INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) USAGE IN HOUSEHOLDS AND BY INDIVIDUALS IN 2023

Internet access

In 2023, 88.5% of the households in Bulgaria had internet access at home. The annual growth tendency of the relative share of households with internet access was retained, and over a ten-year period the relative share increased by 31.8 percentage points.

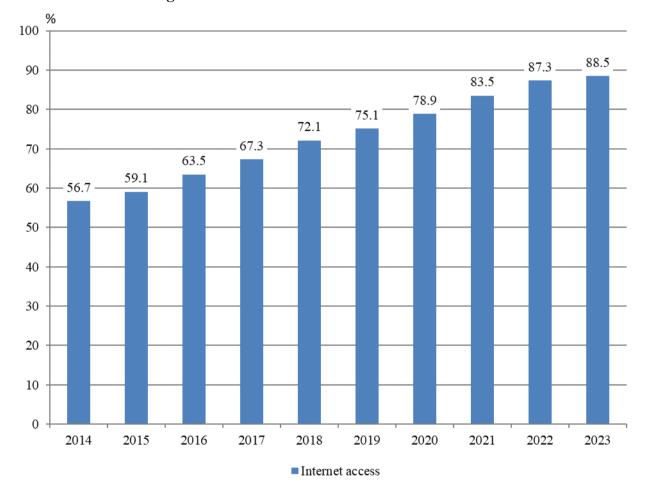


Figure 1. Share of households with internet access

The highest relative share of households with internet access was found in Yugozapaden region (92.8%), while the lowest relative share was observed in Severozapaden region - 82.6%.

The relative share of households living in urban areas that had internet access was 91.8% and of those resided in villages - 77.0%. Households with children used the global network more actively as 97.7% of them had internet access, compared to 87.1% of the households without children (Table 1).

1. Share of households with internet access by statistical region, residence and household type in 2023

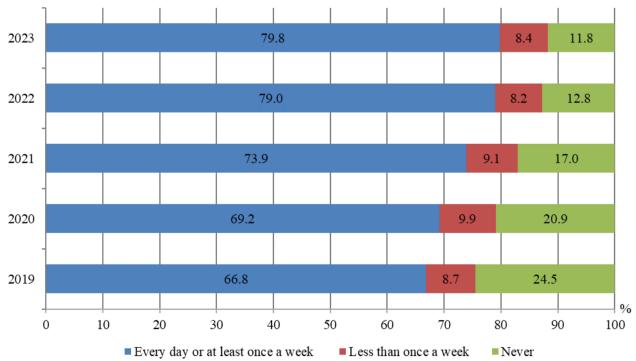
(Per cent)

1		
Total	Households with children	Households without children
88.5	97.7	87.1
82.6	99.1	79.1
85.4	100.0	83.1
86.5	98.8	84.0
87.5	93.0	86.3
92.8	100.0	92.1
87.8	96.7	86.5
91.8	98.7	90.8
77.0	95.1	73.7
	88.5 82.6 85.4 86.5 87.5 92.8 87.8	88.5 97.7 82.6 99.1 85.4 100.0 86.5 98.8 87.5 93.0 92.8 100.0 87.8 96.7 91.8 98.7

Use of the internet

In 2023, 79.8% of the **individuals aged between 16 and 74 years** used the internet every day or at least once a week at home, work or other places. The share of people who had never surfed the internet decreased to 11.8%.

Figure 2. Distribution of individuals by frequency of internet usage



The most active users of the internet were the students (99.3%) and the individuals with tertiary education - 95.6%, as well as young people in the age groups 16 - 24 and 25 - 34 years, 93.6% and 94.7%, respectively. There was almost no divide in the internet usage by gender, as 80.5% of men surfed regularly, compared to 79.2% of women.

The most preferred device to access the internet was the mobile phone (incl. smartphone) which was used by 78.3% of the people, followed by the laptop - 33.5%. The convenience of portable devices led to a decrease in the number of people who used a desktop computer to access the internet, and their relative share decreased by 5.1 percentage points compared to 2021.

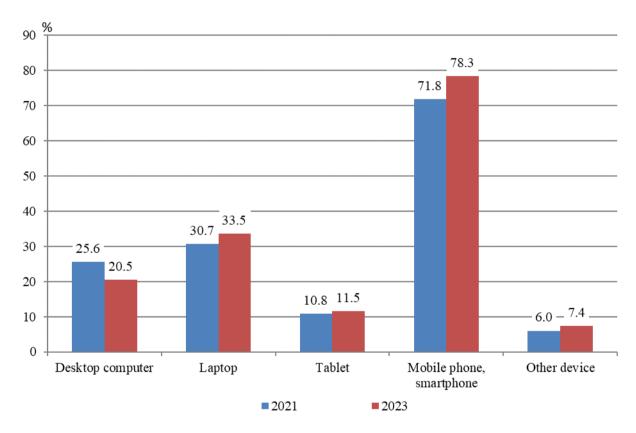


Figure 3. Share of individuals using the internet by type of devices

Individuals used the network mostly for communication as 69.0% of them carried out phone or video calls (using applications such as Viber, WhatsApp, Skype, FaceTime, Messenger, Snapchat, Zoom, MS Teams, Webex), 65.4% used instant messaging (using applications such as Viber, WhatsApp, Messenger, Snapchat, Skype, Discord, Telegram) and 64.2% participated in social networks (Facebook, Twitter, Instagram, Snapchat, TikTok, etc.). The largest gender divide was observed among people who sought health-related information online, as 50.6% of women used the global network for this purpose, compared to 35.4% of men (Table 2).

