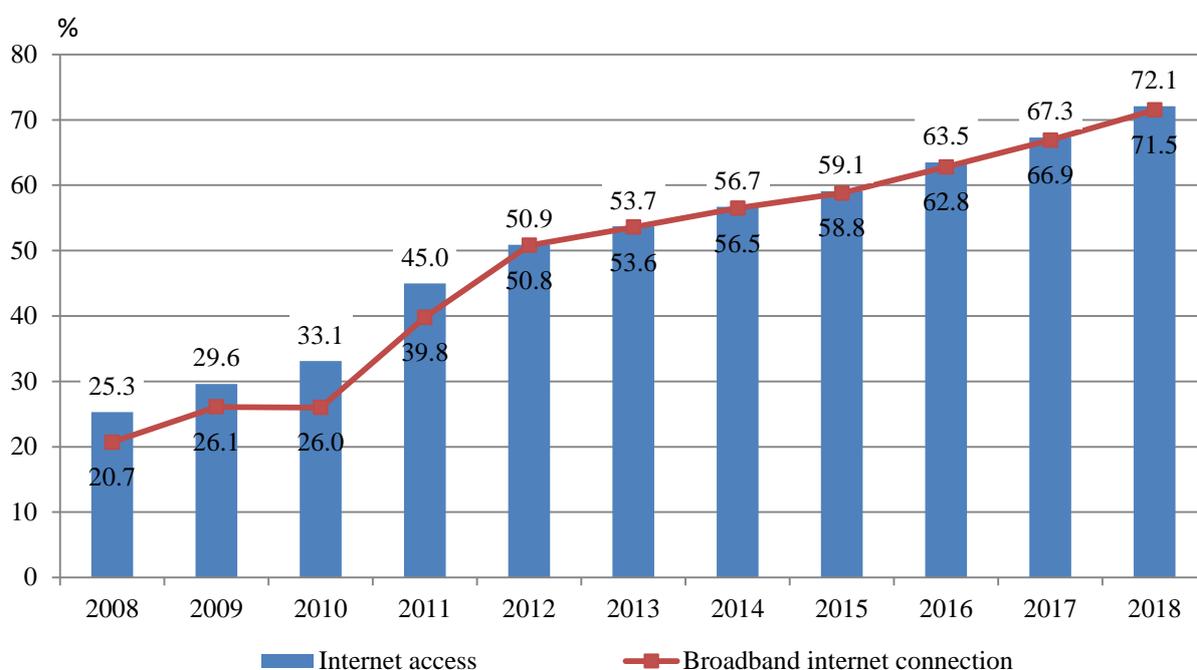




## MAIN RESULTS OF THE SURVEY ON THE INFORMATION SOCIETY IN HOUSEHOLDS IN 2018

The results of the 2018 survey on the usage of information and communication technologies (ICT) in households and by individuals showed that 72.1% of the households in Bulgaria had internet access<sup>1</sup> at home with an increase of 4.8 percentage points compared to the previous year. At the same time, 71.5% of the households were provided with fast and reliable broadband connection, which included fixed wired connection and internet connection through a mobile phone network (Figure 1).

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



In 2018, the highest relative share of households with internet access was found in the Yugozapaden region (75.3%), followed by Severoiztochen and Yuzhen tsentralen region, respectively 73.9% and 73.7%. The households in the Yugoiztochen and Severen tsentralen region lagged behind the tendency within the country, as there respectively 70.0% and 68.5% of the households had internet access at home. The lowest relative share of households with internet access was in Severozapaden region - 65.2%.

Households with children used the global network more actively as 89.5% of them had internet access, compared to 66.4% of the households without children.

<sup>1</sup> Any internet-enabling device should be considered - desktop, laptop, netbook or tablet computers as well as smart phones, games consoles, smart TVs or e-book readers.



