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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 2022**.

This summary publication strives to bring to readers information, in an easy to comprehend form, on trends about the development in usage of modern **information and communication technologies (ICT)** in the main areas of our society in the **Czech Republic** and in **Member States of the European Union** by means set of tables and figures outputs.

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

- A. **ICT Infrastructure** contains basic data on the development of the number of subscribers by citizens and legal entities in the fixed and mobile network within the provided voice (telephone) and data (Internet) services.
- B. **Households and ICT** provides information on households' access to computers, the internet, mobile phones and smart devices of the Internet of Things broken down by type of household measured.
- C. **Persons and ICT** includes basic information on internet users with focus on type of devices used to access the internet by gender, age or educational attainment. This information is supplemented with data on social network users, on activities in the field of internet security and on selected activities carried out on the internet for travel related or entertainment purposes. Information on internet banking and online purchases is provided in more detail here.
- D. **Enterprises and ICT** provides an overview on deployment, ways, and level of use of the internet, websites, social networks, paid cloud services, selected business software applications (ERP, CRM, SCM) by enterprises and their employees. This information is supplemented by detailed data on e-commerce or on the use of Internet of Things and artificial intelligence in enterprises with 10 or more employees.
- E. **Government and ICT** informs about selected eGovernment services such as CzechPoint or data boxes. Data on electronic tax returns are also included in the chapter. This information is supplemented by data on the way in which citizens use the Internet in their dealings with the government authorities and public institutions.
- F. **ICT in Education and Digital Skills** gives an overview on ICT equipment of schools. It also contains information on the use of the Internet by students aged 16+, on the involvement of people in educational activities or on selected digital skills of students and persons aged 16+.
- G. **Health and ICT** gives information on ICT equipment of physicians' surgeries with ICT and an overview of the online services offered on their websites. There is also information on citizens' searching for health related information on the Internet.

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.

In figures, the **publication uses the Czech decimal comma**, instead of the English decimal point, as decimal separator for internal reasons.

Detailed information on the CZSO surveys can be found at:

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

Prague, April 2022

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A ICT Infrastructure

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 or legal entity, 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.
- **Domain (internet domain and/or domain name)** shall mean a definite identifier of a computer or a computer network connected to the internet. The domains shall be registered by domain name registrars, which are authorised to administer Top Level Domains.
- **Fixed wired access** to the internet includes connections over following technologies and networks: i) digital subscriber line xDSL (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) and non-licensed (fixed Wi-Fi) frequency bands. The end-point device is at a fixed place, located in a building, dwelling etc. Sometimes this alternative is also called Wireless Local Loop (WLL).
- **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, except for the number of registered domains (source: cz.nic). Further information: www.ctu.cz and www.nic.cz.

International comparisons were worked out by the CZSO using data from the International Telecommunication Union (ITU World Telecommunication/ICT Indicators Database, December 2021), European Commission and OECD (from data source available in February 2022).

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

Tab. A1 Fixed telephone voice subscriptions in Czechia

	Thousand		
	2010	2015	2020
Total	2 334	1 896	1 334
Subscriber type			
Household - residential subscriptions	1 289	831	459
Organization - business subscriptions	1 044	1 065	875
Network technology and subscriber type			
Switched network - PSTN lines	1 871	994	530
Household - residential PSTN lines	989	523	244
Organization - business PSTN lines	882	471	286
Internet network - VoIP lines	462	902	804
Household - residential VoIP lines	300	309	216
Organization - business VoIP lines	162	594	588

Figure A1 Fixed PSTN telephone voice subscriptions

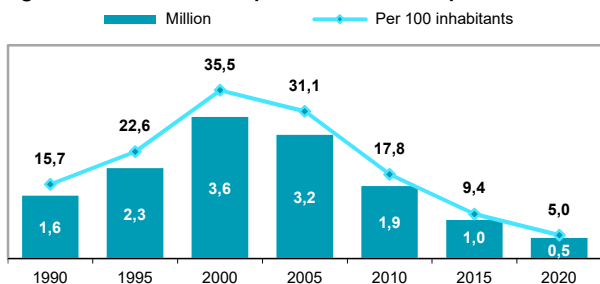


Figure A2 PSTN lines by subscriber type (million)

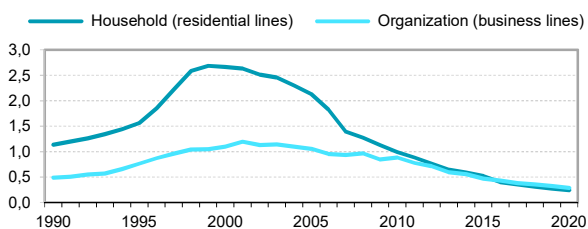
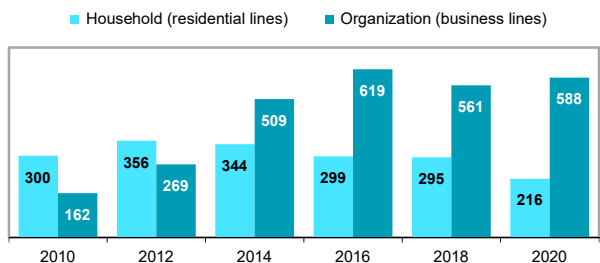


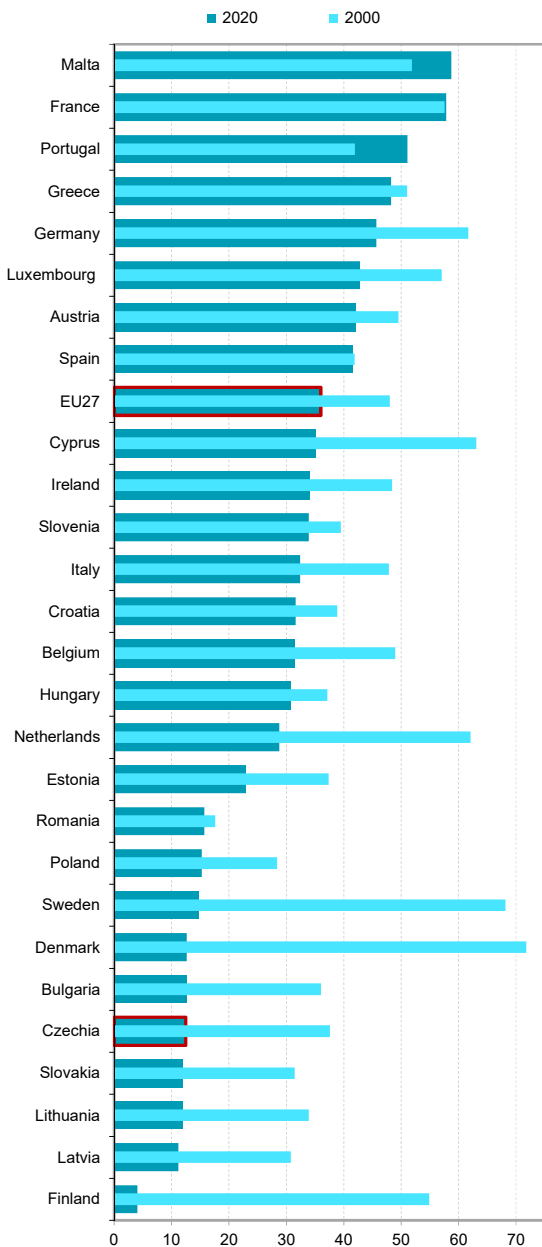
Figure A3 VoIP lines by subscriber type (thousand)



Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

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



Source: International Telecommunication Union

Table A2 Mobile telephone voice subscriptions in Czechia

	Thousand		
	2010	2015	2020
Total	13 113	14 017	14 600
Subscriber type			
Individual (citizen)	.	9 222	8 836
Organization (e.g. enterprise)	.	4 795	5 764
Type of SIM card			
Prepaid	5 538	4 893	3 947
Postpaid	7 575	9 124	10 653

Figure A5 Mobile telephone voice subscriptions

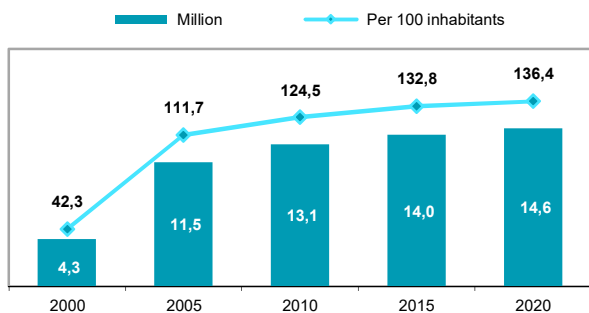


Figure A6 Active SIM cards by subscription type (million)

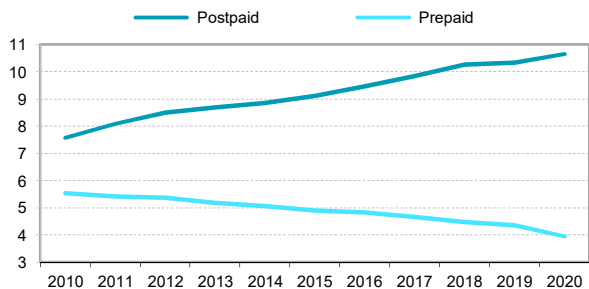
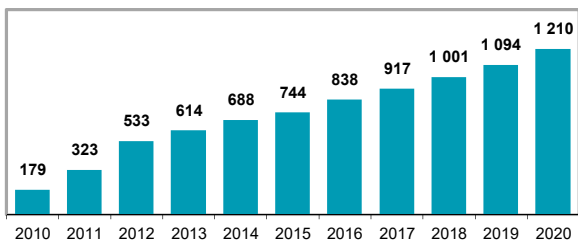


Figure A7 M2M subscriptions* (thousand)

