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Introduction

One year on, the Czech Statistical Office has issued again its flagship publication on digital society titled **Information Society in Figures 2024**.

The aim of this publication is to bring up-to-date main statistical indicators on the development and use of **digital technologies** in the main areas of our society, both in the **Czech Republic** and in the **EU countries**.

The publication consists of **seven chapters** as follows:

- A. **ICT Infrastructure:** this chapter contains data on the development of the number of voice and broadband subscriptions in the fixed and mobile communication networks. Data about broadband is broken down by type of provided service, speed or type of subscriber.
- B. **Households and digital technologies:** this chapter provides information on access to mobile phones, computers and the internet by selected types of households. Data on households with smart devices of the Internet of Things is also included here.
- C. **Persons and digital technologies:** this chapter includes information on mobile phone and internet users by gender, age or education. Data on social networks, internet banking or online shopping users is provided in more detail here. This information is supplemented with data on using the internet for communication, entertainment activities or performing selected security activities on the internet.
- D. **Enterprises and digital technologies:** this chapter contains indicators about the use of the internet, websites, web sales or social networks by enterprises and their employees. This information is supplemented by data on the usage of paid cloud computing services, data analytics or digital technologies such as AI, 3D printing or Robotics. The chapter, for the first time, includes indicators about the level of digitalization by size groups and industry of enterprises.
- E. **eGovernment:** this chapter informs the readers about selected electronic services provided by public administration such as Czech Point, Data Boxes, Citizen Portal or Electronic identity. Data on electronic tax returns are also included in the chapter. This information is supplemented by data on how citizens use eGovernment services.
- F. **ICT in Education and digital skills:** this chapter gives an overview on ICT equipment of schools and it includes also recent data on the time spent on digital devices by 15-year-olds and on internet activities of students aged 16 years and older. In addition, the chapter includes indicators about the involvement of people in online learning activities or on selected digital skills. This year, for the first time, it provides composite indicators about level of different digital skills.
- G. **eHealth:** this chapter includes data on ICT equipment of physicians' surgeries and about the online services offered on their websites. There is also information on how citizens use the eHealth services.

The data are **broken down** by various criteria, such as type of households, enterprises or physicians' surgeries. In the case of persons aged 16+, data are broken down by gender, age or educational attainment. Thus, readers may learn, how the use of the internet depends on the gender, age or educational attainment of persons or by income of households.

Detailed information on ICT statistics can be found at:

https://www.czso.cz/csu/czso/information_technologies

Prague, April 2024

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The **telecommunications and internet infrastructure** is the cornerstone of majority of information technologies and thus the information society as a whole, as well. Data on the state and trends in the infrastructure of electronic communications in Czechia and the Member States of the European Union in the chapter have been collected from the **telecommunication and internet services providers**, on the contrary to majority of other chapters.

The **Reference Period** is as at 31 December of the reference year, unless otherwise stated.

Information in the chapter applies to services provided in retail only that means services provided to **end users**.

Definitions (sorted alphabetically)

- A **subscriber** (or customer) to publicly accessible services of electronic communications shall mean individual (household) or legal entity (e.g. enterprise or public institution), which has concluded a contract on the use of such services with a provider and has an access to the public switched telephone network or public mobile telephone network within the contracted services.
- **Fixed wired access** to the internet includes connections over following technologies and networks: i) digital subscriber line DSL (ADSL, VDSL, FTTC) using fixed telephone networks, ii) cable modem using coaxial cable television networks (CATV) and iii) optical fibre networks (FTTH/B).
- **Fixed wireless access (FWA)** to the internet is the description of fixed wireless access by means of a radio connection both in licensed (including fixed LTE/5G) and non-licensed (fixed Wi-Fi) frequency bands. The end-point device is at a fixed place, located in a building, dwelling etc.
- **SIM cards** are **prepaid** ones, in which case the customer does not conclude any contract with the provider and buys a credit, which the provider deducts payments for services provided from; and **post-paid** ones in which case customers have a contract concluded with the provider and pay for contracted services by monthly invoice.
- The **number of fixed broadband subscriptions** is measured on the basis of so-called access points (**active connections**) at which services are provided in a fixed point via **fixed wired** or **wireless access**.
- The **number of mobile broadband subscriptions using cellular phone** is measured by the number of data SIM cards with activated voice and data services together, which are provided based on the contract allows the access to mobile broadband in cellular phone.
- The **number of subscriptions of voice services in a fixed telephone network** is measured as the number of the **public switched telephone network (PSTN) lines** and the number of **phone numbers** used for voice services by means of the **IP telephone** (VoIP technology).
- The **number of subscriptions of voice services in a mobile network** is measured by the number of **active SIM cards**, which were used at least once in the recent three months for voice services.

Data for the **Czechia** are taken from data sources of the Czech Telecommunication Office. Further information: www.ctu.cz.

International comparisons were worked out by the CZSO using data from the International Telecommunication Union (ITU World Telecommunication/ICT Indicators Database, December 2023), European Commission and OECD (from data source available in February 2024).

Further information on this theme can be found at (in Czech language only): https://www.czso.cz/csu/czso/telekomunikacni_a_internetova_infrastruktura

A ICT infrastructure

Table A1 Fixed telephone voice subscriptions in Czechia*

	Thousand		
	2015	2020	2022
Total	1 896	1 334	1 241
Subscriber			
Household	831	459	356
Legal entity (e.g. enterprise or public inst.)	1 065	875	885
Technology and subscriber			
Switched network (PSTN stations)	994	530	427
Residential subscriber stations	523	244	181
Business subscriber stations	471	286	246
Internet network (VoIP stations)	902	804	814
Residential subscriber stations	309	216	175
Business subscriber stations	594	588	639

Figure A1 Fixed telephone voice subscriptions, total*

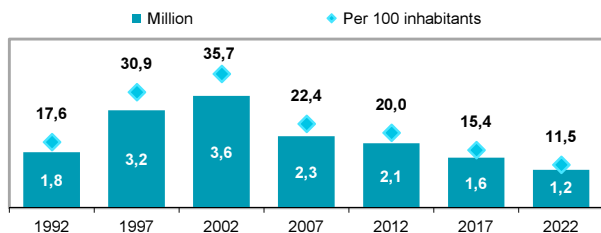


Figure A2 Fixed voice subscriptions* by subscriber (million)

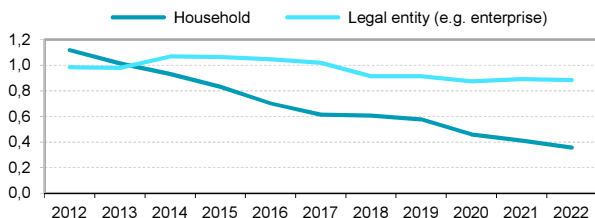
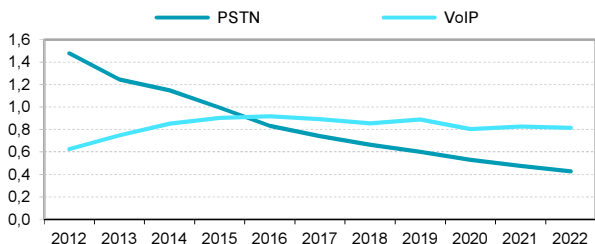


Figure A3 Fixed voice subscriptions* by technology (million)

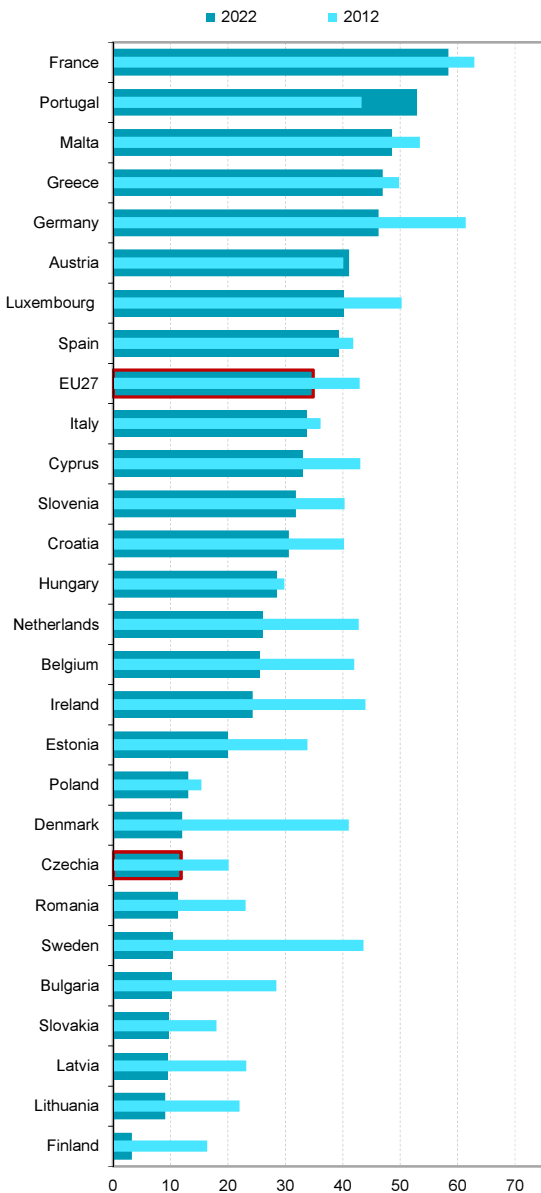


* The number of active residential and business subscriber stations with a contract for voice services over fixed networks.

Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Figure A4 Fixed telephone voice subscriptions in EU countries (per 100 inhabitants)



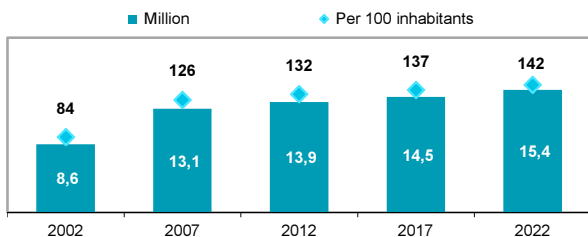
* The number of active residential and business subscriber stations with a contract for voice services over fixed networks.

Source: International Telecommunication Union

Table A2 Mobile telephone voice subscriptions in Czechia

	Active SIM cards (thousand)		
	2015	2020	2022
Total	14 017	14 600	15 408
Subscriber			
Individual (citizen)	9 222	8 836	9 417
Legal entity (e.g. enterprise or public inst.)	4 795	5 764	5 991
Type of service (contract modality)			
Prepaid subscriptions (prepayment)	4 893	3 947	4 059
Postpaid subscriptions (contract)	9 124	10 653	11 349

Figure A5 Mobile telephone voice subscriptions, total*



* The number of SIM cards in mobile phones that were used at least once in the last three months for voice operations.

Figure A6 Mobile telephone voice subscriptions by type of service (contract modality) (million)

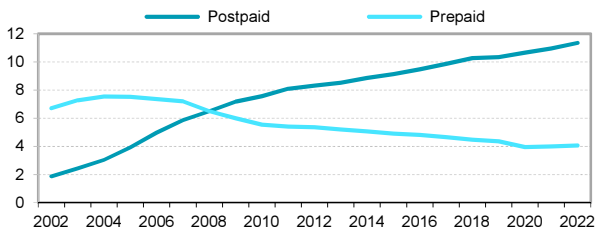
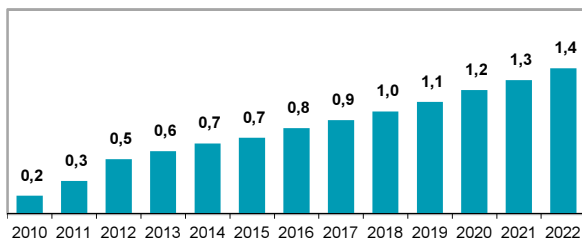


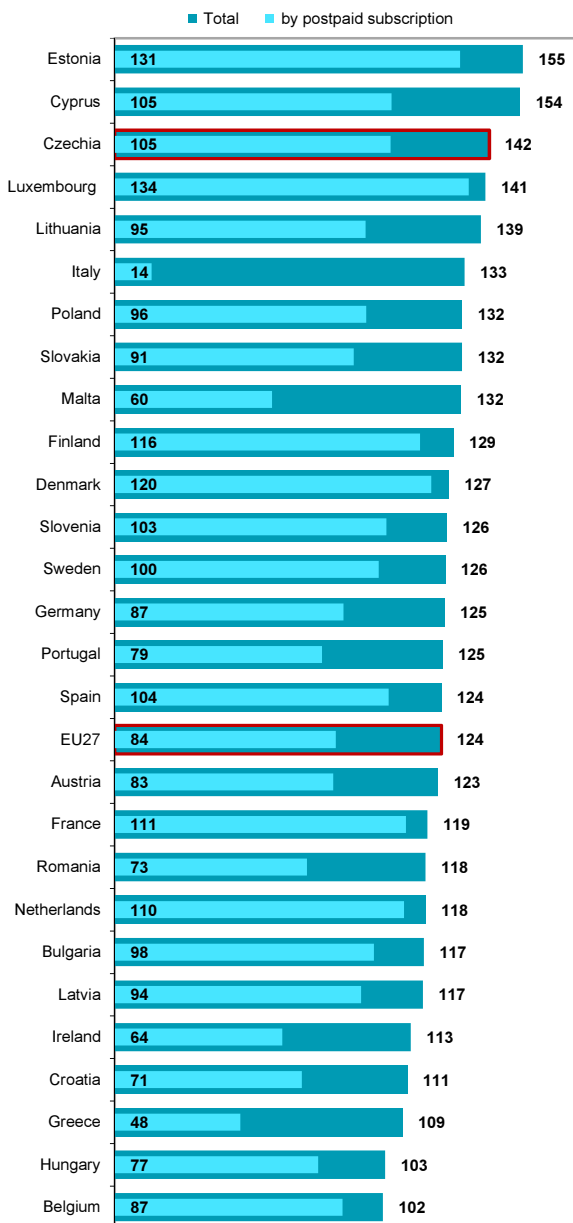
Figure A7 Machine-to-Machine mobile subscriptions (million)**



** The number of active SIM cards that are assigned for use in machines and devices (cars, smart meters, consumer electronics) for the exchange of data between networked devices.

Source: Czech Telecommunication Office and CZSO own calculations

Figure A8 Mobile telephone voice subscriptions in EU countries; 2022 (per 100 inhabitants)



Source: International Telecommunication Union, Czech Telecommunication Office

A ICT infrastructure

Table A3 Fixed voice telephone traffic in Czechia

Outgoing calls from the fixed network (millions of minutes)

	2020	2021	2022
Total	1 318	1 243	1 058
Subscriber			
Household	632	534	434
Legal entity (e.g. enterprise or public inst.)	686	709	624
Technology			
Switched network (PSTN stations)	812	700	577
Internet network (VoIP stations)	506	544	481
Destination and network			
Domestic calls, total	1 202	1 156	976
Fixed-to-Fixed	503	472	400
Fixed-to-Mobile	699	685	575
International calls	72	51	48

Figure A9 Fixed voice telephone traffic, total (minutes)

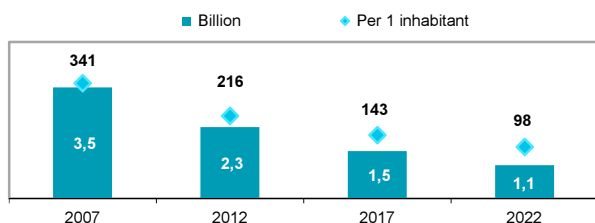


Figure A10 Fixed voice traffic by technology (billion minutes)

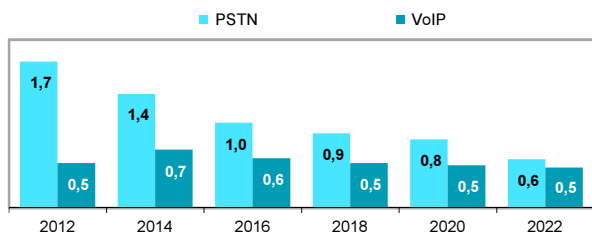
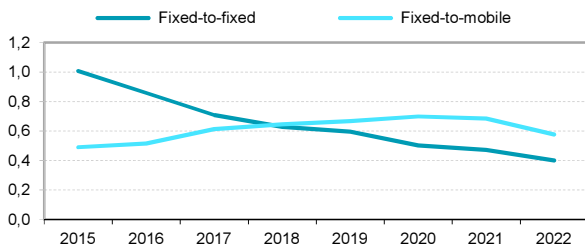


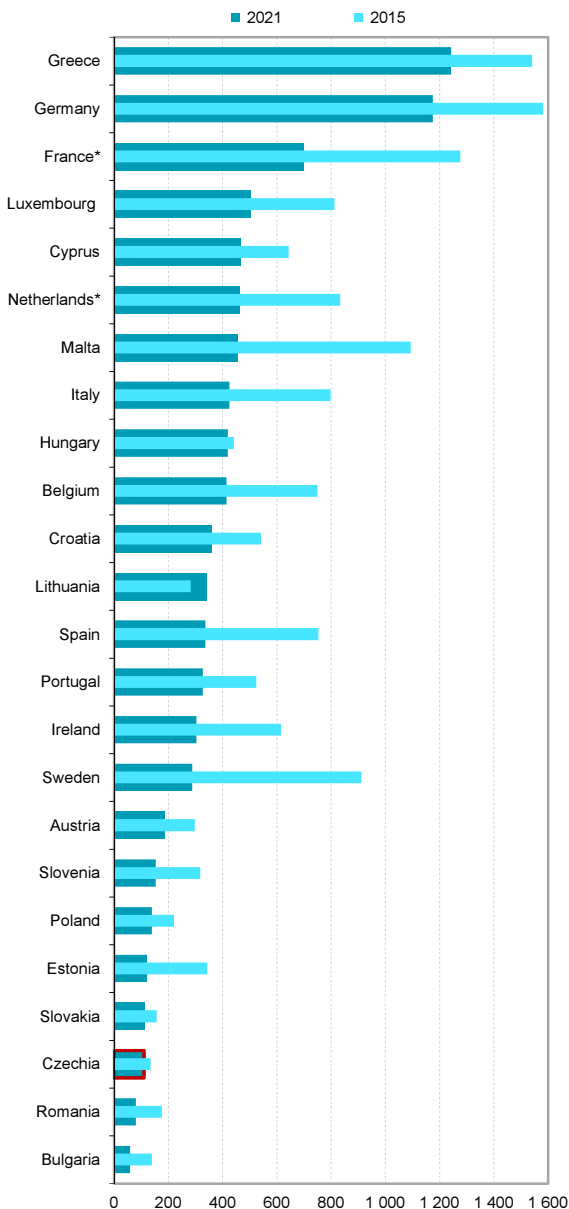
Figure A11 Domestic fixed voice traffic by network (outgoing called minutes per one inhabitant)



Source: Czech Telecommunication Office and CZSO own calculations

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Figure A12 Domestic fixed voice telephone traffic in EU countries (outgoing called minutes per one inhabitant)



* France: data for 2014 and 2019, Netherlands: data for 2015 and 2019.

Source: International Telecommunication Union and CZSO own calculations

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Table A4 Mobile telephone voice traffic in Czechia

Outgoing calls from the mobile network (millions of minutes)

	2020	2021	2022
Total	27 091	28 096	27 585
Subscriber			
Individual (citizen)	14 372	15 156	14 755
Legal entity (e.g. enterprise or public inst.)	11 651	11 813	11 558
Destination and network			
Domestic calls, total	25 660	26 628	25 884
to the same mobile network	13 244	13 537	13 433
to other mobile networks	11 451	12 125	11 613
to fixed networks	965	966	838
International calls*	1 430	1 468	1 701

Figure A13 Domestic mobile voice telephone traffic (minutes)

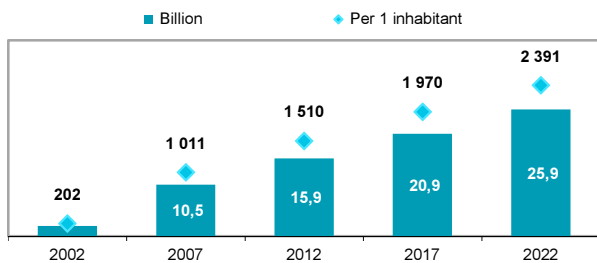


Figure A14 Domestic mobile voice traffic by destination

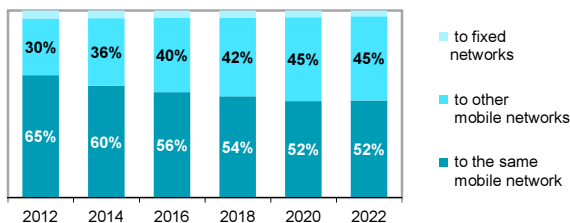
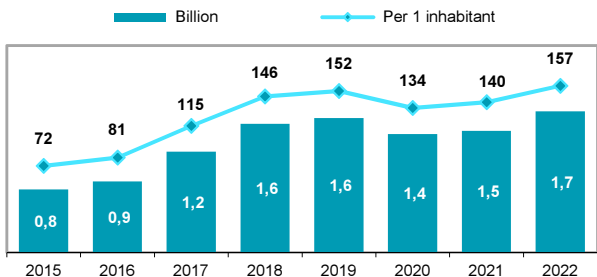


Figure A15 International* mobile voice traffic (minutes)



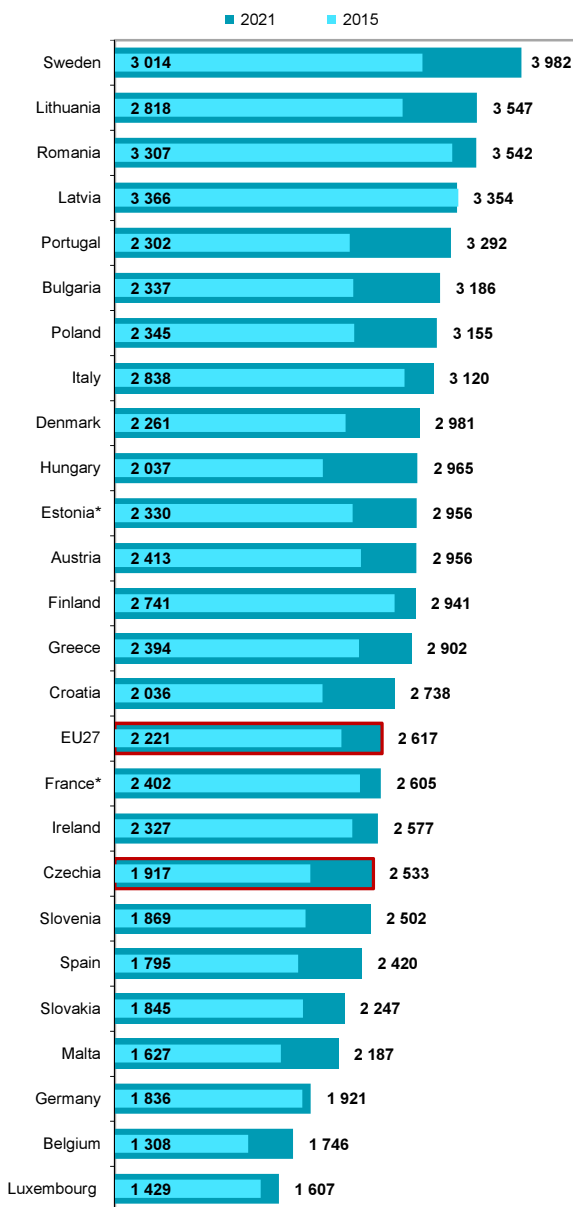
* Incl. outbound roaming, which is not included in the breakdown by subscriber type.

Source: Czech Telecommunication Office and CZSO own calculations



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Figure A16 Domestic mobile voice telephone traffic in EU countries (outgoing called minutes per one inhabitant)



* Estonia: data for 2015 and 2020, France: data for 2015 and 2019

Source: International Telecommunication Union and CZSO own calculations

A ICT infrastructure

Table A5 Fixed broadband subscriptions in Czechia

	Thousand		
	2020	2021	2022
Total	3 833	3 936	4 004
Speed			
< 30 Mbit/s	1 353	1 161	1 037
≥ 30 < 100 Mbit/s	1 253	1 517	1 448
≥ 100 Mbit/s	1 227	1 258	1 519
Subscriber			
Household	3 182	3 260	3 317
Legal entity (e.g. enterprise or public inst.)	651	677	687
Technology			
Fixed wired access, total	2 291	2 355	2 426
DSL incl. FTTCab	956	990	1 004
Fibre (FTTH/B)	721	740	809
Cable modem	614	625	613
Fixed wireless access (FWA), total	1 542	1 582	1 578
WiFi in a fixed location	1 103	1 130	1 126
LTE/5G in a fixed location	440	452	452

Figure A17 Fixed broadband subscriptions, total

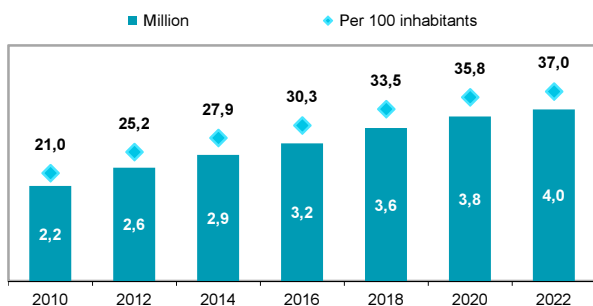
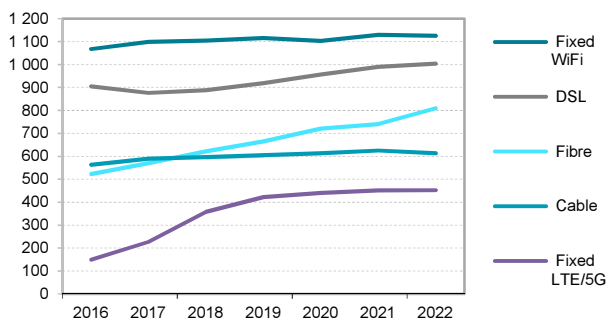


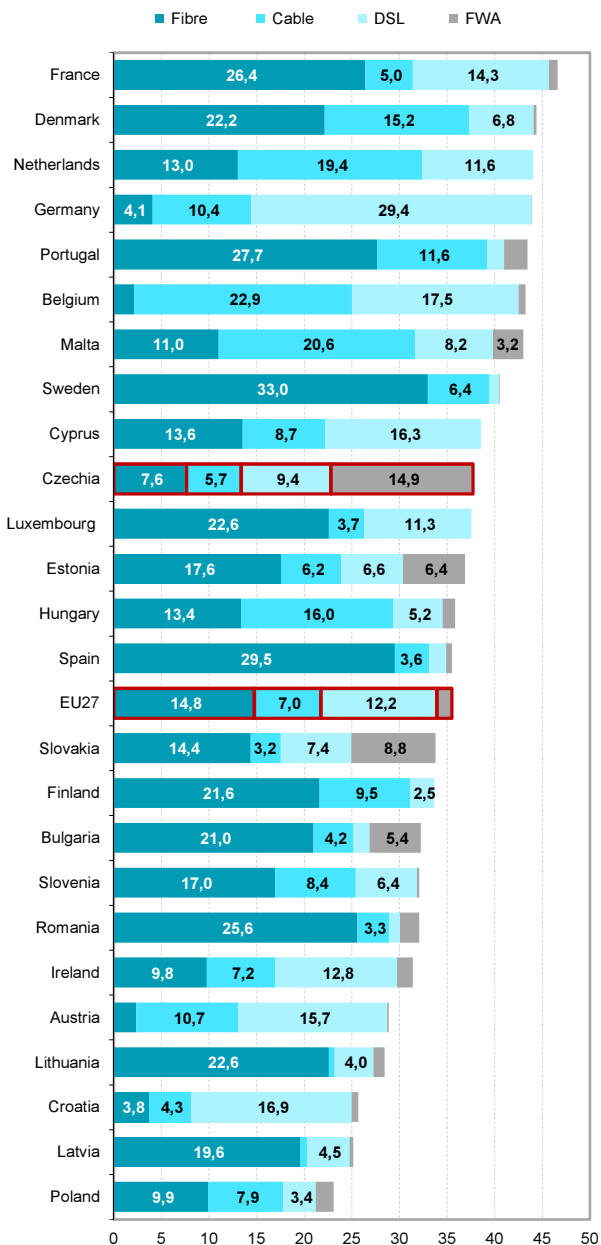
Figure A18 Fixed broadband subscriptions by technology (thousand)



Source: Czech Telecommunication Office and CZSO own calculations

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Figure A19 Fixed broadband subscriptions in EU countries by technology; 2022 (per 100 inhabitants)



Source: International Telecommunication Union and OECD

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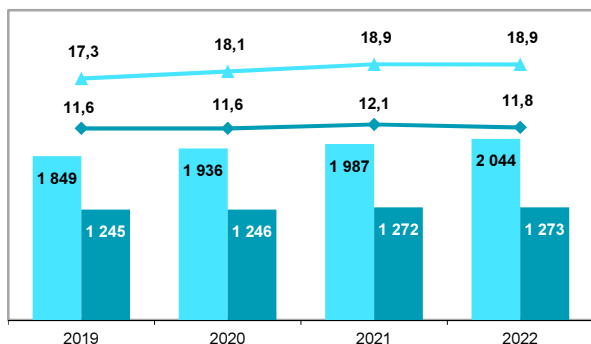
Table A6 Fixed broadband household subscriptions in Czechia

Thousand

	2020	2021	2022
Total	3 182	3 260	3 317
Fixed wired access, total	1 936	1 987	2 044
DSL incl. FTTCab	699	728	738
Fibre (FTTH/B)	657	673	734
Cable modem	579	587	572
Fixed wireless access (FWA), total	1 246	1 272	1 273
WiFi in a fixed location	929	948	949
LTE/5G in a fixed location	317	324	324

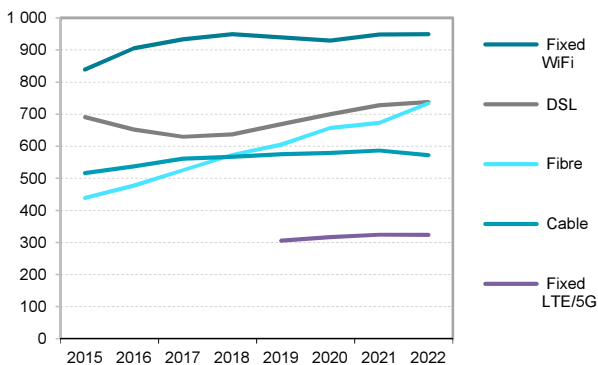
Figure A20 Fixed broadband household subscriptions

■ Wired access (in thous.) ■ FWA* (in thous.)
▲ Wired access (per 100 inhab.) ◆ FWA* (per 100 inhab.)



* FWA (Fixed Wireless Access) includes internet connection provided by Internet Service Providers (ISP) as a commercial Wi-Fi or LTE/5G service in a fixed location (building, apartment).

Figure A21 Fixed broadband household subscriptions by technology (thousand)



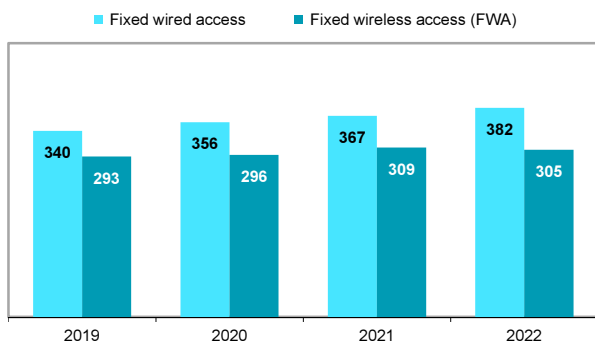
Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Table A7 Fixed broadband business subscriptions* in Czechia

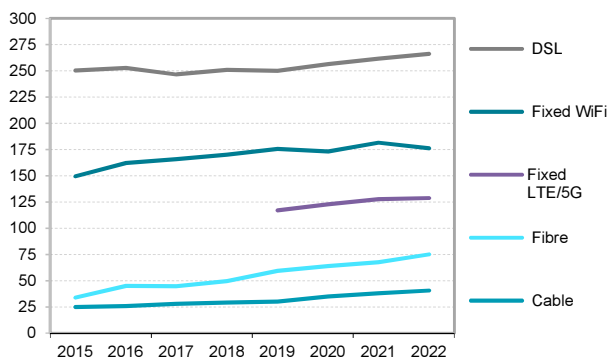
	Thousand		
	2020	2021	2022
Total	651	677	687
Fixed wired access, total	356	367	382
DSL incl. FTTCab	257	262	266
Fibre (FTTH/B)	64	68	75
Cable modem	35	38	41
Fixed wireless access (FWA), total	296	309	305
WiFi in a fixed location	173	182	176
LTE/5G in a fixed location	123	128	129

Figure A22 Fixed broadband business subscriptions* (thous.)



