Information society statistics - households and individuals

Data extracted in June 2015. Most recent data: Further Eurostat information, Main tables and Database. Planned article update: June 2016.

This article

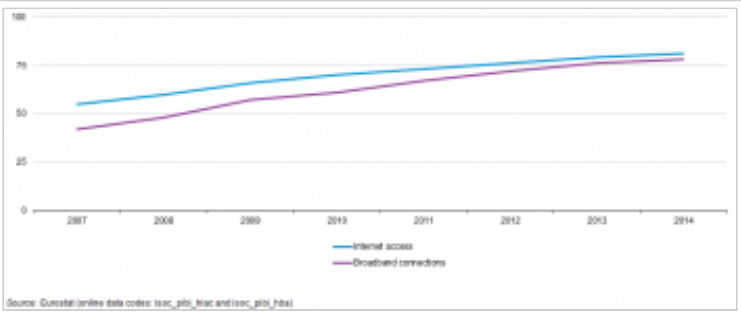

Figure 1: Internet access and broadband internet connections of households, EU-28, 2007–14
(% of all households)
Source: Eurostat (isoc_pibi_hiac) and (isoc_pibi_hba)

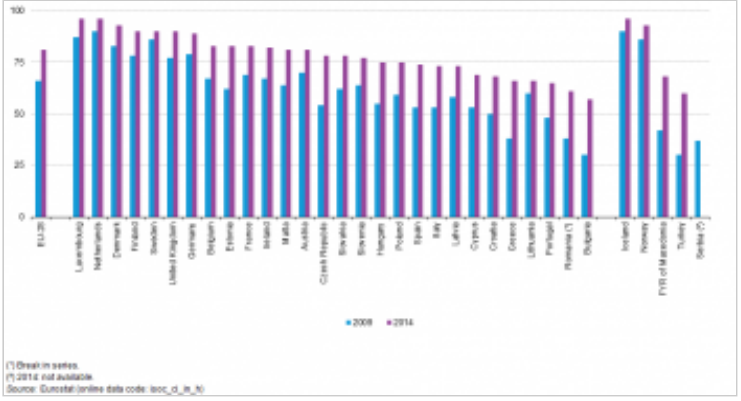

Figure 2: Internet access of households, 2009 and 2014
(% of all households)
Source: Eurostat (isoc_ci_in_h)

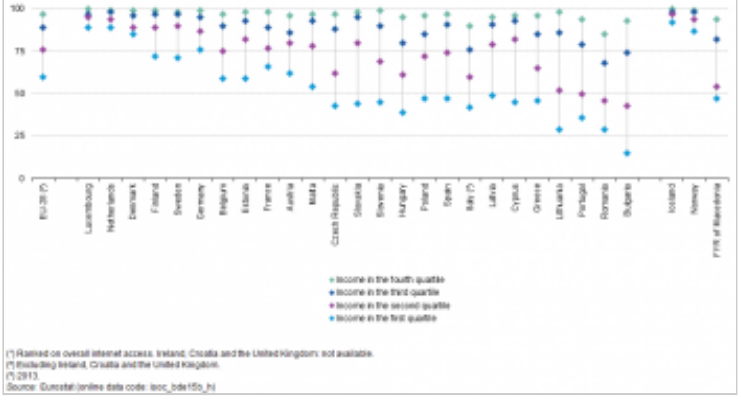

Figure 3: Internet access in households by income quartile, 2014 ([1])
(% of all households)
Source: Eurostat (isoc_bde15b_h)

presents recent statistical data on several different aspects of the information society in the European Union (EU), focusing on the availability of information and communication technologies (ICTs) and their use by

