



SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN HOUSEHOLDS AND BY INDIVIDUALS: 2023

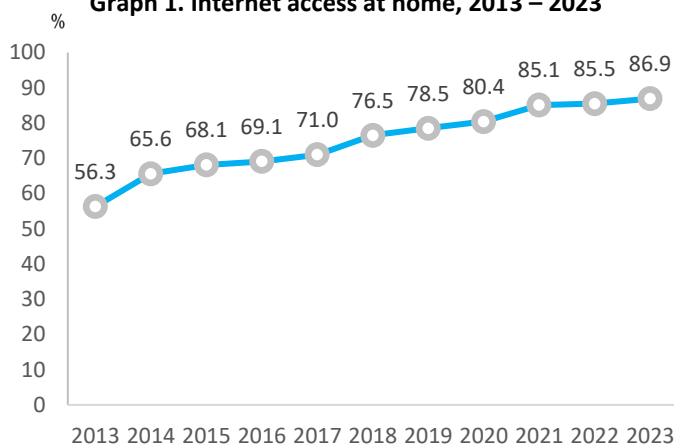
The Hellenic Statistical Authority (ELSTAT) announces data on the use of information and communication technologies (ICT) by households and their members. The data derive from the sample Survey on the Use of Information and Communication Technologies in Households and by Individuals for the year 2023.

The aforementioned survey was conducted on 5,653 private households and equal number of members throughout Greece, with the only prerequisite that there was, at least, one member aged 16-74 in each household.

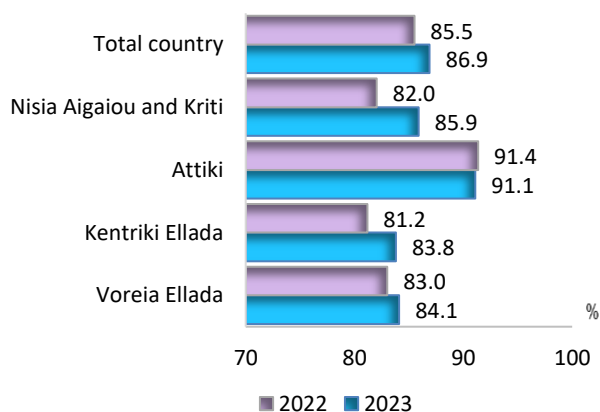
INTERNET CONNECTION AT HOME

According to the survey results, 86.9% of households have access to the internet from home (Graph 1, Annex — Table 1). Compared to 2013, a 54.4% increase is recorded in internet access at home. Graph 2 depicts internet access by great geographical area (NUTS1).

Graph 1. Internet access at home, 2013 – 2023



Graph 2. Geographical distribution of households with internet access at home by NUTS1 region, 2022 - 2023



Information on methodological issues:

Population, Employment and Cost of Living Statistics Division
Households' Special Statistics Unit
G. Ntouros- M. Chalkiadaki - I.Zouliatis
Tel. : 0030 213 1352174, 2896, 2941
E-mail: g.ntouros@statistics.gr,
m.chalkiadaki@statistics.gr, i.zouliatis@statistics.gr

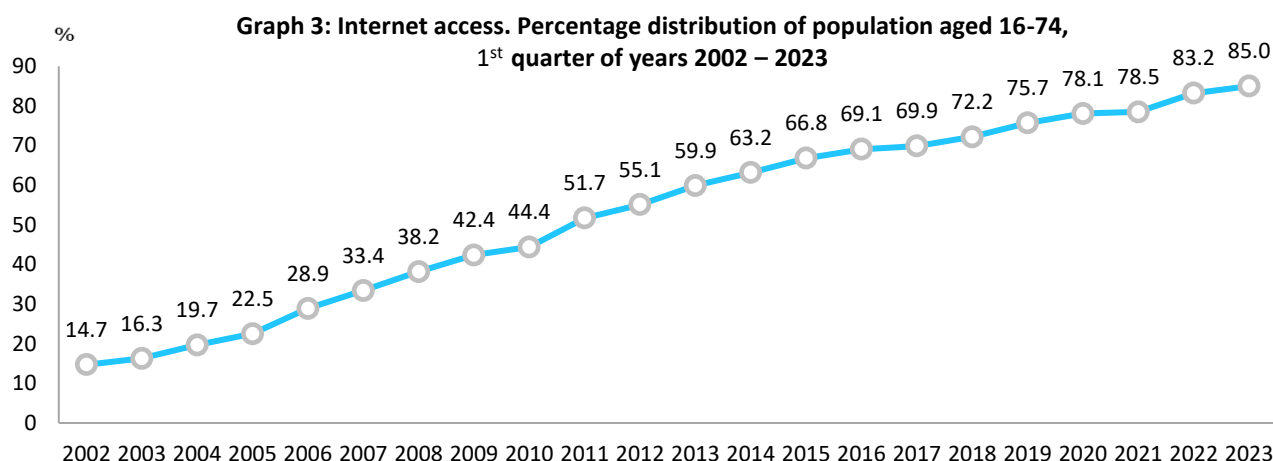
Information for data supply:

Tel. : 0030 213 135 2022, 2308, 2310
E-mail: data.dissem@statistics.gr

USE OF THE INTERNET

- 85.0% of persons aged 16-74 used the internet in the first quarter of 2023, recording an increase of 2.2% compared to 2022.