Note: FWA includes internet connection provided by Internet Service Providers (ISP) as a commercial Wi-Fi or LTE/5G service in a fixed location (building).

Figure A23 Fixed broadband business subscriptions* by technology (thousand)



* It includes fixed broadband subscriptions contracted by legal entities such as enterprises, public organizations or institutions.

Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Table A8 Fixed wired broadband in Czechia by speed*; 2022

	Thousand subscriptions		
	< 30 Mbit/s	30–99,9 Mbit/s	≥ 100 Mbit/s
Total (only wired access)	351	724	1 351
DSL, total	292	456	256
ADSL	31	.	.
VDSL (FTTCab incl.)	261	456	256
Fibre, total	48	184	577
FTTHome	16	60	336
FTTBuilding	32	124	241
Cable modem	11	84	518

Figure A24 Fixed wired broadband subscriptions with contracted speed faster than 100 Mbit/s

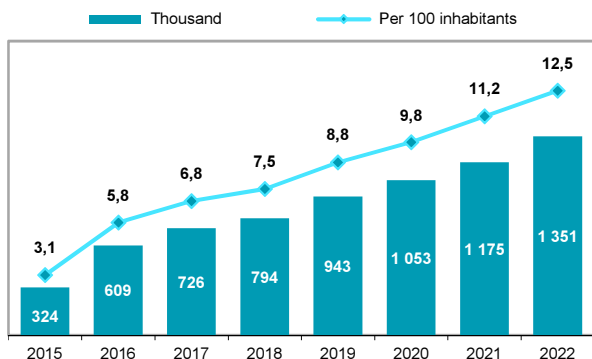
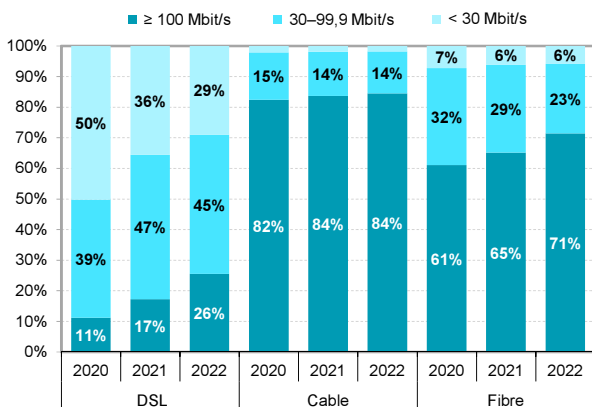


Figure A25 Fixed broadband subscriptions by speed tiers

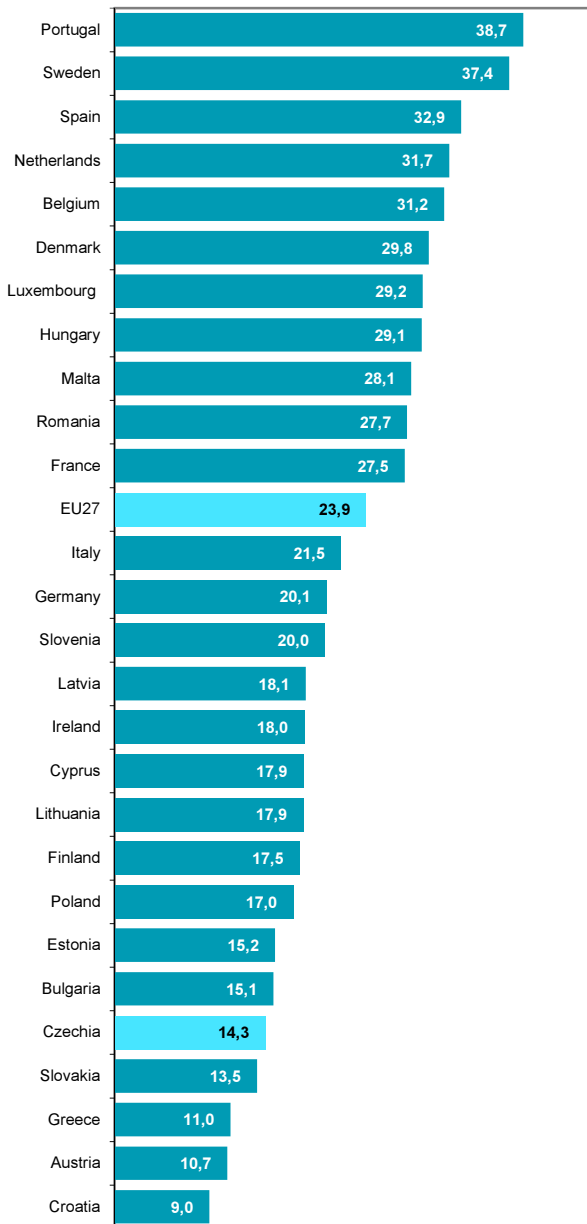


* The number of active residential and business fixed broadband subscriptions with a contract on the use of internet access at a fixed location by given technology and advertised downstream speed.

Source: Czech Telecommunication Office and CZSO own calculations

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Figure A26 Fixed broadband in EU countries with contracted speed faster than 100 Mbit/s; 2022
(subscriptions per 100 inhabitants)



Source: European Commission, OECD and CZSO own calculations

A ICT infrastructure

Table A9 Mobile broadband subscriptions in Czechia

Active data SIM cards and USB modems (thousand)

	2020	2021	2022
Total	10 109	10 434	11 022
Data and voice subscriptions, total*	9 718	10 085	10 709
Temporary access w/o monthly plans	1 980	1 845	1 959
Postpaid monthly data plans	7 739	8 239	8 750
Data-only subscriptions**	390	349	313

* These are typically smartphone based subscriptions with voice and data services used in the same terminal.

** It refers to subscriptions that offer mobile broadband as a stand-alone service, such as mobile-broadband subscriptions for datacards, USB modem/dongle used in tablets or any computer based device.

Figure A27 Mobile broadband subscriptions, total

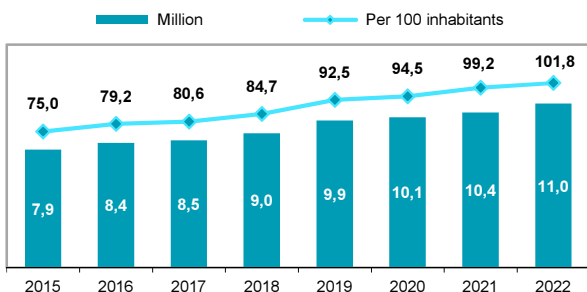


Figure A28 Data and voice mobile broadband subscriptions for smartphones with monthly data plans

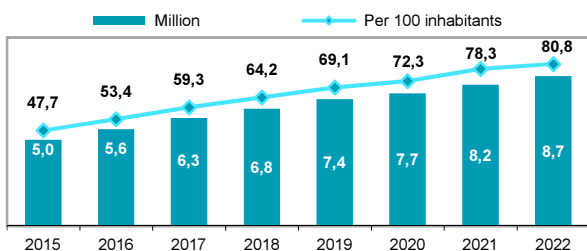
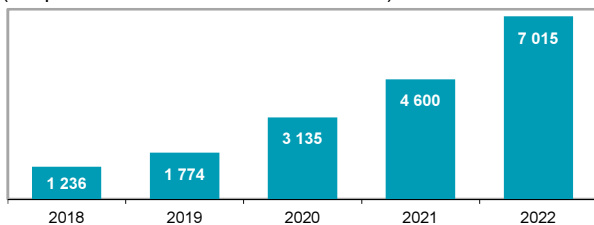


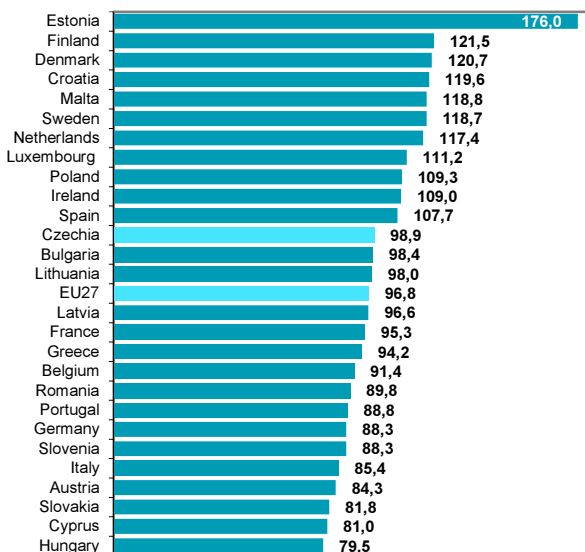
Figure A29 Average monthly mobile data consumption (MB per active SIM card with data services)



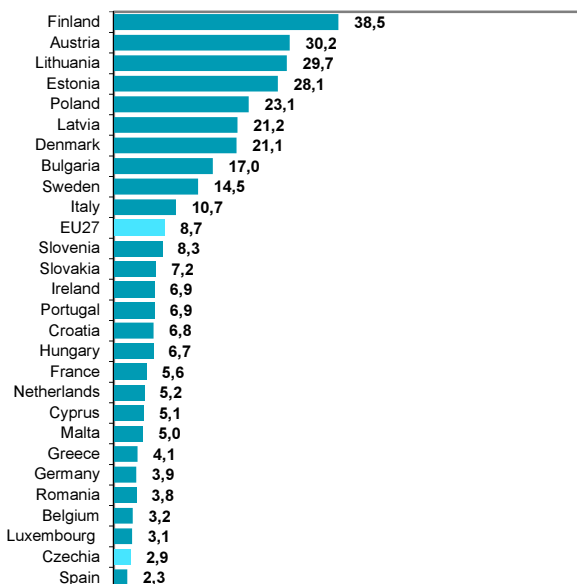
Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Figure A30 Data and voice mobile broadband subscriptions for smartphones in EU countries; 2022 (per 100 inhabitants)



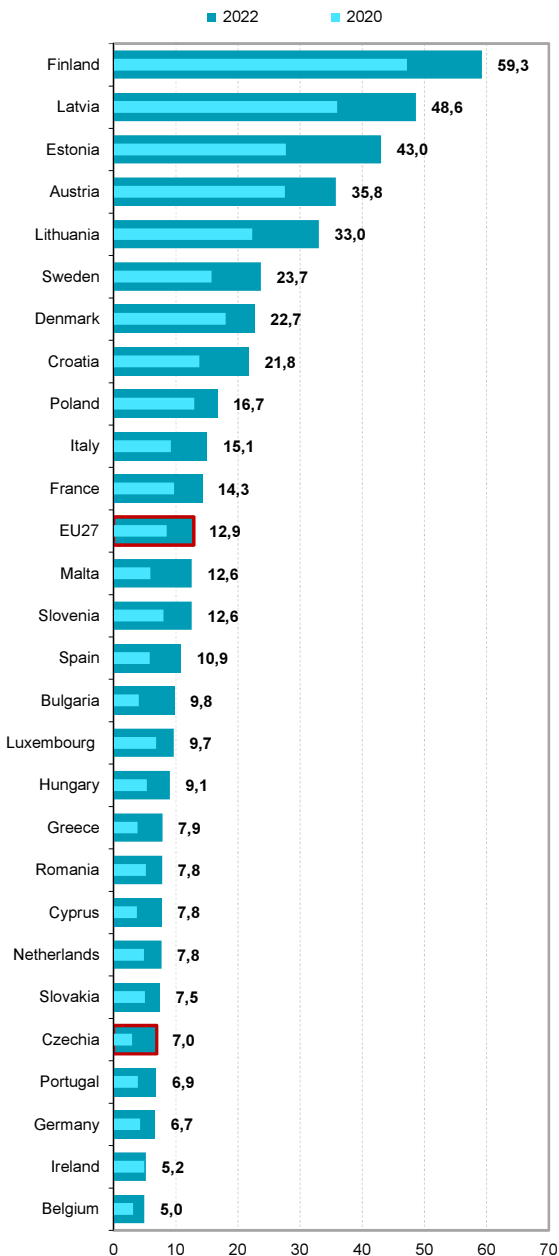
Graf A31 Data-only mobile broadband subscriptions for tablets or laptops in EU countries; 2022 (per 100 inhabitants)



Source: International Telecommunication Union and OECD

A ICT infrastructure

Graf A32 Average monthly mobile data usage in EU countries (GB per 1 inhabitant)



Source: International Telecommunication Union



B Households

The Czech Statistical Office (CZSO) has been monitoring data on penetration of selected information and communication technologies in Czech households by means of a separate annual statistical survey named **Sample Survey on the ICT Use in Households and by Individuals**. The first (pilot) survey was carried out in 2002.

The survey applies the method of personal interviews with the use of tablet computer. During the survey, there were collected answers from approx. 6 thousand individuals who were living in 4 thousand households. The survey has been carried out in accord with the **Regulation (EC) No 2019/1700** of the European Parliament and of the Council. This allows obtaining of internationally comparable data within the EU.

Notes

The **Reference Period** is the 2nd Q of the monitored year

Income quintiles: Households were divided into five groups (quintiles) according to the amount of net income per person in the household.

Comparability of the CZSO and Eurostat Data:

Data published by Eurostat for Czech households slightly differ from data published by the CZSO. This difference is due to the fact that Eurostat includes solely households with at least one person aged 16–74 years. The CZSO publishes data for all households.

International data and comparisons of certain indicators are taken from the Eurostat database for digital economy and society, data of which are updated every year. Detail information can be found at: <https://bit.ly/EurostatDatabase>

Definitions (sorted alphabetically)

- A **WiFi router** is a device that enables to distribute the internet signal inside the household's premises, i.e. it enables wireless connection of more devices at the same time and from different places.
- **Households of persons older than 65+ years** shall mean households in which merely persons aged 65+ years live.
- **Households of persons up to 40 years (without children)** mean households where only persons aged up to 40 years without children live.
- **Households with a computer** involve households, which at the time of the survey stated, that at least one of the household members used a computer at home (desktop, laptop, or tablet).
- **Households with children up to 15 years** shall mean households with at least one child younger than 16 years of age.
- **Households with the internet** shall mean households, which at the time of survey stated, that at least one of the household members used the internet at home, no matter what type is the device used or the way of connection. The internet could be used on a computer, a tablet, a mobile phone, a smart TV, a game console, etc.
- **Smart household appliances** include e.g. smart coffee makers, refrigerators, ovens, vacuum cleaners, washing machines, dryers, but also smart garden equipment such as smart lawn mowers.
- **Smart devices for energy management** include e.g. smart thermostats, consumption meters, lights, electrical outlets, garden irrigation systems, windows or window blinds.
- **Smart home security devices** include, for example, smart home alarms, smoke detectors, security cameras, locks.
- **The Internet of Things (IoT)** refers to devices that are wirelessly connected to other devices and are able to communicate with each other. Users of the IoT devices control them most often via mobile applications or via web interface.

Detailed information on methodology and data from the survey, including international comparison, can be found (in Czech language only) at:

https://www.czso.cz/csu/czso/domacnosti_a_jednotlivci

B Households

Table B1 Households in Czechia with a mobile phone; 2023

	Percentage		
	Total	Smart-phone	Mobile phone without operating system
Households (HHs), total	99,6	85,6	25,3
HHs with children up to 15 years	100,0	98,9	8,7
HHs of persons up to 40 years (without children)	100,0	99,7	2,8
HHs of persons older than 65 years	98,6	48,1	61,6
Other households without children	99,8	94,3	21,5
Household income group			
The lowest income group (first quintile)	98,4	64,6	42,1
Second quintile income group	99,8	78,4	34,0
Third quintile income group	99,9	89,0	26,3
Fourth quintile income group	99,9	97,2	15,9
The highest income group (fifth quintile)	100,0	98,5	8,5

as a percentage of all households of a given type

Figure B1 Households with a smartphone

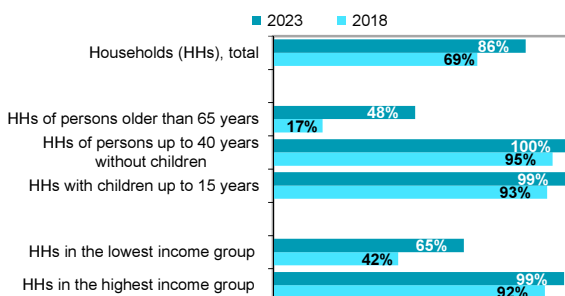


Table B2 Households in Czechia using a Smart TV

	Percentage		
	2016	2020	2023
Households (HHs), total	11,5	34,0	49,5
HHs with children up to 15 years	19,8	50,2	69,1
HHs of persons up to 40 years (without children)	14,8	52,5	68,1
HHs of persons older than 65 years	0,5	4,7	13,6
Other households without children	10,4	35,9	52,2
Household income group			
The lowest income group (first quintile)	1,1	14,1	27,4
Second quintile income group	4,6	22,8	37,3
Third quintile income group	11,3	35,0	49,6
Fourth quintile income group	15,3	45,4	62,6
The highest income group (fifth quintile)	24,7	52,9	70,5

as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

B Households

Table B3 Households in Czechia with a computer

	Percentage		
	2015	2020	2023
Households (HHs), total	73,1	78,7	82,3
HHs with children up to 15 years	93,8	95,8	95,9
HHs of persons up to 40 years (without children)	93,0	94,2	95,7
HHs of persons older than 65 years	24,9	39,9	50,3
Other households without children	76,8	85,7	88,0
Household income group			
The lowest income group (first quintile)	.	44,8	58,6
Second quintile income group	.	69,3	74,7
Third quintile income group	.	87,0	86,8
Fourth quintile income group	.	94,2	94,3
The highest income group (fifth quintile)	.	98,0	97,0

as a percentage of all households of a given type

Figure B2 Households with a computer

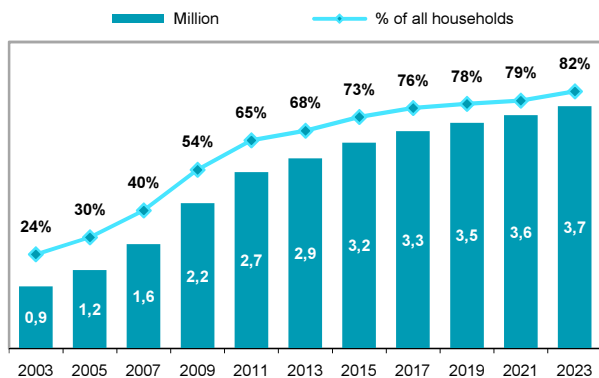


Table B4 Computers used by households in Czechia; 2023

	Percentage		
	Desktop	Laptop	Tablet
Households (HHs), total	33,4	69,7	36,0
HHs with children up to 15 years	40,8	87,1	56,9
HHs of persons up to 40 years (without children)	23,8	88,9	40,7
HHs of persons older than 65 years	25,1	30,1	8,5
Other households without children	35,8	75,7	36,7
Household income group			
The lowest income group (first quintile)	20,7	42,5	22,4
Second quintile income group	29,8	59,6	32,3
Third quintile income group	35,1	71,5	35,1
Fourth quintile income group	39,8	84,0	41,4
The highest income group (fifth quintile)	41,7	90,8	48,7

as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

B Households

Table B5 Households in Czechia with internet access

	Percentage		
	2015	2020	2023
Households (HHs), total	73,1	81,7	87,5
HHs with children up to 15 years	93,6	98,5	99,0
HHs of persons up to 40 years (without children)	94,7	97,8	99,5
HHs of persons older than 65 years	24,2	41,3	55,6
Other households without children	77,0	89,7	94,8
Household income group			
The lowest income group (first quintile)	.	50,4	67,1
Second quintile income group	.	72,9	82,2
Third quintile income group	.	90,4	90,6
Fourth quintile income group	.	95,8	98,4
The highest income group (fifth quintile)	.	98,8	99,2

as a percentage of all households of a given type

Figure B3 Households with internet access

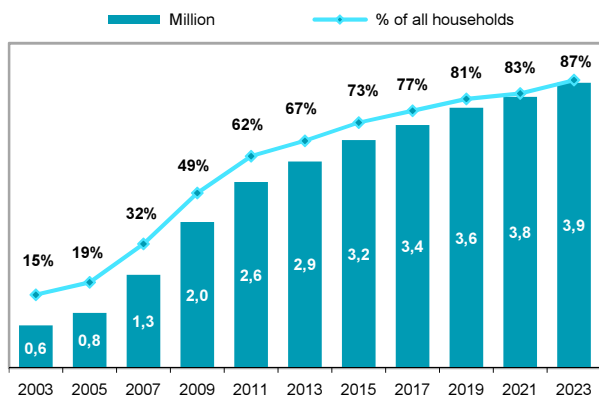


Table B6 Households in Czechia using a WiFi router

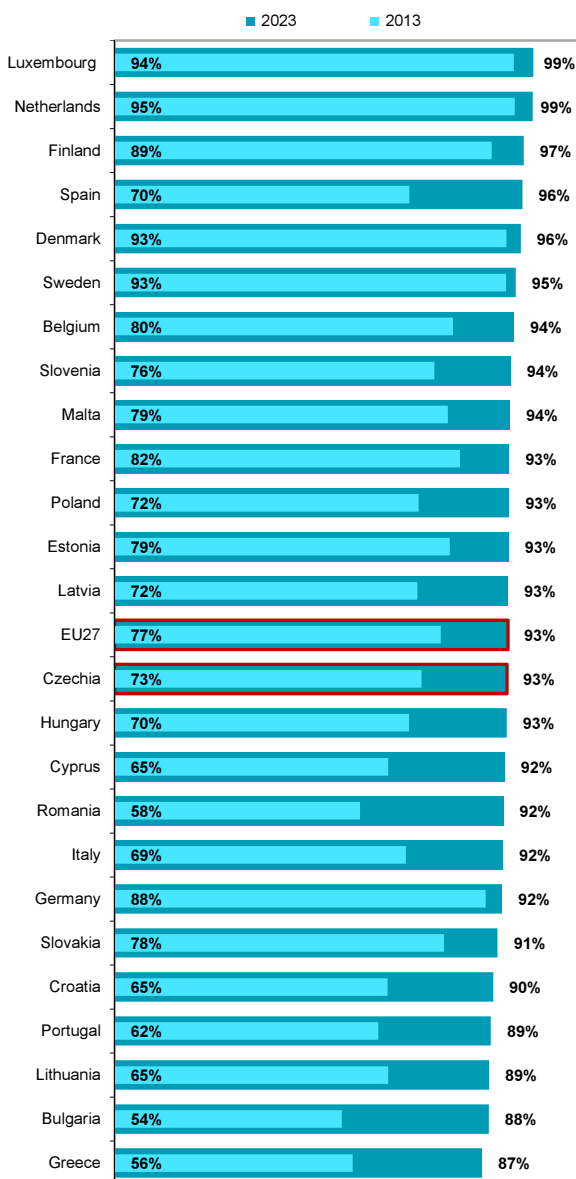
	Percentage		
	2015	2020	2023
Households (HHs), total	47,7	68,3	80,1
HHs with children up to 15 years	68,4	89,2	95,9
HHs of persons up to 40 years (without children)	64,1	82,8	90,3
HHs of persons older than 65 years	8,8	25,9	45,0
Other households without children	48,2	75,2	86,9
Household income group			
The lowest income group (first quintile)	.	35,9	53,8
Second quintile income group	.	55,6	73,4
Third quintile income group	.	75,4	83,2
Fourth quintile income group	.	83,4	93,6
The highest income group (fifth quintile)	.	91,3	96,5

as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

B Households

Graf B4 Households in EU countries with internet access



as a percentage of all households in a given country where at least one member is younger than 75 years

Source: Eurostat

B Households

Table B7 Households in Czechia using selected devices of the Internet of Things; 2022

	Percentage		
	Security devices	Energy management devices	Household appliances
Households (HHs), total	8,2	5,8	7,8
HHs with children up to 15 years	14,3	10,7	13,6
HHs of persons up to 40 years (without children)	7,2	8,9	14,6
HHs of persons older than 65 years	1,9	0,9	0,5
Other households without children	8,3	4,9	6,9
Household income group			
The lowest income group (first quintile)	0,8	0,7	1,2
Second quintile income group	2,0	1,7	2,6
Third quintile income group	7,2	3,1	7,2
Fourth quintile income group	11,1	8,9	12,0
The highest income group (fifth quintile)	19,8	14,6	15,9

as a percentage of all households of a given type

Figure B5 Households using smart home security devices

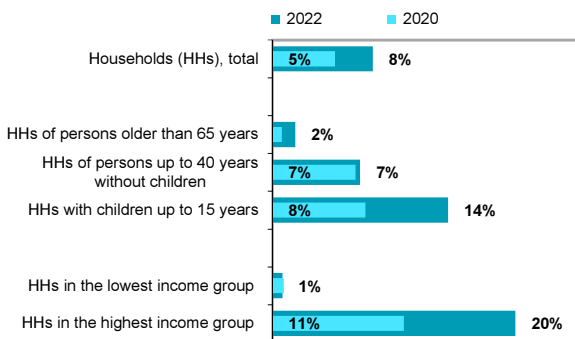
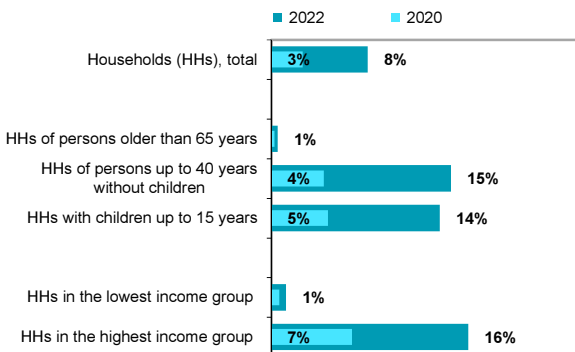


Figure B6 Households using smart home appliances



Source: Czech Statistical Office, ICT use survey in households

The Czech Statistical Office (CZSO) has been collecting detailed information on individuals using selected information and communication technologies (ICT) by means of a separate annual statistical survey named **Sample Survey on the ICT Use in Households and by Individuals**. The first pilot survey was carried out in 2002. Since 2006, this survey has been mandatory for all EU member states according to the relevant regulation of the European Parliament and the Council.

The survey applies the method of personal interviews with the use of tablet computer. During the survey, there were collected answers from approx. 6 thousand individuals aged 16+ years living in **private households** on the territory of the Czech Republic. This means the survey does not cover individuals living in collective households (penitentiaries, social care establishments, retirement homes, etc.).

The survey results are grossed up to the whole population aged 16+ years. This publication offers data broken by sex, age and educational attainment.

Notes

The **reference period** is last 3 months prior to the survey interviews.

Educational attainment is published for the aged 25–64 years in graphs and tables. The population of the aged 16–24 years include numerous persons with still unfinished education process in the time of the survey. Therefore their educational attainment is rather determined by their age than educational aspirations. Similarly, the highest educational attainment of persons over 65 is mainly influenced by the time when persons received this education. Among people over 65, there is a significantly higher share of people with basic education than among younger people.

For the purposes of this publication, the highest educational attainment is divided into **low** which includes lower secondary education and upper secondary education without A–level exam, **middle** which includes upper secondary education with A–level exam and higher vocational education, and **high** which includes tertiary (i.e. university) education.

Comparability of data published by the CZSO and Eurostat

Data published by Eurostat for the Czech Republic individuals slightly differ from data published by the CZSO. This difference is due to the fact that Eurostat includes solely individuals aged 16 to 74 years. On the other hand, the CZSO provides data for the whole population aged 16+ years.

International data and comparisons of certain indicators are taken from the Eurostat database for digital economy and society, data of which are updated every year. Detailed information can be found at: <https://bit.ly/EurostatDatabase>

Definitions (sorted alphabetically)

- A **purchase on the internet** shall mean ordering of any goods or services on a website or by means of an application for private purposes. Goods or services ordered this way may not be paid over the internet, they could be paid in cash on delivery, or while delivered in person.
- A **smartphone** is a phone with a built-in operating system. Most smartphones are touch-sensitive, but there are exceptions that can also be controlled by buttons. The user can use the internet on the smartphone, including downloading mobile applications.
- A **social network** shall mean a service enabling to unite, communicate, and share information with other users thereof. Logging in and the use of own profile to browse through contributions of other users, communication with the users, and sharing of own contributions, etc., are considered the participation in social networks.

- An **individual using the internet on the mobile phone** is a person who gave that he/she had used a mobile phone to access internet services at least once in the last three months prior the survey interviews. It does not matter if the phone was private or employer's one and also it does not matter what type of connection was used to access the internet (mobile networks, WiFi).
- **Cookies** can be used to find out which pages the user has visited. It is also possible to monitor what goods or services the user searched for on the internet. When accessing websites that contain advertisements, the advertisements are then targeted to products that the user has previously searched for.
- **Exchanging messages** online (e.g. via WhatsApp, Messenger or Viber) allows free sending of text messages, photos or videos to users in the contact list or to other users via the internet, most often on a mobile phone.
- **Listening to music** includes playing any music on the internet (e.g. on YouTube or Spotify), including listening to internet radio.
- **Listening to paid music** includes streaming or downloading music for a fee via YouTube Premium, Spotify Premium or similar commercial services.
- **Playing paid games** includes streaming or downloading games for a fee that the user plays with other players or alone. It can also be a subscription. The purchase of virtual accessories or game expansions is also included.
- The **internet banking** is operated by means of an internet portal enabling remote control and administration of bank accounts through the internet. The portal shall enable, for instance, checking the account remainder, setting up of a payment or permanent payments, setting up limits of cash withdrawing from ATMs, etc. The internet banking can also be accessible through a mobile phone by means of an application of so-called mobile banking.
- **Reading paid online news site, magazines or articles** includes buying individual articles on the Internet, and also reading paid sections of websites that publish newspapers and magazines.
- **Refusal to provide data for advertising purposes** can take place, for example, during online shopping, when the user during the creation of an order ticks that he does not want to receive any advertising offers.
- **Requests to delete personal data** on the internet include, for example, requests to delete subscriptions to newsletters.
- **Using the internet** means performing any activity on the internet, such as browsing websites or using social networks.
- **Watching video content (total)** includes watching movies and programs on the websites of regular TV stations, on video-sharing sites (e.g. YouTube) and on internet TV sites (both paid and free).
- **Watching paid videos** includes streaming or downloading movies, series and other programs and videos via Netflix, HBO MAX or similar commercial sites where users can choose from the movie/series catalogue what and when to watch. To use these services, the user must register on the provider's website and then pay for these services.

Detailed information on methodology of the survey can be found in the CZSO publication **ICT Use in Households and by Individuals in 2023, code 062004-23** (in the Czech language only).

