

# MAIN RESULTS OF THE SURVEY ON THE INFORMATION SOCIETY IN HOUSEHOLDS IN 2016

The results of the 2016 survey on the usage of information and communication technologies (ICT) in households and by individuals showed that 63.5% of the households in Bulgaria had internet access at home, which was a growth of 4.4 percentage points compared to the previous year. 62.8% of the households were provided with fast and reliable broadband connection, which included fixed wired connection and internet connection through the mobile phone network.

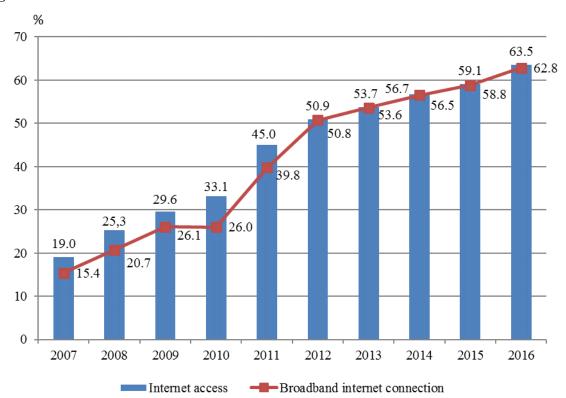


Figure 1. Share of households with internet access and broadband internet connection

In 2016, the highest relative share of households with internet access was found in the Severoiztochen region (67.3%). It was followed by the Yugozapaden region and the Yuzhen tsentralen region, both with relative share of 64.9%. The households in the Severozapaden region lagged behind the tendency within the country, as there 58.6% of the households had internet access at home.

Despite the dynamic development of information technologies in Bulgaria, 36.5% of the households still do not have internet access at home. Nearly half of them (49.5%) state that the main reason was the lack of skills for working with internet, 42.5% believe that they did not need it (not useful, interesting, etc.) and according to 32.1% the equipment was expensive.



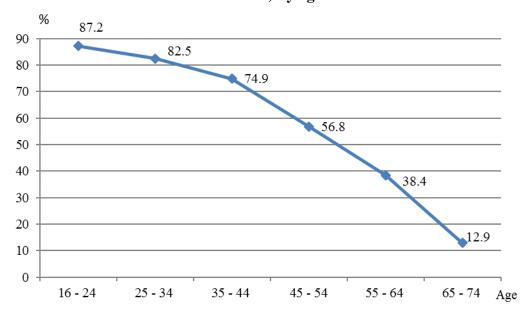


## ICT usage by individuals

In 2016, 58.1% of the individuals aged between 16 and 74 years used the internet every day or at least once a week. There is a stable trend of growth in the regular internet usage by the individuals and in comparison to the previous year an increase of 3.5 percentage points was registered.

The most active web users were the young people aged between 16 and 24 years, as 87.2% of them use the internet every day or at least once a week. While age is increasing, the desire and need of the persons to be present in the global network decreases and only 12.9% of the individuals aged between 65 and 74 years surf regularly.

Figure 2. Relative share of individuals, who used internet regularly (every day or at least once a week) by age in 2016



Males were more active in regular internet usage in comparison to females - respectively 58.5% and 57.8%.

There were significant differences in the regular use of the internet by education - while 86.6% of those with tertiary education regularly used the global network, only 28.5% of the individuals with basic or lower education benefited from the opportunities that it provides.

The employment situation also affects the activity of the individuals in the global network. It was most often used by students (not in the labor force), 95.3% of them surf regularly, and among employees and self-employed persons the relative share was 74.9%. Almost half of the unemployed also regularly benefited from the opportunities provided by the internet (44.4%).

Most preferred device to access the internet at home was the mobile phone used by 70.4% of active internet users. In addition to the traditional devices such as a desktop computer, laptop and tablet some users chose more interesting device like smart TV, which was used as a device for internet access by 6.2% of the individuals.

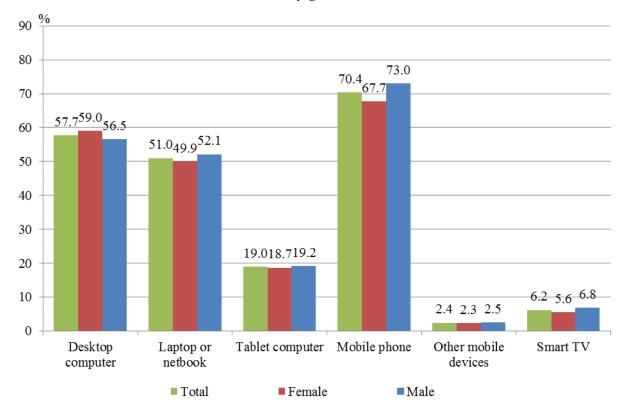
<sup>1</sup> The relative shares are calculated on the basis of individuals aged between 16 and 74 years, who used the internet in the last three months.