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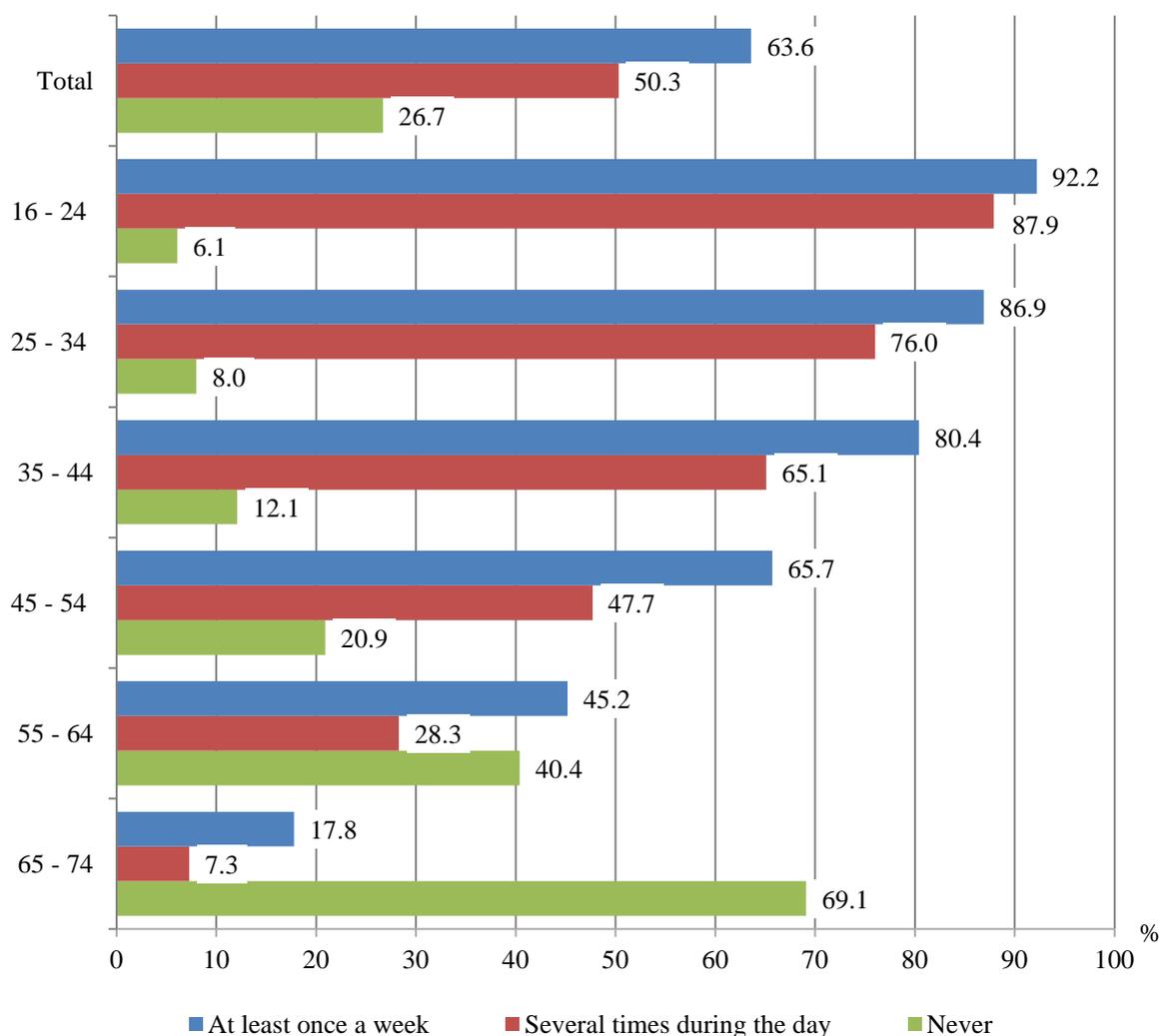
## Use of the internet

In 2018, 63.6% of the population aged between 16 and 74 years used the internet every day or at least once a week at home, at work or any other place. Every second Bulgarian (50.3%) took advantage of the resources of the global network several times during the day.

The most active users of internet were young people aged between 16 and 24 years, as 92.2% of them used the internet every day or at least once a week. With age increasing, the desire and need of the persons to be present in the global network decreased and 17.8% of the individuals aged between 65 and 74 years surfed regularly.

Despite the dynamic development of information technologies in Bulgaria, more than a quarter (26.7%) of the people never used the internet (Figure 2).

**Figure 2. Frequency of internet usage by individuals by age in 2018**



Males were more active in regular internet usage in comparison to females, respectively 64.9% and 62.4%.