Further information on the theme can be found at

https://www.czso.cz/csu/czso/domacnosti_a_jednotlivci

(in the Czech language only)



C Persons

Table C1 Persons in Czechia using a mobile phone; 2023

Percentage

	Total	Smart-phone	Mobile phone without operating system
Total (aged 16+)	98,8	82,4	17,6
Men	98,7	82,6	17,6
Women	98,8	82,2	17,7
Age group (years)			
16–24	99,8	99,6	0,5
25–34	99,6	97,6	3,2
35–44	99,9	98,4	3,0
45–54	99,9	96,3	4,8
55–64	99,4	87,1	14,1
65–74	98,5	56,2	43,6
75+	92,4	23,6	69,4
Education (aged 25–64)			
Low	99,4	90,6	9,7
Middle	99,9	96,9	4,8
High	100,0	98,8	2,7

Figure C1 Use of a smartphone by gender and age

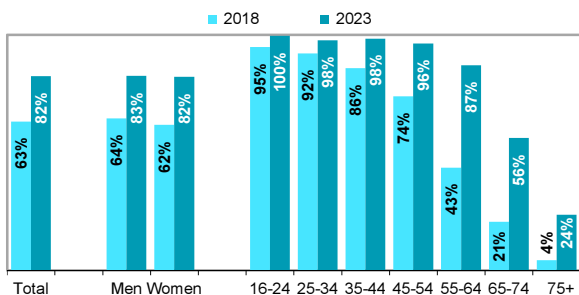
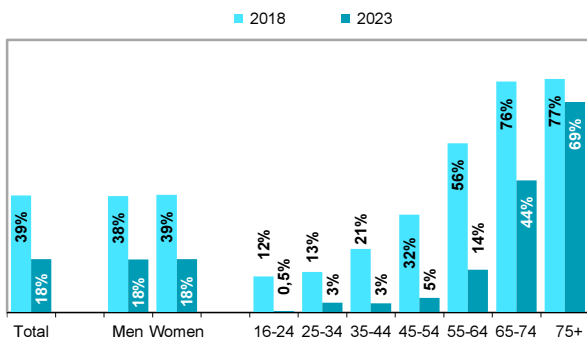


Figure C2 Use of a mobile phone without operating system by gender and age



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

C Persons

Table C2 Persons in Czechia using the internet

	Percentage		
	2015	2020	2023
Total (aged 16+)	75,7	81,3	86,0
Men	77,9	83,1	87,2
Women	73,5	79,7	84,8
Age group (years)			
16–24	97,0	98,6	99,8
25–34	95,4	97,9	98,4
35–44	93,9	98,4	99,4
45–54	86,7	94,7	98,2
55–64	68,0	81,0	90,7
65–74	39,5	53,3	65,2
75+	10,8	19,7	34,4
Education (aged 25–64)			
Low	73,7	86,2	92,8
Middle	95,0	97,8	98,7
High	99,4	99,3	100,0

Figure C3 Persons aged 16+ using the internet

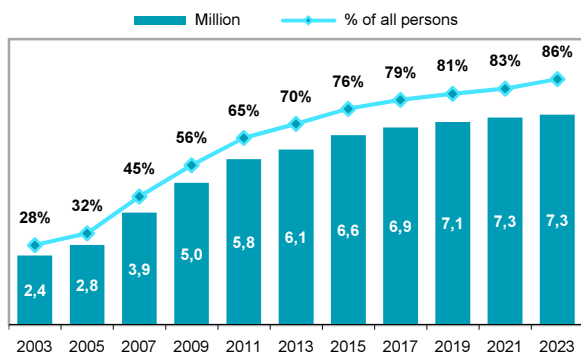
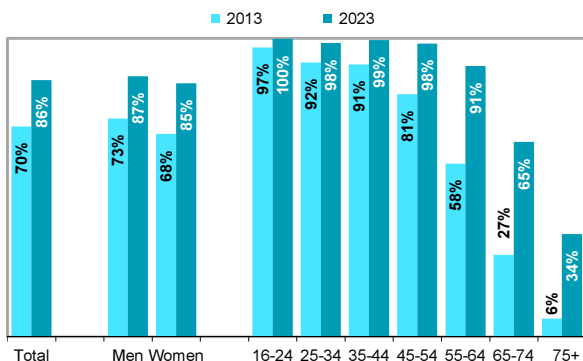


Figure C4 Use of the internet by gender and age



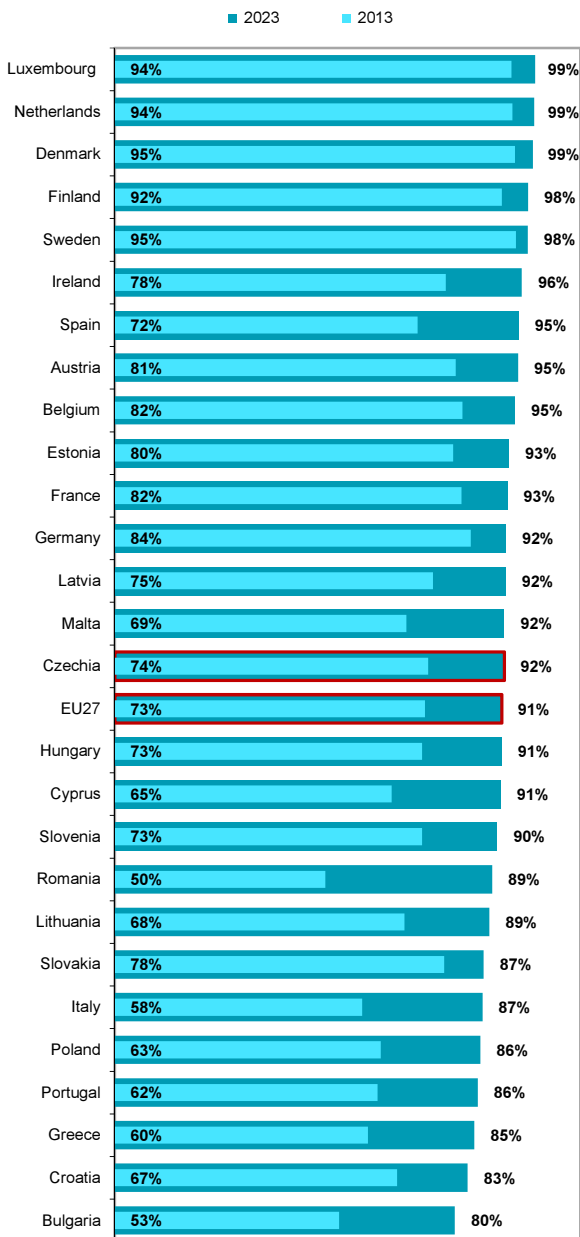
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



C Persons

Figure C5 Persons aged 16–74 years in EU countries using the internet



Source: Eurostat

C Persons

Tab. C3 Persons in Czechia using a mobile phone to access the internet

	Percentage		
	2015	2020	2023
Total (aged 16+)	37,0	67,5	78,3
Men	41,7	68,5	79,2
Women	32,5	66,6	77,5
Age group (years)			
16–24	77,1	96,5	99,6
25–34	68,0	94,5	97,5
35–44	48,6	90,2	97,6
45–54	28,1	80,9	93,3
55–64	14,2	57,5	81,6
65–74	4,5	23,5	43,8
75+	0,9	5,0	16,5
Education (aged 25–64)			
Low	25,9	69,9	86,8
Middle	43,4	87,1	95,0
High	68,3	93,1	98,1

Figure C6 Persons aged 16+ using a mobile phone to access the internet

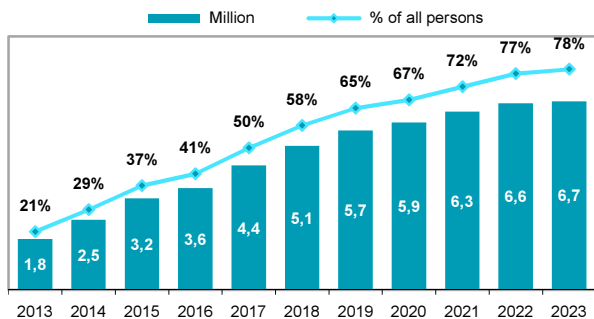
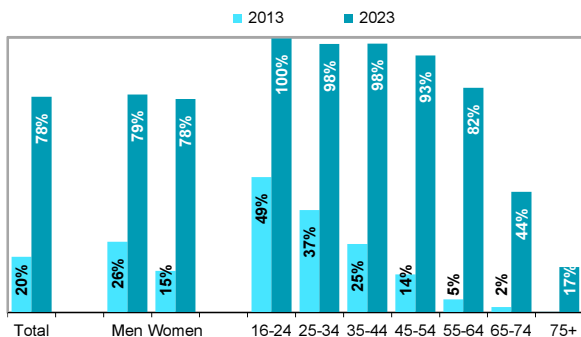


Figure C7 Use of a mobile phone to access the internet by gender and age

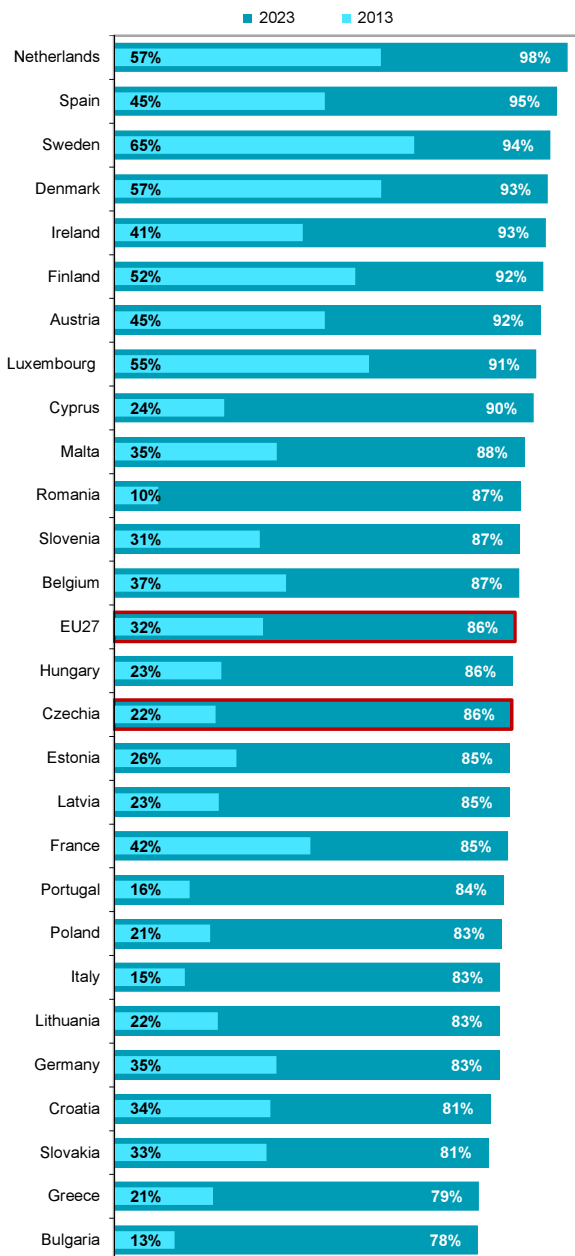


as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

C Persons

Figure C8 Persons aged 16–74 years in EU countries using a mobile phone to access the internet



Source: Eurostat

C Persons

Table C4 Persons in Czechia using social networks

	Percentage		
	2015	2020	2023
Total (aged 16+)	37,4	53,8	61,8
Men	37,6	52,6	59,9
Women	37,3	55,0	63,5
Age group (years)			
16–24	88,7	95,1	98,2
25–34	72,3	89,8	93,7
35–44	46,9	74,3	84,9
45–54	23,9	56,1	68,3
55–64	10,1	31,5	48,0
65–74	5,2	13,5	20,8
75+	0,3	2,8	7,4
Education (aged 25–64)			
Low	28,1	53,7	64,4
Middle	43,9	68,3	77,1
High	55,3	73,5	82,5

Figure C9 Persons aged 16+ using social networks

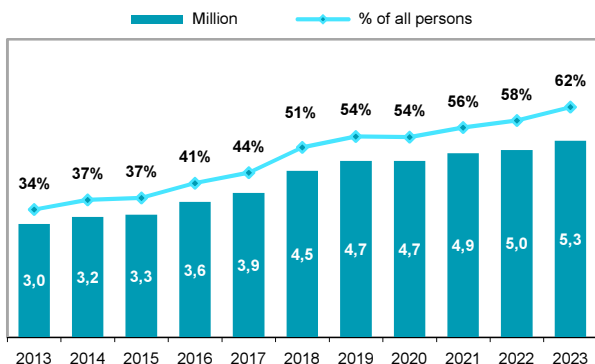
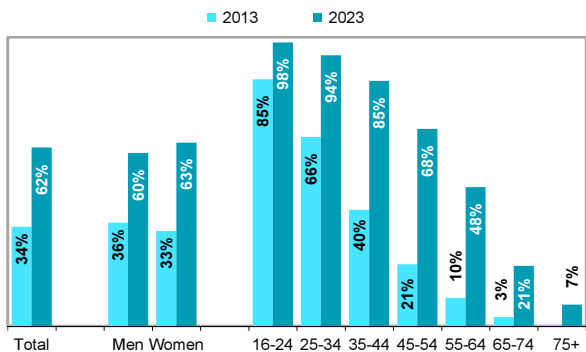


Figure C10 Use of social networks by gender and age



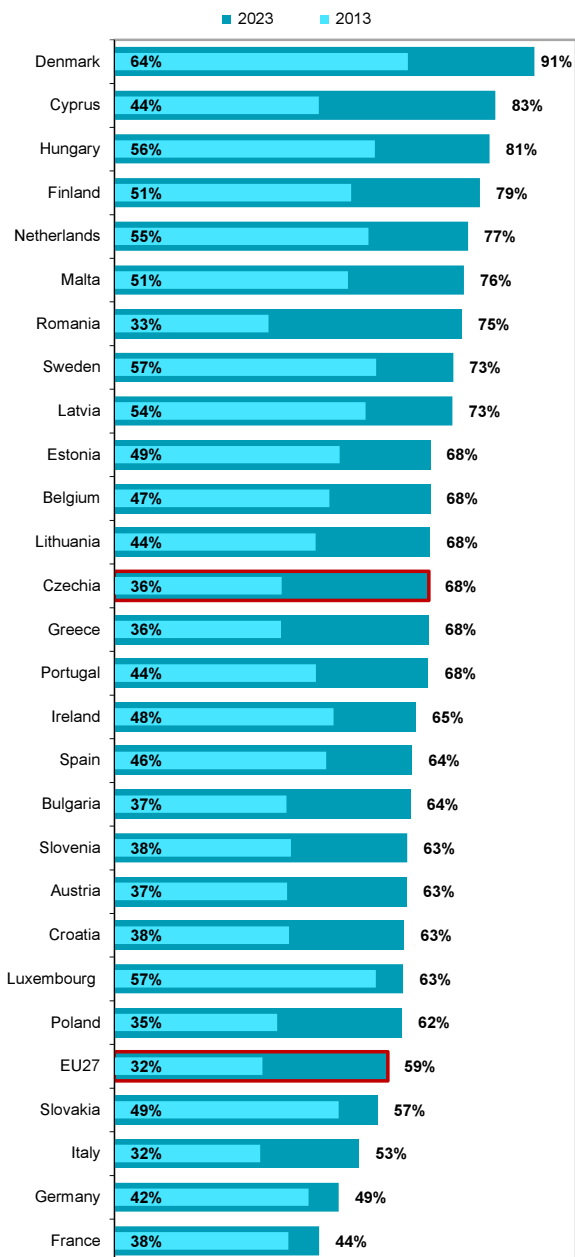
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



C Persons

Figure C11 Persons aged 16–74 years in EU countries using social networks



Source: Eurostat

C Persons

Table C5 Persons in Czechia reading online news sites

	Percentage		
	2015	2020	2023
Total (aged 16+)	65,2	73,6	77,5
Men	68,4	75,4	78,9
Women	62,2	71,8	76,3
Age group (years)			
16–24	79,9	81,6	83,0
25–34	85,0	90,6	88,7
35–44	81,3	90,3	91,7
45–54	75,4	87,3	90,5
55–64	57,3	74,0	82,8
65–74	33,6	46,8	58,9
75+	10,1	17,8	30,0
Education (aged 25–64)			
Low	59,9	77,5	82,1
Middle	85,6	90,0	91,3
High	90,6	94,6	94,3

Figure C12 Reading online news sites by gender and age

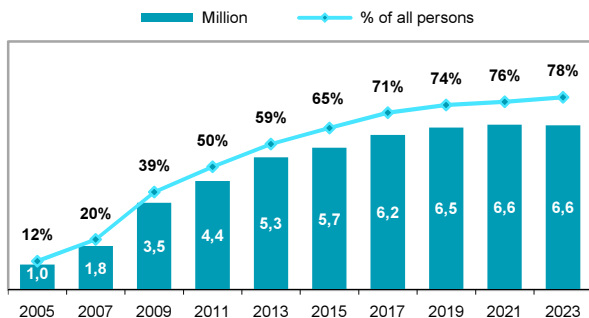
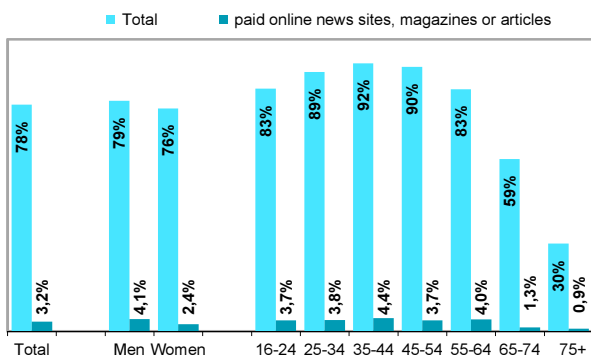


Figure C13 Reading online news sites by gender and age; 2023



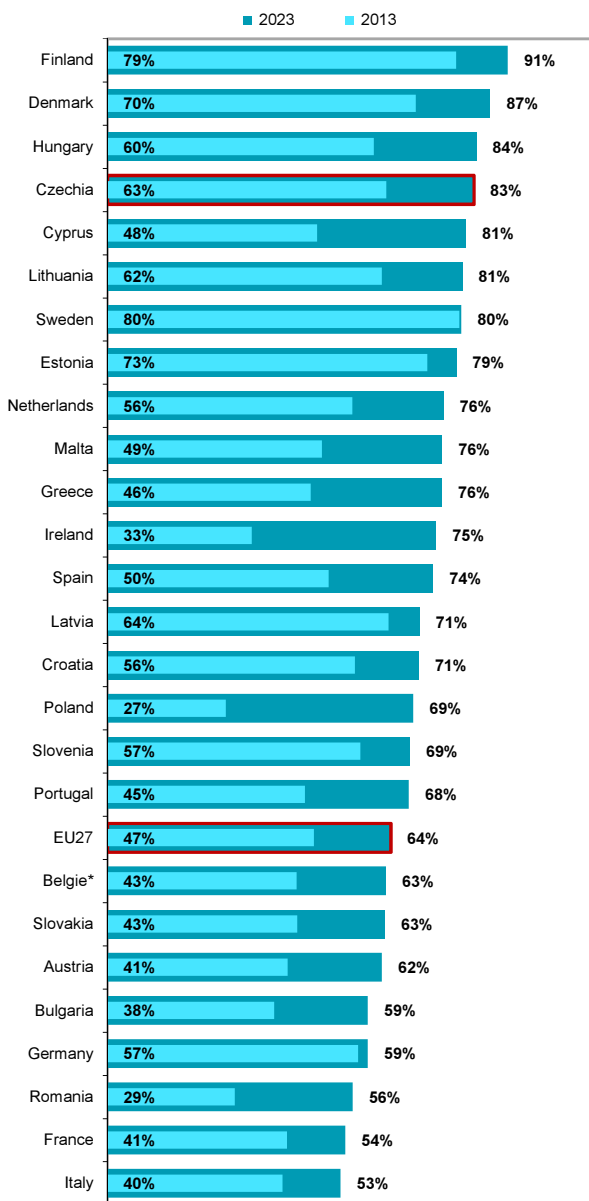
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



C Persons

Figure C14 Persons aged 16–74 years in EU countries reading online news sites



* data for 2012

Source: Eurostat

C Persons

Table C6 Persons in Czechia using internet banking

	Percentage		
	2015	2020	2023
Total (aged 16+)	44,9	64,1	73,3
Men	47,0	65,2	74,1
Women	43,0	63,1	72,6
Age group (years)			
16–24	36,1	62,0	77,9
25–34	68,4	88,3	94,6
35–44	68,5	86,7	94,7
45–54	54,8	80,8	87,5
55–64	33,4	58,6	76,2
65–74	14,1	30,7	43,8
75+	4,2	9,2	17,8
Education (aged 25–64)			
Low	35,9	65,5	76,6
Middle	68,7	86,4	94,1
High	83,3	92,4	96,9

Figure C15 Persons aged 16+ using internet banking

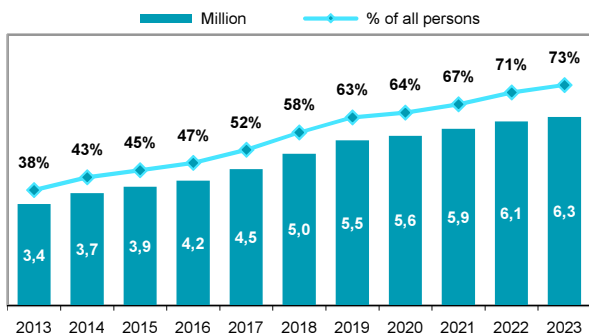
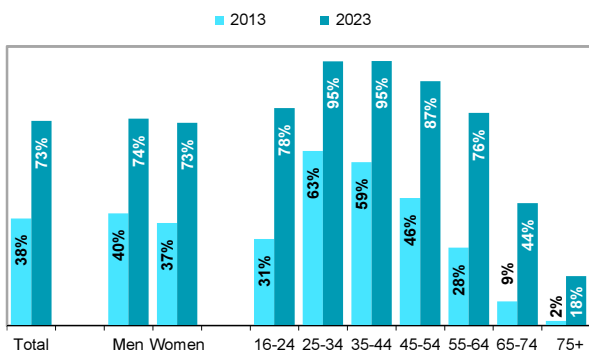


Figure C16 Use of internet banking by gender and age



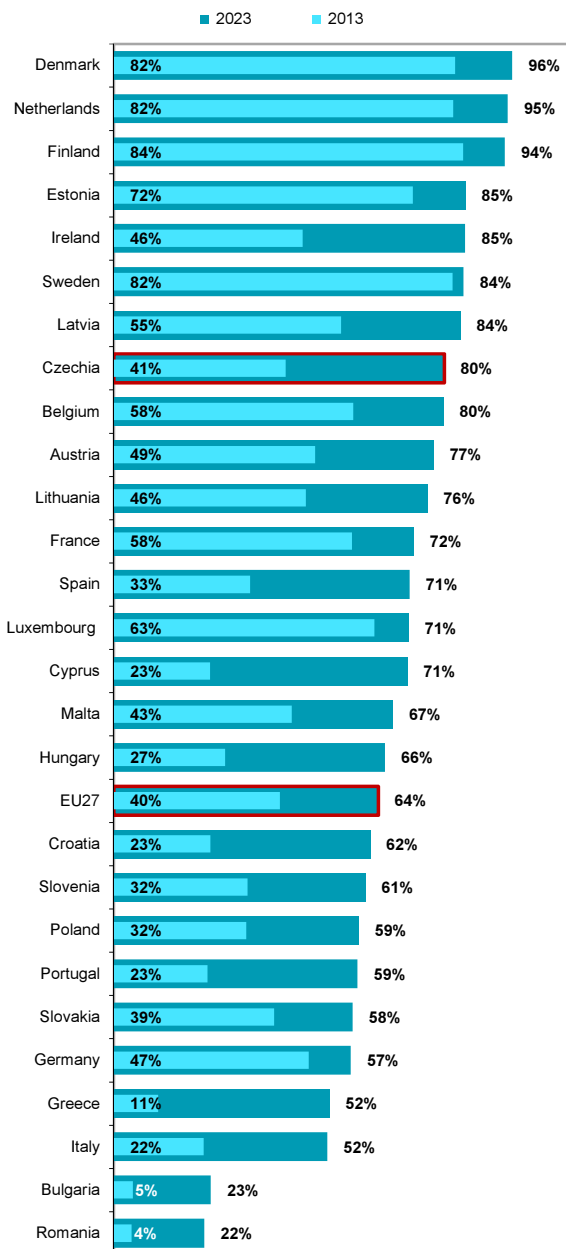
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



C Persons

Figure C17 Persons aged 16–74 years in EU countries using internet banking



Source: Eurostat

C Persons

Table C7 Persons in Czechia purchasing on the internet

	Percentage		
	2015	2020	2023
Total (aged 16+)	24,3	53,8	62,9
Men	23,5	53,1	62,4
Women	25,0	54,4	63,4
Age group (years)			
16–24	36,3	73,1	82,4
25–34	41,9	82,0	88,2
35–44	34,2	71,3	83,9
45–54	22,4	61,3	75,6
55–64	13,9	42,9	56,5
65–74	5,4	21,1	27,3
75+	1,1	5,1	10,7
Education (aged 25–64)			
Low	16,1	48,6	60,2
Middle	34,0	71,7	82,2
High	46,3	82,7	90,7

Figure C18 Persons aged 16+ purchasing on the internet

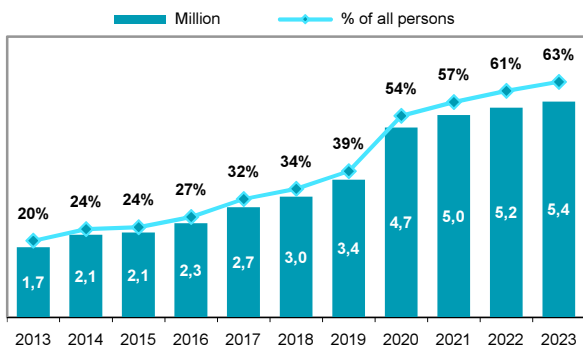
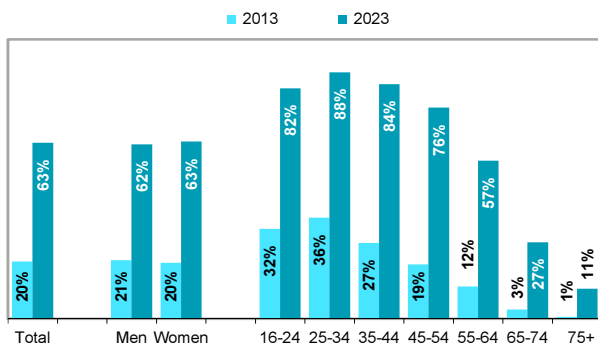


Figure C19 Online purchases by gender and age

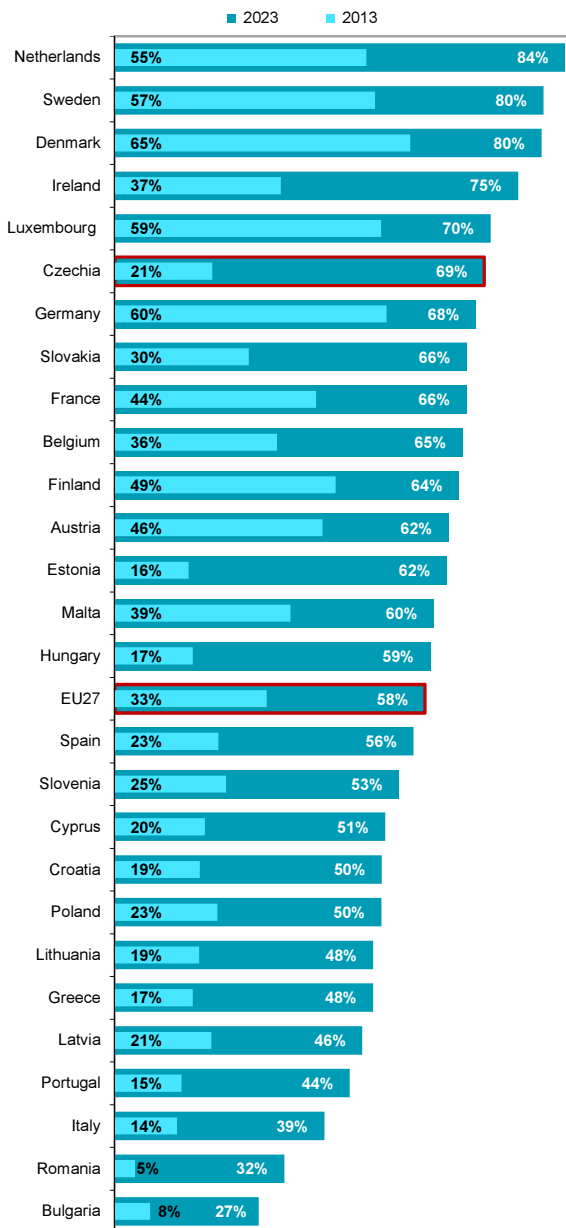


as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

C Persons

Figure C20 Persons aged 16–74 in EU countries purchasing on the internet



Source: Eurostat

C Persons

Table C8 Persons in Czechia using the internet for selected communication activities; 2023

	Percentage		
	Use of e-mail	Exchange of messages*	Making calls
Total (aged 16+)	81,3	76,7	59,8
Men	81,9	75,8	57,1
Women	80,7	77,5	62,3
Age group (years)			
16–24	98,6	98,8	87,7
25–34	96,1	96,5	77,8
35–44	97,3	95,2	77,3
45–54	92,8	91,4	65,6
55–64	84,9	77,2	57,4
65–74	55,9	41,6	29,6
75+	27,6	19,3	13,0
Education (aged 25–64)			
Low	84,1	82,8	59,4
Middle	96,9	93,0	72,5
High	99,7	97,2	80,1

Figure C21 Use of e-mail by gender and age

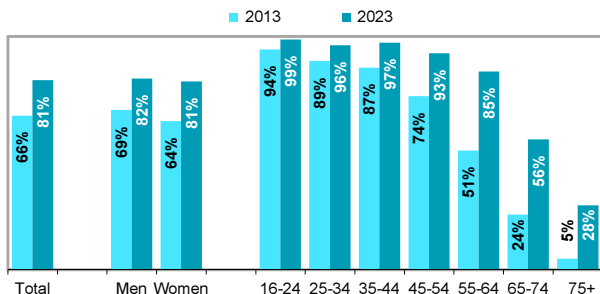
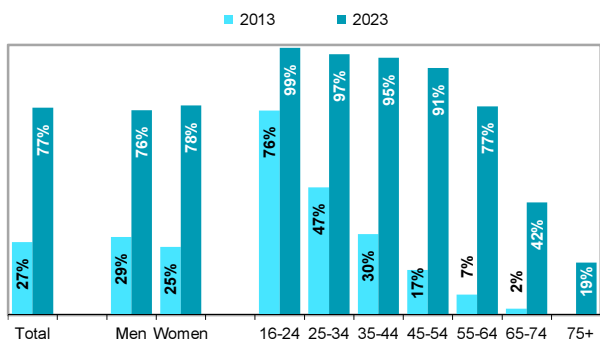


Figure C22 Exchanging messages online* by gender and age



* Exchanging messages, e.g. via Messenger or WhatsApp applications.
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



Figure C23 Persons aged 16–74 in EU countries using e-mail; 2023

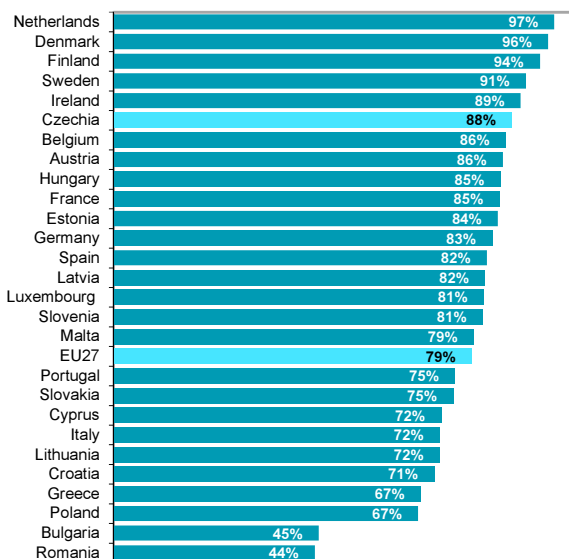
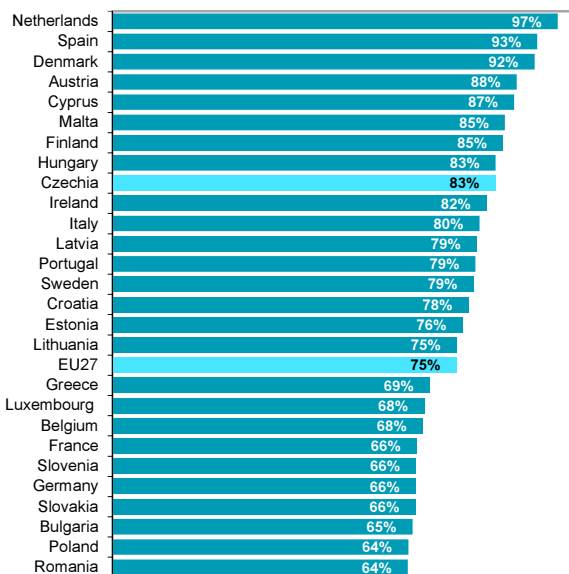


Figure C24 Persons aged 16–74 in EU countries exchanging messages online*; 2023



* Exchanging messages, e.g. via Messenger or WhatsApp applications.

