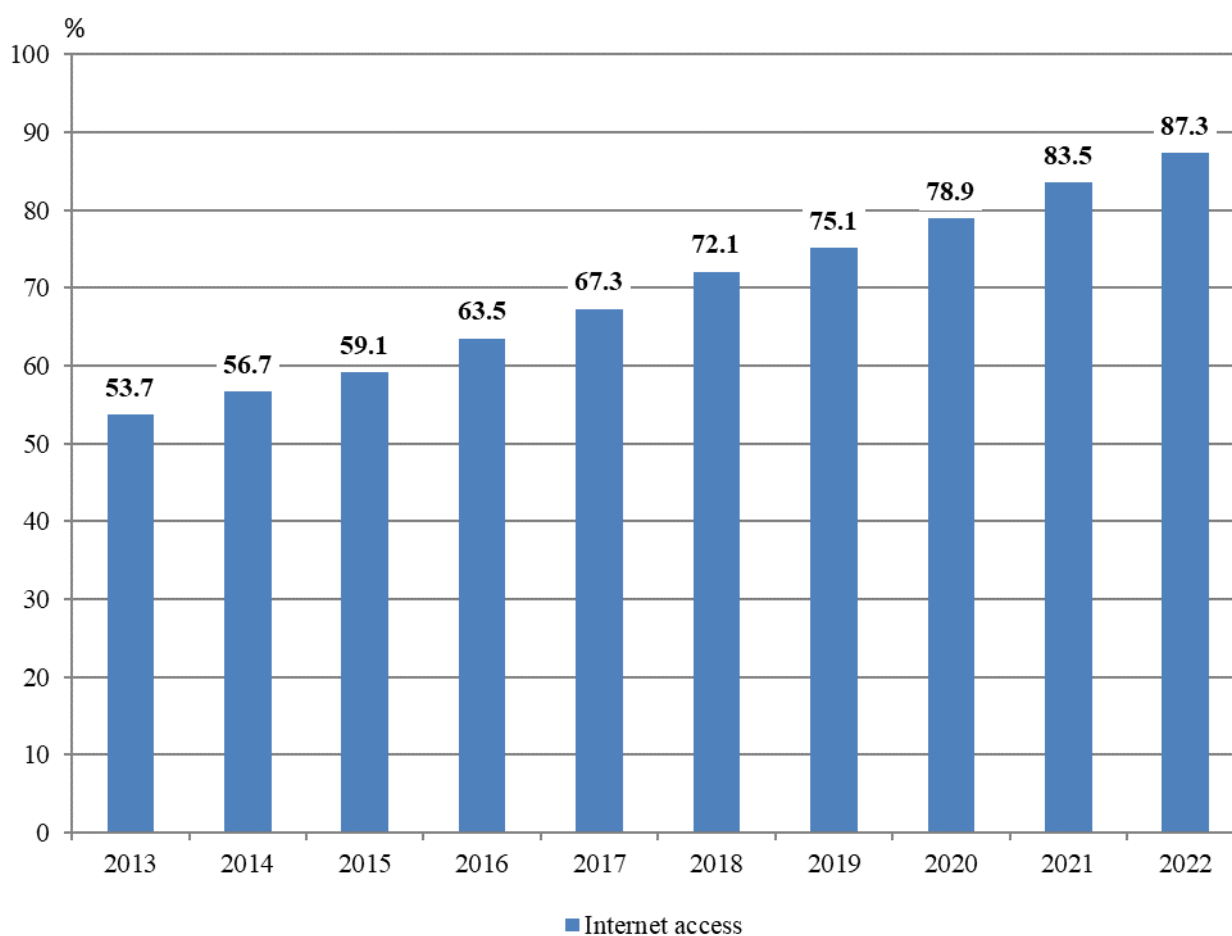


INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) USAGE IN HOUSEHOLDS AND BY INDIVIDUALS IN 2022

In 2022, 87.3% of the households in Bulgaria had internet access at home, which was by 3.8 percentage points more compared to the previous year. The annual growth tendency of the relative share of households with internet access was retained, and for the period 2013 - 2022 the relative share increased by 33.6 percentage points.