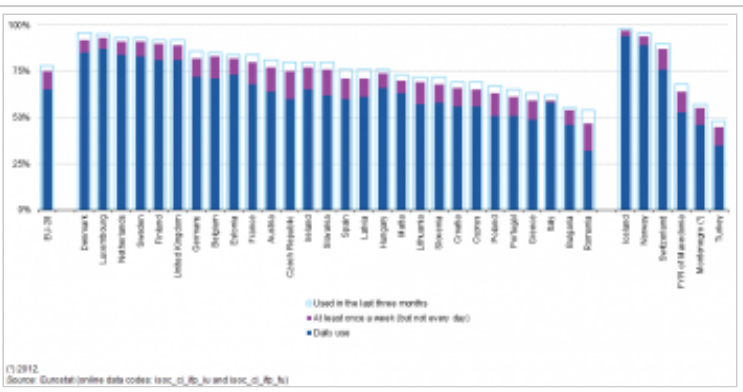

Figure 4: Frequency of internet use, 2014
(% of individuals aged 16 to 74)
Source: Eurostat (isoc_ci_ifp_iu) and (isoc_ci_ifp_fu)

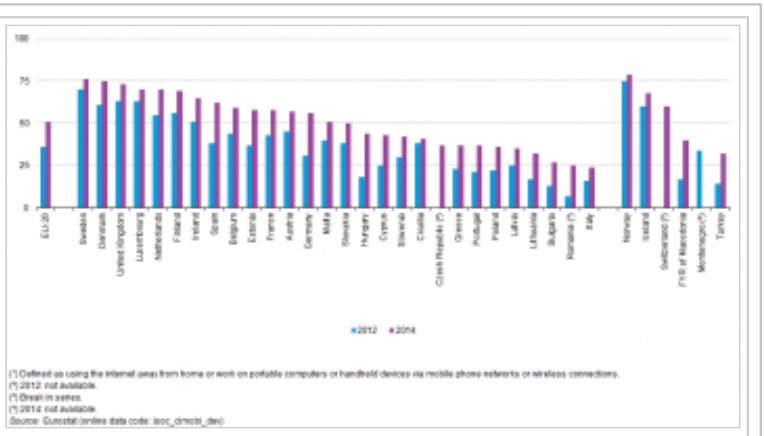

Figure 5: Individuals who used the internet away from home or work, 2012 and 2014 ([1])
(% of individuals aged 16 to 74)
Source: Eurostat (isoc_cimobi_dev)

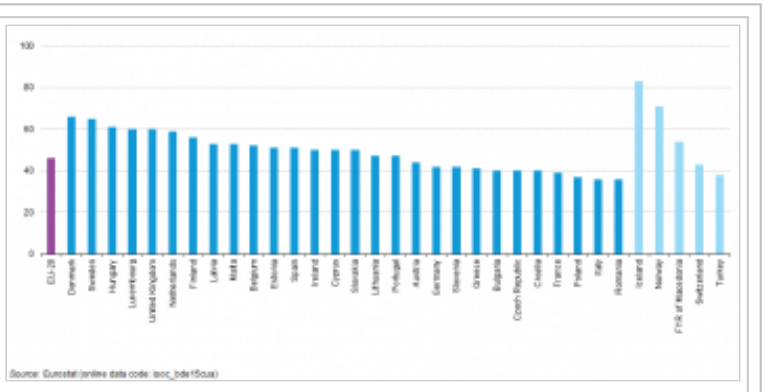

Figure 6: Individuals who used the internet for participation in social networking, 2014
(% of individuals aged 16 to 74)
Source: Eurostat (isoc_bde15cua)

individuals and within households. The development of the information society is regarded as critical to meet the demands of society and the EU economy.

Information and communication technologies (ICT) affect people's everyday lives in many ways, both at work and in the home, for example, when communicating or buying online. EU policies range from regulating entire areas such as e-commerce to trying to protect an individual's privacy.