Source: Eurostat

C Persons

Table C9 Persons in Czechia using the internet for selected entertainment activities; 2023

	Percentage		
	Watching video content	Listening to music	Playing games
Total (aged 16+)	70,9	55,4	24,2
Men	73,5	57,4	31,7
Women	68,5	53,5	17,2
Age group (years)			
16–24	98,9	96,4	64,1
25–34	92,8	86,8	39,3
35–44	89,8	77,2	33,9
45–54	82,9	59,6	16,2
55–64	69,1	39,9	12,4
65–74	34,1	14,5	6,0
75+	14,2	5,2	1,6
Education (aged 25–64)			
Low	76,6	56,1	24,4
Middle	85,5	67,8	25,3
High	91,9	77,6	26,3

Figure C25 Watching video content online by gender and age

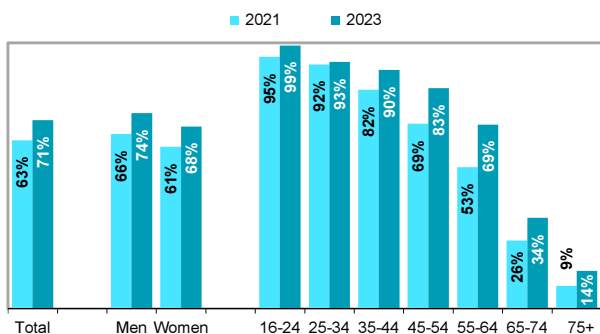
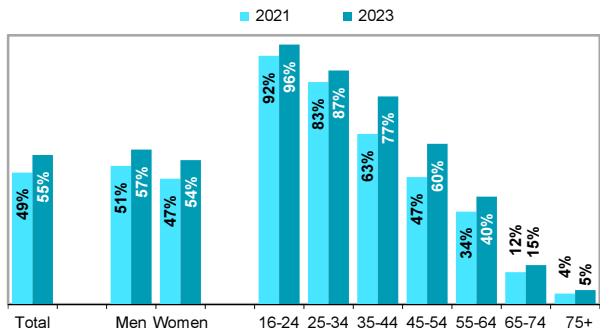


Figure C26 Listening to music online by gender and age



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



Figure C27 Persons aged 16–74 years in EU countries listening to music online; 2022

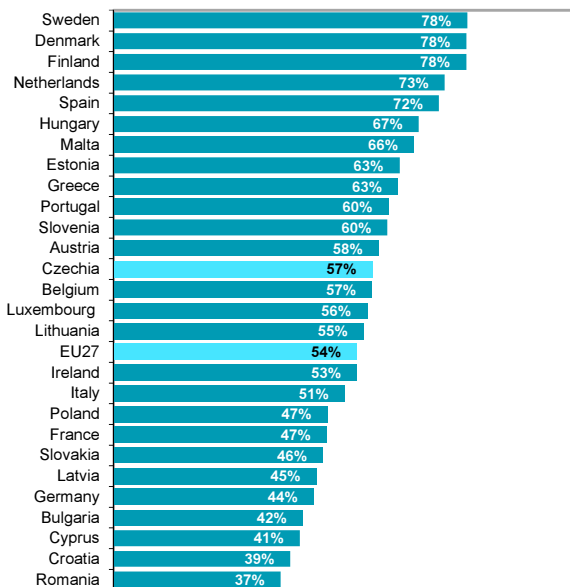
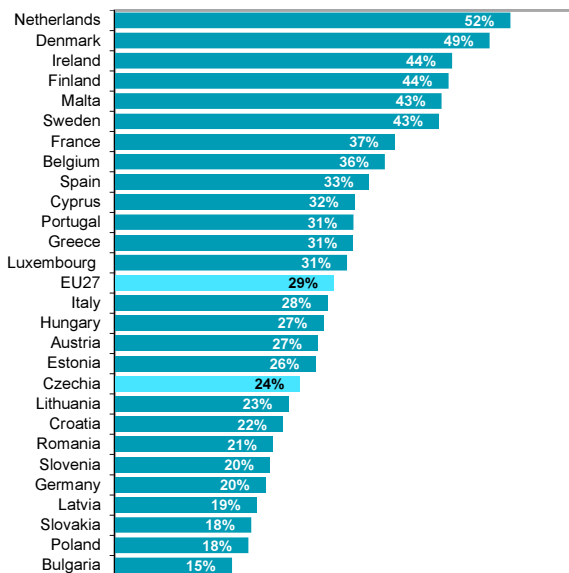


Figure C28 Persons aged 16–74 years in EU countries playing games online; 2022



Source: Eurostat

C Persons

Table C10 Persons in Czechia using the internet for selected paid entertainment services; 2023

	Percentage		
	Watching paid video	Listening to paid music	Playing paid games
Total (aged 16+)	34,7	12,5	7,3
Men	36,6	13,6	11,6
Women	33,0	11,6	3,3
Age group (years)			
16–24	56,0	32,4	21,8
25–34	51,4	26,3	17,2
35–44	49,6	18,0	9,0
45–54	40,5	8,1	3,0
55–64	26,3	3,1	1,7
65–74	10,0	1,4	0,5
75+	1,9	0,2	0,4
Education (aged 25–64)			
Low	32,0	6,3	5,4
Middle	46,3	13,2	7,3
High	50,5	25,4	10,8

Figure C29 Watching paid video via Netflix, HBO MAX or similiar commercial services by gender and age

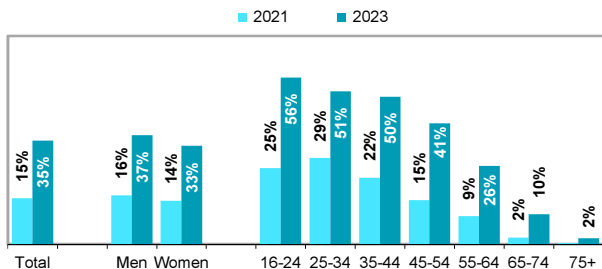
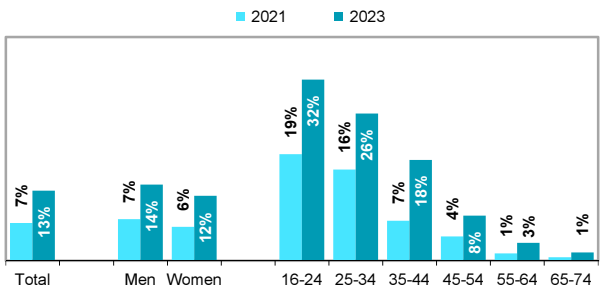


Figure C30 Listening to paid music via Spotify Premium, YouTube Premium or simmilar commercial services by gender and age



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

Figure C31 Persons aged 16–74 years in EU countries listening to paid music; 2023

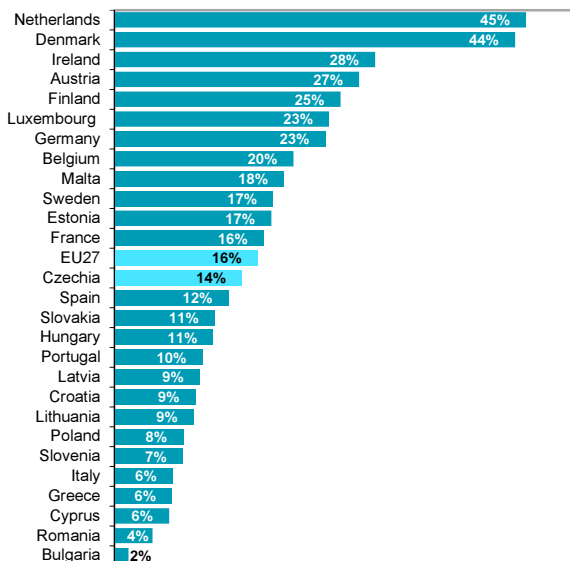
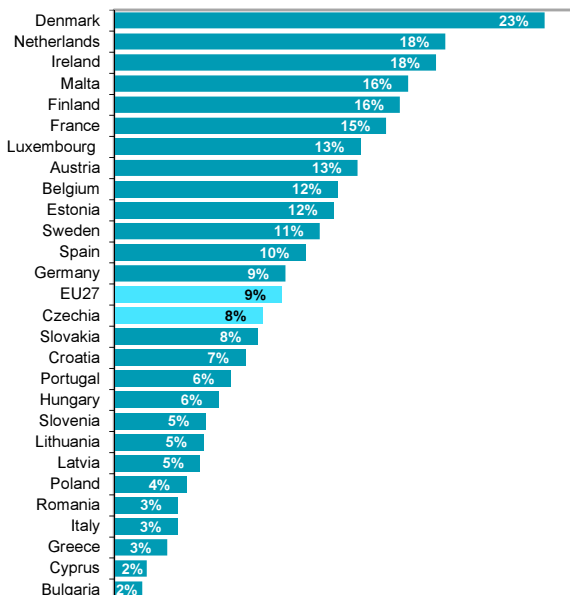


Figure C32 Persons aged 16–74 years in EU countries playing paid games; 2023



Source: Eurostat

C Persons

Table C11 Persons in Czechia performing selected security activities on the internet; 2023

	Percentage		
	Refusal to provide data for advertising purposes	Change of settings to prevent or limit cookies	Request to delete personal data
Total (aged 16+)	53,4	36,2	17,5
Men	55,0	39,1	18,2
Women	51,9	33,6	16,9
Age group (years)			
16–24	64,4	52,8	21,9
25–34	72,1	52,7	26,8
35–44	69,4	49,1	24,7
45–54	63,6	38,6	21,5
55–64	50,0	32,5	13,4
65–74	28,3	14,4	6,6
75+	12,6	7,4	2,9
Education (aged 25–64)			
Low	48,5	26,5	12,8
Middle	67,2	47,1	22,9
High	81,6	61,4	33,0

Figure C33 Change of settings to prevent or limit cookies by gender and age

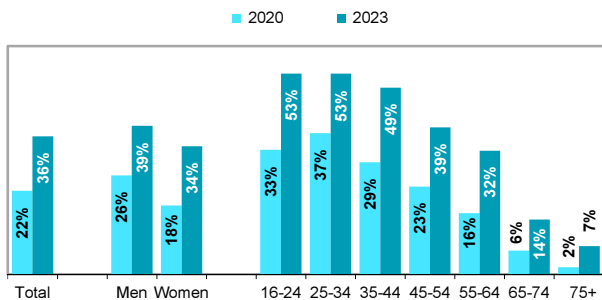
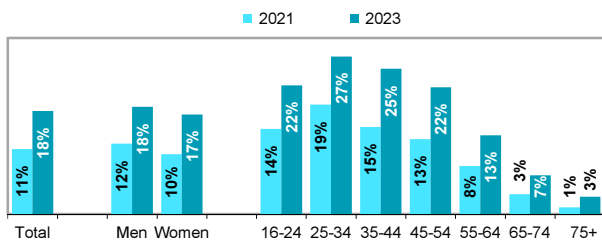


Figure C34 Request to delete personal data from the internet (e.g. unsubscribing from newsletters) by gender and age



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

C Persons

Figure C35 Persons aged 16–74 years in EU countries who refused to provide data for advertising purposes; 2023

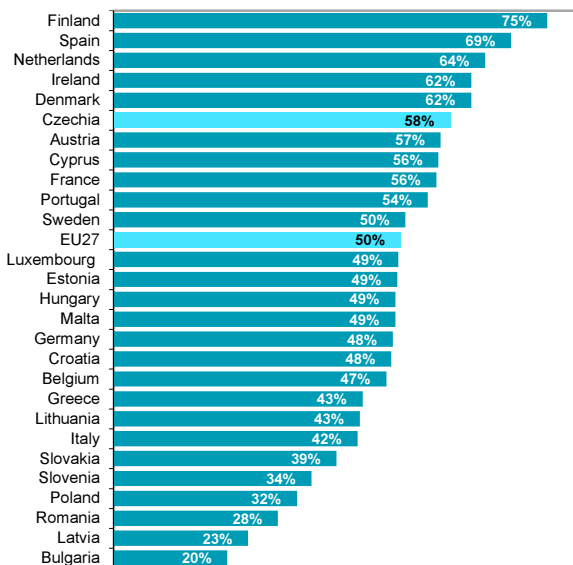
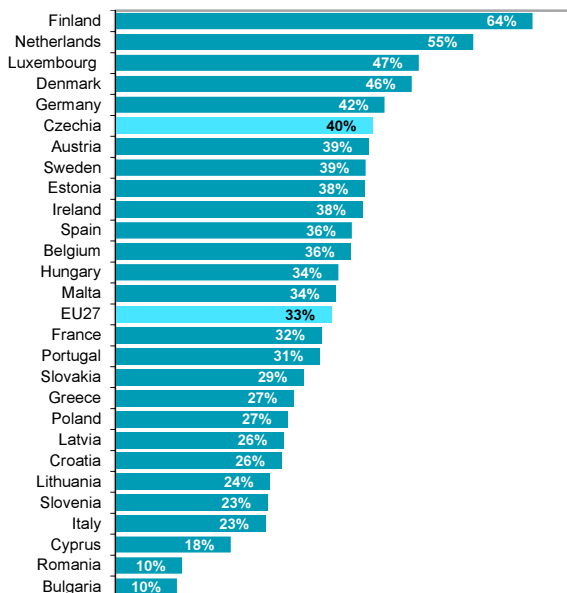


Figure C36 Persons aged 16–74 years in EU countries who changed settings to prevent or limit cookies; 2023



Source: Eurostat

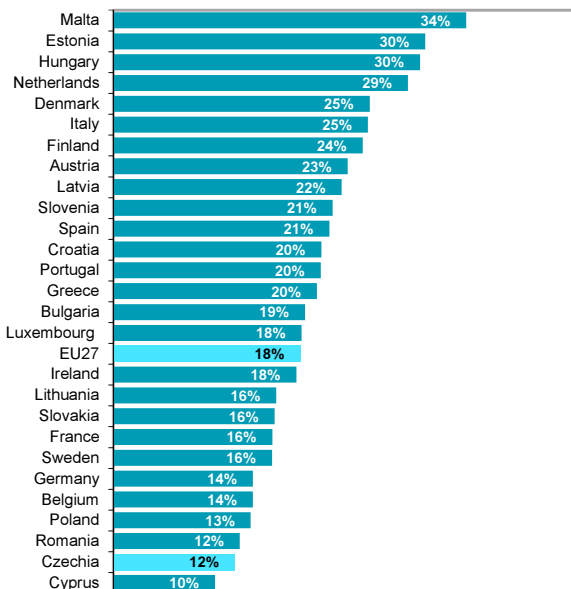
C Persons

Table C12 Persons in Czechia who expressed their opinions on civic or political issues on the internet; 2023

	Percentage	
	Discussing with others	Participation in a survey, petition or voting
Total (aged 16+)	7,2	7,4
Men	8,7	7,4
Women	5,9	7,5
Age group (years)		
16–24	9,4	10,2
25–34	6,7	10,1
35–44	11,9	10,6
45–54	8,2	7,3
55–64	6,7	7,7
65–74	4,0	3,1
75+	1,6	1,7
Education (aged 25–64)		
Low	6,0	5,6
Middle	8,6	8,7
High	11,9	14,1

as a percentage of all persons in a given socio-demographic group

Figure C37 Persons aged 16–74 years in EU countries who expressed their opinions on civic or political issues on the internet*; 2023



* included discussion with others on the internet and participation in a survey

Source: Czech Statistical Office, ICT use survey in households; Eurostat

D Enterprises

Data given in this chapter are based on results of the **Annual Statistical Survey on the ICT Use in Enterprises**, which has been carried out by the Czech Statistical Office (CZSO) since 2002. Since 2006, this survey has been mandatory for all EU member states according to the relevant regulation of the European Parliament and the Council.

The survey is every year conducted in the first quarter of the reference year in the sample of approximately **8 000 enterprises having 10+ employees** in selected economic activities. The results are then grossed up to the whole population of the measured enterprises, which is around 40 000 enterprises with 10+ employees.

The data obtained are available **broken** by prevailing economic activity by the CZ-NACE classification, by size of enterprises measured, and by their mutual combination.

Notes

The reference period is, in case of majority of data on equipment or ICT use in enterprises, is the month, in which the enterprise filled in the report (questionnaire), i.e. usually February to April of the relevant year. In case of indicators on e-commerce and for other selected indicators the reference period is the entire relevant year (in this issue it is 2022 although the survey was carried out in 2023).

Comparability of the CZSO and Eurostat Data

Since 2016 the data published by Eurostat and by the CZSO have been identical. Data for **international comparisons** are taken from the Eurostat database for digital economy and society, data of which are every year updated in January. Detailed information can be found at: <https://bit.ly/EurostatDatabase>

Definitions (sorted alphabetically)

- **Advanced text analytics** in AI is text data mining technology, such as natural language processing or other advanced text generative techniques that can create formats from different types of data to enable deeper analysis.
- A **CRM system/application** (Customer Relationship Management) is focused on the relationship between the enterprise and its customers. CRM applications allow to estimate, predict and meet the needs of customers, their buying habits and consumer behaviour.
- An **ERP system/application** (Enterprise Resource Planning) is used to manage and share information between enterprises' activities (e.g. production, logistics, purchasing, warehousing, sales, distribution, asset management, invoicing, accounting etc.). ERP can be a software package or a customized application using only some of its modules according to specific enterprises' activities.
- An **Artificial Intelligence (AI)** refers to systems that use technologies such as: text mining, computer vision, speech recognition, natural language generation, machine learning, deep learning to gather and/or use data to predict, recommend or decide, with varying levels of autonomy, the best action to achieve specific goals. Artificial intelligence systems can be purely software based, e.g. chatbots and business virtual assistants based on natural language processing, face recognition systems based on computer vision or speech recognition systems, machine translation software, or embedded in devices, e.g. autonomous robots or drones.
- An **enterprise website** is a location on the World Wide Web identified by a Web address. Collection of Web files on a particular subject that includes a beginning file called a home page. Information on only enterprises' contacts published in internet databases or catalogues of enterprises are excluded.
- **Data analytics** involves the extraction of information from Big Data, the storage and processing of which exceeds the capabilities of conventional means of enterprise information technology. Special

programs such as Business Intelligence tools, SQL, Tableau, Python, SAS, Apache Spark, Excel VBA, etc. are used for it.

- Enterprises **conducting online meetings** are those whose employees use applications such as Skype, MS Teams, Google Meet, for video calls, chats or online lectures. They are used via the Internet, users can be connected from anywhere and communication can take place internally, but also between the company and its clients or business partners.
- **Employee access to mobile internet** on portable devices means that the enterprise provides mobile connectivity to employees with the understanding that the charges are at least partially (up to an agreed limit) the enterprise's expense and not the employees'. Employees can also connect to the internet from their personal device, but the data plan charges must be at least partly paid by the enterprise.
- **Fixed Internet connection** includes an external Internet connection supplied by the provider. This includes DSL connection, optical fiber connection, cable modem 'cable TV network connection', leased lines 'frame relay, ATM, digital multiplex' and also fixed wireless connection from a fixed location using WiFi or LTE technology. *This does not include mobile internet connection.*
- **Mobile connection** is an Internet connection via a data plan from mobile operators. Internet access takes place via the mobile telephone network, most often via a data SIM card inserted in a mobile phone / smartphone or tablet. The volume of transmitted data corresponds to the agreed data tariff.
- **Remote access** is the possibility of using the e-mail system of the enterprise, enterprise application or documents for users (employees) located outside the premises of the company, usually in the form of a secure connection via the Internet.
- **Robots/ Robotics:** according to their intended application, robots may be industrial or service. An industrial robot is an automatically controlled, reprogrammable, multipurpose manipulator programmable in three or more axes, which may be either fixed in place or mobile for use in industrial automation applications. A service robot is a machine that has a degree of autonomy and is able to operate in complex and dynamic environment that may require interaction with persons, objects or other devices, excluding its use in industrial automation applications.
- Facebook, the professional network LinkedIn or websites sharing multimedia content (e.g. YouTube, Instagram) are considered **social networks** in this survey. An **enterprise using social networks** has its own profile or account based on them.
- **The use of paid cloud services** means that enterprises use tools, softwares, servers or even storage space that they have bought from cloud providers and use these services over the internet. The advantage of cloud applications is that they don't need to be installed or downloaded anywhere, they only require a web browser to use, and they can be accessed from any device and any location with internet access.
- **Web (e-commerce) sales** include sales via the enterprise's website (e.g. e-shop), mobile apps or online marketplaces. An **online marketplace** is a website where sellers can offer their goods or services for an agreed commission.
- **3D printing** is the process of creating three-dimensional material objects on a 3D printer. 3D objects are usually created layer by layer, by gradually adding continuous layers of material (most often thermoplastics, metals or resins), according to a digital template.

Detailed information on methodology of the survey can be found in the publication **Information and Communication Technologies in the Business Sphere in 2023** (code **062005-23**) accessible on the CZSO website at <https://bit.ly/PodnikyPublikace2023> (in the Czech language only).

Further information on the ICT use by enterprises can be found at: https://www.czso.cz/csu/czso/podnikatelsky_sektor (in the Czech language only).



D Enterprises

Table D1 Enterprises in Czechia with internet access; 2023

	Percentage		
	Fixed	Mobile, total	Mobile only
Total (10+ employees):	93,0	85,4	4,1
Small enterprises (10-49)	92,0	83,4	4,6
Medium enterprises (50-249)	96,5	91,6	2,6
Large enterprises (250+)	99,6	98,5	0,3
Industry (10+ employees):			
Manufacturing	95,3	87,4	2,9
Electricity, gas and water supply	97,4	95,0	2,3
Construction	89,5	84,6	6,6
Sale and repair of motor vehicles	98,5	89,5	1,5
Wholesale trade	94,8	88,5	3,8
Retail trade	94,4	80,1	1,8
Transport and storage	86,7	86,8	8,6
Accommodation	97,2	82,3	2,1
Food and beverage services	89,4	71,1	5,4
Travel agency and related activities	97,8	93,6	.
Media industries including publishing activities	98,2	89,0	.
Telecommunication and ICT activities	97,9	89,1	1,6
Professional, S&T activities	95,7	88,1	2,9
Administrative and support service activities	82,9	77,5	6,9

Figure D1 Enterprises using fixed internet connection

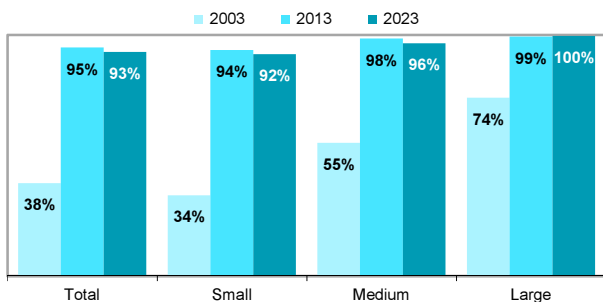
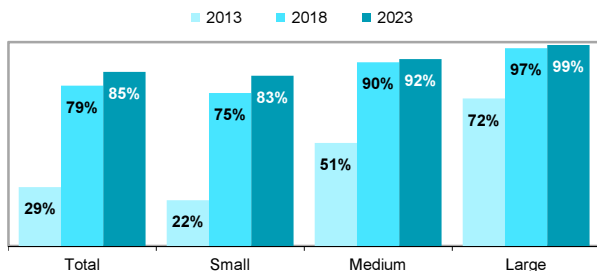


Figure D2 Enterprises using mobile internet connection



as a percentage of all enterprises with 10+ employees in a given group

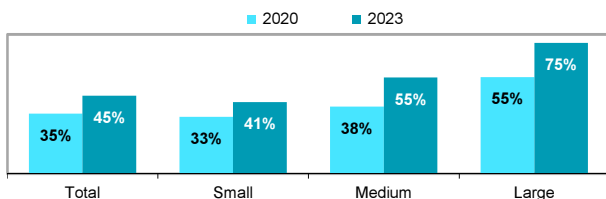
Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Table D2 The maximum contracted download speed of fixed internet connection used by enterprises in Czechia; 2023

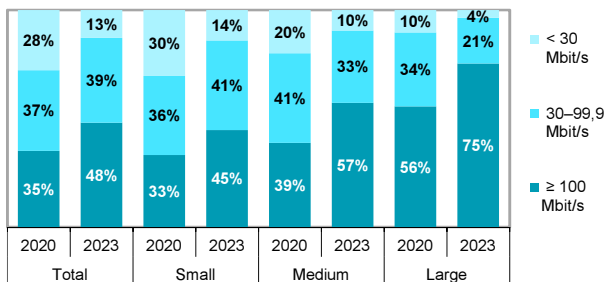
	Percentage		
	< 30 Mbit/s	30–99,9 Mbit/s	≥ 100 Mbit/s
Total (10+ employees):	81,0	44,7	7,5
Small enterprises (10-49)	79,0	41,0	6,9
Medium enterprises (50-249)	87,3	55,2	8,5
Large enterprises (250+)	96,0	75,0	16,3
Industry (10+ employees):			
Manufacturing	80,8	40,8	5,8
Electricity, gas and water supply	83,8	52,4	7,7
Construction	75,0	36,9	3,9
Sale and repair of motor vehicles	88,0	42,8	8,9
Wholesale trade	85,7	47,7	6,7
Retail trade	80,0	43,6	11,3
Transport and storage	72,6	40,3	5,9
Accommodation	90,4	55,4	6,7
Food and beverage services	78,3	43,0	7,9
Travel agency and related activities	90,1	49,6	15,1
Media industries incl. publishing activities	91,4	64,4	19,2
Telecommunication and ICT activities	94,6	73,2	22,8
Professional, S&T activities	87,2	56,2	9,8
Administrative and support service activities	72,4	38,4	5,2

Figure D3 Enterprises using fixed internet connection with the maximum contracted download speed of at least 100 Mbit/s



as a percentage of all enterprises with 10+ employees in a given group

Figure D4 The maximum contracted download speed of fixed internet connection used by enterprises by size



as a percentage of enterprises with fixed internet connection in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D5 Enterprises in EU countries using fixed internet connection with the maximum contracted download speed of at least 100 Mbit/s; 2023

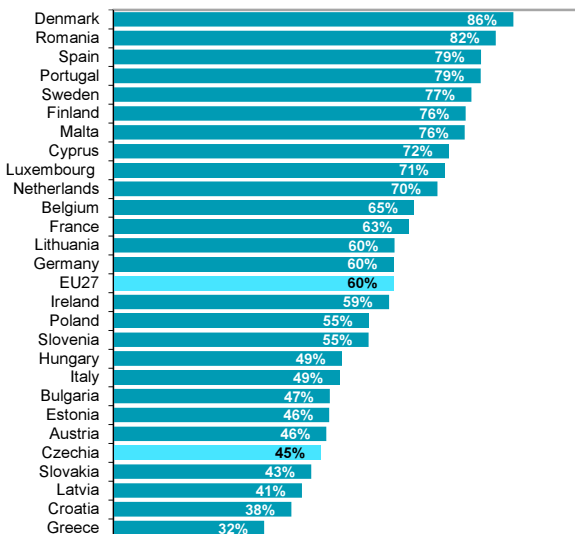
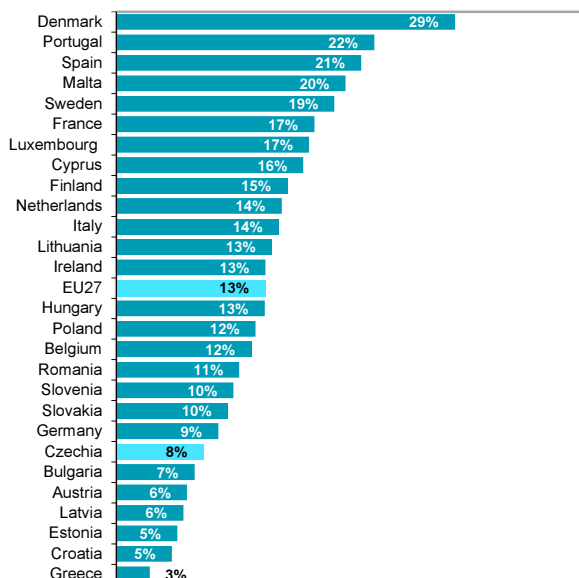


Figure D6 Enterprises in EU countries using fixed internet connection with the maximum contracted download speed of at least 1 Gbit/s; 2023



Source: Eurostat

D Enterprises

Table D3 Employees of enterprises in Czechia with access to the internet for business purposes; 2023

	Total	Percentage via mobile networks
Total (10+ employees):	54,1	35,4
Small enterprises (10-49)	54,3	39,0
Medium enterprises (50-249)	54,4	37,1
Large enterprises (250+)	53,9	32,3
Industry (10+ employees):		
Manufacturing	46,8	26,7
Electricity, gas and water supply	66,0	44,2
Construction	48,9	39,7
Sale and repair of motor vehicles	77,0	49,2
Wholesale trade	80,0	58,4
Retail trade	47,7	20,8
Transport and storage	53,7	40,0
Accommodation	52,3	26,6
Food and beverage services	37,6	22,6
Travel agency and related activities	83,6	59,2
Media industries including publishing activities	93,2	61,0
Telecommunication and ICT activities	94,0	73,9
Professional, S&T activities	87,8	66,7
Administrative and support service activities	25,2	18,4

Figure D7 Employees of enterprises with access to the internet for business purposes

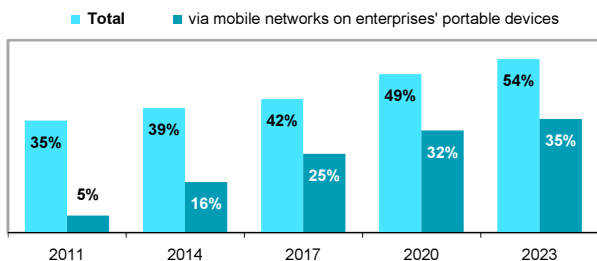
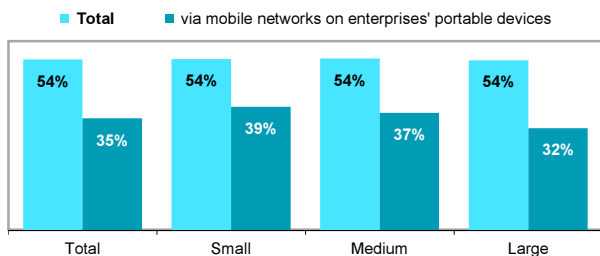


Figure D8 Employees of enterprises with access to the internet for business purposes; 2023