Figure 1. Share of households with internet access



The highest relative share of households with internet access was found in Yugozapaden region (90.5%), while the lowest relative share was observed in Severozapaden region - 83.1%.

The relative share of the households resided in towns that had internet access was 88.8% and of those resided in villages - 82.4%. Households with children used the global network more actively as 96.0% of them had internet access, compared to 84.4% of the households without children (table 1).

1. Share of households with internet access by statistical region, residence and household type in 2022

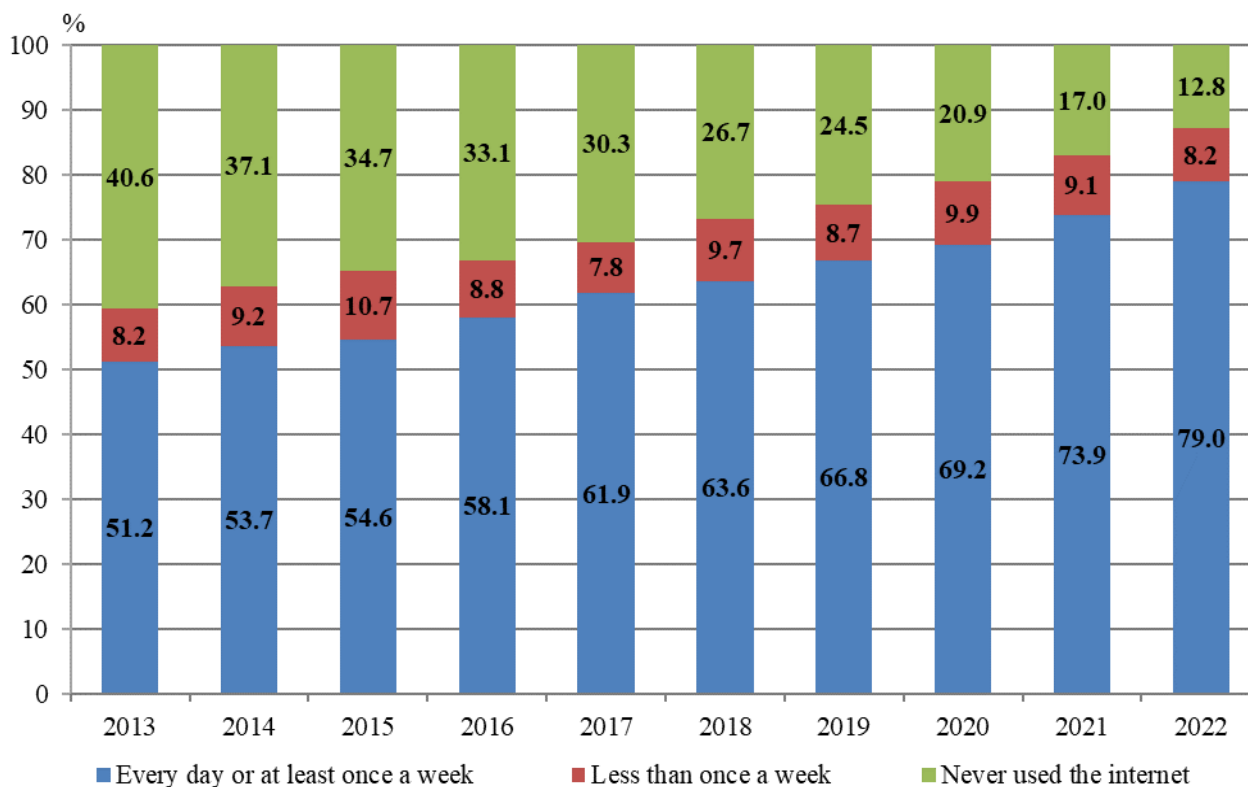
(Per cent)