Main statistical findings

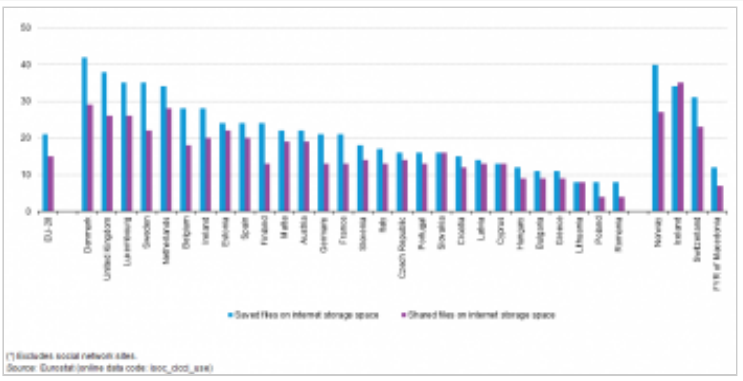

Figure 7: Use of internet storage space for saving and sharing files, 2014 ([1])
(% of individuals aged 16 to 74)
Source: Eurostat (isoc_cicci_use)

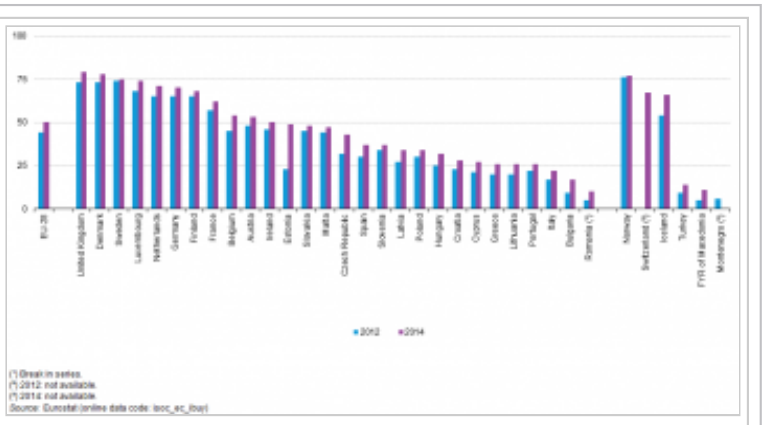

Figure 8: Individuals who ordered goods or services over the internet for private use in the 12 months prior to the survey, 2012 and 2014
(% of individuals aged 16 to 74)
Source: Eurostat (isoc_ec_ibuy)

Internet access

ICT have become widely available to the general public, both in terms of accessibility as well as cost. A boundary was crossed in 2007, when a majority (55 %) of households in the EU-28 had internet access. This proportion continued to increase and in 2014 reached 81 %, rising by an additional 2 percentage points compared with 2013.

Widespread and affordable broadband access is one of the means of promoting a knowledge-based and informed society. Broadband was by far the most common form of internet access in all EU Member States: it was used by 78 % of the households in the EU-28 in 2014, an increase of 36 percentage points since 2007 — see Figure 1.

The highest proportion (96 %) of households with internet access in 2014 was recorded in Luxembourg and the Netherlands (see Figure 2), while Denmark, Finland, Sweden and the United Kingdom also reported that at least 9 out of every 10 households had internet access in 2014. The lowest rate of internet access among the EU Member States was recorded in Bulgaria (57 %). However, there was a rapid expansion in household access to the internet in Bulgaria, as the proportion of households with internet access rose by 27 percentage points between 2009 and 2014, an increase exceeded, among the EU Member States, only in Greece (28 percentage points); the increase in Turkey was slightly larger, at 30 percentage points. The Czech Republic, Romania, Estonia, Spain, Hungary and Italy also recorded increases of 20 percentage points or more over the same period. Unsurprisingly, relatively small increases were recorded in several Member States that were already close to saturation, such as Sweden and the

Netherlands, although Lithuania reported the second lowest increase (6 percentage points), despite having a relatively low proportion of internet access (66 % in 2014).