Graph 3 shows the share of the population aged 16-74 using the internet for the period from 2002 (when the survey was first conducted) until the present day (Annex — Table 1).



According to the survey data, daily or almost daily use of the internet is recorded for 94.1% of those who used the internet in the first quarter of 2023.

INTERNET ACTIVITIES

As regards the reasons for using the internet, main activities are reading online news sites / newspapers / news magazines and finding information about goods or services (89.2% and 89.1%, respectively). The percentages concern 9 out of 10 persons aged 16-74, who used the internet in the first quarter of 2023. The internet activities are presented, in descending order, in the Table 2 of the Annex.

The activities that recorded the largest increase, since last year (1st quarter 2022 – 1st quarter 2023), are selling goods or services via a website or app (e.g. eBay, Facebook Marketplace, Shpock) (+14.9%) and posting opinion on civic or political issues (e.g. via websites or social media, such as Facebook, Twitter, Instagram, YouTube) (+10.9%). The largest decrease, since last year, has been recorded in taking part in online consultations or voting to define civic or political issues increase (-29.5%) and in seeking health-related information (-15.9%).

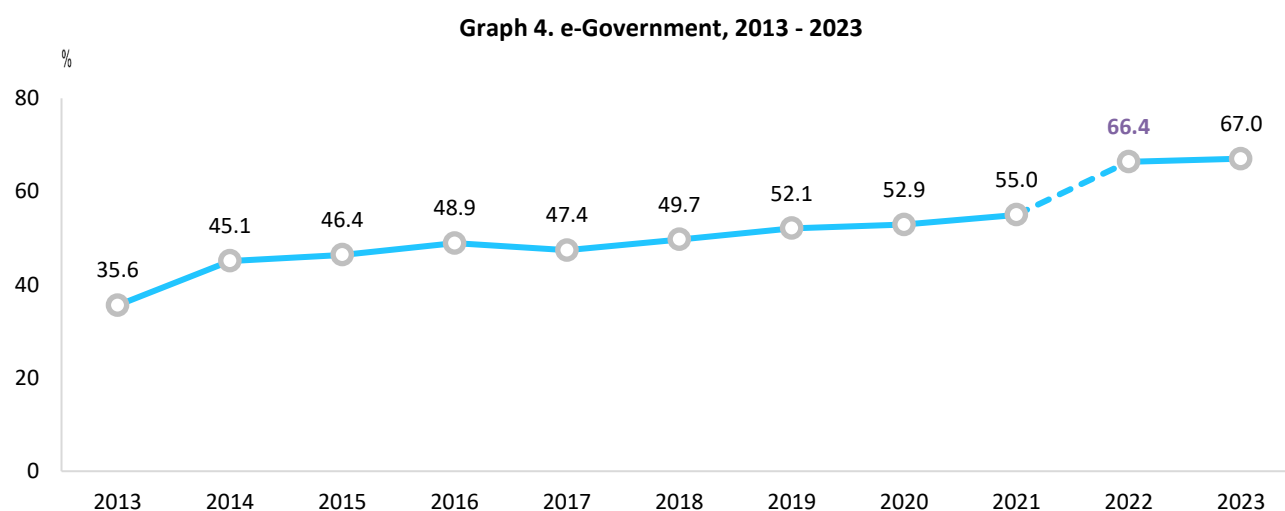
E-GOVERNMENT

E-Government is, generally, defined as the introduction of Information and Communication Technologies (ICT), especially the Internet, into the public administration and, in particular, the new administrative practices introduced by these technologies.

Citizens contact and interact with public services and authorities by using websites or web applications in order to obtain information, exercise rights or fulfill obligations in several areas such as family, health and welfare, education, property and taxation, work and insurance, business activity, armed forces / army, agriculture and livestock, etc.

The survey collected information on the actions carried out electronically by citizens in the context of transactions with public services and authorities. Included are transactions with public services at national and regional level. The main indicators that emerged are listed below:

- As regards the total population of the country aged 16 to 74 years old, almost 2 out of 3 (67.0%) used e-government services, during the period April 2022 – March 2023, for private purposes. Compared with the data recorded during the previous year, for the period April 2021 – March 2022 (66.4%), no statistically significant change (+0.9%) is recorded. It should be noted that for the calculation of this indicator, until 2021, services and actions done in the framework of e-government, had not been collected analytically. Graph 4 presents relevant percentages for the years 2013 – 2023.