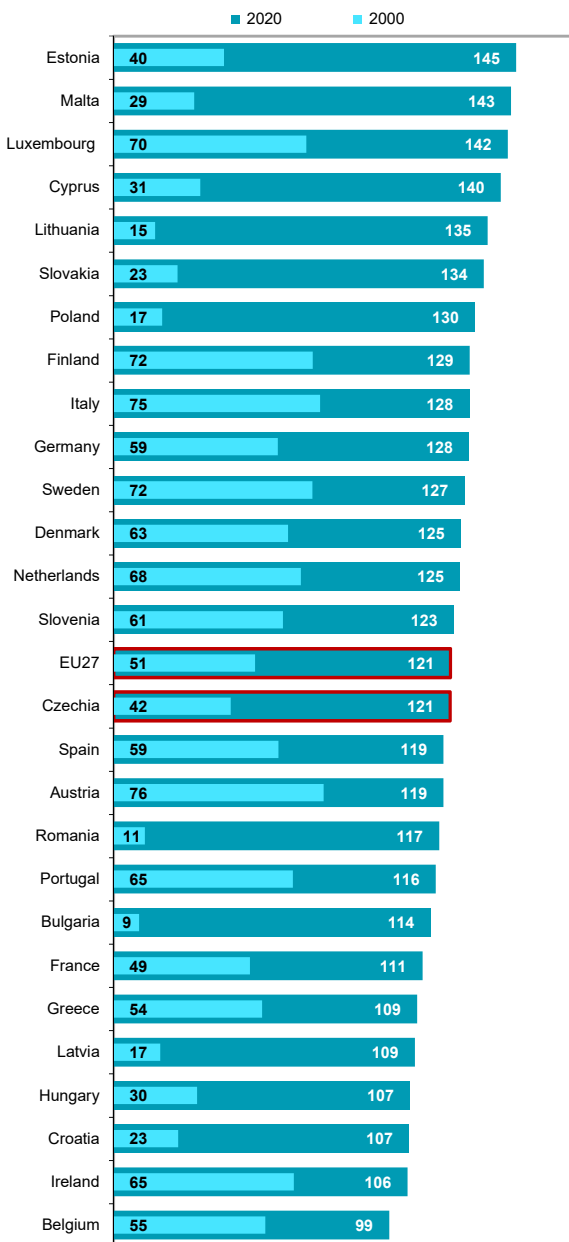


* Machine-to-Machine (M2M) includes SIM cards designed exclusively for wireless communication among devices and systems without human intervention.

Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

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



Source: International Telecommunication Union

Table A3 Fixed telephone traffic in Czechia

Outgoing calls from the fixed network in million minutes

	2010	2015	2020
Total	2 676	1 689	1 318
Subscriber type			
Household - calls from residential lines	.	.	632
Organization - calls from business lines	.	.	686
Technology			
Switched network - calls from PSTN lines	2 185	1 041	812
Internet network - calls from VoIP lines	490	648	506
Destination			
Domestic calls, total	2 310	1 422	1 202
Fixed-to-Fixed calls	1 898	1 007	503
Fixed-to-Mobile calls	412	415	699
International calls	160	110	72

Figure A9 Domestic fixed telephone traffic (minutes)

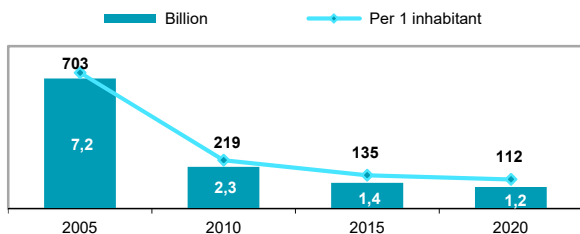


Figure A10 Fixed telephone traffic by technology
(outgoing calls in billion minutes)

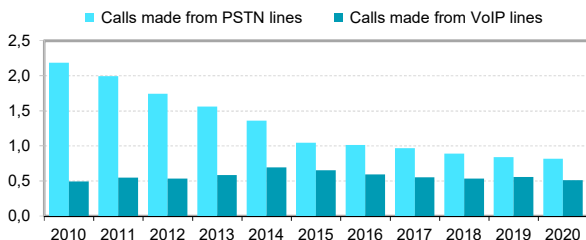
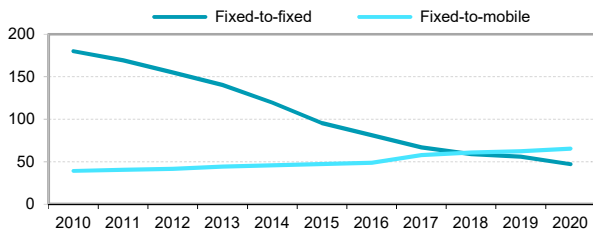


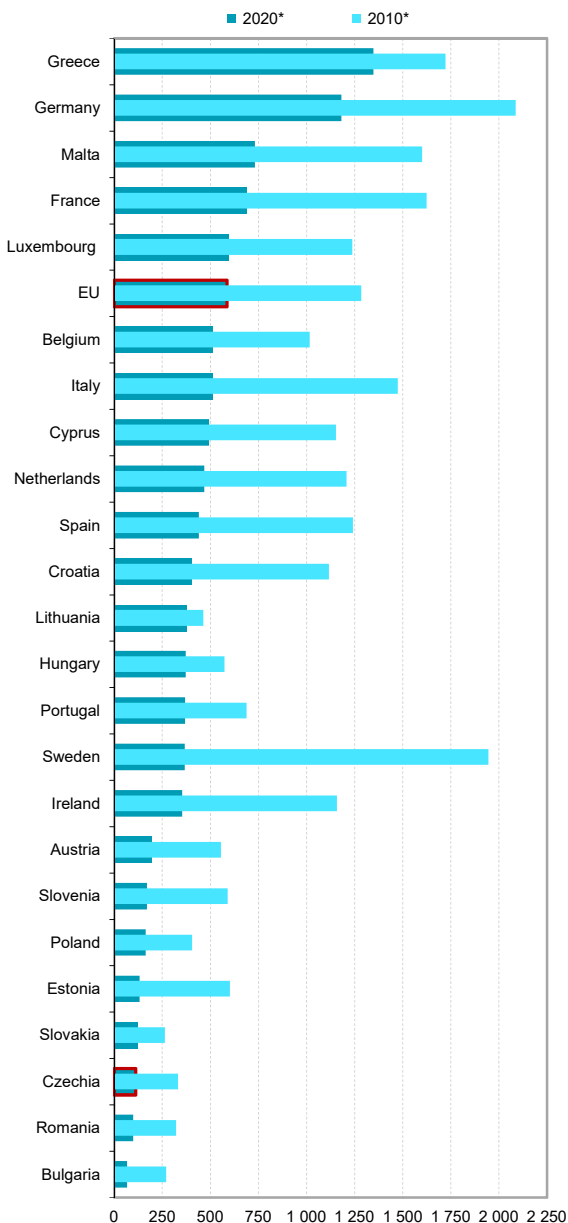
Figure A11 Domestic fixed telephone traffic by network
(outgoing called minutes per one inhabitant)



Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

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



* or last available year

Source: International Telecommunication Union

A ICT infrastructure

Table A4 Mobile telephone traffic in Czechia

Outgoing calls from the mobile network in million minutes

	2018	2019	2020
Total	22 705	23 553	27 091
Subscriber type			
Individual (citizen)	11 685	12 293	14 372
Organization (e.g. enterprise)	9 870	9 991	11 651
Destination			
Domestic calls, total	21 152	21 931	25 660
to the same mobile network	11 443	11 595	13 244
to other mobile networks	8 889	9 501	11 451
to fixed networks	821	836	965
International calls*	1 553	1 622	1 430

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

Figure A13 Domestic mobile telephone traffic (minutes)

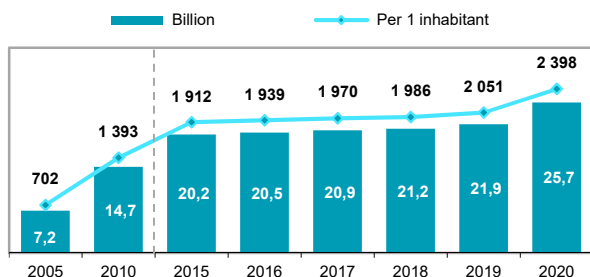


Figure A14 Domestic mobile telephone traffic by destination

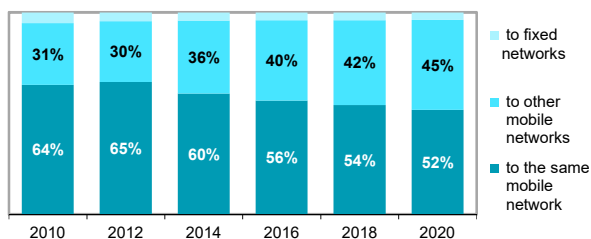
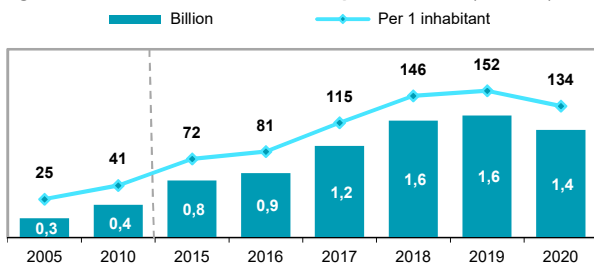