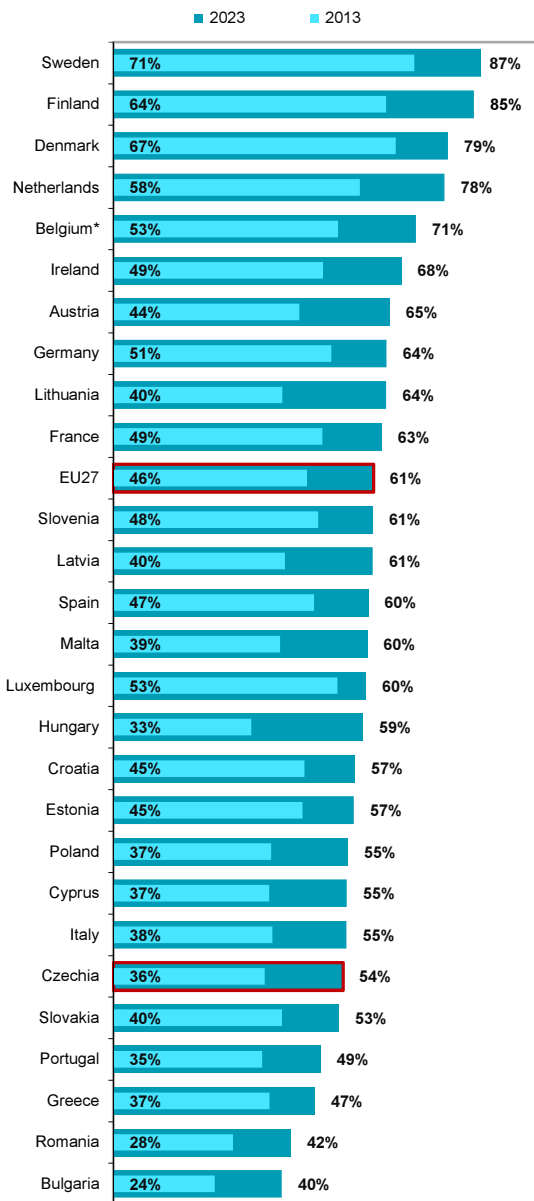


as a percentage of all employees in enterprises in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D9 Employees of enterprises in EU countries with access to the internet for business purposes



* data for 2015

Source: Eurostat

D Enterprises

Table D4 Enterprises in Czechia that allow employees to work remotely; 2022

	Percentage	
	Allowing remote access to the documents and business applications	Conducting remote meetings via the internet
Total (10+ employees):	53,4	42,0
Small enterprises (10-49)	46,0	33,4
Medium enterprises (50-249)	78,3	69,9
Large enterprises (250+)	94,8	94,2
Industry (10+ employees):		
Manufacturing	57,6	45,9
Electricity, gas and water supply	58,9	49,9
Construction	40,0	18,5
Sale and repair of motor vehicles	65,8	48,4
Wholesale trade	64,1	54,3
Retail trade	43,7	29,4
Transport and storage	38,5	23,0
Accommodation	48,4	29,2
Food and beverage services	20,7	9,8
Travel agency and related activities	70,9	68,8
Media industries incl. publishing activities	81,8	78,2
Telecommunication and ICT activities	90,5	92,9
Professional, S&T activities	72,8	74,9
Administrative and support service activities	42,7	34,4

Figure D10 Enterprises with employees having remote access to the enterprises' documents and business applications

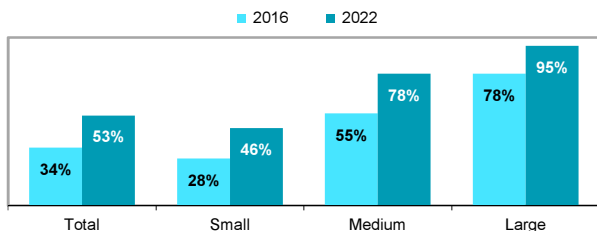
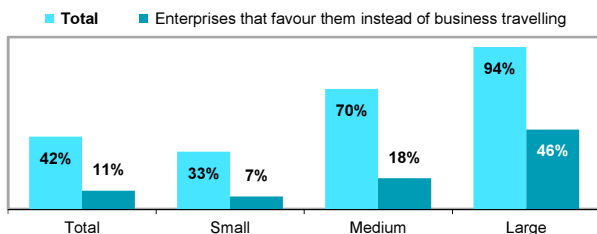


Figure D11 Enterprises conducting remote meetings via the internet; 2022



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

Figure D12 Enterprises in EU countries with employees having remote access to the e-mail system, documents and business applications of the enterprise; 2022

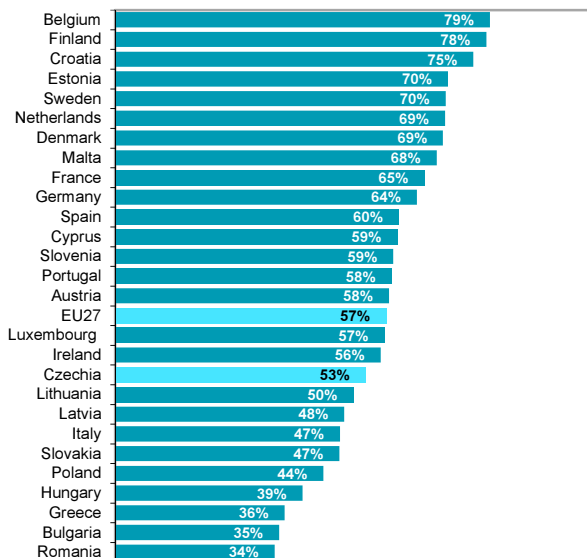
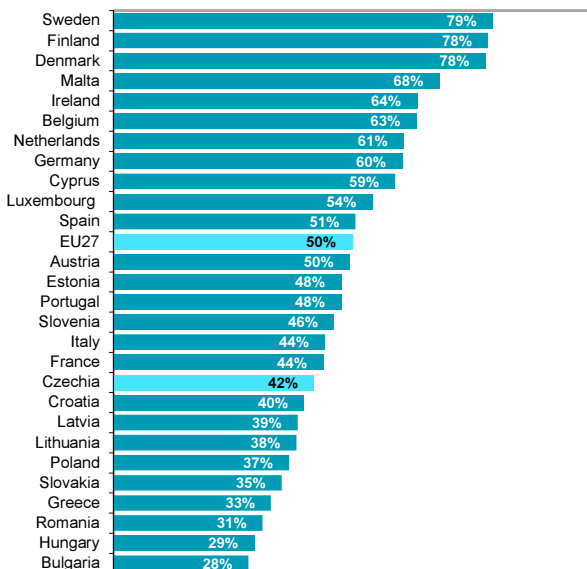


Figure D13 Enterprises in EU countries conducting remote meetings via the internet; 2022



Source: Eurostat

D Enterprises

Table D5 Enterprises in Czechia having a website; 2023

	Percentage		
	Total	website content available	
		only in Czech	in at least two languages
Total (10+ employees):	82,9	50,9	30,2
Small enterprises (10-49)	80,8	54,0	25,2
Medium enterprises (50-249)	90,8	42,0	46,1
Large enterprises (250+)	93,3	26,2	64,4
Industry (10+ employees):			
Manufacturing	86,4	41,9	42,9
Electricity, gas and water supply	93,8	72,0	20,4
Construction	81,1	71,8	8,9
Sale and repair of motor vehicles	97,0	82,0	14,0
Wholesale trade	88,0	59,5	28,3
Retail trade	70,1	50,1	19,9
Transport and storage	68,3	42,9	23,9
Accommodation	95,9	22,3	73,2
Food and beverage services	79,4	52,2	27,3
Travel agency and related activities	94,6	49,7	38,1
Media industries incl. publishing activities	94,9	52,3	34,1
Telecommunication and ICT activities	93,1	36,1	44,3
Professional, S&T activities	89,4	42,5	41,7
Administrative and support service activities	66,3	50,1	14,2

Figure D14 Enterprises having a website

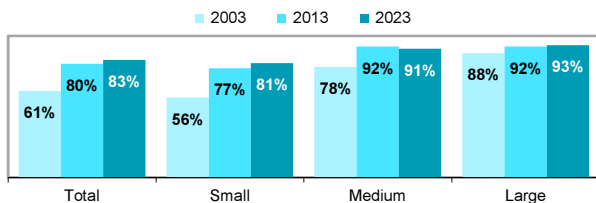
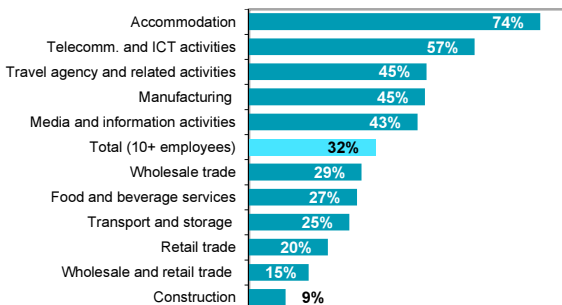


Figure D15 Enterprises in selected industries having website content available in foreign languages; 2023



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D16 Enterprises in EU countries having a website; 2023

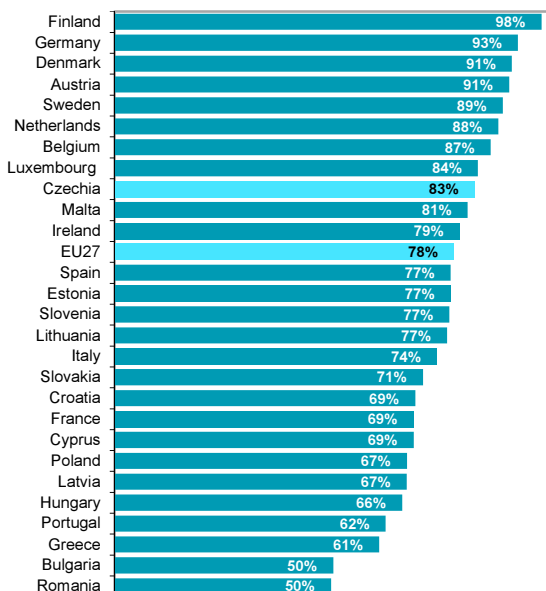
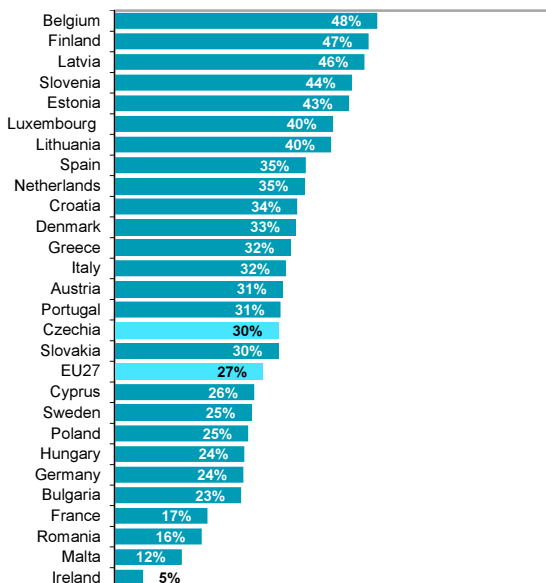


Figure D17 Enterprises in EU countries having website content available in at least two languages; 2023



Source: Eurostat

D Enterprises

Table D6 Enterprises whose websites enabling visitors to carry out selected activities; 2023

	Percentage		
	View the product description / price lists	View job vacancies	Customise or design products online
Total (10+ employees):	58,2	33,8	17,4
Small enterprises (10-49)	56,8	25,9	17,8
Medium enterprises (50-249)	63,3	61,1	14,7
Large enterprises (250+)	65,8	81,3	20,5
Industry (10+ employees):			
Manufacturing	59,2	35,3	15,1
Electricity, gas and water supply	66,7	37,6	11,4
Construction	41,7	24,2	10,7
Sale and repair of motor vehicles	79,9	40,1	38,7
Wholesale trade	75,8	31,9	29,2
Retail trade	53,3	28,4	19,7
Transport and storage	42,2	31,9	13,7
Accommodation	90,3	27,9	44,8
Food and beverage services	76,2	19,5	14,3
Travel agency and related activities	90,0	34,3	55,8
Media industries incl. publishing activities	85,5	50,0	23,9
Telecommunication and ICT activities	66,2	64,8	18,7
Professional, S&T activities	51,3	46,7	13,0
Administrative and support service activ.	41,4	31,6	12,6

Figure D18 Enterprises whose websites enabling view job vacancies or online job application

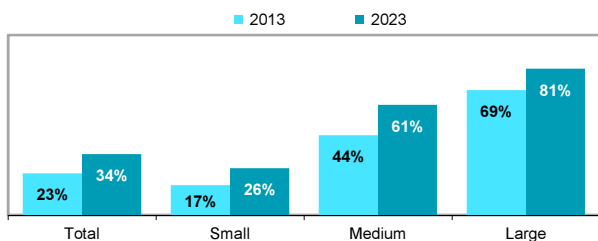
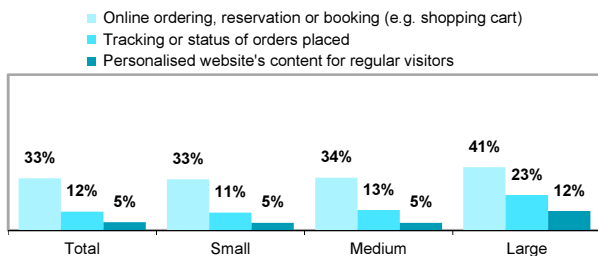


Figure D19 Enterprises whose websites enabling visitors to carry out selected activities; 2023



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D20 Enterprises in EU countries whose websites enabling view job vacancies or online job application; 2023

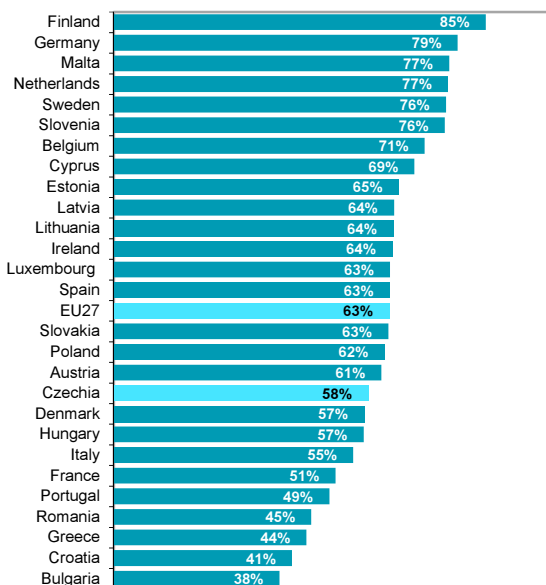
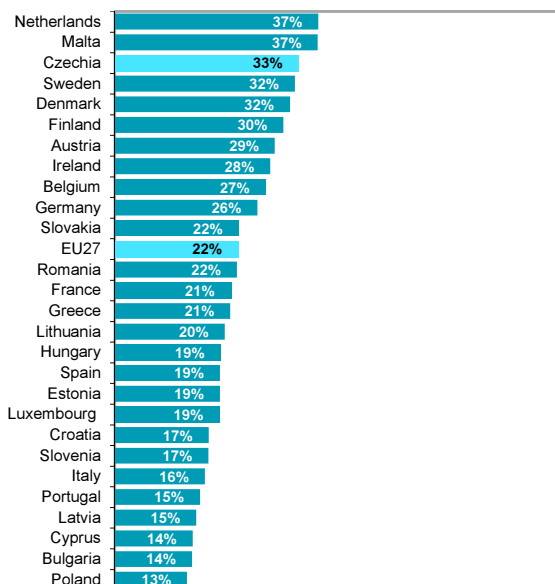


Figure D21 Enterprises in EU countries whose websites enabling online ordering, reservation or booking; 2023



Source: Eurostat

D Enterprises

Table D7 Enterprises in Czechia having web sales*; 2022

	Percentage	
	Total	Web sales generate at least 10 % of turnover
Total (10+ employees):	20,5	13,1
Small enterprises (10-49)	19,9	13,4
Medium enterprises (50-249)	21,7	11,0
Large enterprises (250+)	27,0	14,8
Industry (10+ employees):		
Manufacturing	17,0	8,4
Electricity, gas and water supply	8,0	6,2
Construction	5,8	4,1
Sale and repair of motor vehicles	29,5	18,2
Wholesale trade	41,9	26,5
Retail trade	41,4	26,6
Transport and storage	7,5	4,5
Accommodation	72,3	66,1
Food and beverage services	25,1	18,2
Travel agency and related activities	69,9	65,3
Media industries including publishing activities	54,1	37,4
Telecommunication and ICT activities	22,8	15,8
Professional, S&T activities	13,0	7,8
Administrative and support service activities	8,4	5,5

Figure D22 Enterprises having web sales*

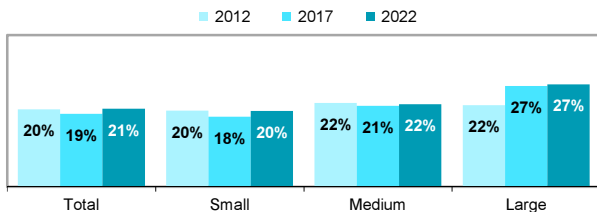
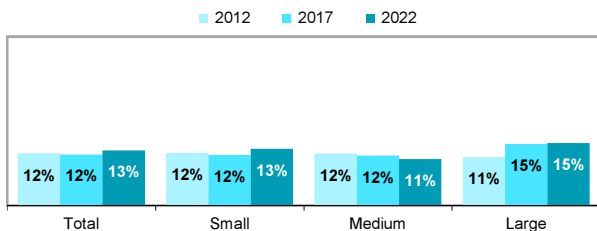


Figure D23 Enterprises for which web sales* generate at least 10 % of their total turnover



* Web sales cover orders, booking and reservations placed via enterprise's websites or apps (webshops) or e-commerce marketplace websites or apps. as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D24 Enterprises in EU countries having web sales*; 2022

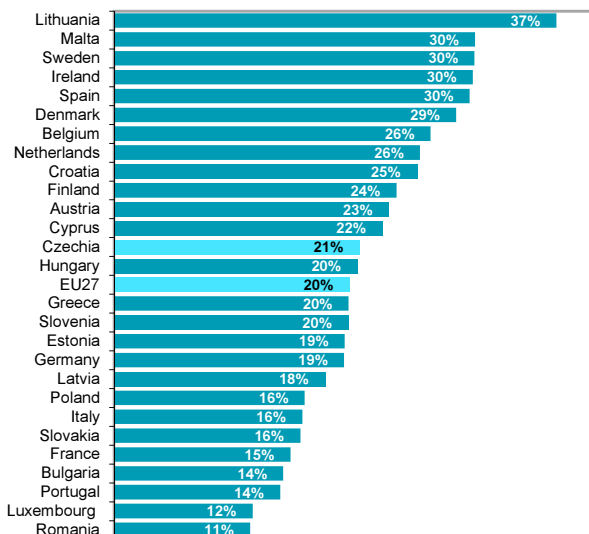
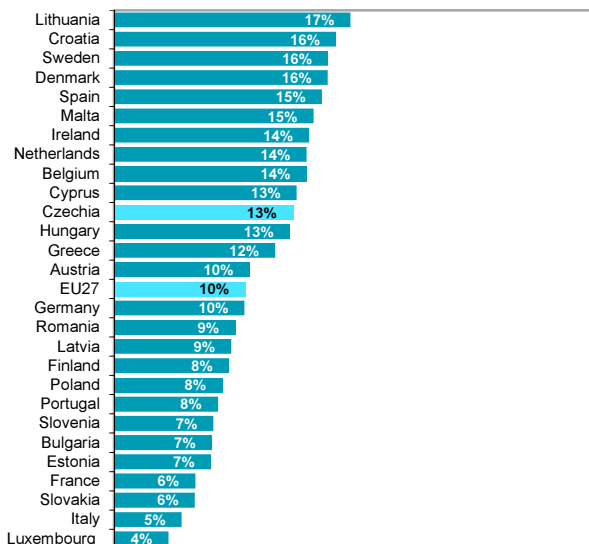


Figure D25 Enterprises in EU countries for which web sales* generate at least 10 % of their total turnover; 2022



* Web sales cover orders, booking and reservations placed via enterprise's websites or apps (webshops) or e-commerce marketplace websites or apps.

Source: Eurostat

D Enterprises

Table D8 Enterprises in Czechia having a user profile on social networks or multimedia content sharing websites; 2023

Percentage

	Facebook or LinkedIn	YouTube, Instagram etc.
Total (10+ employees):	51,5	29,1
Small enterprises (10-49)	47,5	26,0
Medium enterprises (50-249)	62,6	36,6
Large enterprises (250+)	86,6	61,3
Industry (10+ employees):		
Manufacturing	48,0	25,4
Electricity, gas and water supply	43,3	20,8
Construction	29,3	15,2
Sale and repair of motor vehicles	66,1	39,0
Wholesale trade	63,7	42,2
Retail trade	62,8	35,6
Transport and storage	38,0	12,4
Accommodation	86,3	62,1
Food and beverage services	68,4	44,2
Travel agency and related activities	85,5	64,9
Media industries including publishing activities	87,8	70,3
Telecommunication and ICT activities	76,5	47,6
Professional, S&T activities	57,2	32,5
Administrative and support service activities	36,8	15,6

Figure D26 Enterprises having a user profile on social networks like Facebook or LinkedIn

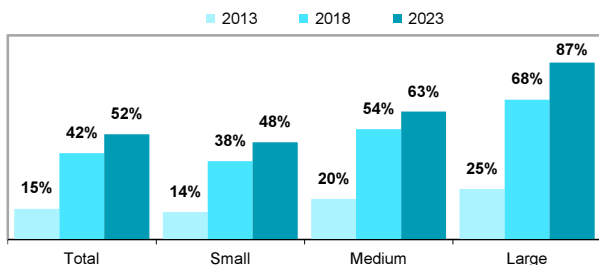
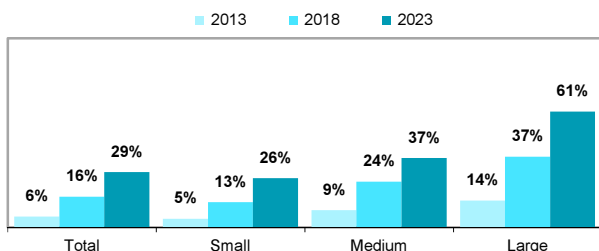


Figure D27 Enterprises having a user profile on multimedia content sharing websites or apps like YouTube or Instagram



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

D Enterprises

Figure D28 Enterprises in EU countries having a user profile on social networks like Facebook or LinkedIn; 2023

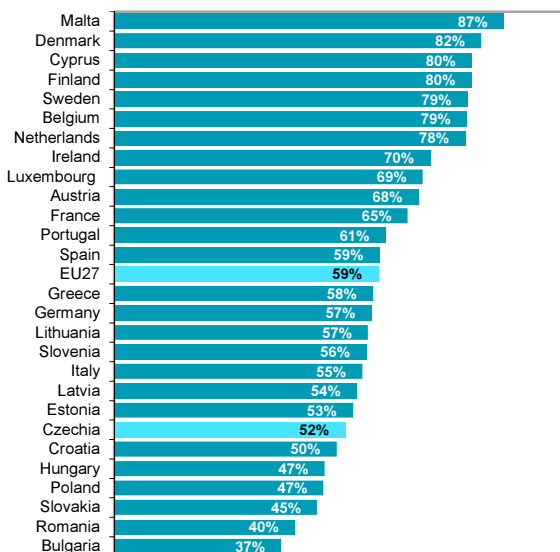
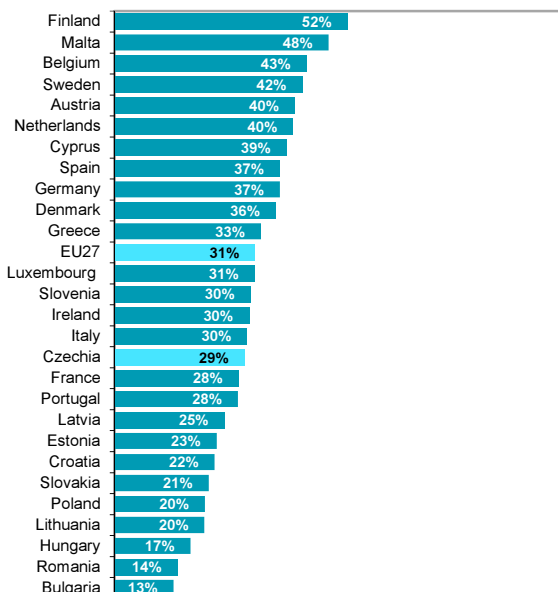


Figure D29 Enterprises in EU countries having a user profile on multimedia content sharing websites or apps like YouTube or Instagram; 2023



Source: Eurostat

D Enterprises

Table D9 Enterprises in Czechia using paid cloud computing services

	Percentage		
	2017	2020	2023
Total (10+ employees):	22,0	28,8	47,1
Small enterprises (10-49)	20,0	25,7	42,9
Medium enterprises (50-249)	27,5	36,9	60,0
Large enterprises (250+)	38,7	55,7	78,9
Industry (10+ employees):			
Manufacturing	19,1	26,5	45,7
Electricity, gas and water supply	24,6	31,1	44,0
Construction	17,0	17,8	43,0
Sale and repair of motor vehicles	22,9	29,7	42,3
Wholesale trade	28,4	38,7	58,0
Retail trade	23,1	27,6	41,3
Transport and storage	12,6	20,8	34,8
Accommodation	24,3	33,5	52,5
Food and beverage services	9,6	17,9	32,9
Travel agency and related activities	33,6	41,8	71,7
Media industries incl. publishing activities	44,0	48,5	70,9
Telecommunication and ICT activities	52,1	68,9	79,1
Professional, S&T activities	30,9	38,6	62,4
Administrative and support service activities	24,4	25,2	33,4

Figure D30 Enterprises using paid cloud computing services

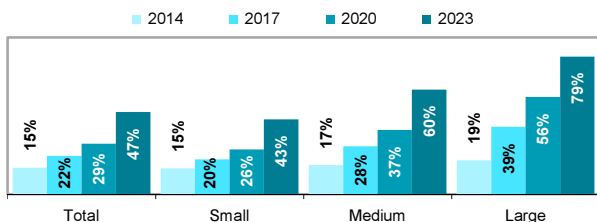
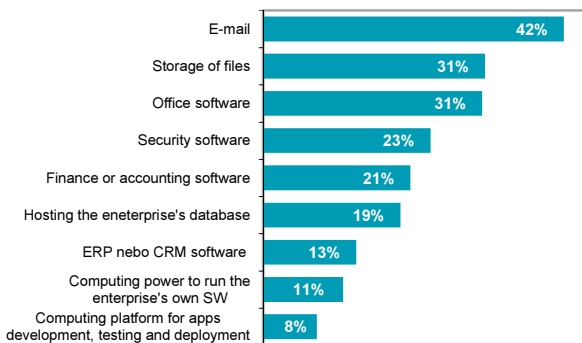


Figure D31 Enterprises using selected paid cloud computing services; 2023



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

Figure D32 Enterprises in EU countries using paid cloud computing services; 2023

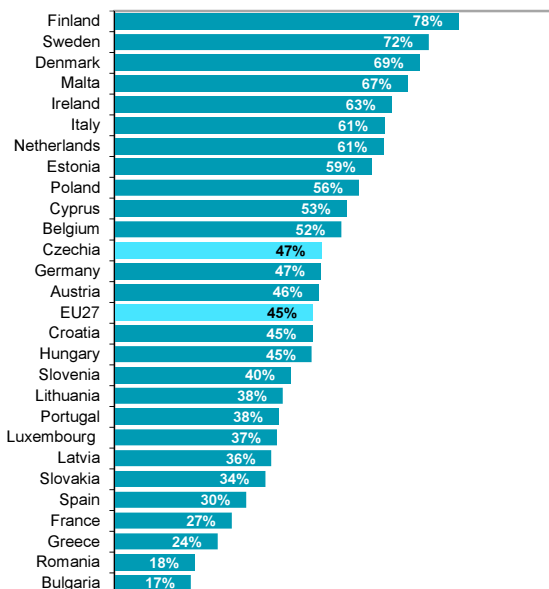
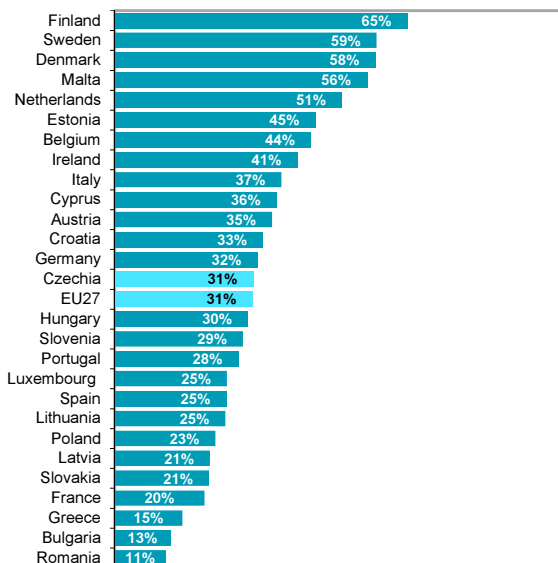


Figure D33 Enterprises in EU countries using storage of files as a paid cloud computing service; 2023



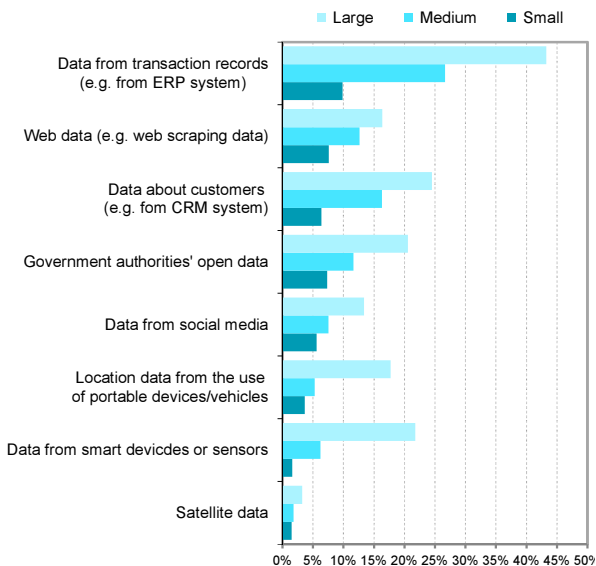
Source: Eurostat

D Enterprises

Tab. D10 Enterprises in Czechia performing data analytics; 2023

	Percentage		
	Total	by own employees	by external enterprise
Total (10+ employees):	19,5	17,6	5,4
Small enterprises (10-49)	15,3	13,4	4,4
Medium enterprises (50-249)	32,3	30,5	8,6
Large enterprises (250+)	51,5	49,3	12,9
Industry (10+ employees):			
Manufacturing	20,3	18,3	5,1
Electricity, gas and water supply	19,9	18,8	3,0
Construction	8,0	6,8	2,0
Sale and repair of motor vehicles	22,6	17,8	7,7
Wholesale trade	32,4	30,5	6,5
Retail trade	22,3	18,1	11,7
Transport and storage	14,6	12,4	4,0
Accommodation	19,5	16,8	8,6
Food and beverage services	11,6	9,4	5,2
Travel agency and related activities	28,9	28,9	6,5
Media industries incl. publishing activities	37,9	36,1	13,0
Telecommunication and ICT activities	38,5	37,2	7,7
Professional, S&T activities	20,2	19,3	5,6
Administrative and support service activ.	10,3	9,0	2,8

Figure D34 Enterprises by size performing data analytics on data from selected sources; 2023



as a percentage of all enterprises with 10+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises



