



# INFORMATION AND COMMUNICATION TECHNOLOGIES USAGE IN HOUSEHOLDS AND BY INDIVIDUALS IN 2020

In 2020, 78.9% of the households in Bulgaria had internet access at home, which was by 3.8 percentage points more compared to the previous year. Mobile connection to the internet via mobile phone network used 68.0% of the households and 59.4% had a fixed wired connection.

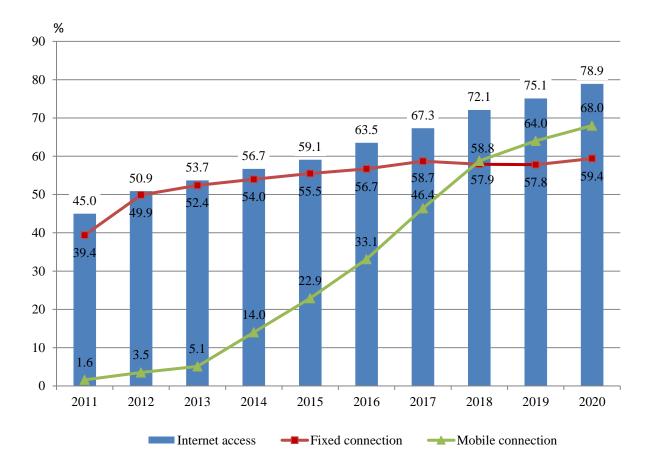


Figure 1. Share of households with internet access by type of connection

In 2020, the highest relative share of households with internet access was found in Yugozapaden region (85.9%), while the lowest relative share was observed in Severozapaden region - 66.2%.

The relative share of the households resided in towns that had internet access was 83.8% and of those resided in villages - 63.4%. Households with children used the global network more actively as 96.1% of them had internet access, compared to 75.5% of the households without children (Table 1).

<sup>2 &</sup>quot;P.Volov" Str., 1038 Sofia, Bulgaria, tel: (+ 359 2) 9857 111, www.nsi.bg e-mail: info@nsi.bg





# 1. Share of households with internet access by statistical region, residence and household type in 2020

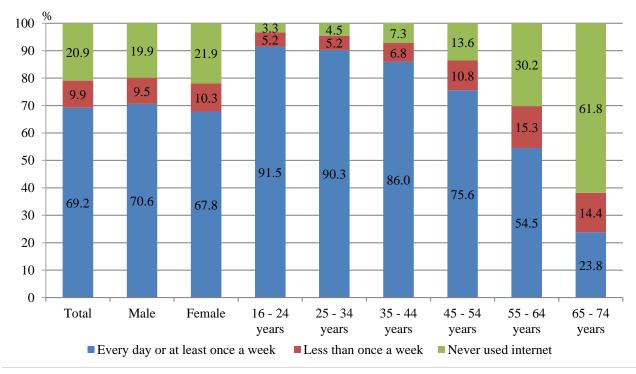
(Per cent)

		` /
Total	Households with children	Households without children
78.9	96.1	75.5
66.2	93.1	59.7
74.8	96.1	70.8
77.7	97.8	74.6
77.2	91.6	74.5
85.9	98.1	83.7
79.2	97.4	75.3
83.8	98.2	81.0
63.4	88.4	59.2
	78.9 66.2 74.8 77.7 77.2 85.9 79.2	78.9         96.1           66.2         93.1           74.8         96.1           77.7         97.8           77.2         91.6           85.9         98.1           79.2         97.4           83.8         98.2

#### Use of the internet

In 2020, 69.2% of the **individuals 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 and 56.7% took advantage of the resources of the global network several times during the day. The most active users of the internet were those with tertiary education (93.8%), as well as the young people aged between 16 and 24 years - 91.5%.

Figure 2. Structure of individuals by frequency of internet usage, sex and age in 2020



<sup>2 &</sup>quot;P.Volov" Str., 1038 Sofia, Bulgaria, tel: (+ 359 2) 9857 111, www.nsi.bg e-mail: info@nsi.bg





Individuals used the network mostly for communication as 58.5% of them carried out phone or video calls (using applications, e.g. Viber, WhatsApp, Skype, FaceTime, Messenger, Snapchat), and 54.7% participated in social networks (Facebook, Twitter, Instagram, Snapchat, etc.).

## 2. Share of individuals by purpose of internet usage and sex in 2020

(Per cent)

Purposes	Total	Male	Female
Communication			
Making calls (including video calls) over the internet	58.5	59.4	57.7
Participating in social networks	54.7	54.5	55.0
Using instant messaging, i.e. exchanging messages	48.8	48.6	49.0
Sending / receiving e-mails	43.5	42.9	44.0
Access to information			
Finding information about goods or services	50.0	50.1	50.0
Reading online news sites/ newspapers/ news magazines	40.8	42.3	39.4
Creativity			
Sharing or publishing self-created videos, photos, music,			
texts etc. on a website or via app	23.5	23.2	23.8
Use of entertainment			
Listening to music or downloading music	36.0	39.1	33.0
Watching video content from sharing services	22.1	24.1	20.0
Watching internet streamed TV	16.5	18.5	14.6
Playing or downloading games	11.6	14.6	8.6
Watching Video on Demand from commercial services	6.1	6.7	5.5
eHealth			
Seeking health-related information	28.8	21.5	36.0
Accessing personal health records online	10.3	7.4	13.1
Making an appointment with a practitioner via a website			
or app	6.5	4.3	8.6
Other on-line services			
Internet Banking via website or app	12.6	13.0	12.2
Selling of goods or services via a website or app	6.9	7.4	6.4

The relative share of the individuals who used storage space on the internet to store documents, pictures, music, videos or other files was 24.2%, as users of cloud services were 25.7% of males and 22.7% of females. The most active users of this activity were the young people aged between 16 and 24 years - 43.0%.