Figure 3 shows that the level of income can influence the level of internet access by households. For the EU-28, the proportion of households with internet access in 2014 ranged from 60 % among households in the first income quartile (the 25 % of households with the lowest income), increasing through the second and third income quartiles, to reach 97 % among households in the fourth income quartile (the 25 % of households with the highest income). Every one of the EU Member State displayed this same basic pattern, with the lowest proportion of internet access recorded for the first income quartile and increases through each quartile to peak for the fourth income quartile. Unsurprisingly, Member States with high overall internet access, such as the Netherlands and Luxembourg, reported relatively little difference in internet access between income quartiles. By contrast, larger differences were generally noted among those Member States with lower overall levels of internet access, mainly in southern and eastern EU Member States and the Baltic Member States.

Among households in the fourth income quartile, the diversity among the EU Member States in relation to the proportion of households with internet access was relatively low, ranging from 93 % in Bulgaria to 100 % in Luxembourg, with just Italy (90 %; 2013 data) and Romania (85 %) below this range. Among households in the first income quartile, the diversity among the Member States in relation to the proportion of households with internet access was much stronger, ranging from 29 % in Romania and Lithuania to 89 % in Luxembourg and the Netherlands, with Bulgaria (15 %) below this range.

Internet usage

As of the beginning of 2014, just over three quarters (78 %) of all individuals in the EU-28, aged between 16 and 74 years, used the internet (at least once within three months prior to the survey date). At least 9 out of every 10 individuals in Denmark, Luxembourg, the Netherlands, Sweden, Finland and the United Kingdom used the internet. By comparison, less than two thirds of all individuals aged 16 to 74 used the internet in Portugal, Greece, Italy, Bulgaria and Romania.

The proportion of the EU-28's population that had never used the internet was 18 % in 2014, down 2 percentage points from the year before and down from 30 % in 2009. The digital agenda has set a target that by 2015 not more than 15 % of the EU-28 population should have never used the internet.

In 2014, nearly two thirds (65 %) of individuals accessed the internet on a daily basis — see Figure 4 — with a further 10 % using it at least once a week (but not daily). As such, 75 % of individuals were regular users (at least weekly) of the internet, a level of use meeting — a year ahead of schedule — the digital agenda target of 75 % (that was set for 2015). When looking at internet users in the EU, the proportion of daily users ranged from 60 % in Romania and 76 % in the Czech Republic and Poland to 90 % in the Netherlands, Luxembourg (92 %) and Italy (94 %). Norway (93 %) and Iceland (95 %) also reported a high share of daily internet users among all internet users.

Figure 5 looks at the use of the internet while on the move, in other words away from home or work and using the internet on a portable computer or handheld device via mobile or wireless connections. The figure compares data for 2012, when 36 % of individuals aged 16 to 74 within the EU-28 used a mobile device to connect to the internet, with data for 2014, by which time this share had risen to 51 %. The most common mobile devices for internet connections were mobile or smart phones, laptops, notebooks, netbooks or tablet computers. Sweden, Denmark and the United Kingdom recorded the highest proportion of mobile internet use in 2014, with around three quarters of individuals aged 16 to 74 using the internet while on the move. By comparison, around one quarter of individuals in Bulgaria, Romania and Italy used the internet away from home or work.

One of the most common online activities in the EU-28 in 2014 was participation in social networking. Nearly half (46 %) of individuals aged 16 to 74 used the internet for social networking, for example using sites such as Facebook or Twitter.

At least 6 out of 10 people in Denmark, Sweden, Hungary, Luxembourg and the United Kingdom used social networking sites, as was also the case in Iceland and Norway; the share in the Netherlands (59 %) was just below this level. At the other end of the scale, there were four EU Member States where less than 4 in 10 people used such sites, namely France, Poland, Italy and Romania; this was also the case in Turkey.