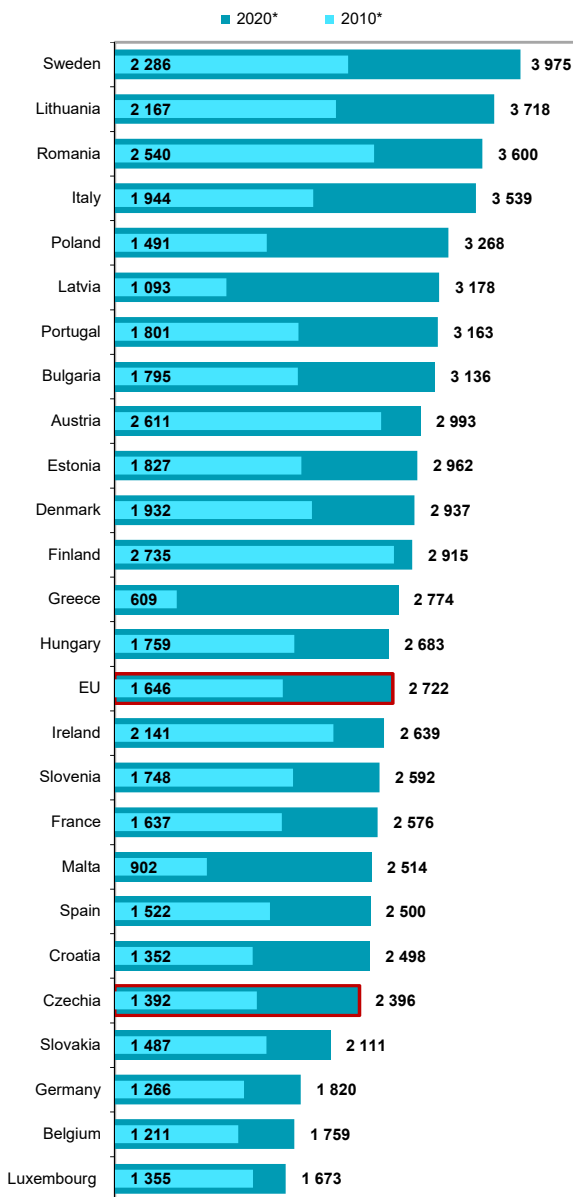
Figure A15 International mobile telephone traffic (minutes)



Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

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



* or last available year

Source: International Telecommunication Union

Table A5 Fixed broadband subscriptions in Czechia

	2018	2019	2020
	Thousand		
Total	3 570	3 726	3 833
Connection speed*			
< 30 Mbit/s	1 472	1 550	1 353
≥ 30 < 100 Mbit/s	916	1 101	1 253
≥ 100 Mbit/s	823	1 075	1 227
Subscriber type*			
Household	2 727	3 094	3 182
Organization (e.g. enterprise)	485	632	651
Access and technology type			
Wired fixed access, total	2 107	2 188	2 291
DSL	888	918	956
Cable and Fibre	1 219	1 270	1 335
Wireless fixed access, total	1 463	1 538	1 542
Fixed WiFi	1 105	1 115	1 103
Fixed LTE	358	423	440

* excludes fixed LTE for the year 2018

Figure A17 Fixed broadband subscriptions

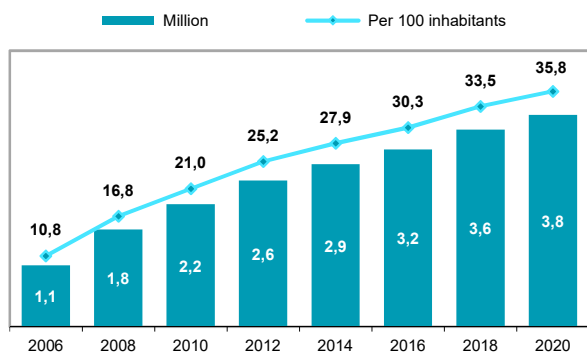
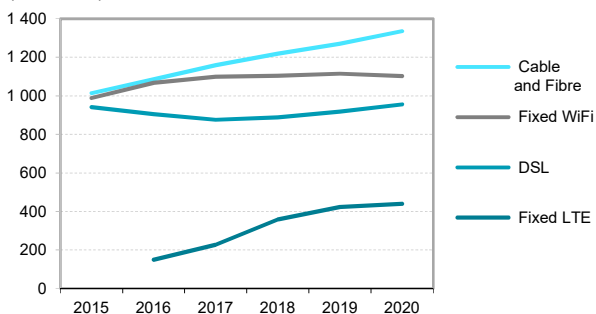


Figure A18 Fixed broadband subscriptions by technology (thousand)



Source: Czech Telecommunication Office and CZSO own calculations

Figure A19 Fixed broadband subscriptions in EU countries; 2020 (per 100 inhabitants)

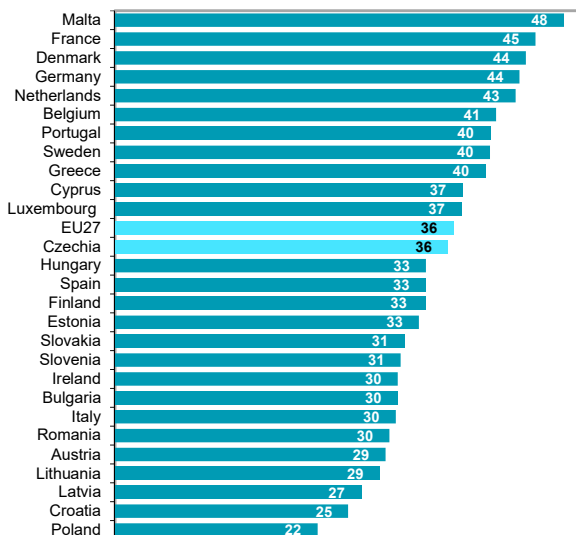
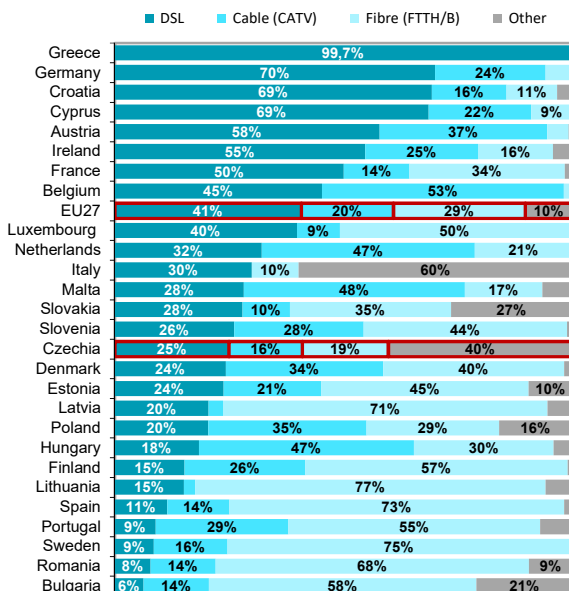


Figure A20 Fixed broadband subscriptions in EU countries by technology; 2020



Source: International Telecommunication Union and OECD

A ICT infrastructure

Table A6 Wired fixed broadband subscriptions in Czechia

	Thousand		
	2018	2019	2020
Total	2 107	2 188	2 291
Speed (advertised download speed)			
< 30 Mbit/s	772	662	547
≥ 30 < 100 Mbit/s	541	583	692
≥ 100 Mbit/s	794	943	1 053
Subscriber type			
Household	1 777	1 849	1 936
Organization (e.g. enterprise)	330	340	356
Network and technology type			
Fixed telephone network, total	888	918	956
ADSL	172	100	78
VDSL incl. FTTCab	717	818	878
Fibre network, total	622	664	721
FTTH	154	188	244
FTTB	469	476	478
Cable network (CATV)	597	606	614

Figure A21 Wired fixed broadband subscriptions

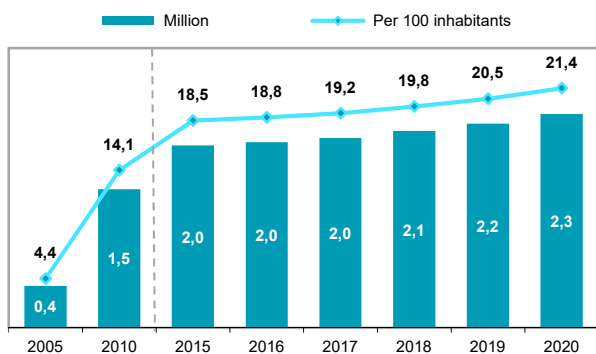
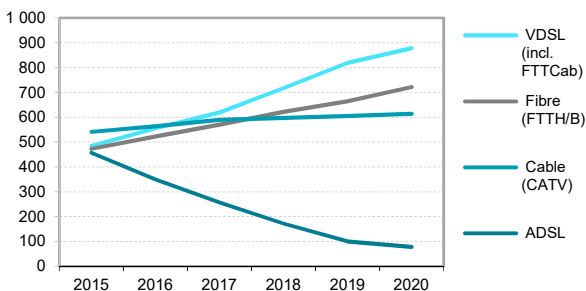