| | Total | Households with children | Households without children |
|------------------------------|-------------|--------------------------|-----------------------------|
| Total | 87.3 | 96.0 | 84.4 |
| By statistical region | | | |
| Severozapaden | 83.1 | 96.5 | 78.7 |
| Severen tsentralen | 85.6 | 97.5 | 82.0 |
| Severoiztochen | 85.4 | 97.6 | 81.3 |
| Yugoiztochen | 84.9 | 89.8 | 83.4 |
| Yugozapaden | 90.5 | 97.4 | 88.1 |
| Yuzhen tsentralen | 88.6 | 95.9 | 85.9 |
| By residence | | | |
| Town | 88.8 | 96.1 | 86.5 |
| Village | 82.4 | 95.7 | 77.4 |

Use of the internet

In 2022, 79.0% 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 61.2% took advantage of the resources of the global network several times during the day. The share of those who had never surfed the internet decreased to 12.8%.

Figure 2. Structure of individuals by frequency of internet usage





The most active users of the internet were the young people aged between 16 and 24 years (95.1%), as well as those with tertiary education - 94.2%. Males used the internet more than females - respectively 79.9% and 78.0%.

Individuals used the network mostly for communication as 67.3% of them carried out phone or video calls (using applications, e.g. Viber, WhatsApp, Skype, FaceTime, Messenger, Snapchat, Zoom, MS Teams, Webex), and 63.4% participated in social networks (Facebook, Twitter, Instagram, Snapchat, TikTok, etc.).

2. Share of individuals by purposes of internet usage and sex in 2022

(Per cent)

| Purposes | Total | Male | Female |
|--|-------|------|--------|
| Communication | | | |
| Making calls (including video calls) over the internet | 67.3 | 66.8 | 67.9 |
| Participating in social networks | 63.4 | 63.3 | 63.6 |
| Using instant messaging, i.e. exchanging messages | 61.5 | 61.8 | 61.1 |
| Sending / receiving e-mails | 42.8 | 41.5 | 44.0 |
| Access to information | | | |
| Finding information about goods or services | 60.2 | 59.8 | 60.6 |
| Reading online news sites/ newspapers/ news magazines | 50.9 | 52.8 | 49.0 |
| Civic and political participation | | | |
| Expressing opinions on civic or political issues on websites or in social media | 16.8 | 16.8 | 16.8 |
| Taking part in online consultations or voting to define civic or political issues | 7.6 | 7.4 | 7.7 |
| Use of entertainment | | | |
| Listening to music or downloading music | 41.6 | 44.9 | 38.4 |
| Watching video content from sharing services | 27.5 | 29.3 | 25.7 |
| Watching internet streamed TV (live or catch-up) from TV broadcasters | 23.0 | 24.2 | 21.8 |
| Playing or downloading games | 15.4 | 19.5 | 11.4 |
| Watching video on demand from commercial services | 8.4 | 9.5 | 7.4 |
| Listening to podcasts or downloading podcasts | 5.3 | 6.3 | 4.4 |
| eHealth | | | |
| Seeking health-related information | 39.1 | 30.1 | 47.8 |
| Accessing personal health records online | 16.1 | 11.9 | 20.1 |
| Making an appointment with a practitioner via a website or app | 11.2 | 6.6 | 15.6 |
| Using other health services via a website or app instead of having to go to the hospital or visit a doctor | 3.3 | 2.7 | 3.9 |
| Other online services | | | |
| Internet banking | 22.4 | 21.2 | 23.6 |
| Selling of goods or services via a website or app | 9.9 | 11.0 | 8.8 |



E-government

In the last 12 months, 26.4% of the individuals used the global network for interaction with the public authorities or public services. Females were more active than males in the use of online services offered by the public authorities or public services - respectively 28.5% and 24.2%.