Using cloud computing for saving and sharing files

Services based on cloud computing technology allow users to store files or use software on a server run over the internet. Cloud services are a relatively new phenomenon compared with web applications for social networking, listening to music or watching films. One of the main challenges faced when measuring the usage of cloud services is being able to make a clear distinction between these and other online services. Figure 7 shows two indicators concerning the use of cloud services by individuals for file saving and file sharing. In 2014, one in five (21 %) individuals aged 16 to 74 in the EU-28 saved files on internet storage space, in other words using cloud services. More than one third of individuals in the Netherlands, Sweden, Luxembourg, the United Kingdom and Denmark used internet storage space for saving files, while in Lithuania, Poland and Romania these services were used by less than 1 in 10 individuals for this purpose.

Compared with other ways of electronic file sharing, internet storage space was less often used for this purpose as more detailed results show (see the article on the internet and cloud services). While 15 % of the EU-28 population used internet storage space for sharing files in 2014, a greater proportion used e-mail applications (44 %), USB sticks, DVDs or Bluetooth (30 %) or personal websites and social networking sites (28 %). Most individuals who were cloud users appreciated the ease of accessing files from several devices or locations. A considerable part of the population had not yet, however, become aware of the existence of cloud services despite being internet users. Among those internet users who were aware, concerns about security and privacy were a major factor that prevented them from using such services.

Ordering goods and services

The proportion of individuals aged 16 to 74 in the EU-28 who ordered goods or services over the internet for private use has risen and in 2014 reached 50 %, an increase of 6 percentage points compared with 2012 (see Figure 8). As such, the digital agenda target to have 50 % of the population buying online by 2015 was achieved a year early. More than two thirds of individuals in the United Kingdom, Denmark, Sweden, Luxembourg, the Netherlands, Germany and Finland ordered goods or services over the internet, whereas the proportion was nearer one person in five in Italy and Bulgaria and around 1 in 10 in Romania. In percentage point terms, the largest increase between 2012 and 2014 was observed in Estonia, jumping 26 percentage points from 23 % in 2012 to 49 % in 2014. The next largest increase, among the EU Member States, was in the Czech Republic (11 percentage points); in Iceland an increase of 12 percentage points was observed.

Data sources and availability

Rapid technological change in areas related to the internet and other new applications of ICTs pose challenges for statistics. As such, there has been a considerable degree of development in this area, with statistical tools being adapted to satisfy new demands for data. Indeed, statistics within this domain are reassessed on an annual basis in order to meet user needs and reflect the rapid pace of technological change.

This approach is replicated in Eurostat's survey on ICT usage in households and by individuals. This annual survey is used to benchmark ICT-driven developments, both by following developments for core variables over time and by looking in greater depth at other aspects at a specific point in time. While the survey initially concentrated on access and connectivity issues, its scope has subsequently been extended to cover a variety of subjects (for example, e-government and e-commerce) and socioeconomic analysis (such as regional diversity, gender specificity, differences in age, education and employment situation). The scope of the survey with respect to different technologies is also adapted so as to cover new product groups and means of delivering communication technologies to end-users.

Coverage and definitions

The household survey covers those households having at least one member in the age group 16 to 74 years old. Internet access of households refers to the percentage of households that have an internet access, so that anyone in the household could use the internet at home, if so desired, even simply to send an e-mail.

Internet users are defined as all individuals aged 16–74 who had used the internet in the three months prior to the survey. Regular internet users are individuals who used the internet, on average, at least once a week in the three months prior to the survey.

The reference period for this survey was the first quarter of 2014; the survey period was the second quarter in most countries. A special module on cloud computing formed part of the 2014 survey and a module on mobile internet use formed part of the 2012 survey.

The wired technologies most commonly used to access the internet are divided between broadband and dial-up access over a normal or an ISDN telephone line. Broadband includes digital subscriber lines (DSL) and uses technology that transports data at high speeds. Broadband lines are defined as having a capacity higher than ISDN, meaning equal to or higher than 144 kbit/s. Popular devices to access the internet at home are desktop and portable computers.