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Figure 3. Relative share of individuals, who used internet in the last 3 months by device for access and by gender in 2016



Individuals who use the internet regularly away from home also preferred the mobile phone as device for access (69.1%), and 30.4% of them used a laptop or a tablet computer.

Regular internet users used the network mostly for communication. 95.3% of them carried out phone or video calls, participated in social networks (Facebook, Twitter, Google+) or sent/received e-mails. 81.4% of the individuals used the internet to access information, read online newspapers, news, magazines or find information about goods or services. They were followed by the individuals who used the internet for entertainment (listening to online music, playing games, watching internet streamed TV, video on demand, etc.) - 63.6%. The individuals that used the internet for creativity purposes (uploading self-created content, creating websites or blogs) had the lowest relative share - 35.6%.

Survey results show that 23.5% of regular internet users used storage space on the internet to store documents, photos, music, videos or other files. 25.0% of males and 22.1% of females used cloud services. The most active users of these services were the persons aged 16 -24 years (35.1%), followed by those aged 25 - 34 years (29.7%). Only 6.9% of the individuals aged 65 and over used storage space on the internet.

#### Use of e-Government

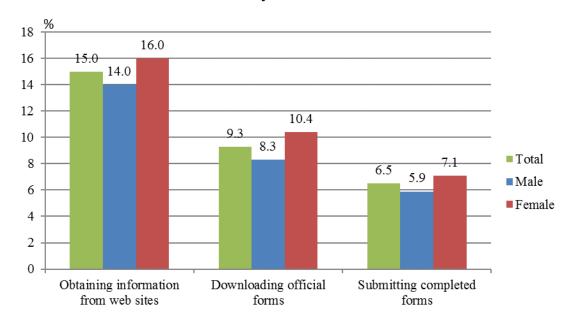
In 2016, 18.4% of individuals used the global network for interaction with the public administration. The most significant was the share of individuals who obtained information from



public administration's websites (15.0%), followed by the share of individuals who downloaded official forms (9.3%) and those who submitted completed forms (6.5%) in the last twelve months.

Females were more active than males in the use of online services offered by the public administration - respectively 19.5% and 17.3%.

Figure 4. Relative share of individuals who used internet to interact with public authorities by sex in 2016



# E-skills

In order to take advantage of the opportunities offered by information technologies and global network, users need to have appropriate digital knowledge and e-skills. The results of the survey showed that 38.5% of the individuals were able to copy or move files or folders, and 25.7% worked with word processing software. The relative shares of the individuals who managed to install software or applications (14.4%), created presentations (14.0%) or used spreadsheet software (14.1%) were almost equal. Only 1.0% of the individuals indicated that they wrote code in a programming language.





# **Electronic commerce (E-commerce)**

In 2016, the share of individuals who bought or ordered goods or services for private use over the internet reached 16.6% <sup>1</sup>. Most active in online shopping were individuals aged 16 - 24 years and 25 - 34 years with relative shares respectively 31.1% and 29.9%, and only 1.3% of individuals aged 65 - 74 years purchased online.

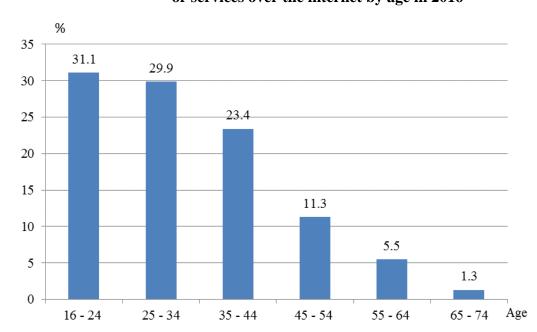


Figure 5. Relative share of individuals who bought or ordered goods or services over the internet by age in 2016

Females were more active in online shopping than men - respectively 17.1% and 16.1%. Most often individuals purchased clothes and sport goods online, as 77.2% of internet buyers purchased such goods, followed by orders of household goods (24.2%) and orders related to travel arrangements and accommodation (23.4%). Most goods and services were bought from sellers from Bulgaria (87.4%), but a lot of people purchased from sellers from other European countries (41.4%) or from other countries outside the EU - 18.7%.

In the last three months before the survey most of the individuals purchased goods or services once or twice (42.9%) and the total amount of purchases was less than 200 BGN.

Only 12.4% of individuals who shopped online, bought or ordered goods or services by clicking through an advertisement on a social media website, and females were more impulsive than males, with relative shares respectively 13.9% and 10.8%.