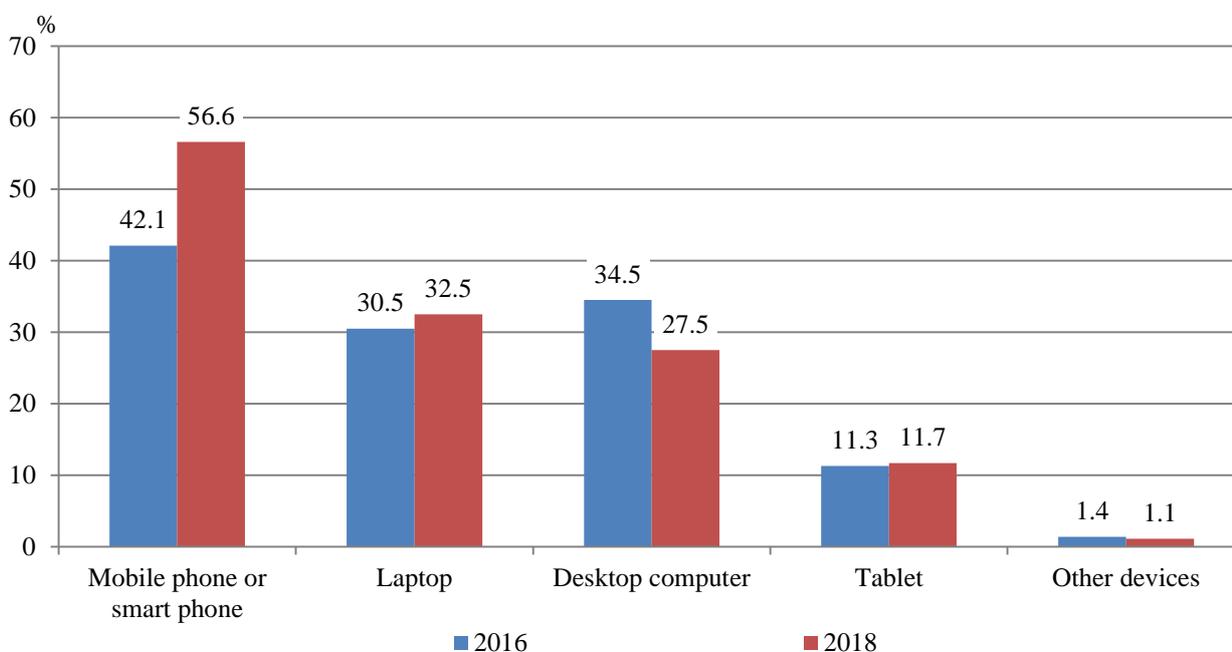
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There were significant differences in the regular use of internet by education - 89.6% of those with tertiary education and 37.7% of the individuals with basic or lower education used the global network regularly.

The employment situation also affected the activity of the people in the global network. Students most often used internet, 98.6% of them surf regularly. Among employees and self-employed persons, the relative share was 80.8%. Almost half of the unemployed (45.1%) regularly used the internet as well.

Most preferred device to access the internet was the mobile phone (incl. smartphone) which was used by 56.6% of the people aged 16 - 74 years. The usage of desktop computer decreased in 2018, and 27.5% of individuals used it to surf in the internet (Figure 3).

**Figure 3. Relative share of individuals, who used the internet in the last three months by type of device**



Individuals used the network mostly for communication and entertainment as 53.9% of them carried out phone or video calls (using applications, e.g. Viber, WhatsApp, Skype, Facetime), and 51.4% participated in social networks (Facebook, Twitter, Instagram, Snapchat, etc.). Almost the same was the proportion of the individuals who used the global network to find information about goods or services (43.0%) and to send/receive e-mails (40.0%). Every third person aged between 16 and 74 (31.2%) listened to music online and 24.7% was seeking health-related information. The smallest share of individuals used the internet to make an appointment with a practitioner via a website or application - 3.5% (Table 1).