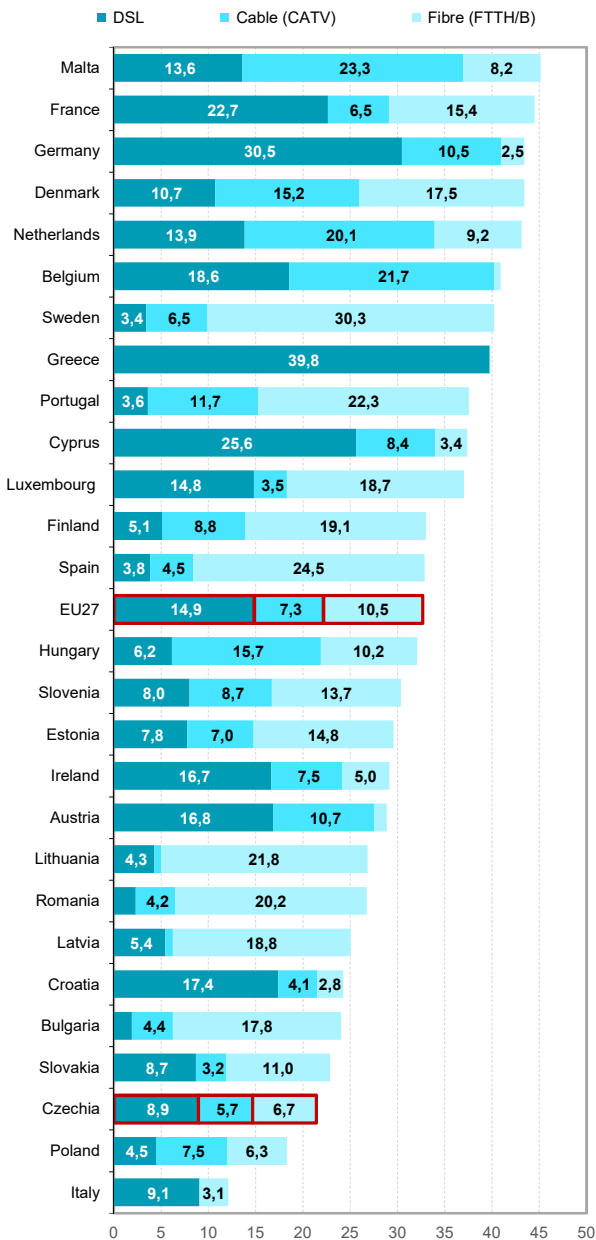
Figure A22 Wired fixed broadband subscriptions by technology (thousand)



Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Figure A23 Wired fixed broadband subscriptions in EU countries by technology; 2020 (per 100 inhabitants)



Source: International Telecommunication Union and OECD

A ICT infrastructure

Table A7 Fixed broadband by speed in Czechia; 2020

	Thousand subscriptions		
	< 30 Mbit/s	30–99,9 Mbit/s	≥ 100 Mbit/s
Total	1 353	1 253	1 227
Wired fixed access, total	547	692	1 053
DSL	481	369	107
Cable (CATV)	13	95	506
Fibre (FTTH/B)	53	228	440
Wireless fixed access, total	806	562	174
Fixed WiFi	464	476	162
Fixed LTE	342	85	12

Figure A24 Fixed broadband subscriptions with advertised download speed 30 Mbit/s or more

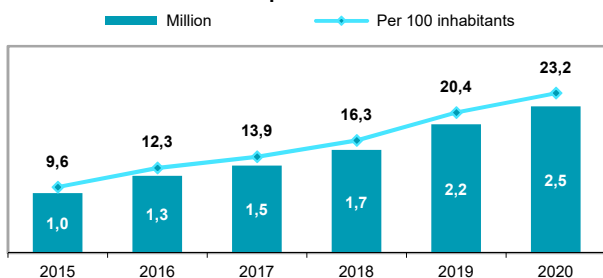


Figure A25 Fixed broadband subscriptions by speed

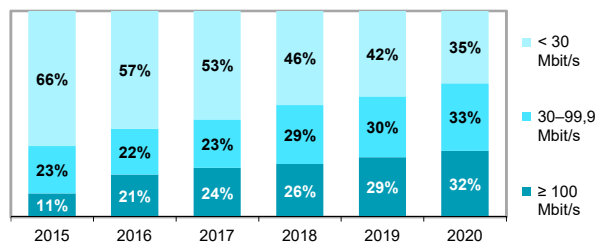
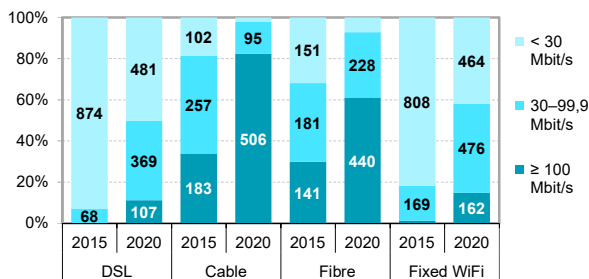


Figure A26 Speed of fixed broadband technologies (thousand subscriptions; percentage)



Source: Czech Telecommunication Office and CZSO own calculations



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Figure A27 Fixed broadband subscriptions in EU countries with download speed 30 Mbit/s and more; 2020
(per 100 inhabitants)

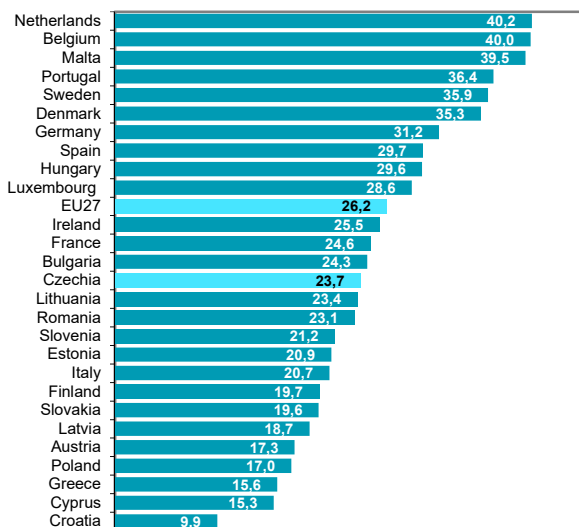
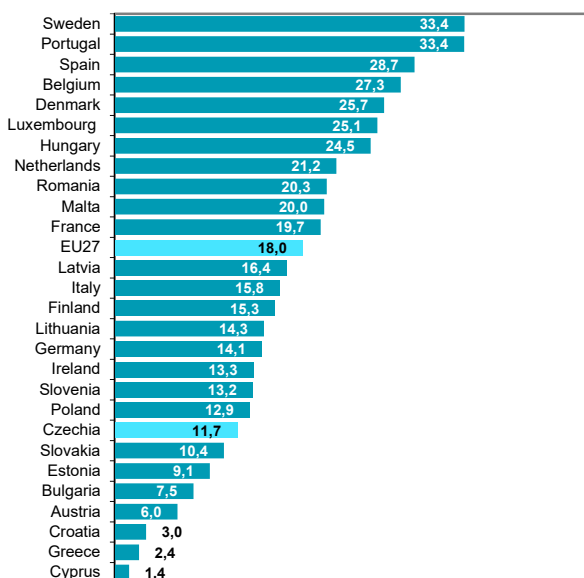


Figure A28 Fixed broadband subscriptions in EU countries with download speed 100 Mbit/s and more; 2020
(per 100 inhabitants)



Source: European Commission and OECD

Table A8 Mobile broadband subscriptions in Czechia

	2018	2019	2020
Total data and voice subscriptions*	8 333	9 372	9 718
Prepaid monthly plans	1 494	1 981	1 980
Postpaid monthly plans/tariffs	6 839	7 391	7 739

Thousand

* Includes active SIM cards for both voice&data services, installed in telephones

Figure A29 Mobile broadband subscriptions

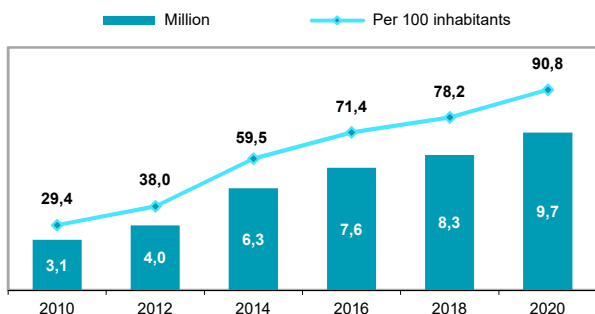


Figure A30 Mobile broadband subscriptions (postpaid plans)

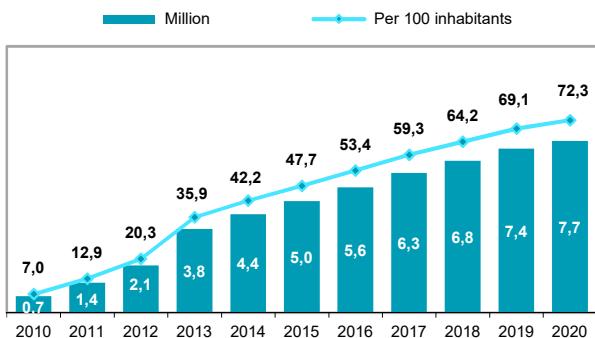
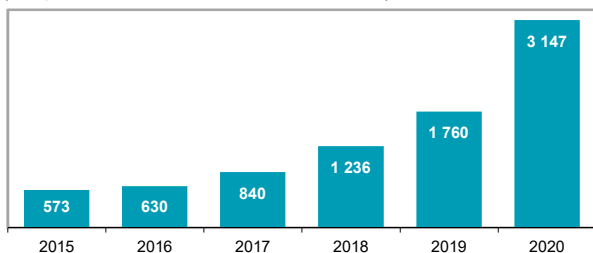


Figure A31 Average monthly mobile data consumption
(MB per active SIM card with data services)



Source: Czech Telecommunication Office and CZSO own calculations

A ICT infrastructure

Figure A32 Mobile voice and data broadband subscriptions in EU countries; 2020 (per 100 inhabitants)