<sup>&</sup>lt;sup>1</sup> Relative share of the individuals aged between 16 and 74 years, who bought or ordered goods or services in the last twelve months.

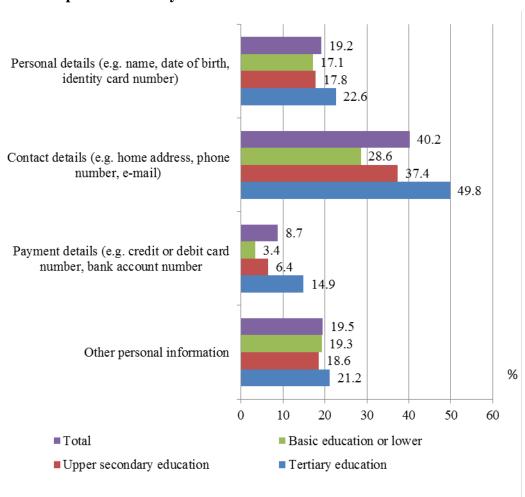




# Privacy and protection of personal identity

In 2016, a special module on provision and protection of personal information in connection with activities carried out by the individuals over the internet in the last twelve months before the survey. The data showed that half of internet users  $(50.1\%)^1$  provided some kind of personal information on global network. Most often these were contact details (e.g. home address, phone number, e-mail) - 40.2%, as individuals with completed basic or lower education were less willing to give out personal information over the internet (28.6%). Least individuals provided payment details (e.g. credit or debit card number, bank account number) - the relative share was 8.7%.

Figure 6. Relative share of individuals who used internet by type of personal information provided and by educational attainment level in 2016



In the previous twelve months 45.9% of individuals who used the internet carried out some activities to manage access to their personal information on the internet. These actions were usually related to reading privacy policy statements on websites (28.9%) or to limiting access to individuals' profile or content on social networking websites (19.3%).

<sup>1</sup> The relative shares are calculated on the basis of individuals aged between 16 and 74 years, who used the internet in the last twelve months.

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Most of the internet users (52.2%) were aware that cookies can be used to trace movements of people on the internet, but only 14.1% of them changed the settings in their browser to limit the amount of cookies put on their computer. More than the half of individuals (50.8%) who surfed on the internet were not concerned that their online activities were being recorded to provide them with tailored ads. Probably that was the reason that only 8.7% of them used anti-tracking software that limits the ability of tracking their activities on the internet.





### Methodological notes

The survey on Information Communication Technologies (ICT) usage in households and by individuals is a part of the European statistical programme and has been carried out in Bulgaria since 2004 according to the Regulation (EU) No. 808/2004. The main purpose of the survey was to obtain reliable and comparable data which reflect the dissemination and usage of ICT at national and European level.

The statistical units are households and individuals. The population of households consists of all private households and their members in the age group of 16 to 74 years. In 2016, 4 173 randomly selected households and 9 444 individuals were surveyed. The survey was conducted by face-to-face interview, carried out by NSI staff. The questionnaire for 2016 comprised several modules which collect information about availability and use of internet in households and by individuals, social media, e-government, e-commerce, e-skills, privacy and protection of personal identity, as well as questions related to the socio-demographic characteristics of households and individuals.

**Fixed broadband connection** include DSL, ADSL, VDSL, LAN, cable modem CATV, optical fibre, satellite, public Wi-Fi connection, etc.

A **mobile broadband connection** means internet connection via mobile phone network (UMTS/HSPA+ - 3G, LTE - 4G), using SIM card or USB key, mobile phone or smart phone as modem.

More information and data from surveys on Information and Communications Technologies usage in households and by individuals can be found at the NSI's web site: <a href="http://www.nsi.bg/en/content/6096/ict-usage-households">http://www.nsi.bg/en/content/6096/ict-usage-households</a> and in Information System 'Infostat'.





#### Annex

Table 1

Relative share of households which do not have internet access by reasons in 2016

(Per cent) Have access to internet elsewhere 4.2 42.5 Don't need internet (because not useful, not interesting, etc.) 32.1 Equipment costs too high Access costs too high (telephone, DSL subscription, etc.) 25.3 Lack of skills 49.5 Privacy or security concerns 0.7 Broadband internet is not available in our area 1.1 Other 7.4

Table 2

# Relative share of individuals who carried out of the any of the following activities to manage access to their personal information in 2016

Read privacy policy statements before providing personal information 28.9
Restricted access to your geographical location 10.5
Limited access to your profile or content on social networking sites 19.3
Refused allowing the use of personal information for advertising purposes 11.8
Checked that the website where you needed to provide personal information was secure (e.g. https sites, safety logo or certificate) 5.6
Asked websites or search engines to access the information they hold about you to update or delete it 3.1