### 1. Relative share of individuals, who used internet for private purpose in the last three months by type of activities and sex in 2018

(Per cent)

	Total	Male	Female
Telephoning over the internet/video calls	53.9	55.0	52.8
Participating in social network	51.4	51.1	51.6
Finding information about goods or services	43.0	42.1	43.9
Sending/receiving e-mails	40.0	39.4	40.5
Listening to music	31.2	34.9	27.6
Seeking health-related information	24.7	17.1	32.2
Watching video content from sharing services	23.7	26.3	21.3
Watching internet streamed TV	16.4	18.8	14.0
Playing or downloading games	14.2	18.5	10.0
Selling of goods or services	8.2	8.6	7.9
Internet Banking	7.4	7.6	7.1
Watching video on demand from commercial services	6.1	6.7	5.5
Making an appointment with a practitioner via a website or apps	3.5	2.2	4.6

Survey results showed that 17.9% of the population aged between 16 and 74 years used storage space on the internet to store documents, photos, music, videos or other files.

In 2018, 19.0% of males and 16.9% of females used cloud services. The most active users of these services were the persons aged 16 to 24 years (35.7%), followed by those aged 25 to 34 years (30.3%).

#### Use of e-Government

In 2018, 22.2% of the individuals used the global network for interaction with the public and local authorities. The most significant was the share of individuals who obtained information from public administration's websites (17.1%), followed by those who submitted completed forms (9.5%) in the last 12 months.

Females were more active than males in the use of online services offered by the public authorities - respectively 22.7% and 21.8%.

#### Electronic commerce (E-commerce)

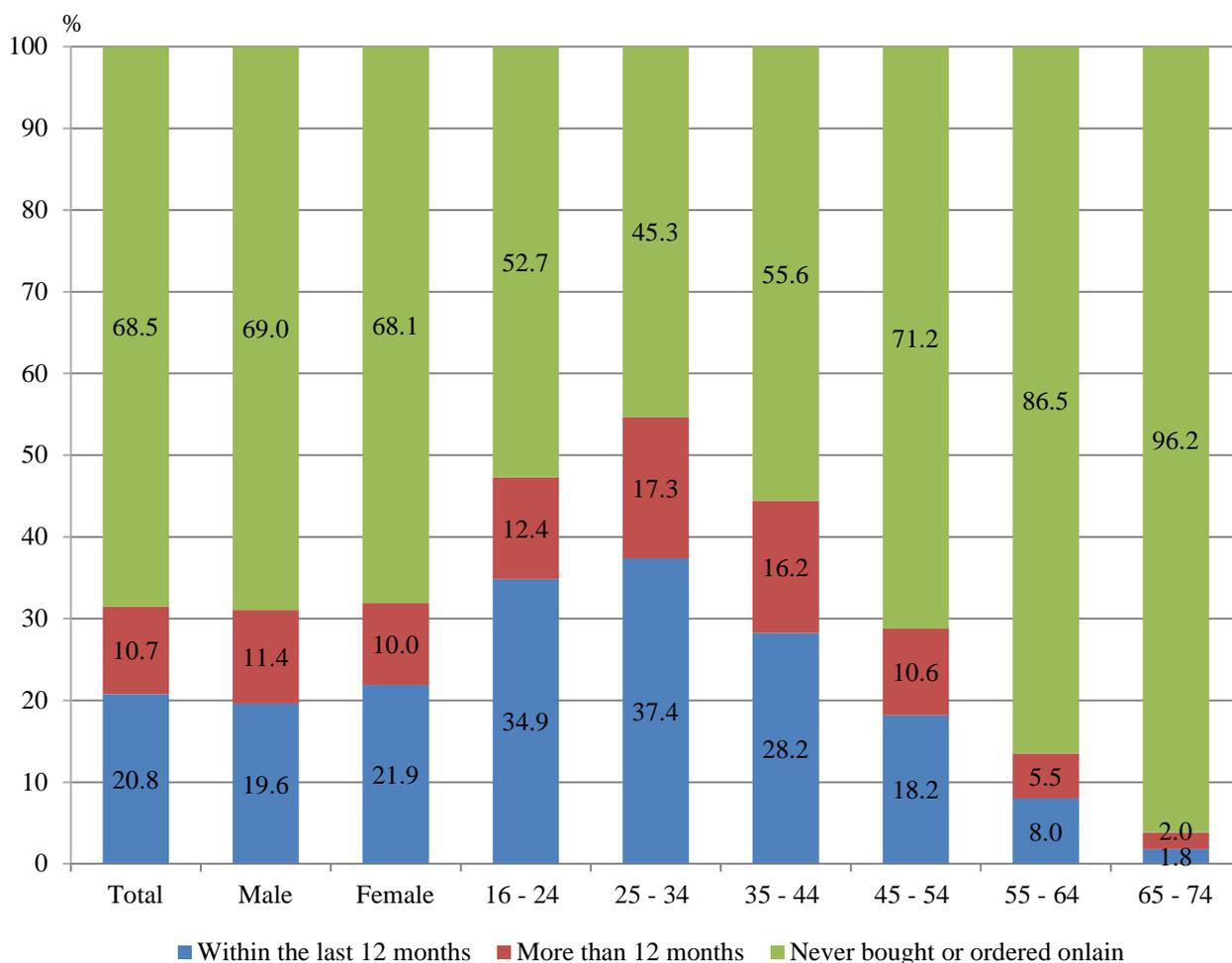
In 2018, the share of individuals who bought or ordered goods or services for private use over the internet reached 20.8%<sup>1</sup>. Most active in online shopping were individuals in age groups 16 - 24 and 25 - 34 years with relative shares respectively 34.9% and 37.4%, and only 1.8% of individuals aged 65 - 74 years purchased online. Females were more active in online shopping than men - respectively 21.9% and 19.6% (Figure 4).