Figure D35 Enterprises in EU countries performing data analytics; 2023

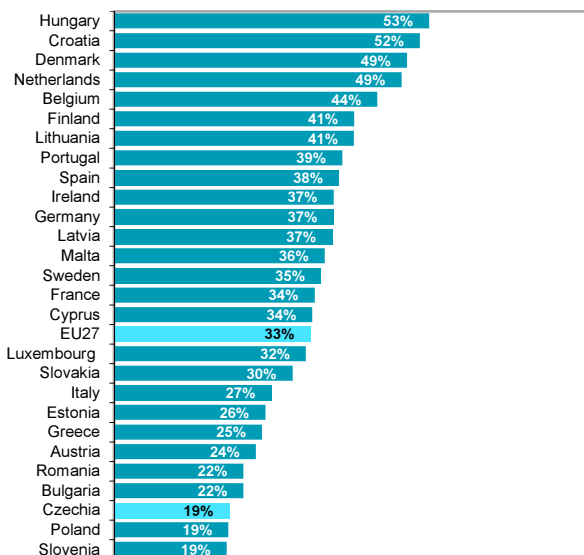
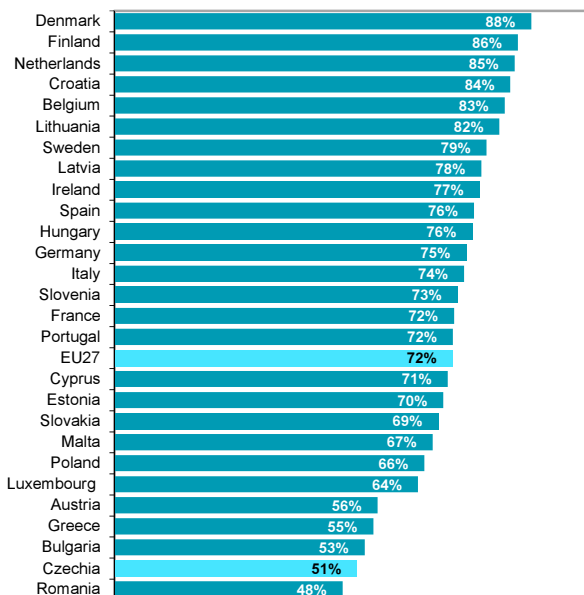


Figure D36 Large enterprises in EU countries performing data analytics; 2023



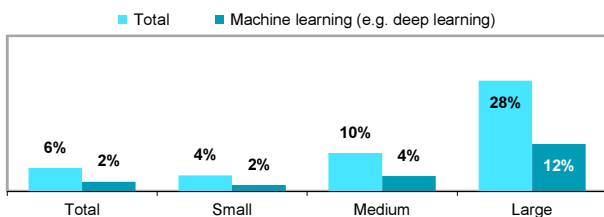
Source: Eurostat

D Enterprises

Tab. D11 Enterprises in Czechia using Artificial Intelligence; 2023

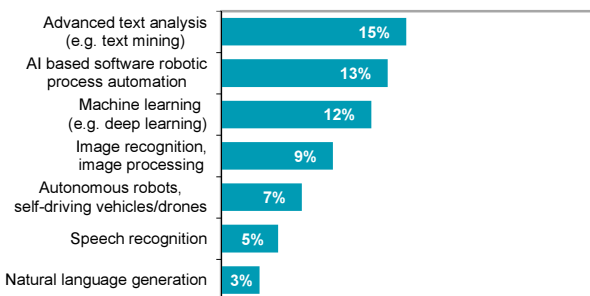
	Percentage		
	Total	Advanced text analysis	Machine (or deep) learning
Total (10+ employees):	5,9	3,0	2,3
Small enterprises (10-49)	4,0	2,0	1,5
Medium enterprises (50-249)	9,8	5,2	3,9
Large enterprises (250+)	28,4	14,9	12,1
Industry (10+ employees):			
Manufacturing	6,0	2,2	2,0
Electricity, gas and water supply	5,2	3,0	2,3
Construction	1,3	0,8	0,4
Sale and repair of motor vehicles	3,5	1,3	1,2
Wholesale trade	5,1	0,9	0,5
Retail trade	6,1	5,3	2,5
Transport and storage	4,4	3,3	1,5
Accommodation	3,3	1,8	0,8
Food and beverage services	2,4	2,4	1,0
Travel agency and related activities	8,7	6,4	.
Media industries incl. publishing activities	13,1	7,7	8,9
Telecommunication and ICT activities	25,6	14,6	18,4
Professional, S&T activities	9,4	5,7	3,6
Administrative and support service activities	5,3	2,3	1,7

Figure D37 Enterprises using Artificial Intelligence; 2023



as a percentage of all enterprises with 10+ employees in a given group

Figure D38 Large enterprises using selected Artificial Intelligence technologies; 2023



as a percentage of large enterprises with 250+ employees in a given group

Source: Czech Statistical Office, Survey on ICT usage in enterprises

Figure D39 Enterprises in EU countries using Artificial Intelligence; 2023

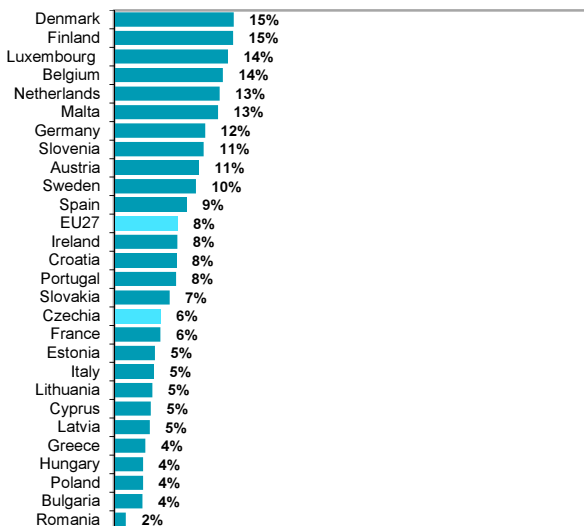
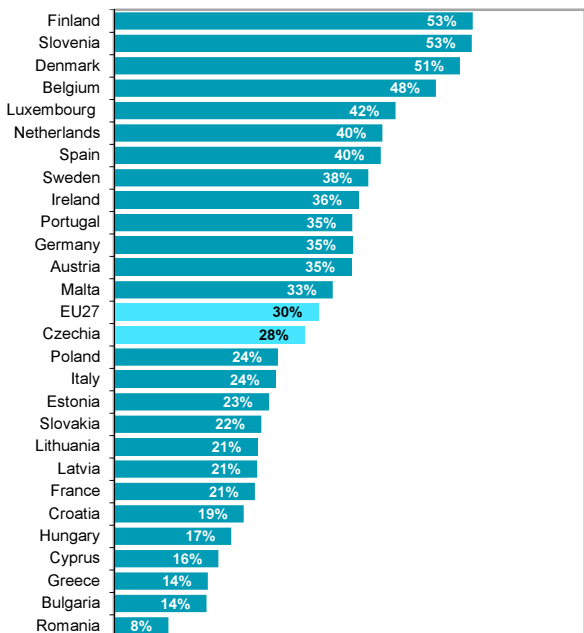


Figure D40 Large enterprises in EU countries using Artificial Intelligence; 2023



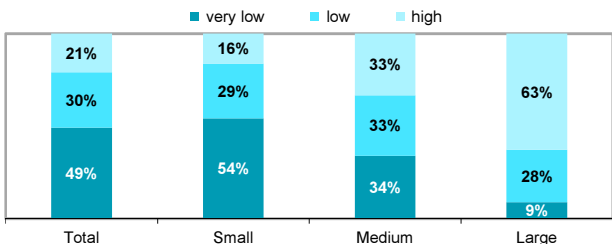
Source: Eurostat

D Enterprises

Tab. D12 Enterprises in Czechia by level of digitalisation*; 2023

	Percentage		
	very low	low	high
Total (10+ employees):	49,1	29,9	21,0
Small enterprises (10-49)	54,2	29,5	16,4
Medium enterprises (50-249)	33,9	32,6	33,5
Large enterprises (250+)	8,8	28,3	62,8
Industry (10+ employees):			
Manufacturing	51,9	30,7	17,4
Electricity, gas and water supply	60,3	24,1	15,6
Construction	65,7	28,8	5,5
Sale and repair of motor vehicles	38,9	33,7	27,4
Wholesale trade	28,3	32,6	39,1
Retail trade	44,9	22,2	32,9
Transport and storage	70,2	20,8	9,0
Accommodation, food and beverage services	48,4	33,1	18,5
Travel agency and related activities	12,1	28,4	59,4
Information and communication	11,2	31,5	57,3
Professional, S&T activities	34,0	40,1	26,0
Administrative and support service activities	69,7	22,2	8,2

Figure D41 Enterprises by level of digitalisation*; 2023



as a percentage of all enterprises with 10+ employees in a given group

* The level of digitisation (so-called Digital Intensity Index) of enterprises is determined by the EC according to the number of digital technologies used by enterprises (or the conditions met) from the following 12-point list:

- 1/ at least 50% of employees use enterprises' devices with internet access
- 2/ enterprise uses fixed internet connection with maximum contracted download speed of at least 30 Mbit/s
- 3/ enterprise uses artificial intelligence
- 4/ enterprise performs data analytics
- 5/ enterprise uses at least one paid cloud service
- 6/ enterprise uses at least one of advanced paid cloud services
- 7/ enterprise has a user profile on at least one type of social media
- 8/ enterprise has a user profile on at least two types of social media
- 9/ enterprise uses an ERP system application to manage business processes
- 10/ enterprise uses a CRM system application to evaluate customer information
- 11/ enterprises' web sales or EDI sales exceed 1% of their sales
- 12/ enterprises' web sales exceed 1% of their sales and sales to end customers exceed 10% of web sales

Enterprises that don't use any of these digital technologies or use no more than 3 digital technologies (see list above) have a very low level of digitalisation, those who use 4 to 6 technologies have a low and who use at least 7 of the 12 digital technologies a high.

Source: Czech Statistical Office, Survey on ICT usage in enterprises



D Enterprises

Figure D42 Enterprises in EU countries with a high level of digitalisation*; 2023

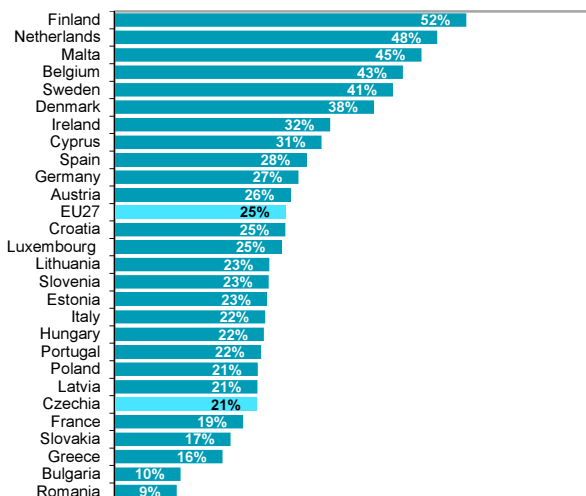
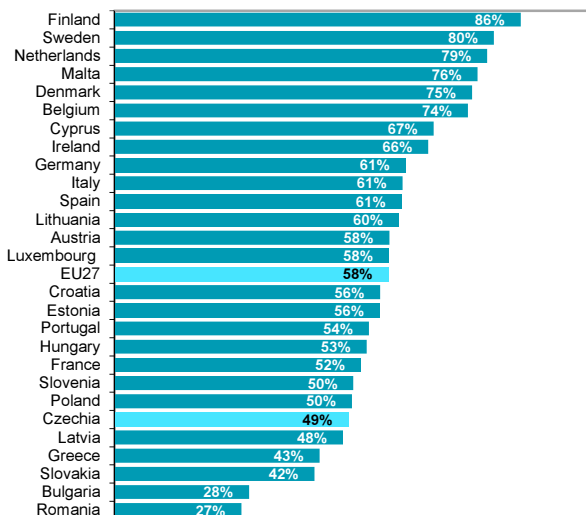


Figure D43 Small and medium enterprises in EU countries with at least a basic level of digitalisation; 2023**



* Enterprises that use at least 7 of the 12 selected digital technologies (see the list on the previous page) have a high level of digitalisation.

** At least a basic level of digitalisation is achieved by SMEs using at least 4 of the 12 selected digital technologies (see the list on the previous page).

Source: Eurostat

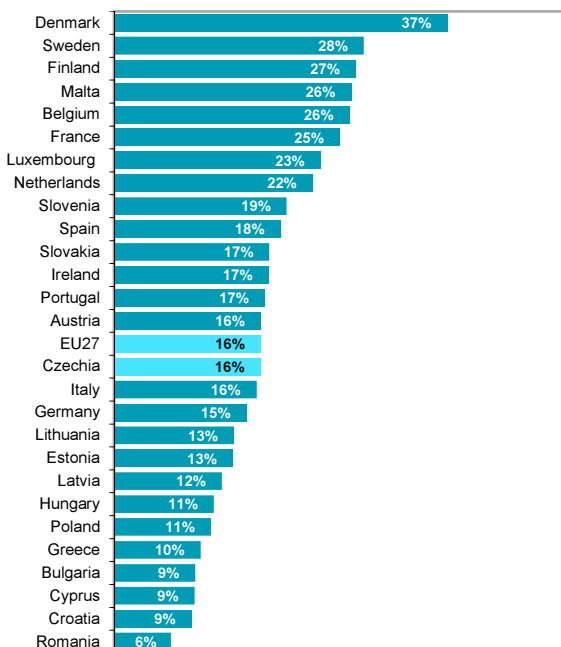
D Enterprises

Table D13 Enterprises in Manufacturing in Czechia using 3D printing and robotics; 2022

	Percentage	
	3D printing	Robotics
Manufacturing, total (10+ employees):	15,0	16,6
Small enterprises (10-49)	8,6	7,2
Medium enterprises (50-249)	21,6	28,2
Large enterprises (250+)	52,1	64,3
Manufacturing industry (10+ employees):		
Manufacturing of food products	2,9	10,6
Manufacturing of textiles and wearing apparel	5,2	3,8
Manufacturing of wood and paper	5,6	8,9
Manufacturing of chemicals or pharmaceutical products	13,9	12,3
Manufacturing of rubber and plastics products	14,6	30,4
Manufacturing of glass and building materials	10,6	20,0
Manufacturing of basic metals	10,8	18,3
Manufacturing of computer and electronic products	48,8	19,7
Manufacturing of electrical equipment	30,9	20,2
Manufacturing of machinery	27,3	17,0
Manuf. of motor vehicles or other transport equipment	34,7	42,8

Source: Czech Statistical Office, Survey on ICT usage in enterprises

Figure D44 Enterprises in Manufacturing in EU countries using industrial robots; 2022



Source: Eurostat

The Czech Statistical Office gathers and processes data on contact points of the **Czech POINT** and their use as the number of the system outputs, on newly established Data Boxes, and on the number of performed transactions by means of the Data Boxes from open data of the **Digital and Information Agency**.

The CZSO takes data on the number of **tax forms submitted electronically** to the Financial Administration of the Czech Republic by means of the **web application EPO** (electronic tax forms, e-Tax) or through Data Boxes from open data of the **Financial Administration of the Czech Republic**.

A valuable source of information on the internet use for communication with public administration is also a separate annual statistical survey named **Sample Survey on the ICT Use in Households and by Individuals** carried out by the CZSO.

The **reference period** for data on individuals is **the last 12 months** prior the survey interview. The interviews took place in **Q2 2023**.

Definitions (sorted alphabetically)

- **Bank identity** is an electronic identity mediated by banks. It serves as an identifier for logging into internet banking. It can also be used for logging into public administration services.
- **Citizen Portal** is the gateway to electronic services of the state. Citizens can submit applications to the authorities here or manage their documents and other data from state registers and databases. The data for numbers of registered users and numbers of authentications refer to 31st December of the given year.
- **Czech POINT** is a system of an assisted platform of public administration where citizens can deal with, dispose off, or settle as many as possible matters related to public administration at a single point.
- **CzechPOINT@home** is an interface of the Czech POINT system dedicated to citizens and enabling the data box holders a remote access (from a computer or mobile phone) to selected copies of documents without the need to pay a visit to a contact point of the Czech POINT system.
- **CzechPOINT@office** is a non-public interface of the Czech POINT system. It contains agendas performed by offices, authorities and bodies of public power in order to carry out their scope of authority.
- A **Data Box** shall serve for secure electronic delivery of documents in between public administration bodies and a legal or natural person.
- An **electronic submission** is a form of a submission performed over the internet. Therefore, legal and/or natural persons are not obliged to pay visits to public administration authorities or offices in person anymore.
- **Other public institutions** shall mean public educational institutions (schools, universities), public health services or public libraries.

Data for **international comparison** on individuals using the internet for interaction with public administration originate from the **Eurostat** database.

More information on this theme can be found at:

https://www.czso.cz/csu/czso/verejna_sprava

(in the Czech language only).

Table E1 Czech POINT - number of public contact points

	Number		
	2015	2020	2023
Total	7 942	7 893	7 377
at the municipal authority offices	6 398	6 398	5 877
at post offices	981	949	951
at notary offices	399	435	439
at other places	164	111	117

Table E2 Outputs issued 'at the desk' of the Czech POINT

	Thousand		
	2015	2020	2023
Total	2 139	1 961	2 639
Verified copies (extracts), total	1 584	1 048	794
from the Criminal Register	829	679	533
from the Land Register	352	171	115
from the Commercial Register	241	96	64
from the Driver Register	91	57	51
from the Trade Register	62	34	25
other verified extracts	9	11	6
Authorized conversion of documents, total	441	628	1 244
from paper to electronic form	139	402	1 010
from electronic to paper form	302	226	234
Requests for a Data box registration	35	112	73
Other outputs	79	173	528

Figure E1 Verified copies issued 'at the desk' of the Czech POINT from selected registers (thousand)

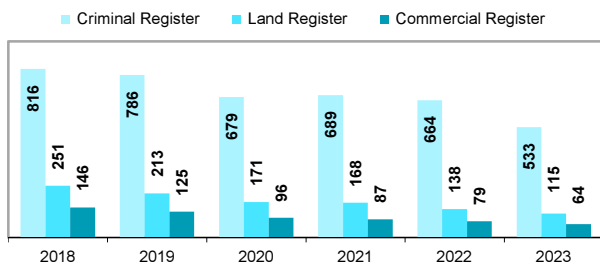
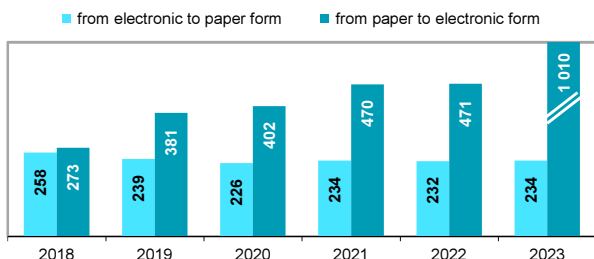


Figure E2 Authorized conversions of documents issued 'at the desk' of the Czech POINT (thousand)



Source: Digital and Information Agency



Table E3 Documents issued via CzechPOINT@office interface

Thousand

	2015	2020	2023
Total	7 795	5 055	2 099
Verified copies (extracts) ex officio, total	952	1 101	1 114
from the Register of Vital Records (e.g. certificates of birth or death)	420	429	374
from the Register of Residents/Citizens (e.g. certificates of permanent residence)	424	383	348
from the Criminal Register	48	72	114
others	59	217	279
Authorized conversion of documents, total	6 554	3 807	843
from paper to electronic form	5 662	3 240	434
from electronic to paper form	892	567	410
Verified extracts from Base registries	289	148	142

Figure E3 Authorized conversions of documents issued via the CzechPOINT@office interface (thousand)

■ from electronic to paper form ■ from paper to electronic form

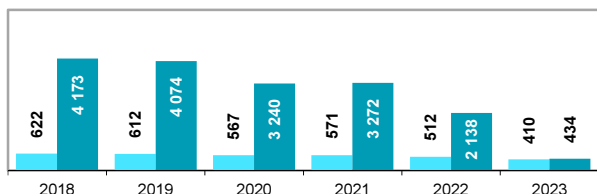


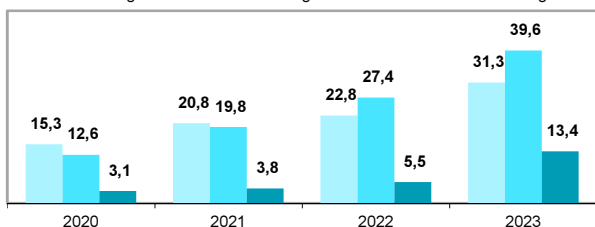
Table E4 Verified copies (extracts) issued from registries via the CzechPOINT@home interface

Number

	2021	2022	2023
Total	54 078	67 474	103 159
Driver Register	20 756	22 755	31 323
Criminal Register - individuals	19 783	27 436	39 636
Criminal Register - legal entities	4 630	5 780	10 420
Trade Register	3 794	5 463	13 436
Commercial Register	3 606	3 922	5 517
Insolvency Register	1 218	1 383	2 318
Register of Qualified Contractors	291	735	509

Figure E4 Verified copies issued from selected registers via the CzechPOINT@home interface

■ Driver Register ■ Criminal Register - individuals ■ Trade register



Source: Digital and Information Agency

Table E5 Newly established Data Boxes in Czechia

Thousand

	2021	2022	2023
Total	241,8	322,7	2 379,1
Established / activated upon request	201,0	292,2	255,0
Established / activated by law	40,8	30,5	2 124,1
by Data Box owner			
Citizens (non-entrepreneurs)	145,4	188,5	254,8
Self-employed persons (entrepreneurs)	59,0	91,6	1 901,2
Legal persons (enterprises)	37,4	42,5	222,9
Public authority bodies	0,1	0,2	0,1

Figure E5 Method of newly established Data Boxes (thousand)

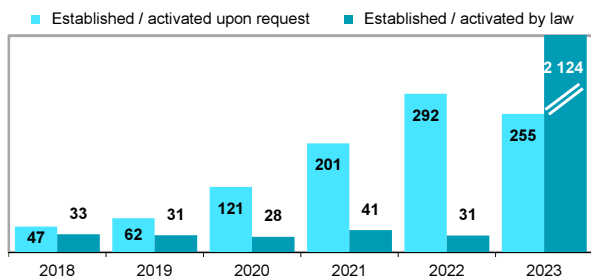


Figure E6 Selected owners of newly established Data Boxes (thousand)

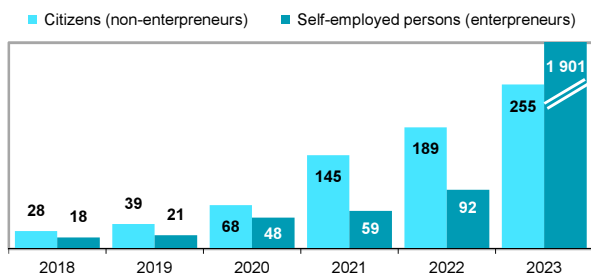
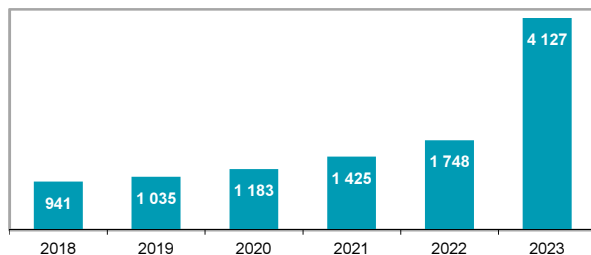


Figure E7 The total cumulative number of activated Data Boxes as of 31st December (thousand)



Source: Digital and Information Agency

Tab.E6 Electronic transactions made via Data Boxes in Czechia

	Thousand		
	2021	2022	2023
Total	121 541	129 640	143 260
by Data Box owner			
Public authority bodies	83 466	90 325	101 291
Legal persons (enterprises)	30 315	31 074	31 606
Self-employed persons (entrepreneurs)	6 261	6 460	8 524
Citizens (non-entrepreneurs)	1 499	1 781	1 839

Figure E8 E-transactions made via Data Boxes (million)

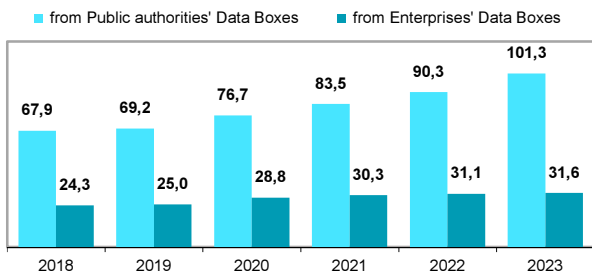


Figure E9 E-transactions made via Data Boxes by type of their owners (million; %)

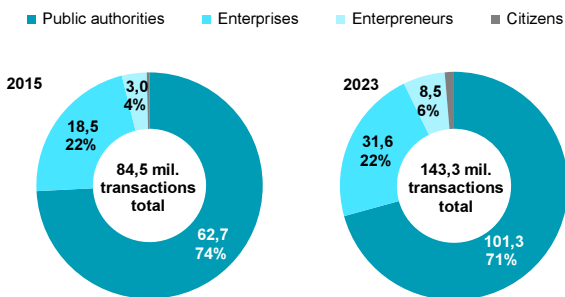
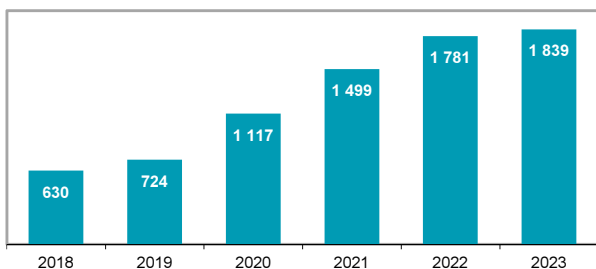


Figure E10 E-transactions made from Citizens' Data Boxes (thousand)



Source: Digital and Information Agency

Table E7 Tax forms sent to the Czech Financial Administration electronically via the EPO application

	Thousand		
	2021	2022	2023
Value Added Tax declaration	2 539	2 636	2 485
Personal Income Tax declaration	504	593	878
Corporate Income Tax declaration	232	243	261
Road Tax declaration	224	230	17
Real Estate Tax declaration	59	83	96

EPO is a Czech abbreviation used for an electronic filing room (client-oriented web application) of the Czech Financial Administration (CFA) which allows electronic submissions in tax related matters (e.g. e-filing of tax declarations).

Figure E11 Personal Income Tax forms sent electronically via the EPO application (thousand)

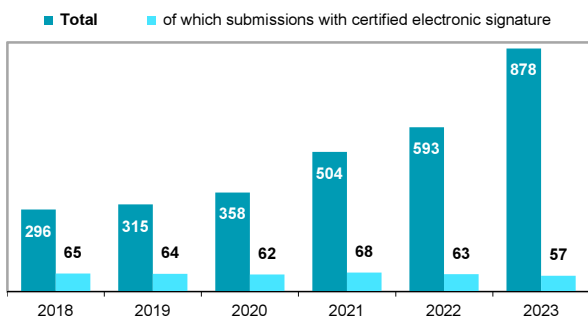
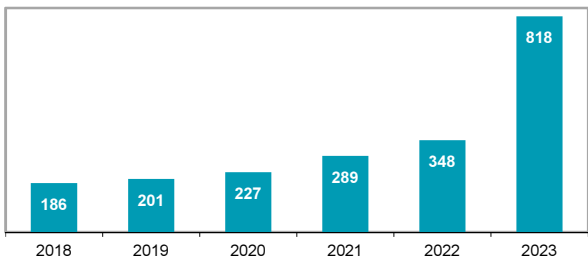


Table E8 Tax forms sent to the Czech Financial Administration electronically via Data Boxes

	Thousand		
	2021	2022	2023
Value Added Tax declaration	2 612	2 808	3 012
Personal Income Tax declaration	289	348	818
Corporate Income Tax declaration	313	317	355
Road Tax declaration	189	196	14
Real Estate Tax declaration	22	28	33

Figure E12 Personal Income Tax forms sent electronically via Data Boxes (thousand)



Source: Czech Financial Administration

Table E9 Citizen Portal in Czechia - selected indicators

	Thousand		
	2021	2022	2023
Registered users	324	601	1 013
Authentications	1 584	3 533	6 767
Electronic submissions, total	109	177	283
Verified copies issued from Criminal Register	48	85	142
Verified copies issued from Trade Register	19	20	43
Verified copies issued from Driver Register	16	17	24

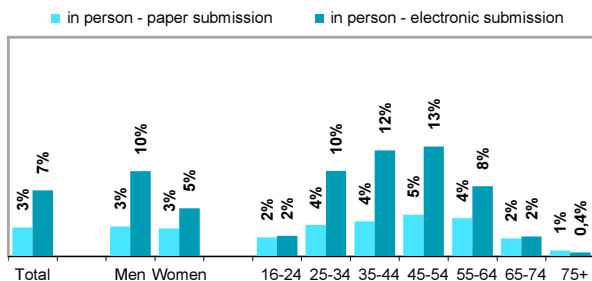
Source: Digital and Information Agency

Table E10 Persons in Czechia using their officially recognized electronic identification; 2023

	Percentage		
	Bank identity	Data Box	other identities*
Total (aged 16+)	21,9	18,9	6,4
Men	24,5	24,2	7,7
Women	19,6	14,1	5,1
Age group (years)			
16–24	14,9	5,2	5,2
25–34	32,6	25,8	10,0
35–44	32,9	29,3	9,1
45–54	30,1	28,5	9,4
55–64	20,6	21,4	4,5
65–74	9,5	8,6	2,4
75+	2,3	1,8	0,9
Education (aged 25–64)			
Low	16,2	17,7	3,3
Middle	32,1	27,2	9,0
High	44,0	38,5	14,8

* Includes: eID, my ID, NIA ID, Mobile Key to eGovernment, I.CA Identity with Starcos card, state-recognized eIDs of other EU countries

Figure E13 Selected methods of submitting personal income tax declaration by gender and age; 2023



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

Table E11 Persons in Czechia searching information on websites of public administration; 2023

	Percentage		
	Total	websites of government authorities	websites of other public institutions*
Total (aged 16+)	56,3	46,9	41,3
Men	55,0	47,6	35,9
Women	57,6	46,2	46,2
Age group (years)			
16–24	63,4	36,9	55,6
25–34	71,9	62,5	53,6
35–44	71,3	63,2	51,4
45–54	66,4	56,8	47,2
55–64	57,8	52,6	37,9
65–74 let	32,8	26,6	23,4
75 a více let	16,8	13,0	12,4
Education (aged 25–64)			
Low	51,3	44,6	31,7
Middle	73,6	64,0	52,9
High	79,5	71,5	62,7

Figure E14 Persons aged 16+ searching selected types of information on websites of government authorities; 2023

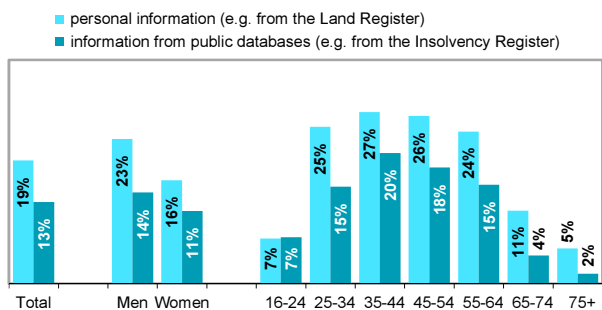
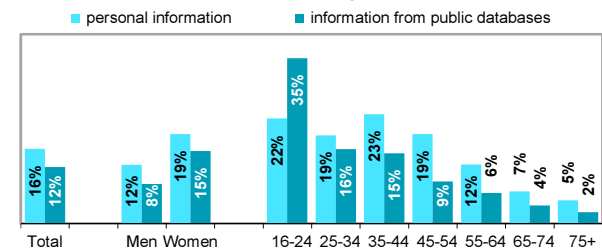


Figure E15 Persons aged 16+ searching selected types of information on websites of other public institutions*; 2023



* Includes public educational institutions, health services or libraries. as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



Figure E16 Persons aged 16–74 years in EU countries searching personal information on the website of public administration; 2023

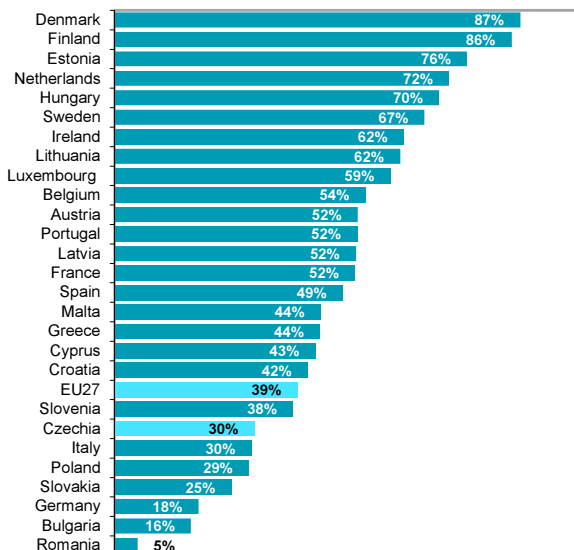
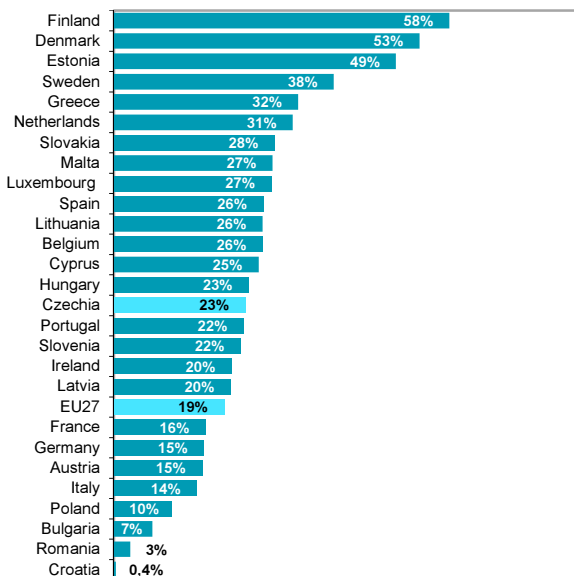


Figure E17 Persons aged 16–74 years in EU countries searching information from public databases; 2023

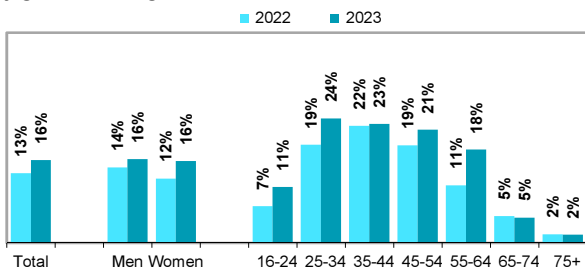


Source: Eurostat

Table E12 Persons in Czechia who conducted selected activities on websites of public administration; 2023

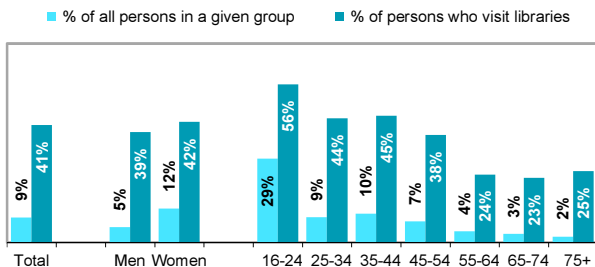
	Percentage		
	Downloading official documents	Submitting requests or claims	Making an appointment with the office
Total (aged 16+)	8,8	9,6	15,7
Men	11,2	8,1	15,9
Women	6,6	11,0	15,5
Age group (years)			
16–24	8,2	7,0	10,6
25–34	12,0	16,4	23,6
35–44	12,4	14,3	22,6
45–54	13,4	12,0	21,5
55–64	7,8	9,1	17,7
65–74 let	2,7	3,3	4,8
75 a více let	1,2	1,1	1,5
Education (aged 25–64)			
Low	6,9	8,0	13,0
Middle	12,6	13,6	25,8
High	16,8	19,2	26,8

Figure E18 Making an appointment with the office by gender and age



as a percentage of all persons in a given socio-demographic group

Figure E19 Online reservation of books in libraries by gender and age; 2023



Source: Czech Statistical Office, ICT use survey in households



F ICT in Education and Digital Skills

Data on **numbers of computers at schools** per 100 pupils/students or 1 teacher of respective school grades, as well as on school equipment with other ICTs in the Czech Republic come from data sources of the **Ministry of Education, Youth and Sports**. The Ministry collect these data at nursery, primary, secondary, and higher professional schools within the annual questionnaire called Report of Schools Headquarters (R 13-01). The data are as at **30 September of the reference year**.