3. Share of individuals who interacted with public authorities or public services by purposes and sex in 2022

(Per cent)

| Purposes | Total | Male | Female |
|--|-------------|-------------|-------------|
| Total | 26.4 | 24.2 | 28.5 |
| Accessing personal information stored about you by public authorities or public services | 14.5 | 13.7 | 15.2 |
| Downloading/printing any official forms from a website or app of public authorities or public services | 13.3 | 11.6 | 14.9 |
| Obtaining information (e.g. about services, benefits, entitlements, laws, opening hours) | 9.7 | 8.3 | 11.0 |
| Submitting tax declaration via the NRA website | 9.7 | 7.7 | 11.6 |
| Receiving any official communication/document by public authorities | 6.9 | 6.7 | 7.1 |
| Accessing information from public databases or registers | 5.6 | 5.1 | 6.1 |
| Requesting official documents or certificates | 3.9 | 3.7 | 4.1 |
| Making any appointment or reservation via a website or app with public authorities or public services | 3.8 | 3.5 | 4.0 |
| Requesting benefits or entitlements | 2.1 | 1.6 | 2.4 |
| Making other requests, claims or complaints (e.g. report theft to the police, launch a legal complaint, request legal aid, initiate a civil claim procedure in front of a court) | 1.3 | 1.3 | 1.3 |

Problems that individuals most often encountered when using a website or app of public authorities or public services were:

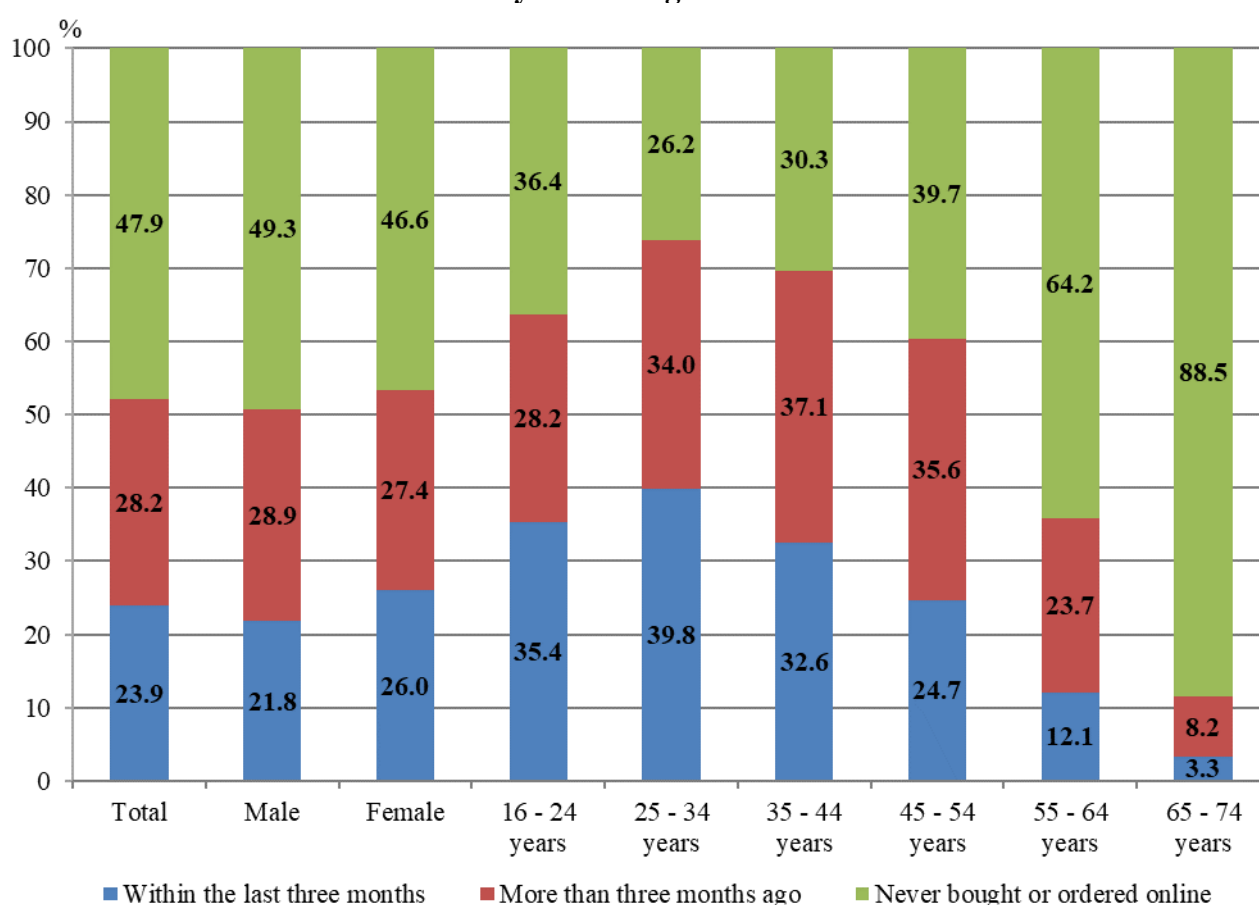
- technical problems experienced when using website or app - 22.6%¹;
- website or app was difficult to used - 14.2%;
- problems in using the electronic signature or electronic identification (eID)- 6.8%;
- lack of access to the service on smartphone or tablet - 4.4%;
- inability to pay online - 4.0%.