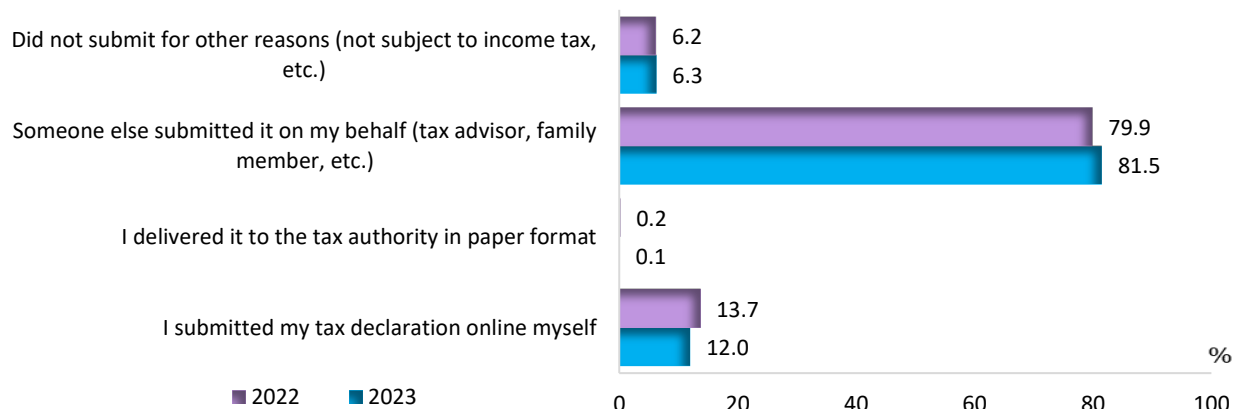


- As regards population aged 16-74 having accessed the internet in the period April 2022 – March 2023, the share of persons who used e-government services, for private purposes, amounts to 77.8% (- 1.5%).
- Almost 6 out of 10 (61.8%) received official documents in their personal account (tax payment, copy of criminal record, notarial deeds and certificates from municipalities / communities, vaccination certificate, rapid test result, vaccination appointment notification and reminder, prescription referral, results for state exams, etc.) through a website or application of a public service or authority.

As personal account is considered a personal email, the digital citizen mailbox at my.gov.gr or at the Independent Public Revenue Authority (“my AAE”), the mobile phone via SMS received, but also mobile applications such as “myhealth” app.

- 4 out of 10 (39.1%) made an appointment with a public service through a website or application, for private purposes. Most common examples are appointments with KEP, EFKA, OAED, AAE, with an NHS doctor in a Primary Health Care Unit - including the appointment for Covid-19 vaccination.
- 12.0% of population aged 16-74, having accessed the internet during the period April 2022 – March 2023, submitted their tax declaration online themselves. A decrease by 12.4% has been recorded, compared to last year (Graph 5).

Graph 5. Online submission of tax declaration. Percentage distribution of population having accessed the internet during April 2022 - March 2023 and April 2021 -March 2022



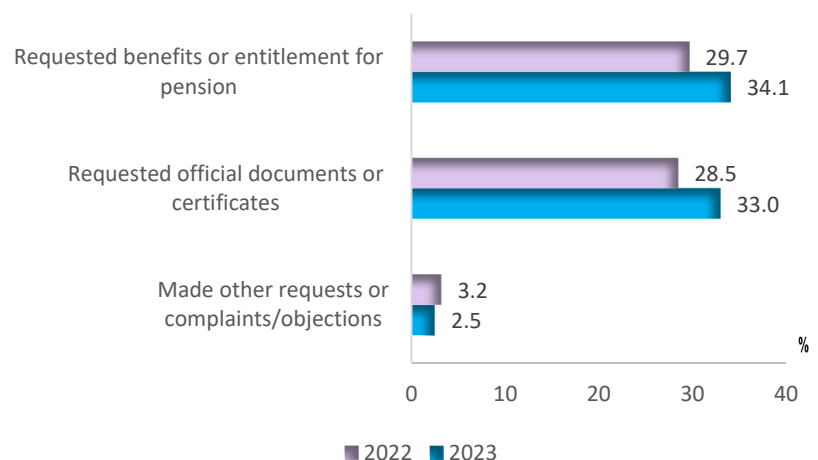
Another indicator is derived from the share of population that submit online requests through websites or applications of public services and authorities. The examples have been chosen to reflect the most used services, services which in a “mature” level of e-government are available online, rather than requiring citizens to go to public service premises.

- 5 out of 10 (49.8%) aged 16-74, having accessed the internet during the period April 2022 – March 2023, submitted online requests for official documents or certificates, benefits (including market / power / fuel pass, etc.) or made complaints / objections. An increase by 19.4% has been recorded compared to last year (April 2021 – March 2022: 41.7%).