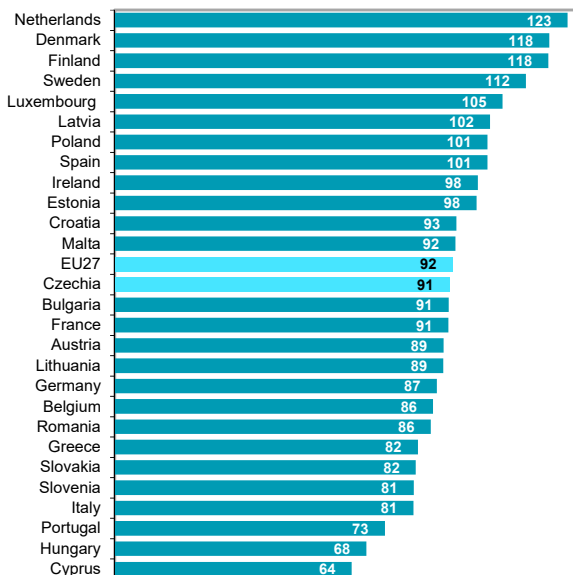
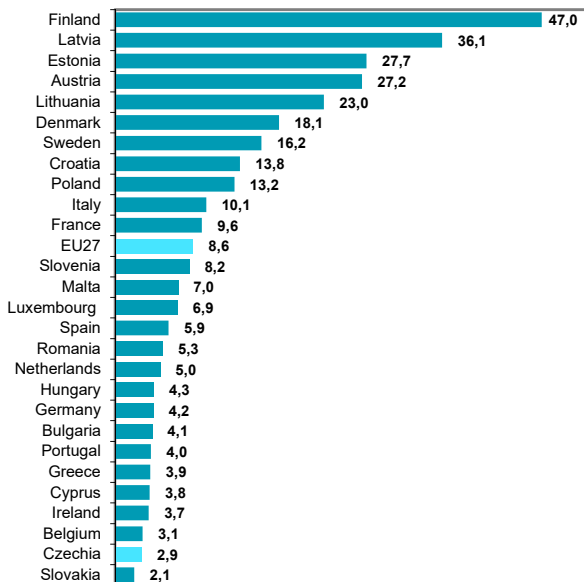


Figure A33 Monthly mobile broadband internet traffic in EU countries (GB per 1 inhabitant)



Source: International Telecommunication Union

A ICT infrastructure

Table A9 Domains under Top Level Domain .CZ in Czechia

	Thousand		
	2019	2020	2021
Total	1 329	1 371	1 424
domains protected by DNSSEC*	787	829	848
Registrant's country			
Czechia	1 234	1 273	1 307
Slovakia	23	24	27
Germany	16	15	14
United States of America	9	10	13
other countries	46	49	63

* Further information can be found at: www.dnssec.cz.

Figure A34 Domains under Top Level Domain .CZ

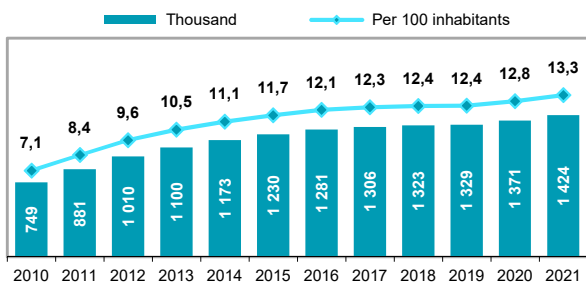


Figure A35 Registered and revoked .CZ domains (thousand)

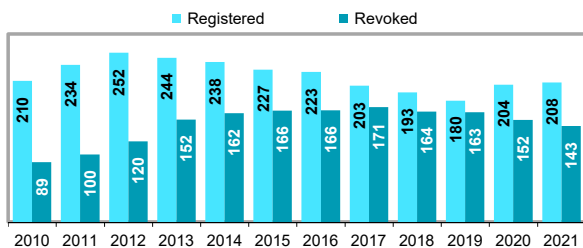
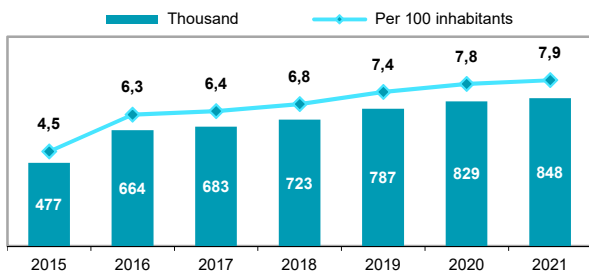


Figure A36 Domains .CZ protected by DNSSEC



Source: CZ.NIC and CZSO own calculations



B Households and ICT

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 personal computer in a sample of around 10 000 individuals aged 16+ years in approx. 6 000 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 for Czechia.

Income quartiles: Households were divided into four groups (quartiles) by household net income.

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 every year updated in January. Detail information can be found at: <https://ec.europa.eu/eurostat/web/digital-economy-and-society/overview>

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 within the reach of household's WiFi network.
- **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 (no 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). *Type of its ownership is not relevant. It could be own one, company one, or borrowed one.*
- **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 and ICT

Table B1 Households in Czechia with a computer

	Percentage		
	2010	2015	2021
Households (HHs), total	59,2	73,1	79,0
HHs with children up to 15 years	84,6	93,8	96,5
HHs of persons up to 40 years (no children)	.	93,0	92,9
HHs of persons older than 65 years	8,8	24,9	41,3
Other households without children	.	76,8	87,1
Household income group			
The lowest income group (first quartile)	21,2	34,3	44,6
Second quartile income group	46,8	57,2	78,0
Third quartile income group	74,8	85,7	94,8
The highest income group (fourth quartile)	91,8	96,7	98,7

as a percentage of all households of a given type

Figure B1 Households with a computer

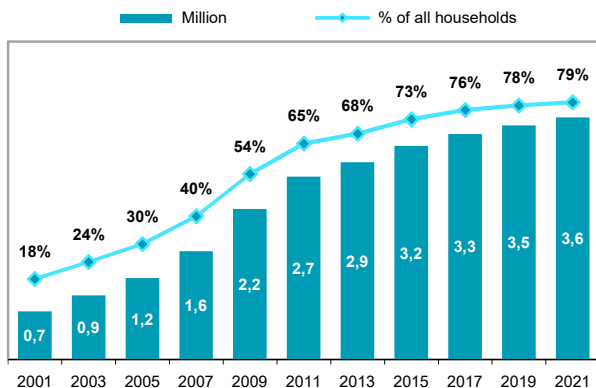
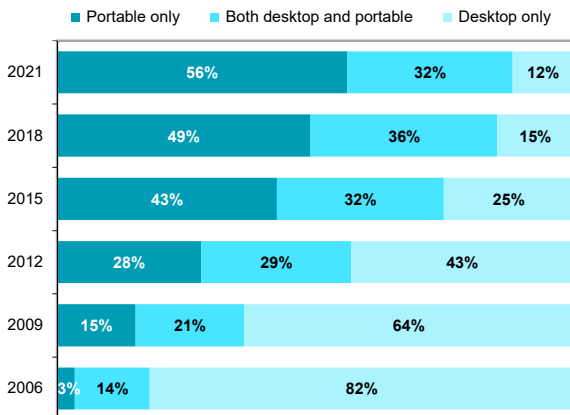


Figure B2 Households with a computer by its type



Source: Czech Statistical Office, ICT use survey in households

B Households and ICT

Table B2 Computers used by households in Czechia; 2021

	Percentage		
	Desktop	Laptop	Tablet
Households (HHs), total	34,6	64,8	31,4
HHs with children up to 15 years	43,5	85,8	54,9
HHs of persons up to 40 years (no children)	26,0	85,5	36,2
HHs of persons older than 65 years	20,4	21,9	7,4
Other households without children	39,6	72,1	29,5
Household income group			
The lowest income group (first quartile)	15,8	28,3	9,1
Second quartile income group	29,5	59,1	25,0
Third quartile income group	42,9	80,4	39,7
The highest income group (fourth quartile)	50,2	91,5	51,9

as a percentage of all households of a given type

Figure B3 Households with a laptop or a tablet

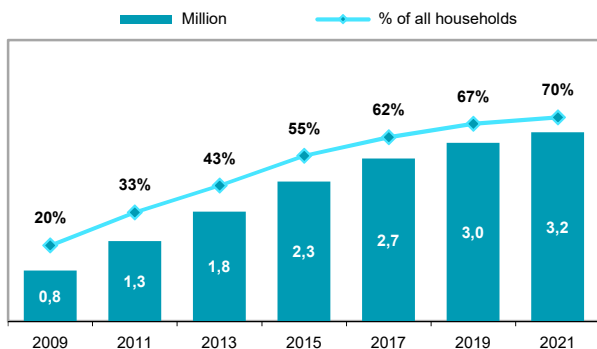
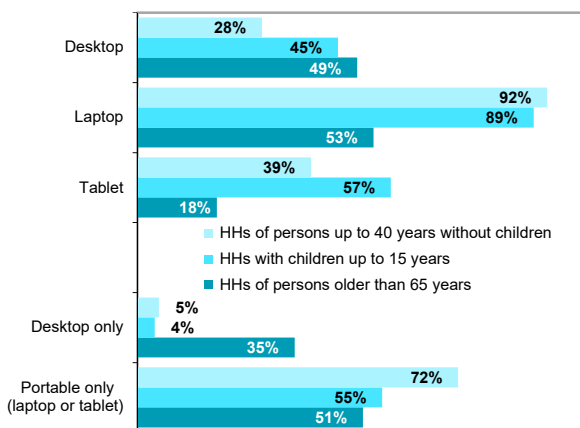