1st stage of basic schools covers the first five years of formal education for children aged 6 to 11 years. 2nd stage of basic schools covers last four years of formal education for children from the ages of 12 to 15.

More information on these fields can be found at:

https://www.czso.cz/csu/czso/information_technologies_in_schools

The independent annual statistical survey called **Sample Survey on the ICT Use in Households and by Individuals** (for details see Chapter C) has been a valuable source of information on how **students aged 16+ years** use information technologies.

The **Programme for International Student Assessment (PISA) survey** conducted in **2022** collected also data on the amount of time 15-year-olds spend on selected activities on digital devices at school and outside of school. This survey is the most important OECD project on measuring learning outcomes currently underway in the world. More detailed information on PISA 2022 is available on the OECD website <http://www.oecd.org/pisa/> and also on the website of the Czech School Inspectorate (in Czech only): <https://www.csicr.cz/cz/Mezinarodni-setreni/PISA/O-setreni-PISA>.

The **Sample Survey on the ICT Use in Households and by Individuals** is also a source of data on **online learning activities** over the internet. Within the survey, respondents were asked if they attended an online course, used online learning material or communicated with instructors using educational portals within **the last 3 months** prior the survey.

The indicators on **computer (digital) skills** of people in Czechia are also based on results from the above-mentioned Sample Survey on the ICT Use in Households and by Individuals. Within the survey, respondents were asked if they used selected digital skills in **the last 3 months**.

For the purposes of this publication, the highest educational attainment is divided into **low** which includes lower secondary education and upper secondary education without A-level exam, **middle** which includes upper secondary education with A-level exam and higher vocational education, and **high** which includes tertiary (i.e. university) education.

Definitions (sorted alphabetically)

- **Copying or moving files** between folders or between two computers (e.g. via USB flash drive) or between computers and other devices (e.g. from/to mobile phone via Bluetooth)
- **Editing photos** means using photo editing software e.g. Adobe Photoshop or GIMP. The software for editing allows to add effects, filters, overlays and use other tools.
- **Index of digital skills**
 - The **overall level of digital skills** was measured using 5 sub-areas: communication, finding and sorting information, solving

problems on the internet, safe behaviour on the internet and creation of digital content.

- Persons with **at least basic overall digital skills** mean persons with basic digital skills together with persons with advanced digital skills.
- Persons with **basic overall digital skills** achieved basic level in all 5 sub-areas, however they did not achieve advanced skills in all of the subareas.
- Persons with **advanced level of overall digital skills** achieved advanced level in all of the 5 sub-areas.
- **Presentation software** e.g. Powerpoint or Prezi is used to create slides for presentation integrating text, pictures, tables or charts.
- **Programming** shall include the use of programming languages as Java, C, Python, Pascal, for instance, writing of scripts in PHP or JavaScript, for instance, writing of source codes, formatting and generating of tools, binary tools for compatibility analyses, tools for code checking, generators of documentation, generators of interfaces, etc.
- **School intranet (portal)** uses most of the same technology as the internet but it is restricted only to a limited group of users within an organization, typically to students and staff of given school. The access by outsiders is excluded. Schools often provide **school parents portal** where they can see e.g. school results of their children online.
- **School Wireless Network** (school WiFi network) enables students and school staff to use portable devices in a school to connect to the school computer network. An example is international roaming service Eduroam.
- **Spreadsheet software** e.g. MS Excel is used to organise and analyse data, such as sorting, filtering, using formulas or creating charts.
- **The participation in an online course** shall include a participation in course attended over the internet. Students communicate with lecturers over the internet, study materials are also sent online. Online courses may include language courses, personal development courses, computer courses and more. It also includes courses made through the applications such as Duolingo.
- **Using online learning material** includes using audio-visual materials, online learning software or electronic textbooks. Excludes downloading such material for offline use at a later point of time.
- **Word processing software** e.g. MS Word or OpenOffice Writer is used to create a document with text.

More information on these fields can be found at:

https://www.czso.cz/csu/czso/vyuzivani_informacnich_techologii_studenty
(in the Czech language only)



F ICT in Education and Digital Skills

Table F1 Schools in Czechia with wireless network and school intranet (portal); 2023

	Percentage		
	Basic schools - 1st stage	Basic schools - 2nd stage	Secondary schools
School intranet (portal), total	75,2	87,8	89,6
School parents portal	64,7	79,7	83,5
School wireless network	98,7	99,1	97,7

Figure F1 Schools with school intranet (portal)

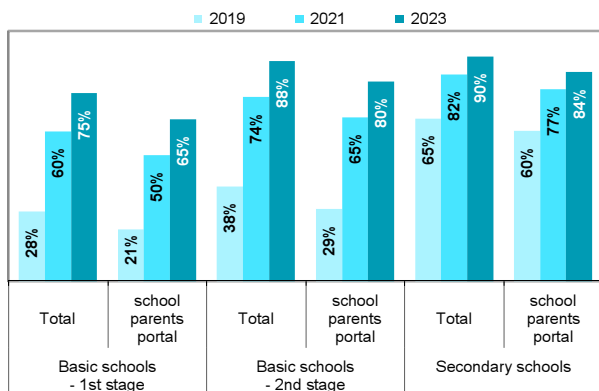
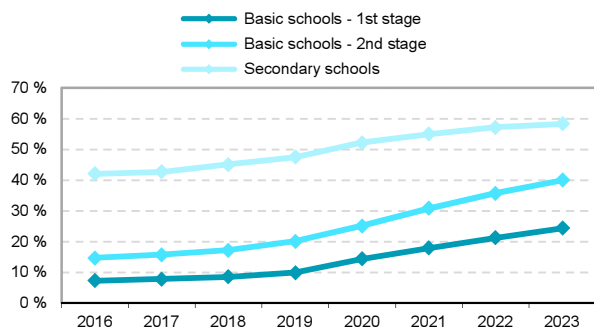


Table F2 Schools in Czechia permitting students to use their personally owned digital devices during classes

	Percentage		
	2021	2022	2023
Basic schools - 1st stage	17,9	21,2	24,3
Basic schools - 2nd stage	30,8	35,7	40,0
Secondary schools	55,0	57,2	58,3

Figure F2 Schools permitting students to use their personally owned digital devices during classes



Source: Ministry of Education, Youth and Sports and CZSO own calculations

F ICT in Education and Digital Skills

Table F3 Computers available to students in schools in Czechia; 2023

Number of devices per 100 students in a given school type

	Basic schools - 1st stage	Basic schools - 2nd stage	Secondary schools
Computers, total	36,7	46,7	28,5
Computers up to 2 years old	12,1	16,4	8,4
Portable computers	22,9	28,0	9,8
Portable computers up to 2 years old	9,9	12,9	4,2
Desktops	13,7	18,7	18,7
Desktops up to 2 years old	2,2	3,5	4,2

Figure F3 Computers available to students in schools (thous.)

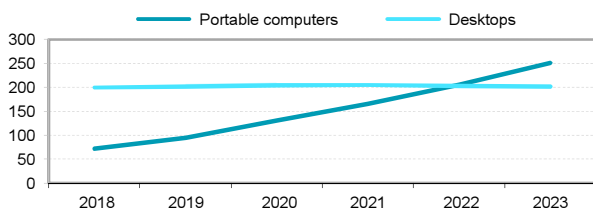


Figure F4 Type of computers available to students in schools (per 100 students in a given school type)

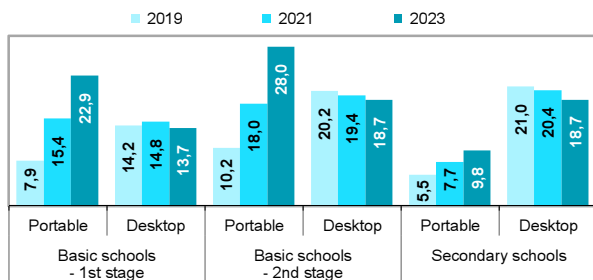
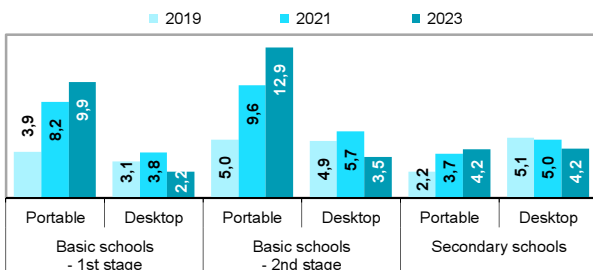


Figure F5 Computers up to age of two years available to students in schools (per 100 students in a given school type)



Source: Ministry of Education, Youth and Sports and CZSO own calculations

F ICT in Education and Digital Skills

Table F4 Computers available to teachers in Czechia; 2023

Number of devices per 1 teacher in a given school type

	Basic schools - 1st stage	Basic schools - 2nd stage	Secondary schools
Computers, total	2,0	2,1	1,9
Computers for individual use (not shared)	1,2	1,3	1,2
Portable computers, total	1,3	1,4	1,0
Portable computers for individual use (not shared)	1,0	1,1	0,8
Desktops, total	0,7	0,8	0,9
Desktops for individual use (not shared)	0,1	0,2	0,4

Figure F6 Computers for teachers in schools (thousand)

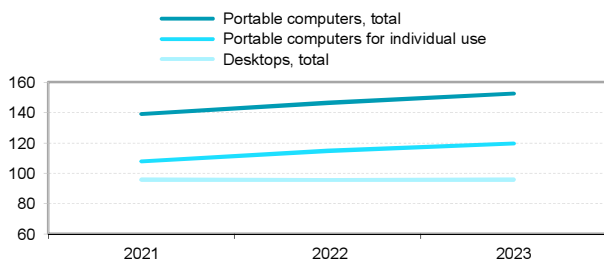


Figure F7 Computers available to teachers in schools (per 100 teachers in a given school type)

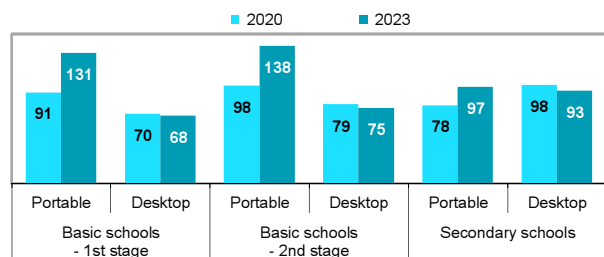
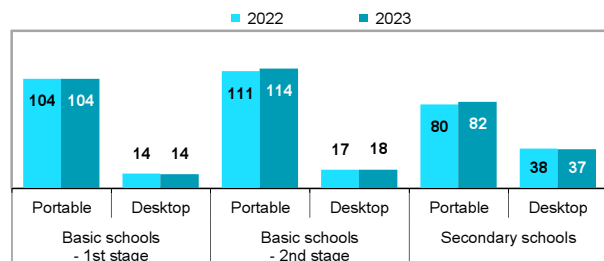


Figure F8 Computers intended for individual use by teachers (per 100 teachers in a given school type)



Source: Ministry of Education, Youth and Sports and CZSO own calculations

F ICT in Education and Digital Skills

Table F5 Time spent daily on digital devices by 15-year-olds in Czechia; 2022

	average number of hours		
	Total	Girls	Boys
Learning activities at school	1,4	1,4	1,4
Learning activities on weekdays outside of school	1,3	1,4	1,3
Learning activities at the weekend	1,5	1,7	1,3
Leisure activities on weekdays outside of school	2,5	2,4	2,7
Leisure activities at the weekend	4,8	4,6	4,9

Figure F9 Time spent daily on digital devices by 15-year-olds; 2022

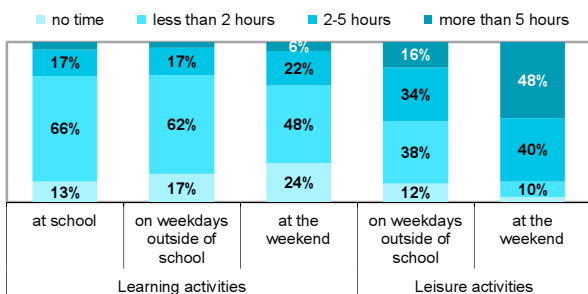
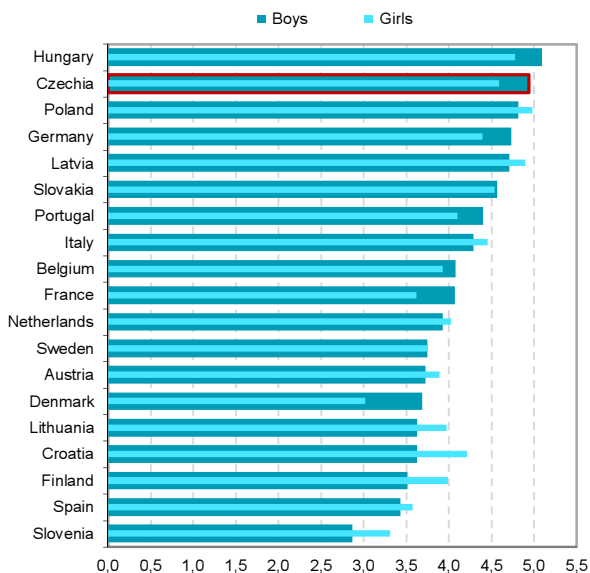


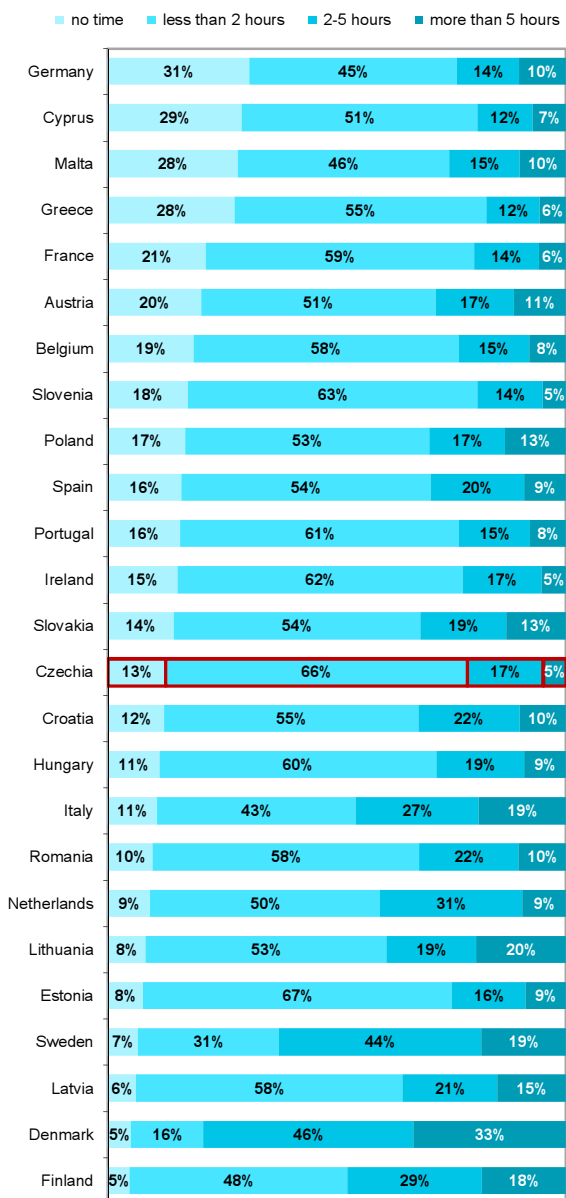
Figure F10 Time spent daily on digital devices by 15-year-olds in selected EU countries during leisure activities at the weekend; 2022 (average number of hours)



Source: OECD, PISA survey

F ICT in Education and Digital Skills

Figure F11 Time spent daily on digital devices by 15-year-olds in EU countries at school during learning activities; 2022 (average number of hours)



Source: OECD, PISA survey

F ICT in Education and Digital Skills

Table F6 Students aged 16+ in Czechia using the internet; 2023

	Percentage		
	Total	Men	Women
Total	100,0	100,0	100,0
Using the internet on a mobile phone	99,7	99,4	100,0
For selected activities			
Exchanging messages online	98,8	97,6	100,0
Participating in social networks	97,6	95,8	99,1
Reading online news sites	81,5	80,9	82,0
Listening to music	96,4	96,0	96,8
Listening to paid music	31,3	29,7	32,7
Watching videos	98,3	98,1	98,5
Watching paid videos	53,6	54,6	52,7
Purchasing online	82,3	78,3	85,9
Internet banking	73,6	73,0	74,1
Playing games	65,3	82,4	49,8
Playing paid games	21,7	36,6	8,2

as a percentage of all students (men/women) aged 16+

Figure F12 Students and persons aged 16+ using the internet for selected activities; 2023

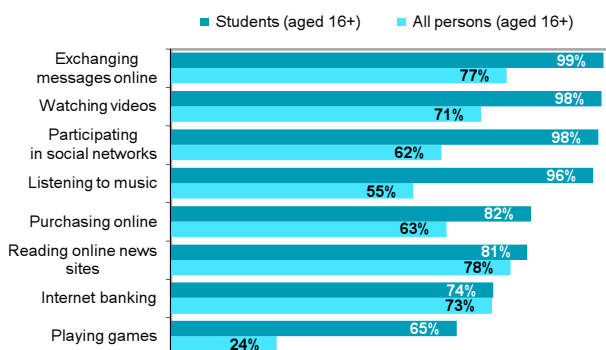


Table F7 Students 16+ in Czechia using selected software; 2023

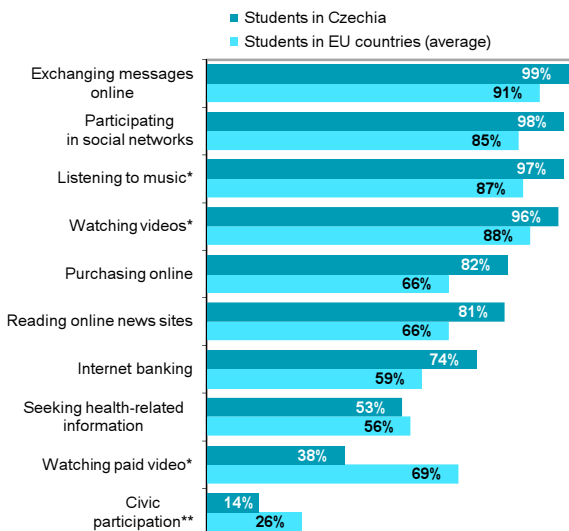
	Percentage		
	Total	Men	Women
Word processing software, total	95,9	92,6	98,9
Use of advanced functions in word processing software (e.g. inserting pictures or charts)	78,2	73,7	82,2
Spreadsheet software, total	77,4	75,1	79,4
Use of advanced functions in spreadsheet software (e.g. filters, formulas)	47,7	46,6	48,6
Presentation software	67,9	60,5	74,6
Photo/ video editing software and apps	60,7	51,1	69,3
Programming	14,1	17,2	11,3

as a percentage of all students (men/women) aged 16+

Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

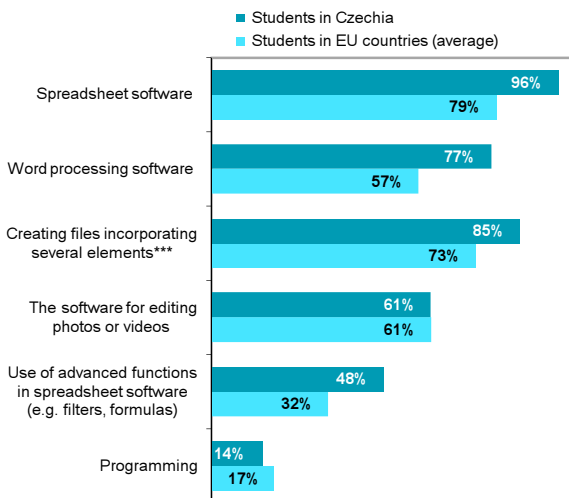
Figure F13 Students aged 16+ in Czechia and EU countries using the internet for selected activities; 2023



* data for 2022

** discussion with others and participation in the survey on civic and political issues

Figure F14 Students aged 16+ in Czechia and EU countries using selected software; 2023



*** creating files (e.g. document, image, video) incorporating several elements, e.g. text, picture, table, chart, animation, sound

Source: Eurostat

F ICT in Education and Digital Skills

Table F8 Persons in Czechia using the internet for selected learning activities; 2023

	Percentage	
	Doing an online course	Using online learning materials
Total (aged 16+)	16,9	17,2
Men	15,0	16,0
Women	18,7	18,2
Age group (years)		
16–24	33,7	46,6
25–34	27,5	23,9
35–44	22,0	21,8
45–54	17,8	14,2
55–64	13,5	11,4
65–74	1,8	3,0
75+	1,1	2,3
Education (aged 25–64)		
Low	4,0	6,9
Middle	22,3	16,9
High	40,4	35,2

Figure F15 Doing an online course by gender and age

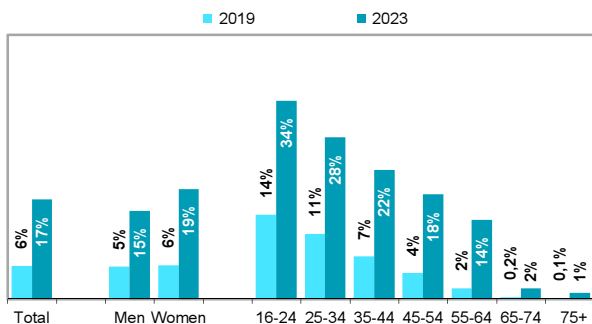
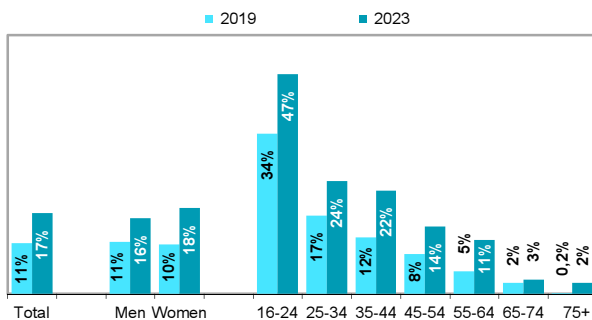


Figure F16 Using online learning materials by gender and age



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

Figure F17 Persons aged 16–74 years in EU countries doing an online course; 2023

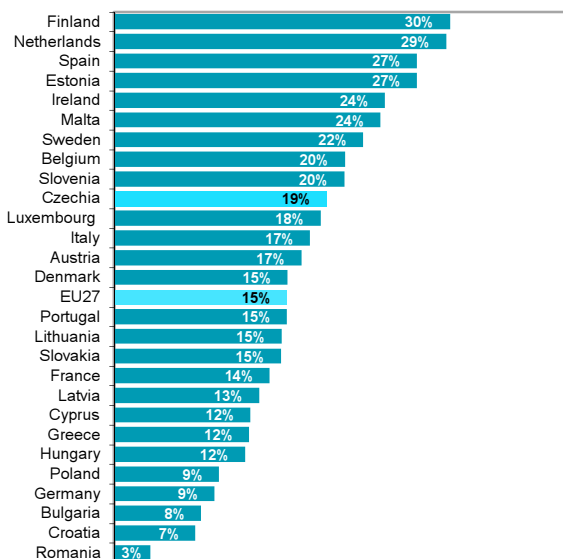
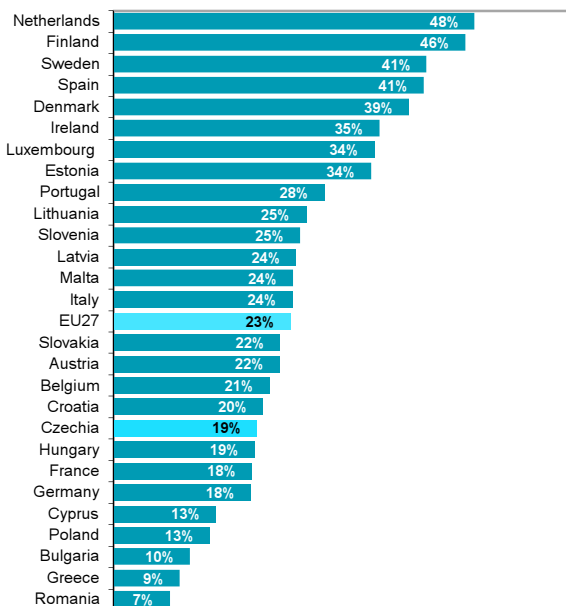


Figure F18 Persons aged 16–74 years in EU countries using online learning materials; 2023



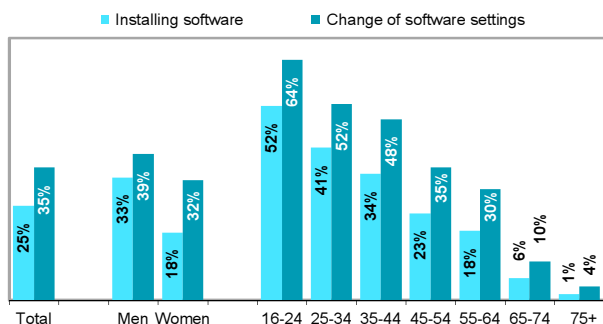
Source: Eurostat

F ICT in Education and Digital Skills

Table F9 Selected digital skills of persons in Czechia; 2023

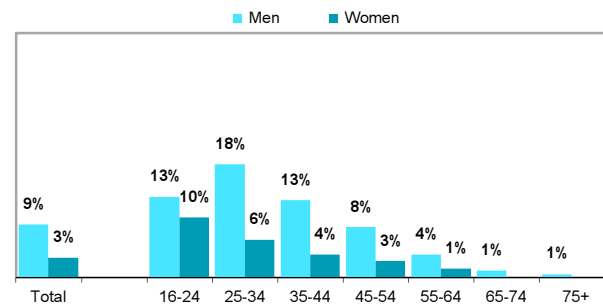
	Percentage		
	Copying files	Editing photos	Programming
Total (aged 16+)	61,5	26,9	5,8
Men	63,4	26,4	8,6
Women	59,6	27,5	3,2
Age group (years)			
16–24	94,8	57,5	11,4
25–34	82,9	44,7	12,3
35–44	79,3	35,5	8,1
45–54	70,6	23,7	5,2
55–64	57,9	16,1	2,5
65–74	23,1	8,0	0,5
75+	11,0	3,8	0,2
Education (aged 25–64)			
Low	48,8	16,2	1,5
Middle	80,6	29,7	6,4
High	95,8	50,1	16,0

Figure F19 Installing software and change of software settings by gender and age; 2023



as a percentage of all persons in a given socio-demographic group

Figure F20 Programming by gender and age; 2023



as a percentage of all men/women in a given age group

Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

Figure F21 Persons aged 16–74 years in EU countries who used photo or video editing software; 2023

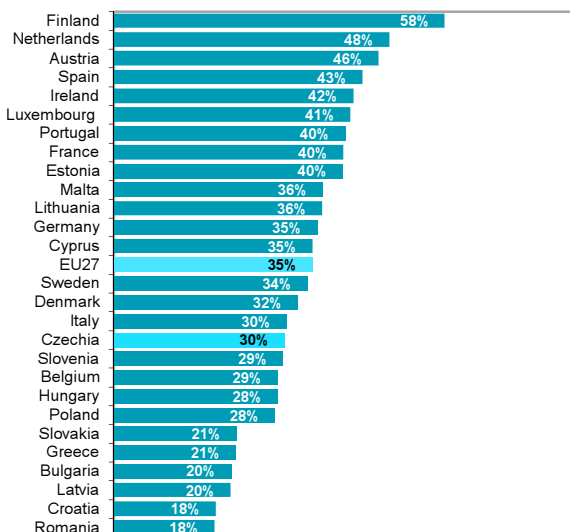
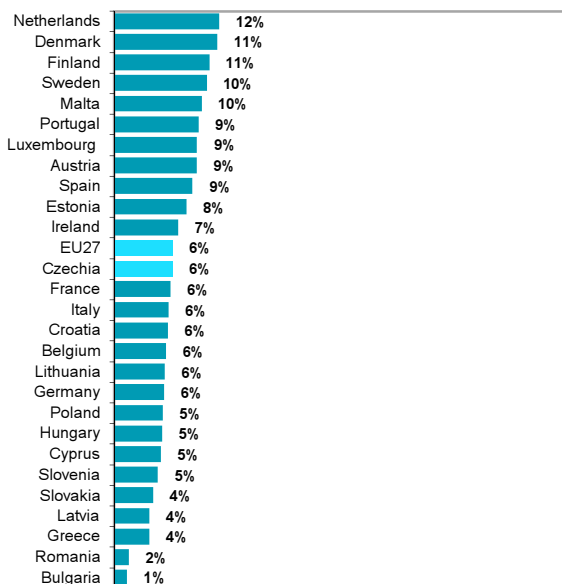