<sup>1</sup> Relative share of the individuals aged between 16 and 74 years, who bought or ordered goods or services in the last 12 months.



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**Figure 4. Structure of individuals who bought or ordered goods or services over the internet by sex and age in 2018**



Most of the internet buyers (75.8%) bought clothes and sport goods online, 32.7% purchased household goods, and 19.1% made orders related to travel arrangements and accommodation. Almost the same were the number of people who bought online tickets for different events (cinema, theater, concerts, sport events) and electronic equipment (incl. cameras, mobile phones, etc.), respectively 15.7% and 15.3% of the internet buyers. The smallest number of people bought over the internet computer and video games, computer software and upgrades (3.3%), as well as films and music (incl. video on demand) - 3.2%.

Most goods and services were bought from sellers from Bulgaria (87.5%), but many people purchased from sellers from other European countries (35.3%) or from countries outside the EU - 17.2%.

### Trust, security and privacy

The increasing deployment of digital technologies in our daily life, the variety of devices used, and the ubiquitous internet connectivity, raises new safety-related challenges. In 2018, module on the ability of the individuals to protect their personal information online was included in the survey.



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The results showed that, out of the individuals aged between 16 and 74 years who used internet in the last 12 months:

- 57.6% used simple login with username and password as an identification procedure for online services for private purposes (e.g. online banking, public services, online shopping);
- 35.9% used social media login for other services;
- 10.9% used more sophisticated and secure identification methods such as procedures involving mobile phone, electronic identification certificate, digital signature, security token, etc.;
- 38.4% indicated that they had not used any identification procedure in the internet.

In 2018, the smartphone was preferred device for access to the internet and 54.6% of individuals used such device for private purpose, as of them:

- 55.6% protected it by using a security software or service like antivirus, antispyware or firewall, which was installed automatically or provided with the operating system, and 12.8% installed or subscribed to such application by themselves;
- 33.7% did not use or did not know if they used application for security and protection of their smartphone;
- 76.5% indicated that they had not lost information, documents, pictures and other kind of data as a result of a virus or other hostile type of programs;
- 35.5% had at least once restricted or refused access to personal data (e.g. location, contact list, pictures) stored on their smartphone while using or installing an application.