Specifically, among the population aged 16-74 years old having accessed the internet during the period April 2022 – March 2023 (Graph 6):

- 34.1% requested online benefits (housing allowance, heating, unemployment, market / fuel pass, etc.) or entitlement for pension,
- 33.0% submitted online requests to receive an official document or certificate (family status, birth, marriage / legal partnership certificate, copy of car registration license, etc.),
- 2.5%) made other requests or complaints / objections.

Graph 6. Submission of online requests / objections. Share of population having accessed the internet during April 2022 - March 2023.



- 56.8% of persons that didn't submit online any request for official document or certificate and didn't submit any complaint / objection, did not have to, while for individuals having to submit, the reasons mentioned were as follows:
 - another person (tax consultant, friend, relative) did it on their behalf (73.9%),
 - lack of skills or knowledge (24.8%),
 - concerns about the security of personal data or credit card details they had to provide (2.2%) and,
 - lack or electronic signature or electronic identification (eID) (1.8%).

ELECTRONIC IDENTIFICATION (eID)

The survey recorded, for the first time, the use of electronic identification (eID). Electronic Identification is the process which guarantees the unambiguous identification of a person and ensures that the right service is provided to the person who is really entitled to it. Electronic identification methods were recorded, of advanced/high or basic/adequate level of assurance, used in applications of the Greek public services and authorities (such as those of gov.gr), but also in services / applications of the private sector such as for web banking.

An advanced/high or basic/adequate level of security is achieved when, in addition to the electronic identification codes known to the user, an additional one-time password (OTP) is used from a relevant certified application (app) or device (token OTP generator) or a confirmation code is sent to the mobile phone registered by the user for this reason.

The codes of CCPSDD (formerly taxisnet) are of basic/adequate level of assurance, given that the key number is obtained from the tax service in person (1st stage of identification) and then the identification codes (username / password) are used (2nd stage of identification). Examples of services for which a basic/adequate level of identification is required are the issuance of an authorization, the issuance of an affirmation, the digital certification of a document (original signature), the digital certification of a private agreement, as well as the submission of the tax declaration.

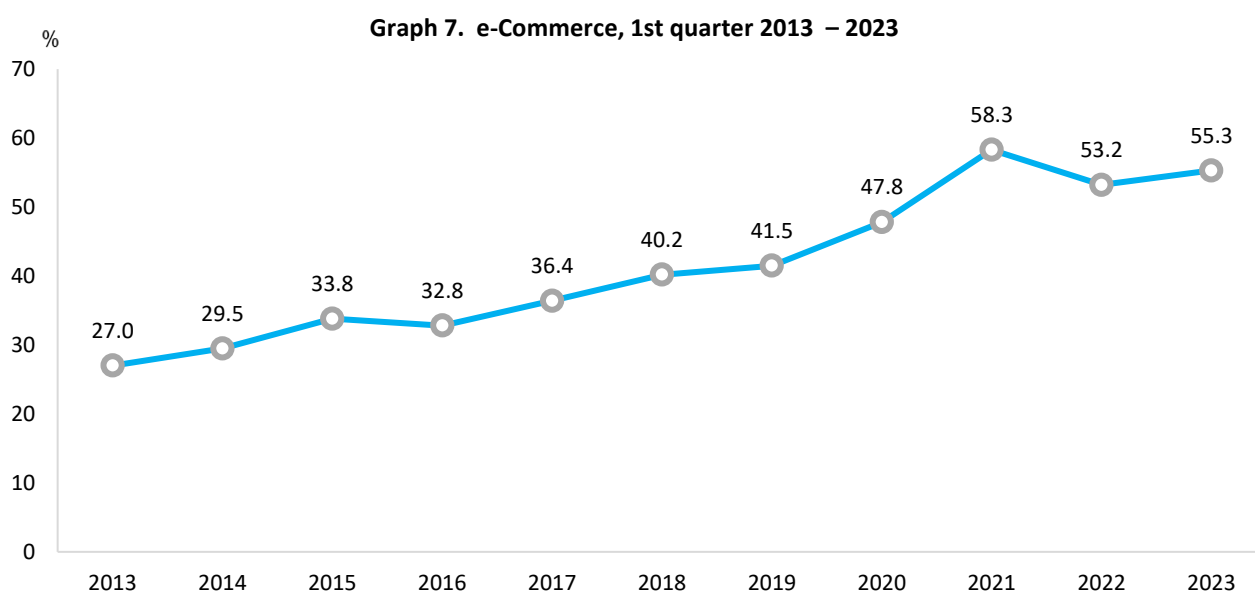
An example of an advanced/high level of assurance is the use of identification codes (username / password) and a one-time password for accessing to online banking services (web banking).