¹ The relative share were calculated on the basis of individuals who interacted with public authorities or public services over the internet.

Electronic commerce (e-commerce)

In 2022, 23.9%¹ of individuals bought goods or services for private use over the internet, and over a five-year period this relative share has almost doubled. The highest relative share of individuals who purchased goods or services online was found in Severoiztochen and Yugozapaden region - respectively 31.1% and 29.1%, while the lowest relative share was observed in Severen tsentralen region - 14.8%. The most active in internet shopping were those with tertiary education with a relative share of 42.7%, as well as people in the age group 25 - 34 years (39.8%). Females were more active in online shopping than males - respectively 26.0% and 21.8%.

Figure 3. Structure of individuals who bought goods or services over the internet by sex and age in 2022



Internet shoppers most frequently bought:

- clothes, shoes or accessories - 81.3%²;
- accommodation (from hotels, travel agencies, tour operators or private persons) - 30.5%;
- sports goods - 30.4%;
- cosmetics, beauty or wellness products - 27.0%;
- deliveries from restaurants, fast-food chains, catering services - 26.5%;

¹ The relative share refers to individuals who bought goods or services in the last three months before the survey.

² The relative shares were calculated on the basis of individuals who bought goods and services in the last three months before the survey.

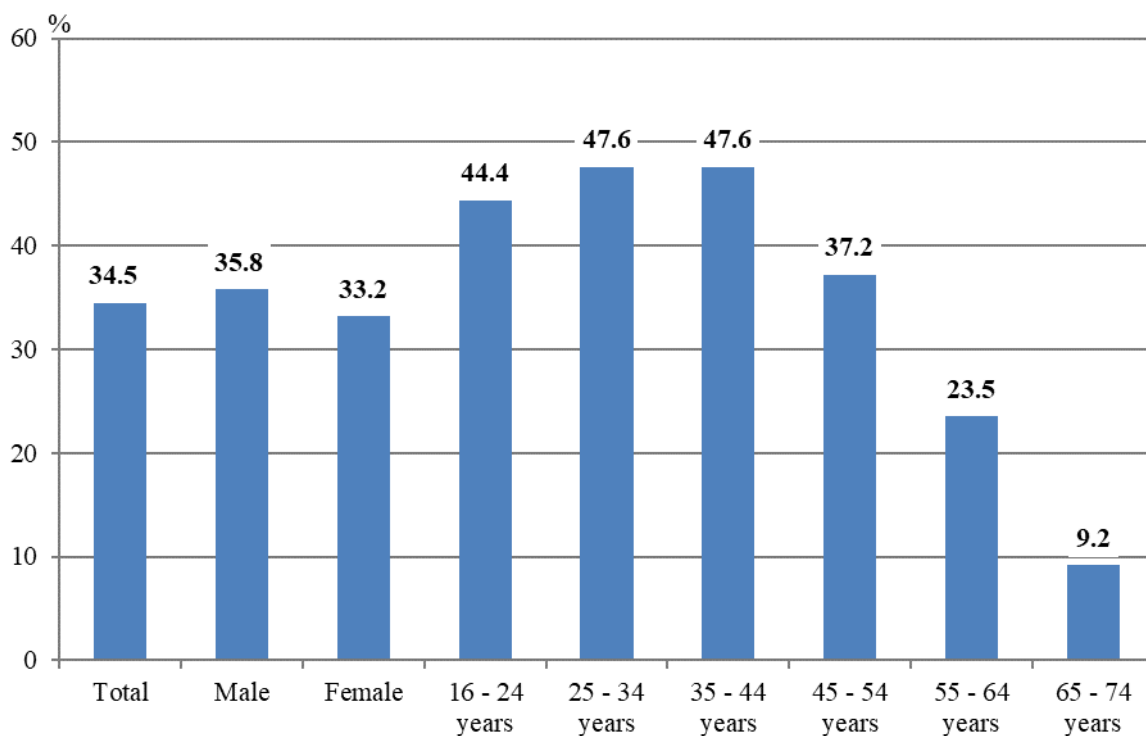
- transport services (e.g. local bus, train, flight ticket, taxi ride) - 19.3%;
- tickets to cultural or other events - 17.9%;
- medicine or dietary supplements such as vitamins - 15.2%.

Of those who purchased over the internet, 94.4% bought goods or services from national sellers, 32.0% from sellers from EU countries, and 18.0% purchased online from sellers from other countries. 22.1% of individuals bought goods from private persons via website or app (e.g. eBay, Facebook Marketplace).

Internet of Things (IoT)

In 2022, 34.5% of individuals used internet-connected smart devices or systems for private purposes. The most active were those with tertiary education (57.1%), as well as the people aged between 25 and 44 years - 47.6%. Males used internet-connected devices or systems more than females - respectively 35.8% and 33.2%.