Figure B4 Computers used by households; 2021



as a percentage of all households of a given type with a computer

Source: Czech Statistical Office, ICT use survey in households

B Households and ICT

Table B3 Households in Czechia with internet access

	Percentage		
	2010	2015	2021
Households (HHs), total	56,0	73,1	83,0
HHs with children up to 15 years	79,8	93,6	99,3
HHs of persons up to 40 years (no children)	.	94,7	97,7
HHs of persons older than 65 years	.	24,2	44,4
Other households without children	.	77,0	92,2
Household income group			
The lowest income group (first quartile)	18,8	33,8	52,9
Second quartile income group	42,0	57,2	81,9
Third quartile income group	71,7	85,8	97,9
The highest income group (fourth quartile)	89,1	96,8	99,2

as a percentage of all households of a given type

Figure B5 Households with internet access

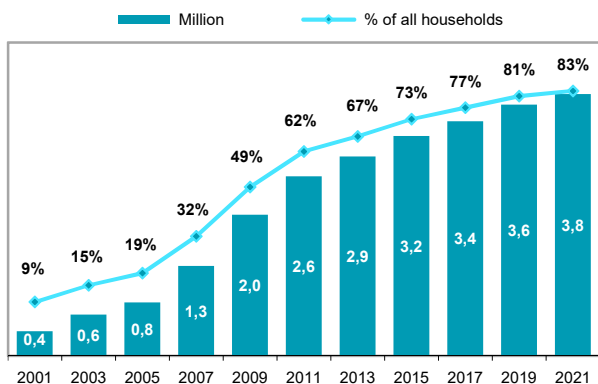
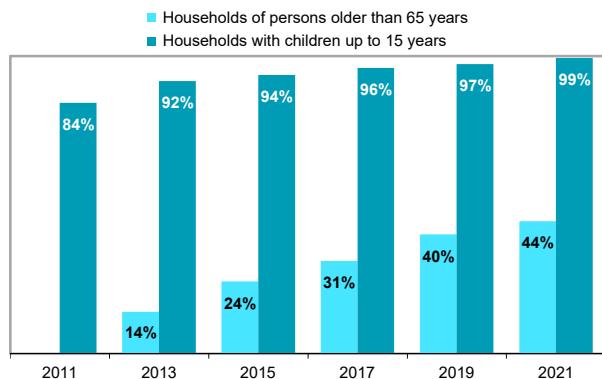


Figure B6 Households with children and households of elders with internet access

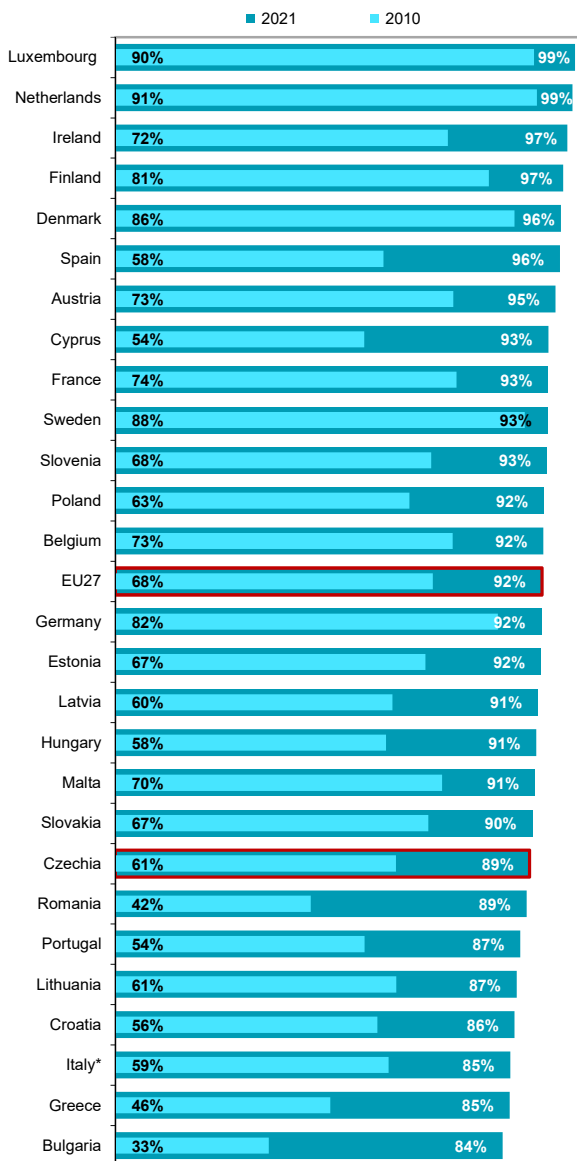


as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

B Households and ICT

Figure B7 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

* data for 2020

Source: Eurostat

B Households and ICT

Table B4 Households in Czechia using a WiFi router

	Percentage		
	2010	2015	2021
Households (HHs), total	16,2	47,7	70,0
HHs with children up to 15 years	22,9	68,4	91,5
HHs of persons up to 40 years (no children)	.	64,1	82,3
HHs of persons older than 65 years	.	8,8	27,9
Other households without children	.	48,2	78,5
Household income group			
The lowest income group (first quartile)	3,7	13,5	34,8
Second quartile income group	9,4	28,7	64,4
Third quartile income group	18,8	53,4	87,8
The highest income group (fourth quartile)	32,0	76,8	93,0

as a percentage of all households of a given type

Figure B8 Households using a WiFi router

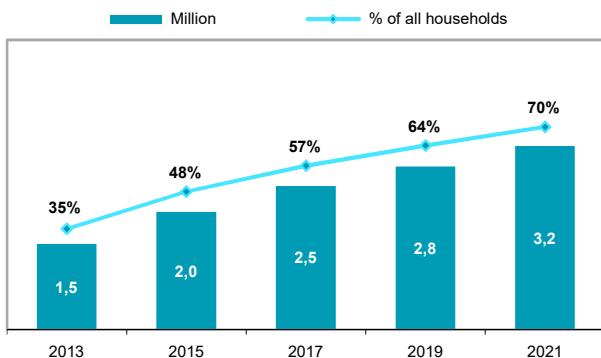
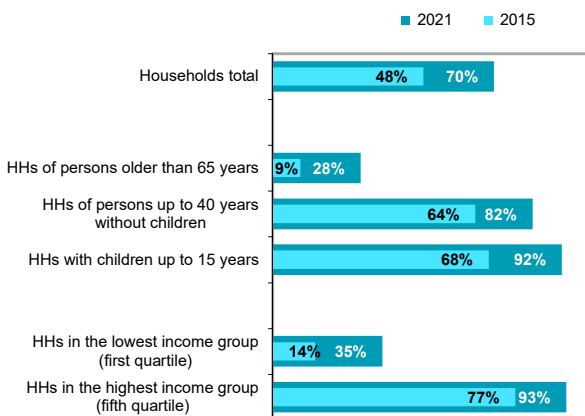


Figure B9 Types of households using a WiFi router



as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

B Households and ICT

Table B5 Households in Czechia with a mobile phone; 2021

		Percentage	
	Total	Smart-phone	Mobile phone without operating system
Households (HHs), total	99,3	78,4	33,6
HHs with children up to 15 years	100,0	98,8	8,9
HHs of persons up to 40 years (no children)	100,0	97,6	3,3
HHs of persons older than 65 years	97,9	32,5	76,3
Other households without children	99,6	88,4	31,1
Household income group			
The lowest income group (first quartile)	97,9	44,7	57,4
Second quartile income group	99,4	74,4	40,4
Third quartile income group	99,9	95,9	19,1
The highest income group (fourth quartile)	100,0	98,7	17,5

as a percentage of all households of a given type

Figure B10 Households with a smartphone

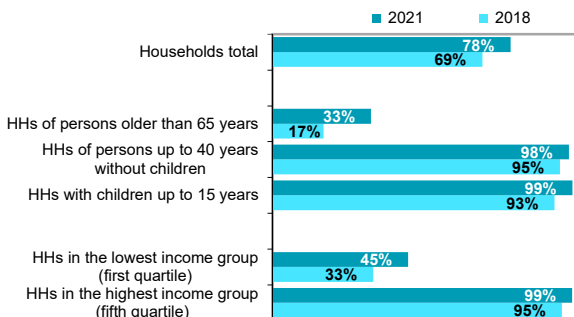
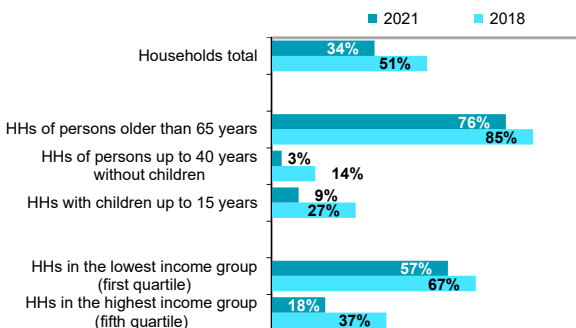


Figure B11 Households with a mobile phone without operating system



as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

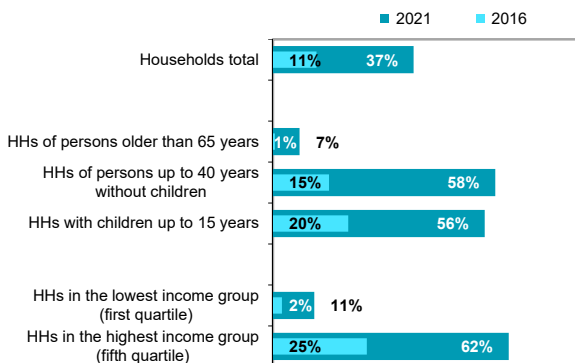
B Households and ICT

Table B6 Households in Czechia using a Smart TV

	Percentage	
	2016	2021
Households (HHs), total	11,5	37,1
HHs with children up to 15 years	19,8	55,7
HHs of persons up to 40 years (no children)	14,8	58,5
HHs of persons older than 65 years	0,5	7,0
Other households without children	10,4	37,9
Household income group		
The lowest income group (first quartile)	2,4	10,9
Second quartile income group	6,8	28,5
Third quartile income group	14,5	46,8
The highest income group (fourth quartile)	24,7	62,1

as a percentage of all households of a given type

Figure B12 Households using a Smart TV



as a percentage of all households of a given type

Table B7 Households in Czechia using selected devices of the Internet of Things; 2020

	%		
	Security devices	Energy management devices	Household appliances
Households (HHs), total	5,1	3,4	2,6
HHs with children up to 15 years	7,6	5,0	4,6
HHs of persons up to 40 years (no children)	6,8	5,9	4,3
HHs of persons older than 65 years	0,8	0,7	0,3
Other households without children	5,6	3,3	2,1
Household income group			
The lowest income group (first quartile)	1,2	0,3	0,3
Second quartile income group	2,0	0,9	1,0
Third quartile income group	6,5	4,8	2,2
The highest income group (fourth quartile)	10,8	7,7	6,7

as a percentage of all households of a given type

Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

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.