Mobile internet usage is defined as using the internet away from home or work on portable computers or handheld devices via mobile phone networks or wireless connections.

Cloud computing services offer internet storage space for saving files, with or without additional possibilities for sharing or editing uploaded files. The survey on ICT usage in households and by individuals addressed the use of cloud services for private purposes.

The ordering of goods and services by individuals refers to the 12-month period prior to the survey and includes confirmed reservations for accommodation or travel, purchasing financial investments, telecommunication services, video games or software, as well as information services from the internet that are directly paid for. Goods and services that are obtained via the internet for free are excluded. Orders made by manually typed e-mails, SMS or MMS are also excluded.

Context

Broadband technologies are considered to be important when measuring access to and use of the internet, as they offer users the possibility to rapidly transfer large volumes of data and keep access lines open. The take-up of broadband is considered to be a key indicator within the domain of ICT policymaking. Widespread access to the internet via broadband is seen as essential for the development of advanced services on the internet, such as e-business, e-government or e-learning. Digital subscriber lines (DSL) remain the main form of delivery for broadband technology, although alternatives, such as the use of cable, satellite, fibre optics and wireless local loops are becoming more widespread.

In May 2010, the European Commission adopted its Communication concerning A Digital Agenda for Europe (COM(2010) 245 final), a strategy designed to encourage a flourishing digital economy by 2020. The digital

agenda is one of the seven flagship initiatives under the Europe 2020 strategy for smart, sustainable and inclusive growth. It outlines policies and actions aimed at maximising the benefit of the digital era to all sections of society and the economy. The agenda focuses on seven priority areas for action: creating a digital single market, greater interoperability, boosting internet trust and security, providing much faster internet access, encouraging investment in research and development, enhancing digital literacy skills and inclusion, and applying ICT to address challenges facing society like climate change and the ageing population.

In 2012, the European Commission adopted a Communication titled 'Unleashing the potential of cloud computing' (COM(2012) 529). The wider EU policy interest is in enabling and facilitating the faster adoption of cloud computing across all sectors of the economy. Cloud computing is one of the strategic digital technologies considered as an important enabler for productivity and better services.

In May 2015, the European Commission adopted a digital single market strategy (COM(2015) 192), which is one of its top priorities. This strategy covers three areas:

- promoting better online access to goods and services across Europe;
- designing an optimal environment for digital networks and services to develop;
- ensuring that the European economy and industry takes full advantage of the digital economy as a potential driver for growth.

See also

- High-tech statistics
- Information society statistics - enterprises
- Information society statistics at regional level
- Innovation statistics
- Internet and cloud services - statistics on the use by individuals
- Internet use statistics - individuals

Further Eurostat information

Publications

- Science, technology and innovation in Europe — 2013 edition — Pocketbook
- Science, technology and innovation in Europe — 2008 edition — Statistical book
- Press releases and other publications

Main tables

- Information society statistics (t_isoc), see:

Policy indicators (t_isoc_pi)
Computers and the Internet in households and enterprises (t_isoc_ci)
E-commerce by individuals and enterprises (t_isoc_ec)
E-skills of individuals and ICT competence in enterprises (t_isoc_sk)
Regional Information society statistics (t_isoc_reg)

Database

- Information society statistics (isoc), see:

Policy indicators (isoc_pi)
Computers and the Internet in households and enterprises (isoc_ci)
E-commerce by individuals and enterprises (isoc_ec)
E-skills of individuals and ICT competence in enterprises (isoc_sk)
Regional Information society statistics by NUTS regions (isoc_reg)

Dedicated section

- Information society

Methodology / Metadata

- ICT usage in households and by individuals (ESMS metadata file — isoc_bde15c)

Source data for tables and figures (MS Excel)

- Information society - households and individuals: tables and figures

External links

- OECD — Internet

Categories: Information society | Information society - households | Statistical article | Yearbook