Figure 4. Share of individuals who used internet-connected devices or systems for private purposes by sex and age in 2022



The most frequently used internet-connected device was the smart TV, which was used by 30.1% of individuals in their daily lives, and 12.7% had a smart watch or a fitness band. Internet-connected home appliances such as robot vacuums, fridges, ovens, coffee machines, etc. were used by 4.3% of individuals.

The main reasons why individuals do not use internet-connected devices or systems were:

- no need to use - 39.4%;
- costs too high - 13.9%;
- didn't know that such devices and systems exist - 6.7%;
- lack of skills to use those devices or systems - 6.0%.



ICT and the environment

In 2022, 52.5% of individuals kept in their household the electronic devices (mobile phone, smartphone, laptop, tablet or desktop computer) that they no longer used, and 22.2% sold or gave them away. 6.2% of individuals disposed their old devices in electronic waste collection and recycling.

When bought mobile phone, smartphone, tablet or desktop computer, 13.7% of individuals considered important environmental characteristics of the device such as energy efficiency, possibility to extend the life span by buying extra guarantee or ecodesign. For the majority of users (62.0%), the determining purchase factor was the price, and for 42.8% - the technical characteristics (hard drive characteristics, processor speed) of the device were important.



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) 2020/1013. The survey was jointly financed by the NSI and by 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 2022, 3 966 randomly selected households and 8 596 individuals were surveyed. The survey was conducted by face-to-face interview, carried out by NSI staff. The 2022 questionnaire comprised several modules, which collect information about availability and use of the internet in households and by individuals, e-government, e-commerce, internet of things and ICT and the environment, 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.

The **Internet of Things** (IoT) refers to the use of internet-connected devices or systems (often called smart devices) that can also be connected to each other and can be monitored or remotely controlled via the internet.

More information and data from surveys on Information and Communications Technologies usage in households and by individuals in 2022 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).