Figure F22 Persons aged 16–74 years in EU countries who do programming; 2023



Source: Eurostat

F ICT in Education and Digital Skills

Table F10 Persons in Czechia using office software; 2023

	Percentage		
	Word processing software	Spreadsheet software	Presentation software
Total (aged 16+)	55,9	40,5	20,2
Men	56,5	41,9	21,0
Women	55,3	39,1	19,5
Age group (years)			
16–24	88,6	69,9	57,9
25–34	71,8	56,6	28,7
35–44	72,9	55,1	24,9
45–54	61,3	42,1	18,6
55–64	53,4	37,5	12,1
65–74	24,1	11,7	1,8
75+	11,1	5,4	1,1
Education (aged 25–64)			
Low	34,0	16,5	4,5
Middle	75,1	54,8	18,4
High	94,2	82,5	49,9

Figure F23 Using word processing software; 2023

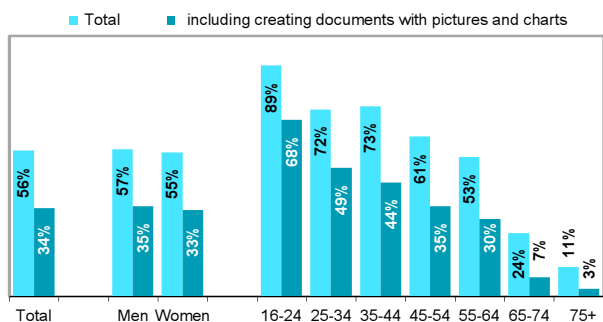
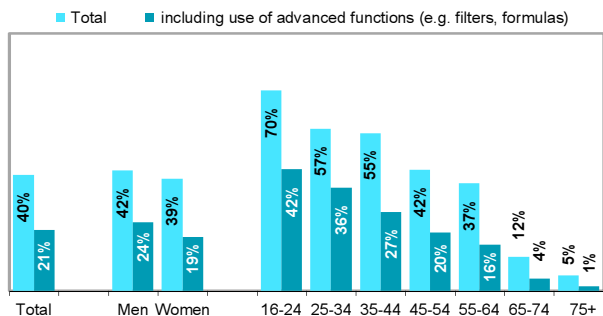


Figure F24 Using spreadsheet software; 2023



as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

Figure F25 Persons aged 16–74 years in EU countries who used word processing software; 2023

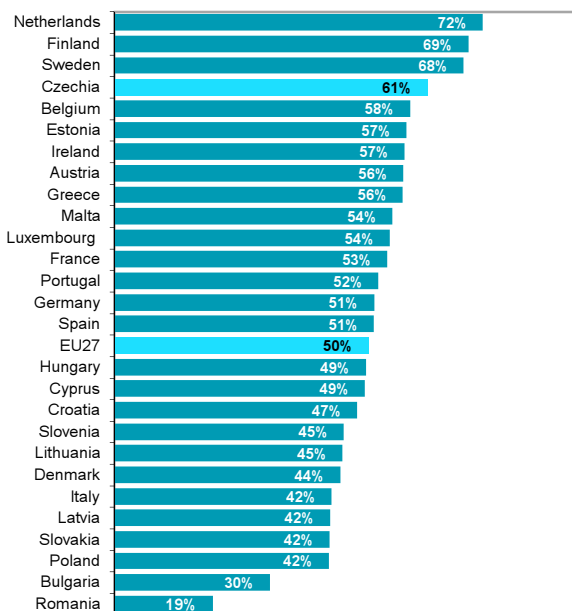
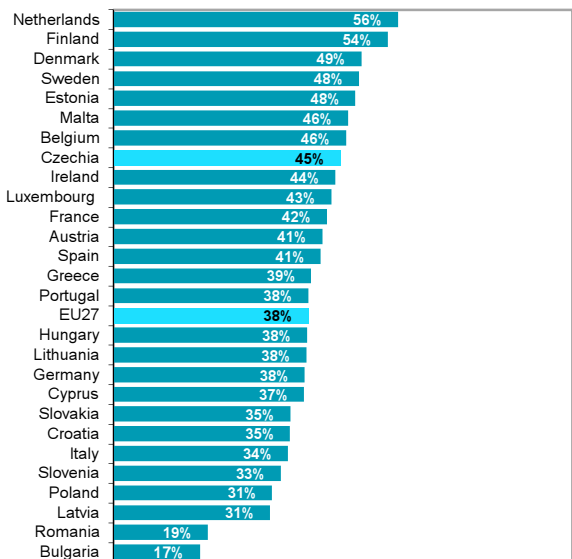


Figure F26 Persons aged 16–74 years in EU countries who used spreadsheet software; 2023



Source: Eurostat

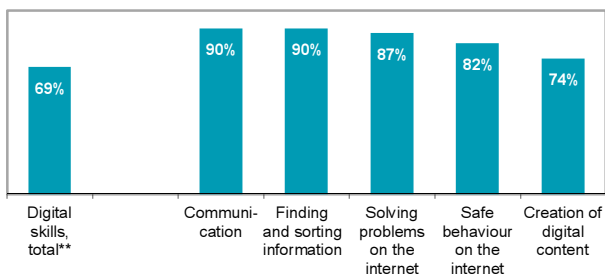
F ICT in Education and Digital Skills

Table F11 Level of digital skills* of persons in Czechia; 2023

	Percentage		
	Low	Basic	Advanced
Total (aged 16–74)	21,8	33,6	35,5
Men	21,8	33,4	36,0
Women	21,8	33,8	35,0
Age group (years)			
16–24	7,1	37,4	55,3
25–34	12,6	31,8	53,7
35–44	16,5	37,0	45,9
45–54	24,8	39,8	32,4
55–64	29,7	34,3	24,7
65–74	36,4	20,3	5,3
Education (aged 25–64)			
Low	44,2	28,7	2,4
Middle	25,9	40,8	29,5
High	4,2	25,8	69,8

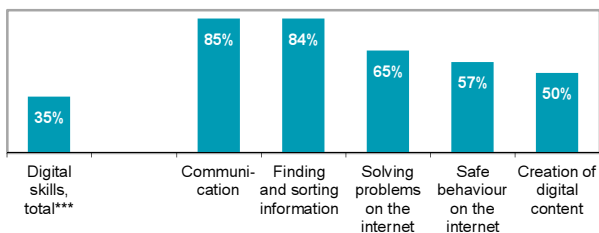
* The overall level of digital skills was measured using 5 sub-areas: communication, finding and sorting information, solving problems on the internet, safe behaviour on the internet and creation of digital content.

Figure F27 Persons aged 16–74 years with at least basic overall digital skills in given sub-areas; 2023



** Includes persons who have reached basic or advanced level in all the areas covered, but not advanced level in all areas.

Figure F28 Persons aged 16–74 years with advanced level of digital skills in given sub-areas; 2023



*** Includes persons who have reached an advanced level in all the areas covered.

Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

Figure F29 Persons aged 16–74 years in EU countries with at least basic overall digital skills; 2023

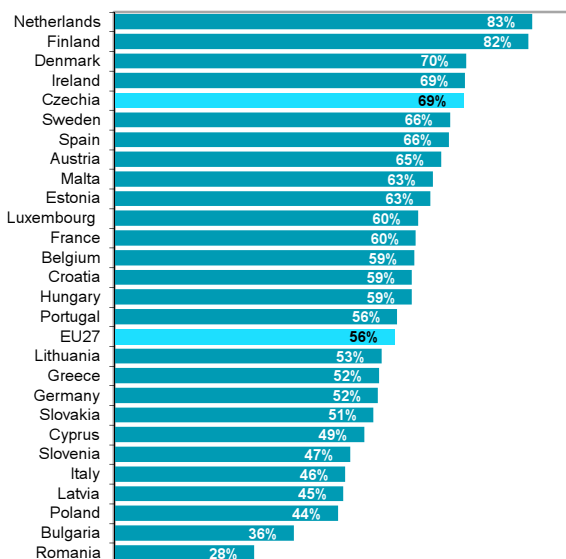
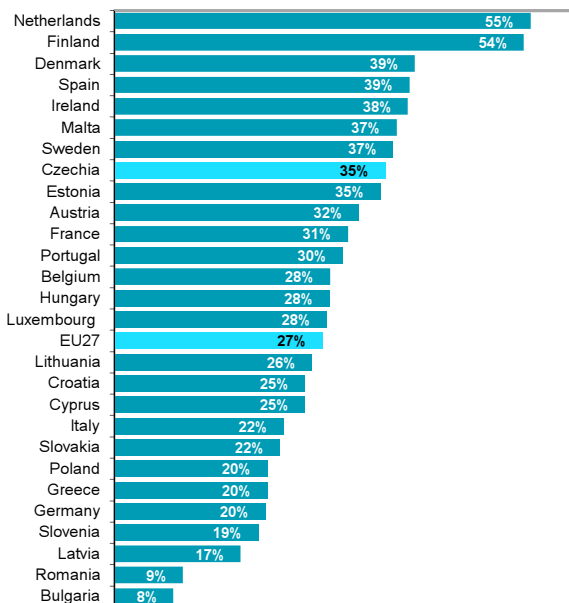


Figure F30 Persons aged 16–74 years in EU countries with advanced level of digital skills; 2023



Source: Eurostat

F ICT in Education and Digital Skills

Figure F31 Persons aged 16–74 years in EU countries with advanced level of digital skills in the area of digital content creation; 2023

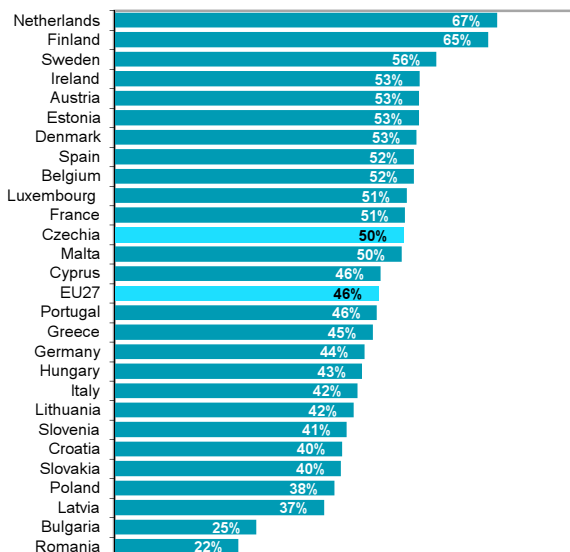
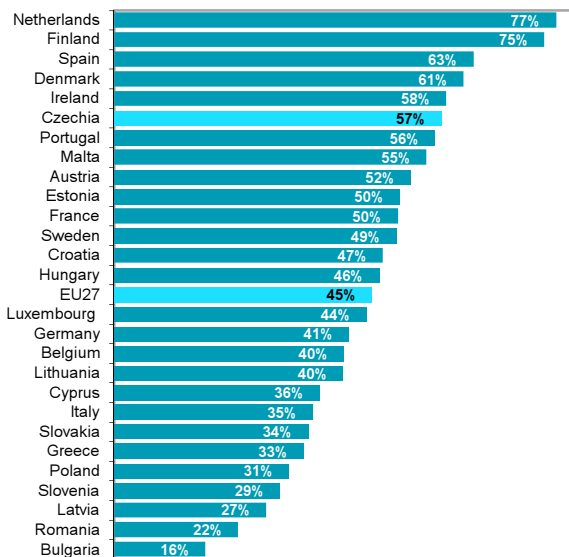


Figure F32 Persons aged 16–74 years in EU countries with advanced level of digital skills in the area of safe behaviour on the Internet; 2023



Source: Eurostat



Data on e-Health services are processed from the comprehensive annual survey on information on health care services providers E (MZ) 1-01 performed by the **Institute of Health Information and Statistics of the Czech Republic** (IHIS CR). This survey includes questions on the ICT equipment of practices of **independent physicians**, data on **online services** offered via websites of independent physicians and **keeping health records (documentation) in the electronic form**.

The survey includes also detailed questions on available functionalities and used records of **electronic information healthcare systems** deployed in offices of independent physicians.

Reference period: the data are as at 31 November of the reference year for ICT equipment of practices and 3 months prior to the survey for seeking health-related information by individuals.

Available breakdowns: Data on the ICT use by independent physicians are available by the type of practice – general practitioner for adults, general practitioner for children, dentist, gynecologist, and specialist.

The independent annual statistical survey called **Sample Survey on the ICT Use in Households and by Individuals** (for details see Chapter C) has been a valuable source of information how many individuals use the internet for seeking health-related information in the last 3 months. The survey results are internationally comparable as a percentage of all individuals aged 16 to 74 years.

International data and comparisons of certain indicators are taken from the **Eurostat database** for digital economy and society, data of which are updated every year in December. Detailed information can be found at: https://bit.ly/Comprehensive_database.

Definitions (sorted alphabetically)

- A **specialist physician** shall mean a doctor in a specific field of medicine as a dermatologist or an urologist, etc. This category excludes gynecologists and dentists.
- **Independent physicians** include all independent practices who are not part of another medical facility, e.g. hospital.
- **Lists of patients by diagnosis, laboratory results or for an appointment** for examinations shall mean a list of electronic records of all patients of the health establishment by a given criterion entered.
- **Online appointments to the physician** shall mean that the patients may make appointments for examination and/or medical intervention by means of an online editable form, which is transmitted directly from the website of the surgery. **These do not include making appointments simply by email.**
- **Online consultancies** shall mean the option to send health related queries via a website of the physician's surgery.
- **Online prescribing** allows a physician to use digital prescription software to electronically transmit a prescription to the patient. Patient receives an electronic identification code which then produces to the pharmacist.
- **Online prescription order** mean that the patients fill out an online form and receives their electronic prescription via email or SMS.
- **Seeking health-related information** includes searching for information about injuries, diseases, nutrition, improving health, etc.
- **The drug interaction alerts** shall mean that the system issues a notice to the physician if the patient has been prescribed medicines, which have mutual effects.
- **Laboratory tests ordering** is made from a computer in a physician's office. The result are received in a form of secure protocol.

For more information see:

https://www.czso.cz/csu/czso/information_technologies_in_the_czech_health_sector

Table G1 Independent surgeries of physicians in Czechia with the computer, the internet access and the website; 2022

	Percentage		
	Computer	Internet	Website
Total	96,5	95,6	51,5
General practitioners (GP) for adults	98,6	97,5	57,7
General practitioners (GP) for children	98,8	98,1	71,5
Dentists	97,6	96,3	35,6
Gynecologists	97,1	96,5	66,5
Specialists	93,9	93,1	51,3

Figure G1 Independent surgeries of physicians with the internet access and the website

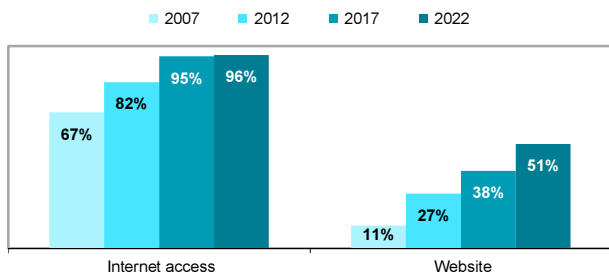


Figure G2 Independent surgeries of physicians with the internet access

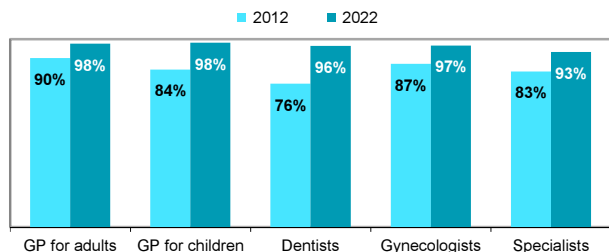
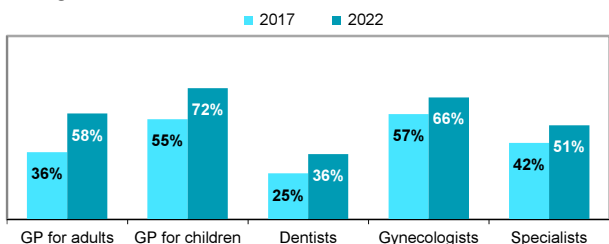


Figure G3 Independent surgeries of physicians having own website



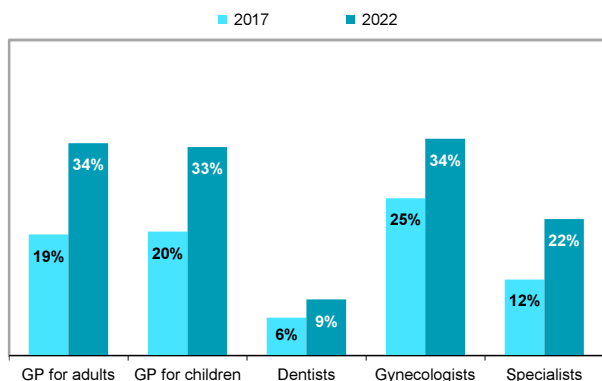
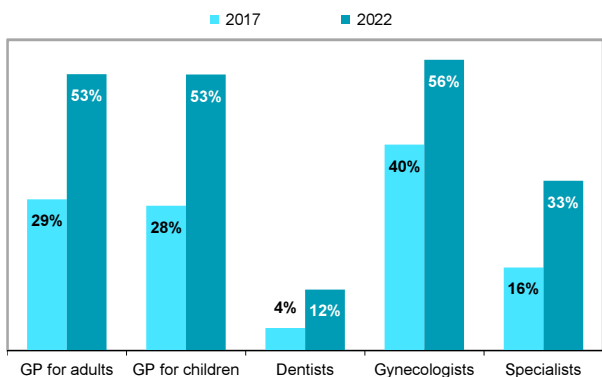
as a percentage of all independent surgeries of a given physician practice

Source: Institute of Health Information and Statistics and CZSO own calculations



Table G2 Selected online services available on the websites of independent surgeries of physicians in Czechia; 2022

	Percentage		
	Online appointment	Online consultation	Online prescription
Total	22,9	18,2	35,3
General practitioners (GP) for adults	33,6	24,5	53,3
General practitioners (GP) for children	33,0	36,4	53,3
Dentists	8,9	5,2	11,8
Gynecologists	34,3	32,9	56,1
Specialists	21,6	16,5	32,7

Figure G4 Independent surgeries of physicians having a website application for making online appointment**Figure G5 Independent surgeries of physicians having a website application for online prescriptions**

as a percentage of all independent surgeries of a given physician practice

Source: Institute of Health Information and Statistics and CZSO own calculations

Table G3 Independent surgeries of physicians in Czechia using selected functions of e-health information systems; 2022

	Percentage		
	Medical prescription	Drug interaction alerts	Laboratory tests ordering
Total	75,6	36,5	41,3
General practitioners (GP) for adults	86,5	58,7	73,4
General practitioners (GP) for children	82,0	45,0	66,0
Dentists	70,2	17,2	6,2
Gynecologists	84,1	42,1	68,9
Specialists	69,6	33,1	34,8

Figure G6 Independent surgeries of physicians using e-health information systems for drug interaction alerts

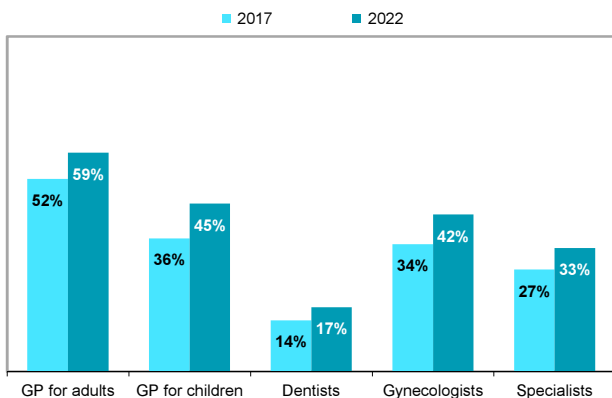
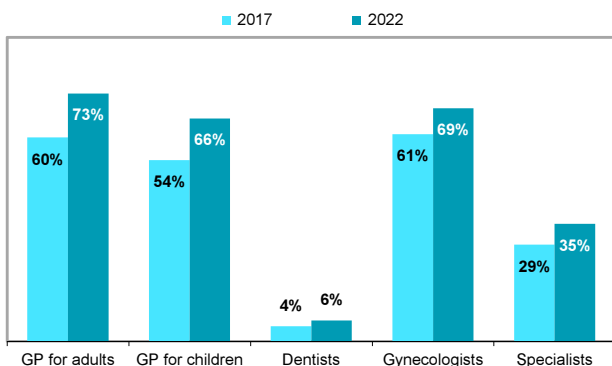


Figure G7 Independent surgeries of physicians using e-health information systems for laboratory tests orderings



as a percentage of all physicians of a given practice

Source: Institute of Health Information and Statistics and CZSO own calculations



Table G4 Independent surgeries of physicians in Czechia using e-health inf. systems for generating patient extracts; 2022

	Percentage		
	Patients for appointment	Patients by diagnosis	Patients by laboratory results
Total	48,7	56,3	30,0
General practitioners (GP) for adults	67,3	72,2	47,1
General practitioners (GP) for children	61,6	61,0	38,7
Dentists	37,2	33,0	9,8
Gynecologists	65,5	73,0	47,0
Specialists	39,5	58,6	28,7

Figure G8 Independent surgeries of physicians using e-health information systems for generating patients by diagnosis

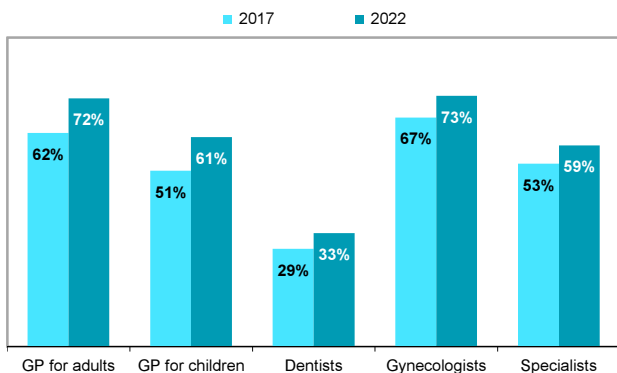
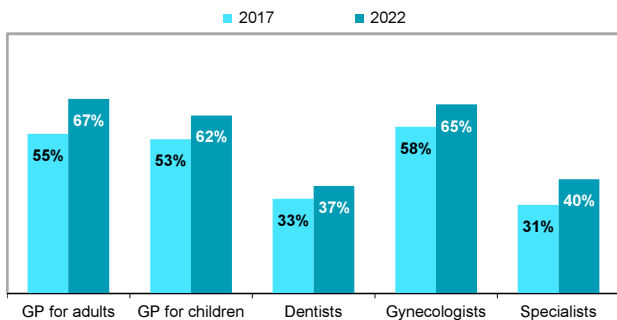


Figure G9 Independent surgeries of physicians using e-health information systems for generating patients for appointment



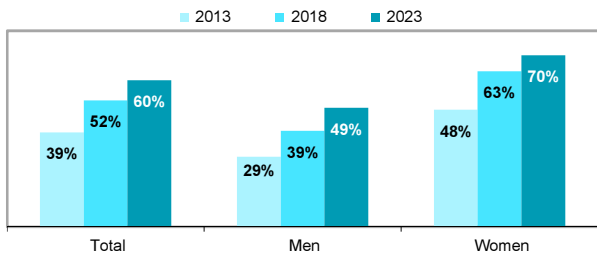
as a percentage of all physicians of a given practice

Source: Institute of Health Information and Statistics and CZSO own calculations

Table G5 Persons in Czechia using the internet for seeking health-related information

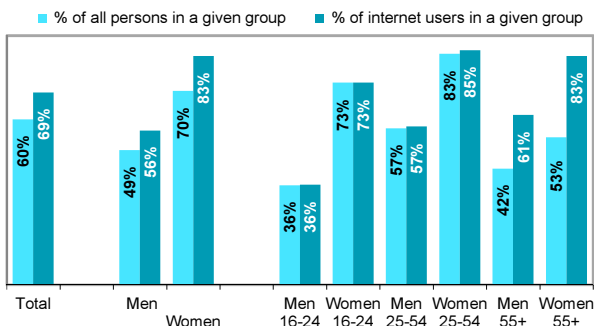
	Percentage		
	2015	2020	2023
Total (aged 16+)	37,3	57,8	59,7
Men	26,4	49,2	48,6
Women	47,9	66,0	70,0
Age group (years)			
16–24	23,3	45,2	54,8
25–34	46,2	69,9	68,9
35–44	48,3	74,7	72,7
45–54	47,5	71,0	69,1
55–64	41,0	59,2	66,8
65–74	24,4	41,1	48,0
75+	8,2	15,8	22,1
Education (aged 25–64)			
Low	32,5	57,4	56,1
Middle	54,8	74,0	75,1
High	59,2	82,2	80,2

Figure G10 Persons aged 16+ using the internet for seeking health-related information by gender



as a percentage of all persons in a given socio-demographic group

Figure G11 Use of the internet for seeking health-related information by gender and age; 2023



Source: Czech Statistical Office, ICT use survey in households



Figure G12 Men aged 16–74 years in EU countries using the internet for seeking health-related information; 2023

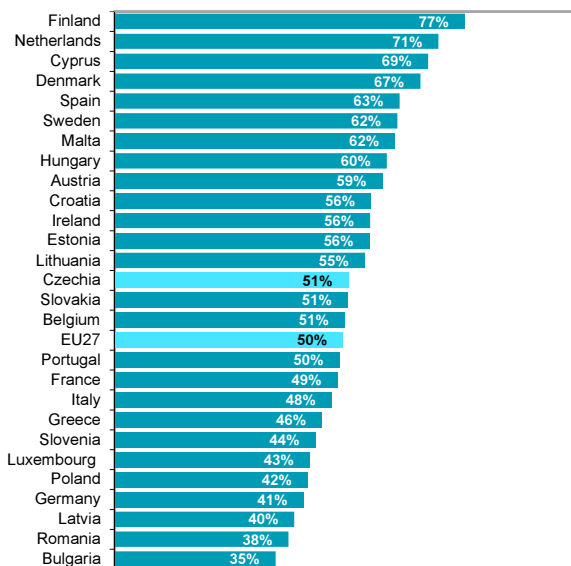
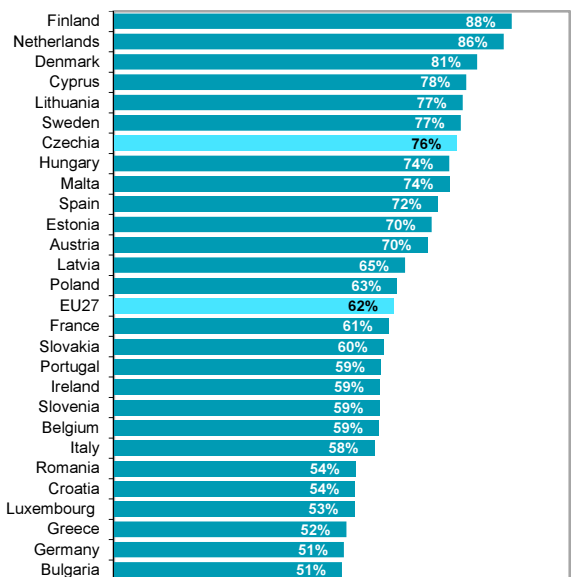


Figure G13 Women aged 16–74 years in EU countries using the internet for seeking health-related information; 2023

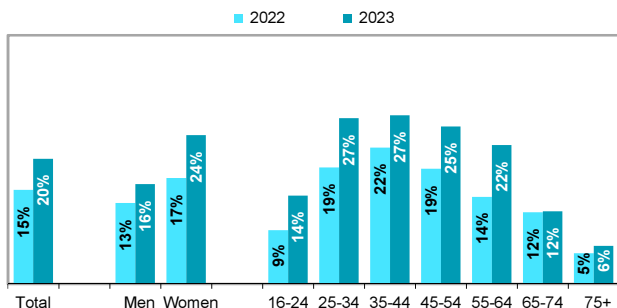


Source: Eurostat

Table G6 Persons in Czechia using the internet for making an appointment with the physician; 2023

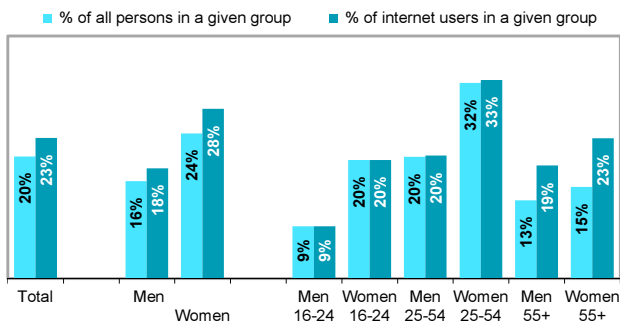
	Percentage		
	Total	Men	Women
Total (aged 16+)	20,1	16,0	23,9
Age group (years)			
16–24	14,2	8,6	19,5
25–34	26,6	17,0	36,4
35–44	27,1	22,9	31,2
45–54	25,3	20,0	30,1
55–64	22,3	18,1	26,1
65–74	11,7	11,9	11,4
75+	6,1	6,8	5,6
Education (aged 25–64)			
Low	16,3	14,2	18,9
Middle	28,0	19,9	34,4
High	34,7	29,5	38,9

Figure G14 Making appointment with the physician via the internet by gender and age



as a percentage of all persons in a given socio-demographic group

Figure G15 Making appointment with the physician via the internet by gender and age; 2023



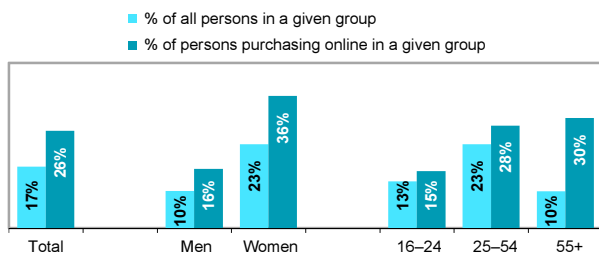
Source: Czech Statistical Office, ICT use survey in households



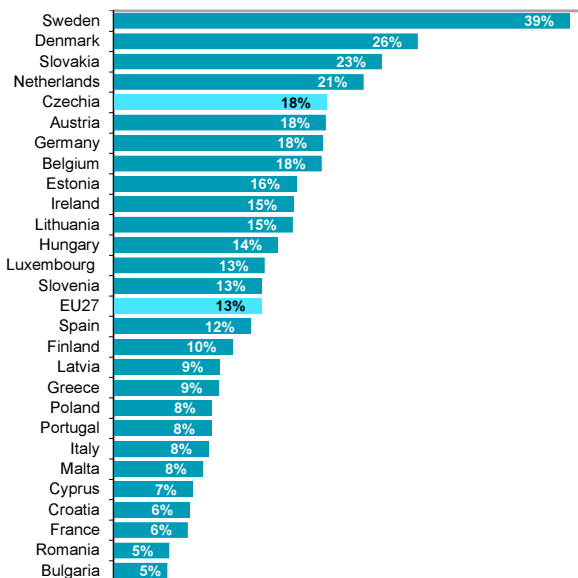
Table G7 Persons in Czechia purchasing medicine or dietary supplements on the internet; 2023

	Percentage		
	Total	Men	Women
Total (aged 16+)	16,7	10,1	22,8
16–24 years old	12,7	8,5	16,8
25–54 years old	22,8	12,8	32,4
55 years and more	10,0	6,9	12,8

as a percentage of all persons in a given group

Figure G16 Persons aged 16+ purchasing medicine or dietary supplements on the internet; 2023

Source: Czech Statistical Office, ICT use survey in households

Figure G17 Persons aged 16–74 years in EU countries purchasing medicine or dietary supplements online; 2023

Source: Eurostat