### **ICT usage at work**

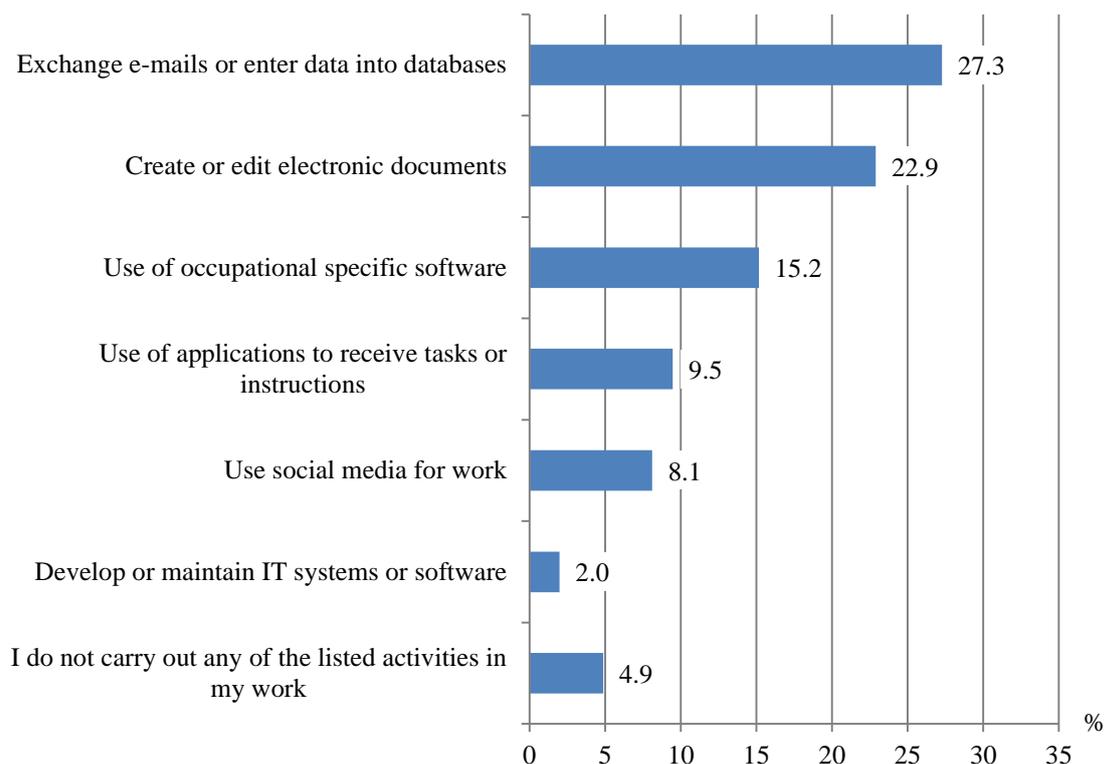
Information and communication technologies usage affect our everyday life and a lot of the activities at work cannot be performed quickly and efficiently without them. The results of the 2018 survey showed that:

- 38.5% of employees and self-employed persons used a computer, laptop, smartphone, tablet or other portable device at least once per week during their work;
- 8.0% used other computerized equipment or machinery at work;
- 29.6% considered that their skills relating to the use of computers, software or applications corresponded well with their duties, 8.3% indicated that they had the skills to cope with more demanding duties, and 2.0% considered that they needed further training to cope well with their duties.

At work, most often people exchanged e-mails or enter data into databases (27.3%), created or edited electronic documents (22.9%), and used specific software (e.g. for design, data analysis, processing, etc.) - 15.2%. The smallest share of employees and self-employed persons developed or maintained information systems or software (2.0%) (Figure 5).



**Figure 5. Relative share of employees and self-employed persons who used computers or other computerized equipment at work by type of activities in 2018**



### Digital skills

The survey results showed that more than a half of the people aged between 16 and 74 years (54.9%), did not attend courses or any other learning activities in order to improve their skills related to the use of computers, software or application in the last 12 months. Free online training or self-study was conducted by 8.4%, 4.5% were educated at work, by colleague, supervisor or mentor, and 1.9% of the persons participated in training paid or provided by their employer.



## 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 from 16 to 74 years. In 2018, 4 223 randomly selected households and 9 275 individuals were surveyed. The survey was conducted by face-to-face interview, carried out by NSI staff. The questionnaire for 2018 comprised several modules, which collect information about availability and use of internet in households and by individuals, e-government, e-commerce, ICT usage at work, digital skills, sharing economy, as well as questions related to the socio-demographic characteristics of households and individuals.

**Fixed broadband connection** includes 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.

**Smartphone** is a mobile phone that has an operating system and allows access to the internet.

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:

<http://www.nsi.bg/en/content/6096/ict-usage-households> and in Information System 'Infostat' ([https://infostat.nsi.bg/infostat/pages/module.jsf?x\\_2=240](https://infostat.nsi.bg/infostat/pages/module.jsf?x_2=240)).