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 Member States.

The survey applies the method of **personal interviews** with the use of personal computer (Computer Assisted Personal Interviewing – CAPI) in a sample of around 10 000 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. The data found are available broken by a wide spectrum of demographic and social characteristics as, for instance, sex, age, educational attainment, economic activity, income group, region, and residential municipality size.

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 then 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 basic education, secondary education without A–level exam, secondary education with A–level exam together with higher vocational education, and 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 every year updated in January. Detailed information can be found at: [https://bit.ly/Comprehensive database](https://bit.ly/Comprehensive_database).

Definitions (sorted alphabetically)

- A **purchase over 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 **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, etc.).

- **Cookies** - 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.
- **Foreign sellers** include sellers from other EU and non-EU countries.
- **Seeking information on travel and accommodation** includes searching for information in this field both in the form of browsing via an internet browser, and direct visits to selected web pages. Examples of information on travel may include information on available flights, bus or railway connections, accommodation, car renting, or travel insurance.
- The broadband **wireless internet connection (WiFi)** shall mean the internet connection through a local wireless network, secured or not. Typical examples include household wireless networks, local wireless networks of cafes, hospitals, airports, transport means, schools, etc. The WiFi connection is usually for free, it may be paid in certain cases as at the airports, for instance, or with limited access time.
- The **internet connection by means of mobile data**, that is a paid data tariff of a mobile network operator, shall mean a connection of a mobile phone to the internet through a mobile telephone network. The user utilises a paid internet connection from a provider/operator of the mobile phone services. The user can be connected to the internet on location where there is the signal of the contracted mobile telephone network.
- 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.
- **Using the internet** means performing any activity on the internet, such as browsing websites or downloading files.
- **Watching videos on the internet (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).

Detailed information on methodology of the survey can be found in the CZSO publication **ICT Use in Households and by Individuals in 2021, code 062004-21**, accessible for free on the CZSO website at www.czso.cz/publikaceict_domacnosti2021 (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 and ICT

Table C1 Persons in Czechia using a mobile phone; 2021

	Percentage		
	Total	Smart-phone	Mobile phone without operating system
Total (aged 16+)	98,8	76,6	23,2
Men	98,8	77,3	22,6
Women	98,7	76,0	23,8
Age group (years)			
16–24	99,5	99,2	0,4
25–34	99,8	97,9	2,5
35–44	99,7	96,0	5,2
45–54	99,4	91,0	9,2
55–64	99,4	73,4	28,1
65+	96,2	30,0	67,3
Education attainment (aged 25–64)			
Primary	95,6	70,7	25,3
Secondary without A-level examination	99,7	83,8	17,1
Secondary with A-level examination	99,8	94,7	6,5
Tertiary	100,0	96,5	4,7

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

Figure C1 Mobile phone users by gender and age

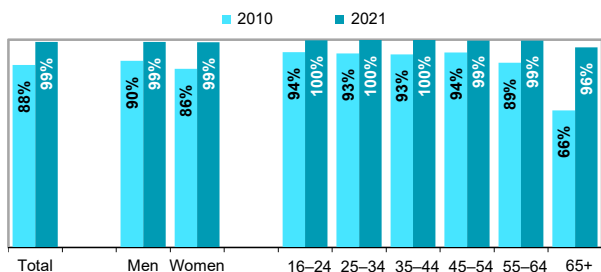
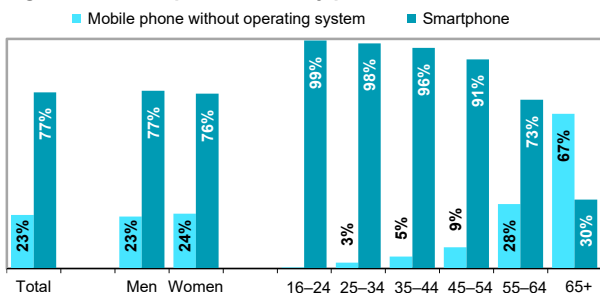


Figure C2 Mobile phones used by persons; 2021



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

Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Table C2 Persons in Czechia using the internet

	Percentage		
	2010	2015	2021
Total (aged 16+)	61,8	75,7	82,7
Men	65,8	77,9	84,4
Women	58,1	73,5	81,1
Age group (years)			
16–24	92,3	97,0	99,3
25–34	83,1	95,4	98,6
35–44	79,7	93,9	97,9
45–54	65,8	86,7	96,5
55–64	42,1	68,0	84,0
65+	13,2	28,4	42,7
Education attainment (aged 25–64)			
Primary	25,0	49,2	76,8
Secondary without A-level examination	54,2	78,1	90,1
Secondary with A-level examination	83,6	95,0	98,2
Tertiary	95,8	99,4	99,6

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

Figure C3 Persons aged 16+ using the internet

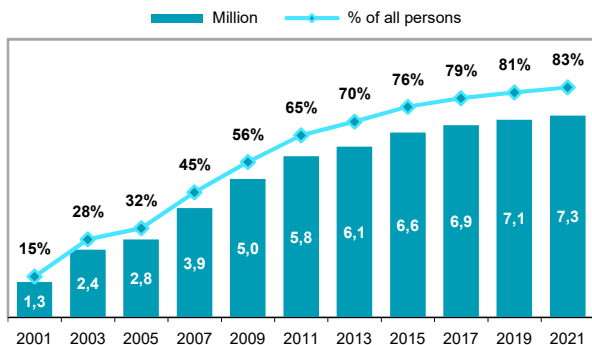
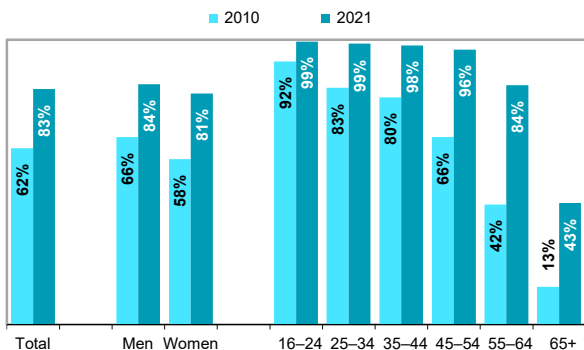


Figure C4 Internet users by gender and age



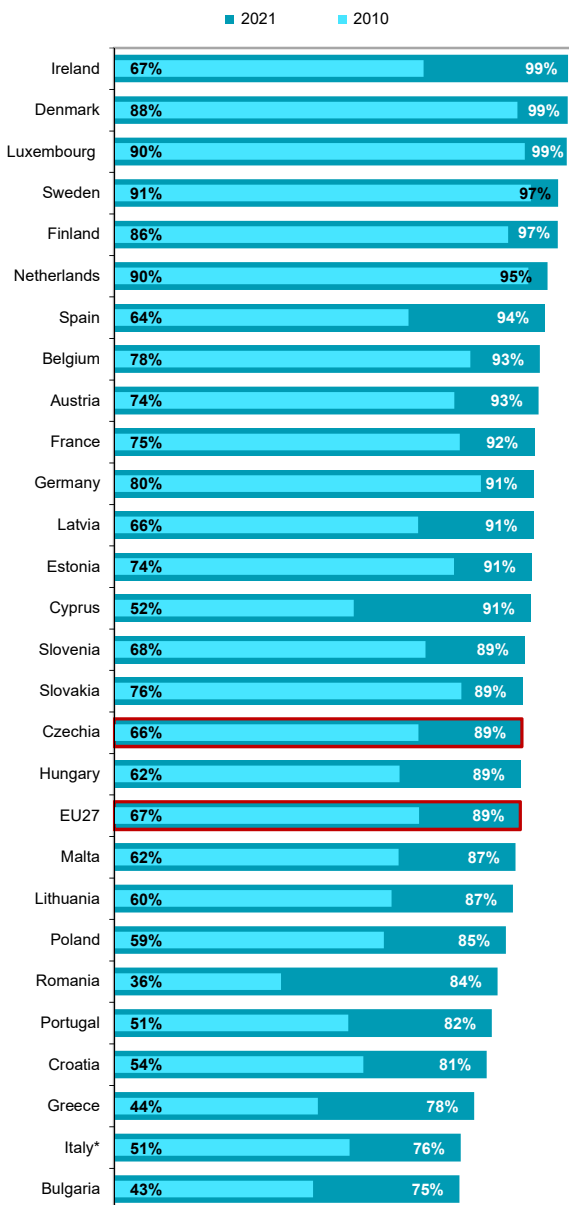
as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households



C Persons and ICT

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



* data for 2020

Source: Eurostat

C Persons and ICT

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

	Percentage		
	2010	2015	2021
Total (aged 16+)	4,0	37,0	72,1
Men	5,4	41,7	73,3
Women	2,7	32,5	71,0
Age group (years)			
16–24	9,7	77,1	98,3
25–34	6,2	68,0	96,8
35–44	5,2	48,6	94,0
45–54	2,7	28,1	86,3
55–64	0,9	14,2	65,8
65+	0,4	3,1	21,8
Education attainment (aged 25–64)			
Primary	-	15,5	65,0
Secondary without A-level examination	1,5	27,9	77,2
Secondary with A-level examination	5,4	43,4	91,7
Tertiary	8,9	68,3	96,1