2. Share of individuals by purpose of the use of internet and sex in 2023

(Per cent)

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Purposes	Total	Male	Female
Communication			
Making calls (including video calls) over the internet	69.0	69.7	68.4
Using instant messaging, i.e. exchanging messages	65.4	65.7	65.1
Participating in social networks	64.2	63.5	64.9
Sending / receiving e-mails	45.1	43.7	46.4
Access to information			
Reading online news sites/newspapers/news magazines	59.0	60.2	57.9
Finding information about goods or services	50.7	50.6	50.8
Seeking health-related information	43.1	35.4	50.6
Civic and political participation			
Expressing opinions on civic or political issues on websites or in social media	17.2	17.6	16.8
Taking part in online consultations or voting to define civic or political issues	6.8	6.2	7.4
Professional life			
Looking for a job or sending a job application	8.1	8.5	7.7
Other on-line services			
Internet banking	23.4	22.9	24.0
Selling of goods or services via a website or app	8.6	9.1	8.2
Doing an online course	7.7	6.2	9.1

Privacy and protection of personal data on the internet

In 2023, 50.3% 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 31.9%;
- restricting or refusing access to the geographical location 21.8%;
- limiting access to profile or content on social networking sites 20.2%;
- refusing the use of personal data for advertising purposes 19.6%.

Concerns that their online activities were being recorded to provide them with tailored ads, had 36.0% of the individuals, 5.5% used software that limited the ability to track their activities on the internet, and 9.6% changed the settings of their internet browser to limit the number of cookies that were stored on their devices.

E-government

In 2023, 29.7% of the individuals used the global network for interaction with public authorities or public services, mainly with the purpose of:

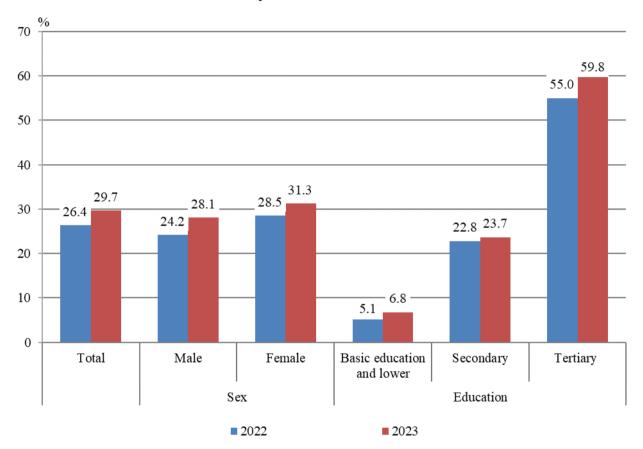
- accessing personal information stored by public authorities or public services 16.5%;
- downloading/printing any official forms 13.3%;

¹ The relative share were calculated on the basis of individuals who interacted with public authorities or public services over the internet in the last 12 months before the interview.

- obtaining information (e.g. about services, benefits, entitlements, laws, opening hours) 9.3%;
- submitting tax declaration online 9.2%.

Females were more active than males in the use of online services offered by the public authorities or public services - 31.3% and 28.1%, respectively. People with tertiary education used egovernment services more often (59.8%), compared to only 6.8% of people with basic education and lower.

Figure 4. Share of individuals who interacted with public authorities or public services by sex and education



Electronic commerce (e-commerce)

In 2023, 45.2% of the individuals bought goods or services for private use over the internet, and over a five-year period this relative share increased more than twice. The highest relative share of the individuals who purchased goods or services online was found in Yugozapaden and Severoiztochen region - 57.4% and 43.4%, respectively, while the lowest relative share was observed in Severen tsentralen region - 37.3%. Females were more active in online shopping than males - 47.2% and 43.1%, respectively. The most active in internet shopping were the individuals with tertiary education with a relative share of 70.4%, as well as people in the age group 25 - 34 years (65.6%).

¹ The relative shares were calculated on the basis of individuals who bought goods or services in the last 12 months before the interview.

21.7 Total 45.2 20.6 Male 43.1 22.7 Female 47.2 36.1 16 - 24 63.1 40.4 25 - 3465.6 28.4 35 - 44 Age groups 63.7 19.3 45 - 54 51.6 8.9 55 - 64 29.2 65 - 74 9.8 % 0 10 20 40 50 70 80 30 60 2019 **2023**

Figure 5. Share of individuals who bought goods or services over the internet by sex and age

Internet shoppers most frequently bought:

- clothes, shoes or accessories 78.1%¹;
- accommodation (from hotels, travel agencies, tour operators or private persons) 35.9%;
- cosmetics, beauty or wellness products 30.4%;
- deliveries from restaurants, fast-food chains, catering services 26.9%;
- sports goods (excluding sport clothing) 25.3%;
- transport services (e.g. local bus, train, flight ticket, taxi ride) 24.6%;
- tickets to cultural or other events 22.6%;

¹ The relative shares were calculated on the basis of individuals who bought goods or services in the last three months before the interview.

