary (both 19%). In nine out of the 29 countries (EU27, Norway and Croatia), enterprises realised more than 15% of their total turnover from e-commerce sales during 2010. However, within this group of countries, there was a significant variation in the percentage of enterprises selling electronically, ranging from 12% in Hungary to 36% in Norway.

Similarly, regarding the percentage of enterprises purchasing electronically, the proportions within the same group of nine countries ranged from 21% in Slovakia to 61% in Norway.

E-commerce sales can be broadly divided into web sales and EDI-type sales (Electronic Data Interchange or Extensible Markup Language (XML) format for example ), referring to the way customers – private or business – place orders for the products that they wish to purchase. Websites are increasingly offered by enterprises or third parties for various purposes. In particular, websites allow customers to purchase by placing their orders electronically.

In 2010, 78% of enterprises selling electronically in the EU27 used a website (Figure 41), while 35% used EDI-type sales. The percentage of enterprises that used EDI-type sales ranged from 17% of enterprises conducting e-sales in Greece to 68% in the Czech Republic. The percentage of enterprises receiving orders over websites was considerably higher for almost all countries, ranging from 64% in the Czech Republic to 92% in Malta.

**Figure 41: E-commerce sales broken down by web and EDI-type sales, 2010 (% of enterprises with e-sales)**

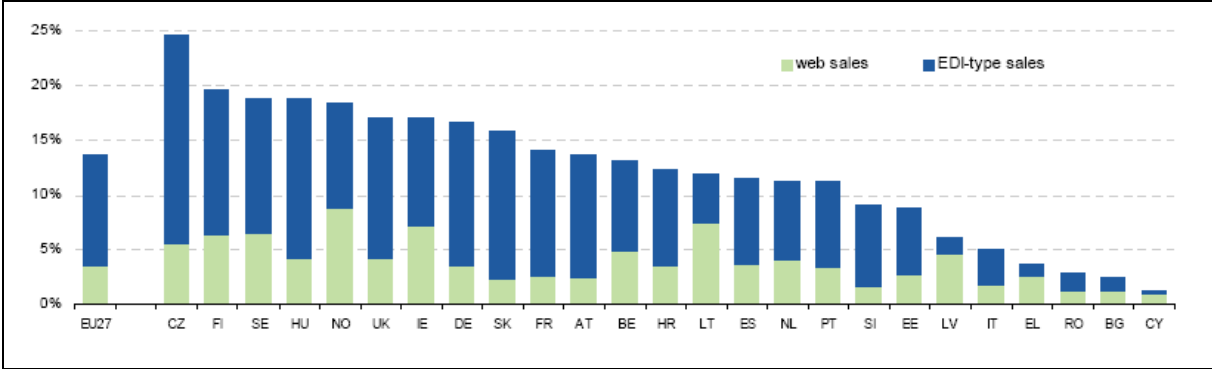


Source: Eurostat

The use of either type of sale is very much related to the sector of activity. Almost all enterprises making e-sales in the 'Travel agency, tour operator reservation service and related activities' branch received orders via a website, while 17% made e-sales via EDI-type messages. More than half of 'Manufacturing' enterprises making e-sales reported that they received orders via EDI-type messages, followed closely by enterprises in the 'Transport and storage' sector (46%). The percentages for 'Manufacturing' enterprises that conducted e-sales via a website and via EDI-type messages were very close: 58% and 56% respectively. For all other economic activities, enterprises received their orders in most cases via websites.

The use of EDI also means that the share of turnover from this type of sale is greater than that from web sales; the turnover realised from EDI-type sales was 10% of total turnover, while the turnover from web sales was only 4%.

**Figure 42: Turnover from e-commerce broken down by web and EDI-type sales, 2010 (% of total turnover)**



Source: Eurostat