- As regards the total population of the Country aged 16 to 74 years old, 2 out of 3 (66.4%) used e-ID, of advanced/high or basic/adequate level of assurance, during the period April 2022 – March 2023, for private purposes.
- As regards the population aged 16 - 74 having accessed the internet during the period April 2022 - March 2023, the share of population having used e-ID, of advanced/high or basic/adequate level of assurance, for private purposes, amounted to 77.0 %.
- Among those having used e-ID, of advanced/high or basic/sufficient level of assurance, 9 out of 10 (90.9%) were identified to use services provided by public services and authorities, and 8 out of 10 (79.3%) to use services, such as online banking, provided from private businesses.
- 3 out of 10 (29.9%) of those who did not use electronic identification, did not do so because they were not aware of its existence.
- 43.6% among those who knew about electronic identification and had means of electronic identification, did not use eID because they preferred handling their issues in person or because they did not have the necessary skills to use it.

E-COMMERCE

- 55.3% of population aged 16-74, having accessed the internet even once, in the first quarter of 2023, purchased or ordered goods or services over the internet for private purposes (Annex — Table 1).

Compared with the first quarter of 2022 (53.2%) an increase by 4.0% is recorded, while an increase by 104.8% is recorded compared to 2013 (Graph 7).



Regarding physical goods purchased or ordered over the internet in the first quarter of 2023, for private purposes (Table 3), it is observed that:

- 73.6 % of the persons aged 16-74 years purchased clothing (including sports clothing), footwear and accessories (bags, jewellery, etc.),
- 44.1% purchased deliveries from restaurants, fast-food chains, catering services,
- 27.3% purchased sport goods (e.g. sports equipment / accessories), special sportswear and footwear for sports, excluding sportswear and footwear included in clothing and footwear,
- 27.2% purchased computers, tablets, mobile phones or accessories (printers, cables, cases, headphones, etc.),
- 25.3% purchased cosmetics, beauty or wellness products and,
- 19.0% purchased food or beverages from supermarkets (physical or online stores).

As regards products purchased in digital form:

- 26.3% of the persons aged 16-74 years, who bought online in the first quarter of 2023, purchased films or series as streaming service or downloads,
- 13.1% of the persons purchased music as a streaming service or downloads,
- 8.4% of the persons purchased computer or other software as downloads including upgrades,

- 6.0% of the persons purchased games online or as downloads for smartphones, tablets, computers or game consoles.

As regards the services mostly purchased online:

- 37.3% of the persons aged 16-74, who bought online in the first quarter of 2023, bought subscriptions to the internet or mobile phone connections,
- 32.3% of the persons aged 16-74 bought tickets for cultural or leisure events (cinema, theatre, concerts, etc.),
- 22.0% of the persons aged 16-74 bought subscriptions to electricity, water or heating supply, waste disposal or similar services,
- 11.8% of the persons aged 16-74 bought tickets for sport events.

More details on the products and services purchased online, in descending order, are presented in Table 3 of the Annex.

Furthermore, the survey recorded information on the purchase of transport / travel and accommodation services, both from businesses and natural persons / individuals, in the context of the collaborative economy. The purchases for these services recorded an increase during the first quarter of 2023 as compared to the first quarter of 2022. More specifically:

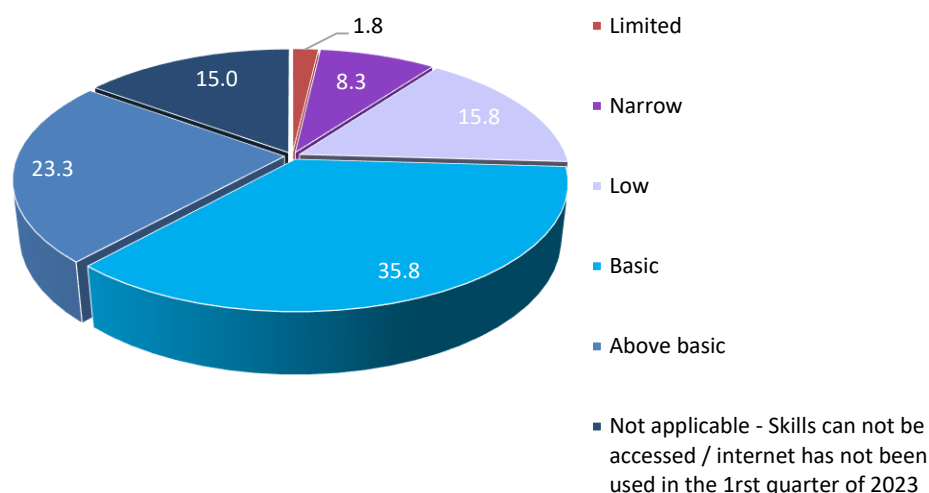
- 38.3% of the persons aged 16-74 who bought online in the first quarter of 2023 purchased transport services from public transport operators, such as long-distance bus lines providers (KTEL), urban transport operators, taxi companies (including UBER), airlines and coastal shipping companies, etc. An increase of 37.3% has been recorded in the first quarter of 2023 compared to the first quarter of 2022 (27.9%).
- 1.6% purchased transport / travel services from natural persons / individuals via online platforms or applications. An increase of 14.3% has been recorded in the first quarter of 2023 compared to the first quarter of 2022 (1.4%).
- 25.9% purchased accommodation services from businesses, such as hotels or travel agencies. An increase of 53.3% has been recorded in the first quarter of 2023 compared to the first quarter of 2022 (16.9%).
- 16.8% purchased accommodation services from natural persons / individuals via online platforms or applications, such as Airbnb, Homeaway, ihaHolidays. An increase of 110.0% has been recorded in the first quarter of 2023 compared to the first quarter of 2022 (8.0%).