• medicine or dietary supplements such as vitamins - 17.1%.

Of those who purchased over the internet in the last three months, 95.5% bought goods or services from national sellers, 27.4% from sellers from EU countries, and 12.9% purchased online from sellers from other countries. 21.3% of individuals bought goods from private persons via website or app (e.g. eBay, Facebook Marketplace). 43.8% of e-shoppers bought goods or services once or twice and 35.9% made three to five purchases.

Digital skills

In 2023, 35.5% of the individuals have basic or above basic digital skills¹. The highest relative share was found among the young people aged between 16 and 24 years (53.2%), and the lowest in the age group 65 - 74 - 7.3%. More than half of people resided in the Yugozapaden region (51.5%) had basic or above basic digital skills, while in the Yuzhen tsentralen region their relative share was 22.5%.

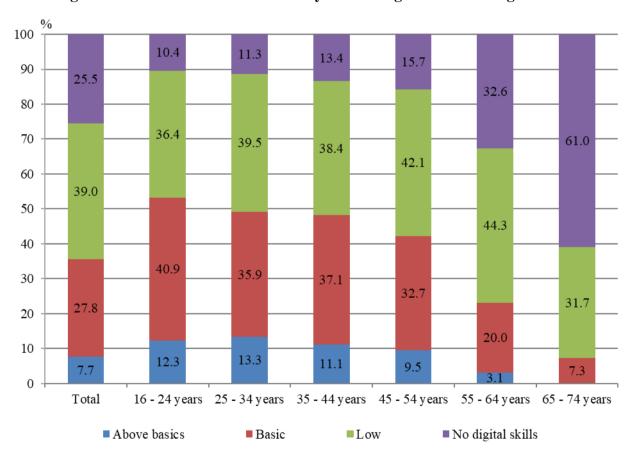


Figure 6. Distribution of individuals by level or digital skills and age in 2023

41.5% of the individuals were able to copy or move files, 30.4% used word processing software, and 26.5% downloaded or installed software or apps.

¹ Digital skills indicator is based on certain activities performed by individuals on the internet or related to the use of software or digital tools. For more information, see the Methodological notes.



3. Share of individuals by selected software related activities and education in 2023

(Per cent)

Activities	Total	Education		
		Basic education and lower	Secondary	Tertiary
Copying or moving files (e.g. documents, data, images, video) between folders, devices	41.5	18.3	36.0	70.7
Using word processing software	30.4	9.9	22.9	61.8
Downloading or installing software or apps	26.5	14.0	21.2	47.2
Creating files incorporating several elements, e.g. text, picture, table, chart, animation, sound	23.2	9.8	15.8	49.1
Changing settings of software, app or device	21.7	10.4	15.7	43.0
Editing photos, video or audio files	20.4	13.0	16.9	33.5
Using spreadsheet software	17.0	5.6	9.9	40.7

32.2% of the individuals indicated that they found information that they considered untrue or doubtful on internet news sites or social media. From them, 36.6% checked the truthfulness of the information found on the internet through:

- checking the sources or finding other information on the internet 76.5% 1;
- discussing the information offline with other persons or using sources, not on the internet 44.2%;
- following or taking part in a discussion on the internet regarding the information 38.9%;

Almost a quarter of individuals (23.8%) encountered messages on the internet that they considered to be hostile or degrading towards groups of people or individuals. These messages were mainly referred to people's political or social views (68.4%)², sexual orientation (46.4%) or racial and ethnic origin - 44.2%.

¹ The relative shares were calculated on the basis of individuals who checked the truthfulness of the information found on the internet.

² The relative shares were calculated on the basis of individuals who encountered hostile or degrading messages online

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 according to the Commission implementing Regulation (EU) 2022/1399. The survey was jointly financed by the NSI and the European Commission under a signed agreement between the two institutions. 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 April - June 2023, 3 919 randomly selected households and 8 408 individuals were surveyed. The survey was conducted by face-to-face interview, carried out by NSI staff. The 2023 questionnaire comprised several modules, which collect information about availability and use of the internet in households and by individuals, e-government, e-commerce, digital skills, privacy and protection of personal data, as well as questions related to the socio-demographic characteristics of the 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 the last 12 months before the survey.

Digital skills indicator measures people's digital literacy and competence, and it is based on selected activities related to internet and software use performed by individuals in five specific areas: information and data literacy; communication and collaboration; problem solving; digital content creation and safety skills. According to the variety and complexity of activities performed, several levels of skills are computed - no skills, low, basic or above basic digital skills.

More information and data from surveys on Information and Communications Technologies usage in households and by individuals in 2023 can be found at the NSI's website (http://www.nsi.bg/en/node/6096) and in Information System 'Infostat' (https://infostat.nsi.bg/infostat/pages/module.jsf?x_2=240&lang=en).