#### Use of e-government

In the last 12 months, 26.9% of the individuals used the global network for interaction with the public and local authorities, in order to:

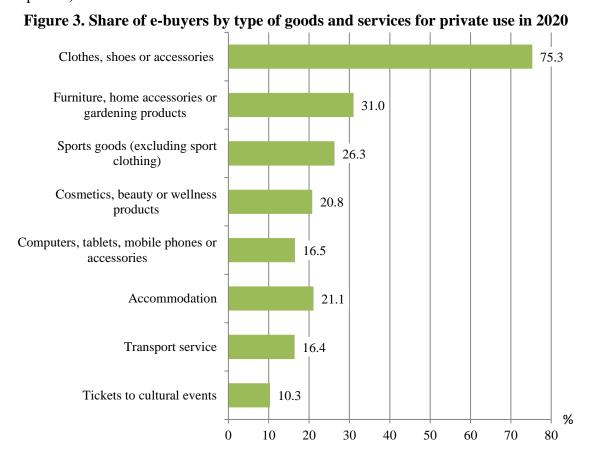
- obtain information from public administration's websites or apps 19.0%;
- submit completed forms online 15.0%;
- download official forms 14.4%.

Females were more active than males in the use of online services offered by the public authorities - respectively 27.4% and 26.5%.

### **Electronic commerce (e-commerce)**

The share of the individuals who bought goods or services for private use over the internet in the last 3 months was 15.6%, as 15.4% bought goods and 6.7% - digital products and services. Most active in internet shopping were those with tertiary education with a relative share of 31.7%, as well as young people in the age group 16 - 24 years (25.5%) and age group 25 - 34 years (25.4%). Females were more active in online shopping than males - respectively 16.2% and 15.0%.

Internet buyers purchased mainly goods like clothes, shoes or accessories (75.3%)<sup>1</sup> and the most purchased servises were related to accommodation (from hotels, travel agencies, tour operators or private person) - 21.1%.



<sup>&</sup>lt;sup>1</sup> The relative share were calculated on the basis of individuals who bought goods and services in the last 3 months.

<sup>2 &</sup>quot;P.Volov" Str., 1038 Sofia, Bulgaria, tel: (+ 359 2) 9857 111, www.nsi.bg e-mail: info@nsi.bg



In the last three months, 59.7% of e-shoppers bought goods or services once or twice and 31.9% made three to five purchases. The total value of online purchases of 31.3% of the e-buyers was between 100 and 199 BGN, 29.9% purchased online for less than 100 BGN and 25.4% spent between 200 and 599 BGN.

### Privacy and protection of personal data on the internet

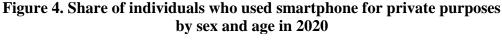
In 2020, 42.3% of the individuals carried out activities to manage access to their personal data on the internet, such as:

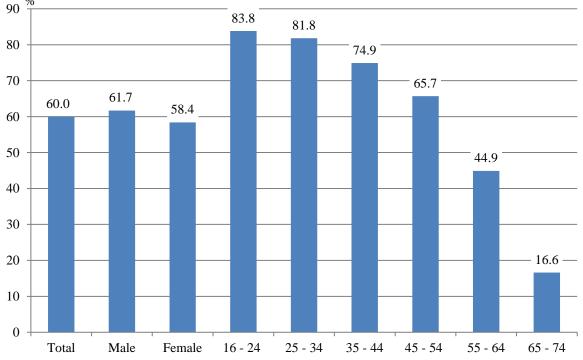
- reading privacy policy statements before providing personal data 33.5%;
- restricting or refusing access to the geographical location 18.2%;
- limiting access to profile or content on social networking sites 14.5%.

Every third person (31.4%) had concerns that their online activities was being recorded to provide with tailored advertising and 8.7 % used software that limited the ability to track their activities on the internet.

Almost half of the individuals (45.5%) were aware that cookies can be used to track the visited websites and 14.6% changed the settings of their internet browser to limit the number of cookies that were stored on their devices.

In 2020, 60.0% of the individuals used smartphone for private purposes and the most active users were the people in the age group 16 - 24 years (83.8%), followed by those aged 25 - 34 years (81.8%).





<sup>2 &</sup>quot;P.Volov" Str., 1038 Sofia, Bulgaria, tel: (+ 359 2) 9857 111, www.nsi.bg e-mail: info@nsi.bg





Among the individuals who used smartphone:

- 64.6% protected it by using a security software or service like antivirus, antispam or firewall;
- 42.2% restricted or refused access to personal data at least once (e.g. location, contact list, pictures);
- 13.6% lost information, documents, pictures and other kind of data as a result of a virus or other hostile type of programs.





## **Methodological notes**

The survey on Information and 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 16 to 74 years.** In the period June - July 2020, 4 166 randomly selected households and 9 357 individuals were surveyed. The survey was conducted by face-to-face interview, carried out by NSI staff. The questionnaire for 2020 comprised several modules, which collect information about availability and use of internet in households and by individuals, e-government, e-commerce, privacy and protection of personal data, trust, as well as questions related to the socio-demographic characteristics of households and individuals. The data collected during the survey refer to three periods: to the moment of the survey, to the last three months before the survey or to the last 12 months before the survey.

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

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

"Cookies" are small text files that a website downloads to a user's device in order to track their behaviour on the website, and to remember their preferences.

**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 NSI's web households and by individuals be found the site (http://www.nsi.bg/en/node/6096) in Information System 'Infostat' (https://infostat.nsi.bg/infostat/pages/module.jsf?x\_2=240&lang=en).