DIGITAL SKILLS (e-skills)

Digital skills are defined as a set of knowledge, skills and behaviors that give the user digital competence with specific results. They enable people to locate and retrieve information needed, to create and share digital content, to communicate, interact and collaborate in the digital environment.

- As regards the total population of the country aged 16 to 74 years old, 6 out of 10 (59.1%), have at least basic digital skills. The relevant results are depicted in Graph 8 below:

Graph 8. Overall digital skills (e-skills)



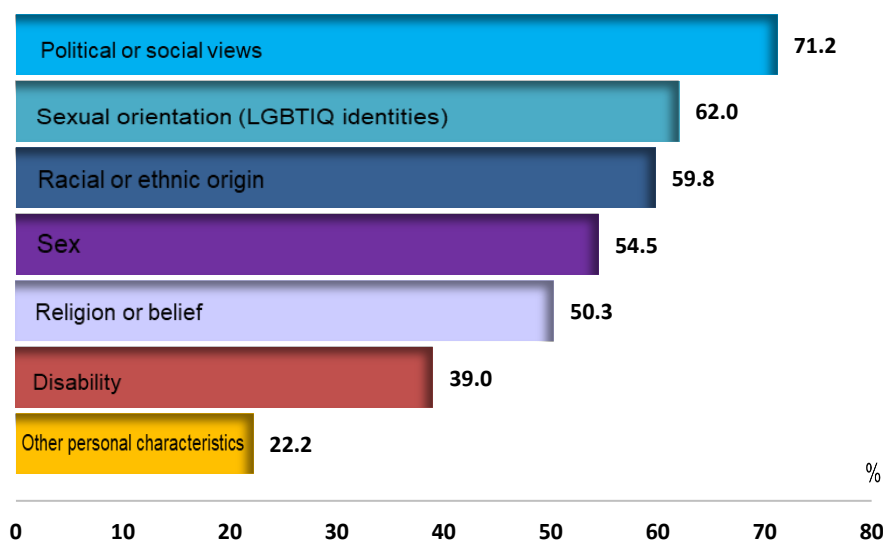
In the first quarter of the year, 54.0% of persons who used the internet, encountered, and checked information, videos, photos they considered untrue or doubtful (40.6%). 80.1% of them checked this information through other internet sources, 23.8% participated in discussions on the internet, and 45.9% checked them in offline sources.

Furthermore, for the first time, information was collected on whether those who used the internet in the first quarter of the year encountered degrading or hostile messages and news about specific individuals or specific groups of individuals.

- 3 out of 10 (30.3%) reported encountering related messages / news on blogs, vlogs, social media, or news sites.

The reasons for the degrading information are listed in Graph 9 below:

Graph 9. Degrading online messages by reason. Percentage distribution of population having encountered degrading messages / news in blogs / vlogs / social media / news sites. 1st quarter 2023



ANNEX

Table 1. Survey on the use of information and communication technologies from households and by individuals. Basic figures, 2022 and 2023

	2022	%	2023	%
TOTAL COUNTRY POPULATION AGED 16-74 YEARS	7,608,143	100.0	7,557,544	100.0
Population aged 16-74 having accessed the internet during the 1 st quarter of the years	6,327,743	83.2	6,424,685	85.0
Population aged 16-74 having ever accessed the internet	6,545,020	86.0	6,603,752	87.4
Population aged 16-74 having used e-government services (April 2021 - March 2022), (April 2022 - March 2023)	5,048,844	66.4	5,066,984	67.0
Population aged 16-74 having submitted online tax return April 2022 - March 2023 ⁽¹⁾	873,357	13.7	784,890	12.0
Population aged 16-74 having purchased/ordered goods or services over the internet (1 st quarter of the years) ⁽²⁾	3,484,828	53.2	3,650,262	55.3
TOTAL COUNTRY HOUSEHOLDS (with at least one household member aged 16-74 years)	3,565,317	100.0	3,711,296	100.0
Households with internet access at home	3,048,140	85.5	3,225,170	86.9

(1) % share of the population aged 16-74 years old having accessed the internet during the 1st quarter of 2023.

(2) % share of the population aged 16-74 years old having ever accessed the internet.

Table 2. Internet activities – 1st quarter 2023

INTERNET ACTIVITIES	Share % of population aged 16-74 years having accessed the internet during the 1st quarter of 2023
Reading online news sites / newspapers / news magazines	89.2
Finding information about goods or services	89.1
Making calls (including video calls) over the internet (Skype, Messenger, Facetime, Viber, Whats App, Snapchat, etc.)	84.1
Using instant messaging i.e. exchanging messages, for example via Skype, Messenger, WhatsApp, Viber, Snapchat	81.3
Participating in social networks (Facebook, Twitter, Instagram, Snapchat etc.)	80.1
Sending / receiving e-mails	79.4
Internet Banking via website or app (including mobile banking)	61.2
Seeking health-related information	57.3
Posting opinion on civic or political issues via websites (e.g. blogs, Facebook, Twitter, Instagram, YouTube)	22.3
Looking for a job or sending a job application	10.6
Selling goods or services via a website or app (e.g. eBay, Facebook Marketplace, Shpock)	5.4
Taking part in online consultations or voting to define civic or political issues	4.3

Table 3: e-purchases of goods and services – 1st quarter 2023

GOODS / SERVICES	Share % of population aged 16-74 years having purchased over the internet in the 1st quarter of 2023
Physical goods (that is, goods not in digital form)	
Clothes (including sport clothing), shoes or accessories (e.g. bags, jewellery)	73.6
Deliveries from restaurants, fast-food chains, catering services	44.1
Sport goods (e.g. sports equipment / accessories), special sportswear and footwear for sports, such as skiing, water sports, etc.	27.3
Computers, tablets, mobile phones or accessories (printers, cables, phone cases, headphones, etc.)	27.2
Cosmetics, beauty or wellness products	25.3
Food or beverages from supermarkets (physical or online stores)	19.0
Medicine or dietary supplements	18.5
Consumer electronics (e.g. TV sets, stereos, cameras) or household appliances (e.g. washing machines, cooking machines)	18.2
Printed books, magazines, newspapers	13.5
Furniture, home accessories (e.g. carpets, curtains) or gardening products (e.g. tools, plants)	13.0
Children toys or childcare items (e.g. nappies, bottles, baby strollers)	11.8
Cleaning products or personal hygiene products (e.g. toothbrushes, washing detergents, shampoos, etc.)	11.6

Other physical goods (e.g. tobacco products, electronic cigarettes, vouchers for electronic shops, etc.)	4.9
Music as CDs, vinyls etc., films or series as DVDs, Blu-ray etc. (excluding music /films or series in digital form)	3.3
Bicycles, mopeds, cars or other vehicles or their spare parts	2.9
Goods in digital form	
Films or series as streaming service or downloads	26.3
Music as a streaming service or downloads	13.1
Computer or other software as downloads including upgrades	8.4
Games online or as downloads for smartphones, tablets, computers or game consoles	6.0
e-books, online magazines or online newspapers	5.3
Apps related to health or fitness (excluding free apps)	0.9
Apps related to learning languages, travelling, weather, etc. (excluding free apps)	0.9
Services	
Subscriptions to the internet or mobile phone connections	37.3
Tickets to cultural or other events (cinema, theater, concerts etc.)	32.3
Subscriptions (payments) to electricity, water or heating supply, waste disposal or similar services	22.0
Tickets to sports events	11.8
Household services (e.g. cleaning, babysitting, repair work, gardening)	1.1

EXPLANATORY NOTES

Survey on the Use of Information and Communication Technologies by Households and Individuals The Survey on the Use of Information and Communication Technologies by Households and Individuals (HH ICT) is part of the European Statistical Programme, in which all EU-countries participate. The main purpose of this survey is to study, at European and national level, the degree of ICT use by households. Most of the provided data are used for the benchmarking of the Information Society indicators. The survey was conducted by telephone.

The survey collects data on the access of households to selected information and communication technologies and more specifically data on internet access, transactions / communication with public authorities via the internet (e-government), e-commerce, etc.

The survey was conducted in Greece for the first time in 2002 and is fully harmonised with the corresponding surveys conducted by the other EU Member States.

The survey data are collected via telephone by means of questions answered by one only member of the household, which is randomly selected, with the only prerequisite that he/she is 16-74 years old. The questionnaire helps collecting data with regard to the household, in general, as well as individual information concerning the selected household member.

Legal basis The survey is conducted in the framework of Regulation 2019/1700 of the European Parliament and of the Council establishing a common framework for European statistics on persons and households, based on data collected from individual-level samples, amending Regulation (EC) 2004 /808, and in compliance with the Implementing Regulation 2022/1399 for the statistics of the Information Society.

Reference period 01/01/2023 - 31/03/2023.

Coverage The survey covered all private households throughout Greece, irrespective of their size or socioeconomic characteristics, with the only prerequisite that at least one person aged 16 – 74 years old lives in the household.

Methodology The Survey on the Use of Information and Communication Technologies by Households and Individuals was conducted by using the three-stage stratified sampling, with ultimate unit the individual. The sample of individuals-households was selected among the households having been surveyed in the EU-SILC of the years 2014 - 2021 that are the primary sampling units of the first stage.

The design of the stratification includes two stratification criteria:

1. Region (NUTS 2): The 13 NUTS 2 Regions of Greece including the two Major City Agglomerations for Athens and Thessaloniki.
2. Urbanisation degree: In each Region, the households are allocated on the basis of the urbanisation degree of the Municipal /Local Communities where they belong. With the exception of the two Major City Agglomerations of Athens and Thessaloniki, the stratification by urbanisation degree is as follows:

1	Municipal/Local Communities with at least 30,000 inhabitants
2	Municipal/Local Communities with 5,000 – 29,999 inhabitants
3	Municipal/Local Communities with 1,000 – 4,999 inhabitants
4	Municipal/Local Communities up to 999 inhabitants

The total size of the units of the second stage of the sample amounts to 10,992 households, among which a person aged 16 – 74 years is surveyed, selected with equal selection possibilities among the household members aged 16 – 74 years.

e-Government Electronic Government (eGovernment) means the communication and interaction of citizens with public services and authorities, using Information and Communication Technologies (ICT) and especially the

internet. The citizen's communication with public services and authorities is recorded for the first time detailed by grouped service and action.

The index is calculated based on the following online services / actions:

- o Access to personal information.
- o Access to public database or registry information.
- o Access to general information regarding services provided, working hours, benefits, laws, vaccination for Covid-19, testing, etc.
- o "Downloading" or printing official documents or templates / forms.
- o Making an appointment (with KEP, AADE, EFKA, OAED, ESY (including the appointment for vaccination), etc.).
- o Submitting online a tax return.
- o Apply for official documents or certificates (notarial acts, birth, marriage, family status certificates, criminal record extract, etc.).
- o Apply for benefits (housing, unemployment, heating, child, student, birth, etc.) or for the award of a pension.
- o Submission of complaints / objections.

It is clarified that until 2021 the indicator resulted from one general question that recorded access to general information from websites of public services and authorities, "downloading" or printing of documents or templates/forms and online submission of completed forms/documents.

e-Commerce E-commerce is any paid commercial transaction carried out over the internet using any device, for private purposes. Purchases of products and services, both from businesses and natural persons/individuals, are included. Purchases/orders made via e-mail and not online through a website are not included, while the method of payment or delivery can be any.

e-Skills Digital competence refers to the set of knowledge and skills required to use information and communication technologies (ICTs) and digital media to perform tasks, solve problems and communicate effectively at work and in daily life.

Digital skills, according to the current Eurostat classification, are categorized into five focus areas:

1. **Information and data literacy skills** - Skills to be able to articulate information needs and then to locate and retrieve the digital data. Also, to be able to judge the relevance of the source and the digital needs, to store, organize and manage digital data.
2. **Communication & collaboration skills** - Skills to interact, communicate and collaborate through digital technology.
3. **Digital content creation** - Skills to be able to create and edit digital content, improve it, and integrate information.
4. **Safety skills** - Skills to be able to protect devices used, content and personal data, in digital environments. Also, to protect physical and mental health and to be aware of the environmental impact of digital technologies.
5. **Problem solving skills** - Skills to be able to identify problems in digital environments and solve them, using digital tools, innovative or not.

Great geographical areas (NUTS 1)

Voreia Ellada (Northern Greece): Anatoliki Makedonia, Thraki (East Macedonia and Thrace), Kentriki Makedonia (Central Macedonia), Dytiki Makedonia (West Macedonia), Ipeiros (Epirus).

Kentriki Ellada (Central Greece): Thessalia (Thessaly), Ionioi Nisoι (Ionian Islands), Dytiki Ellada (Western Greece), Sterea Ellada (Central Greece), Peloponnisos (Peloponnese).

Attiki (Attica): Attiki (Attica).

Nisia Aigaiou, Kriti (Aegean Islands and Crete): Voreio Aigaio (Northern Aegean), Notio Aigaio (Southern Aegean), Kriti (Crete).

Map of the 4 Great Geographical Regions (NUTS 1) of Greece



References More information on the survey is available on the webpage of the Hellenic Statistical Authority, www.statistics.gr, Section: Statistics / Industry – Commerce – Services – Transportations / Use of information and communication technologies (ICT) / Use of information and communication technologies (ICT) by Households- Individuals.