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

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

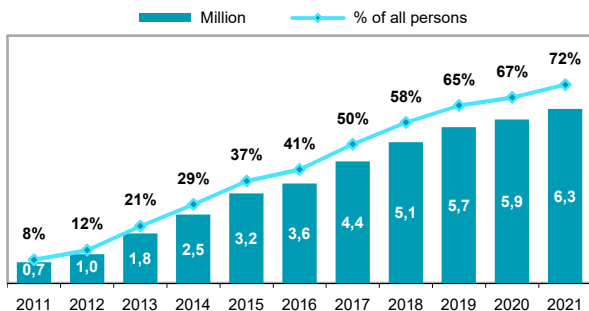
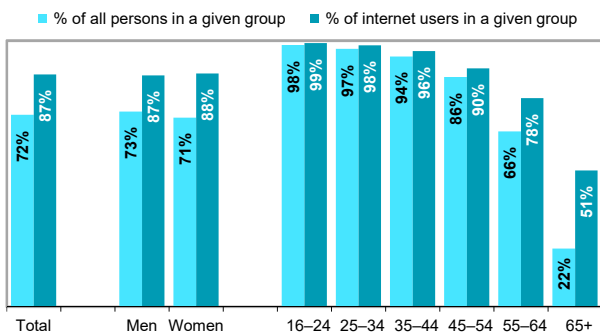


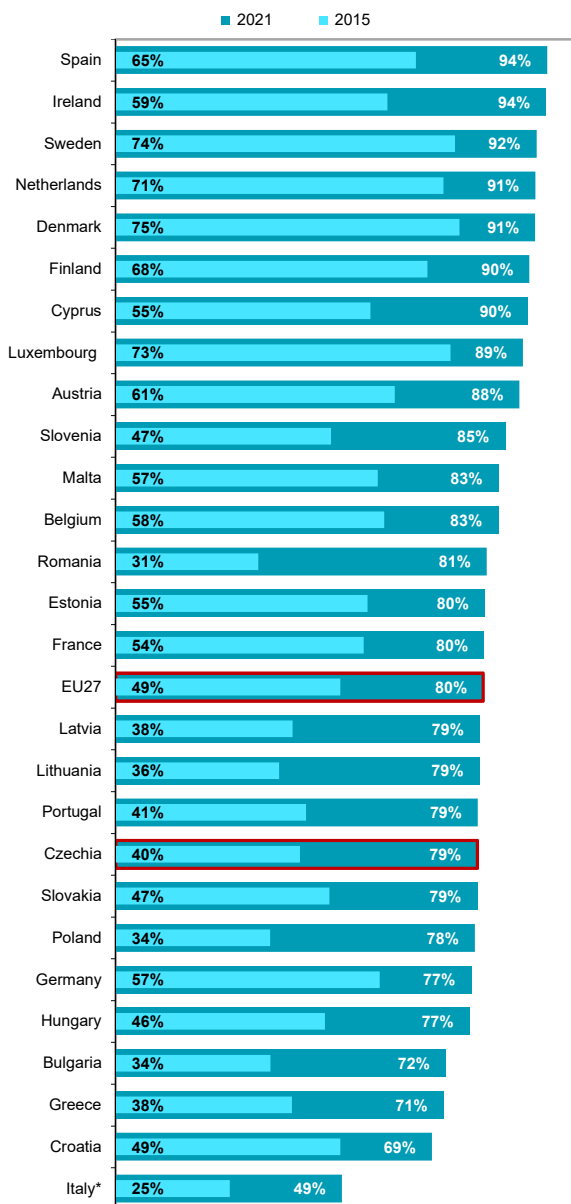
Figure C7 Use of a mobile phone to access the internet by gender and age; 2021



Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

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



* data for 2019

Source: Eurostat

C Persons and ICT

Table C4 Type of connection used by persons in Czechia to access the internet on a mobile phone; 2021

	Percentage		
	Mobile (e.g. LTE)	Wireless (WiFi)	WiFi only
Total (aged 16+)	62,3	69,6	9,8
Men	64,4	71,0	8,9
Women	60,4	68,4	10,6
Age group (years)			
16–24	86,9	96,7	11,4
25–34	89,6	93,7	7,2
35–44	83,4	91,3	10,6
45–54	74,2	84,1	12,1
55–64	52,6	62,8	13,2
65+	15,7	19,7	6,2
Education attainment (aged 25–64)			
Primary	48,1	59,6	16,9
Secondary without A-level examination	64,2	72,7	12,9
Secondary with A-level examination	80,9	89,9	10,8
Tertiary	89,8	95,0	6,3

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

Figure C9 Persons aged 16+ using a mobile network (e.g. LTE) to access the internet on a mobile phone

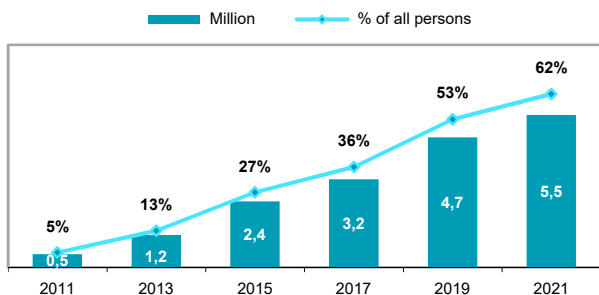
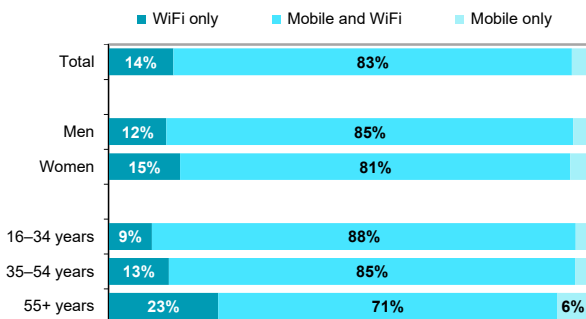


Figure C10 Internet use on a mobile phone by type of connection; 2021



Source: Czech Statistical Office, ICT use survey in households

Figure C11 Persons aged 16–29 years in EU countries using a mobile phone to access the internet; 2021

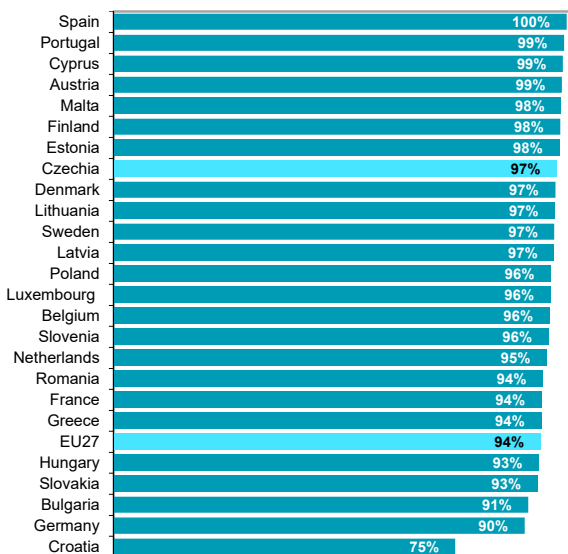
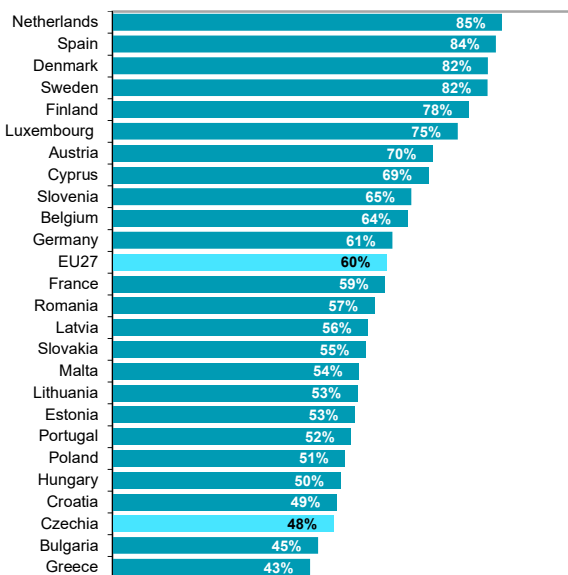


Figure C12 Persons aged 55–74 years in EU countries using a mobile phone to access the internet; 2021



Source: Eurostat

C Persons and ICT

Table C5 Persons in Czechia using computers to access the internet; 2021

	Percentage		
	Laptop	Desktop	Tablet
Total (aged 16+)	61,7	40,7	25,1
Men	62,7	43,3	25,1
Women	60,8	38,1	25,1
Age group (years)			
16–24	85,0	38,3	42,4
25–34	82,1	43,8	37,2
35–44	77,1	52,2	37,6
45–54	73,4	51,6	22,8
55–64	54,8	46,2	16,9
65+	22,6	19,0	7,3
Education attainment (aged 25–64)			
Primary	43,3	21,8	14,9
Secondary without A-level examination	57,2	35,5	21,5
Secondary with A-level examination	79,3	55,5	28,7
Tertiary	90,0	64,0	43,2

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

Figure C13 Use of laptop computer to access the internet by gender and age; 2021

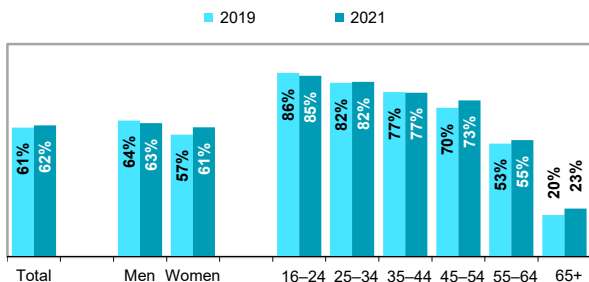
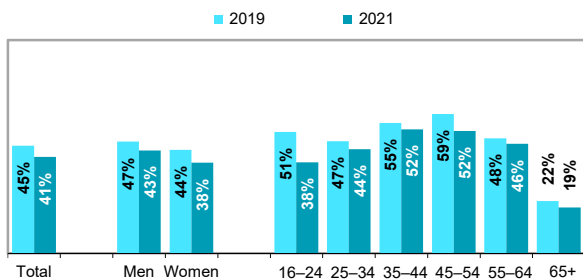


Figure C14 Use of desktop computer to access the internet by gender and age; 2021



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

Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Figure C15 Persons aged 16–74 years in EU countries using laptop computer to access the internet; 2021

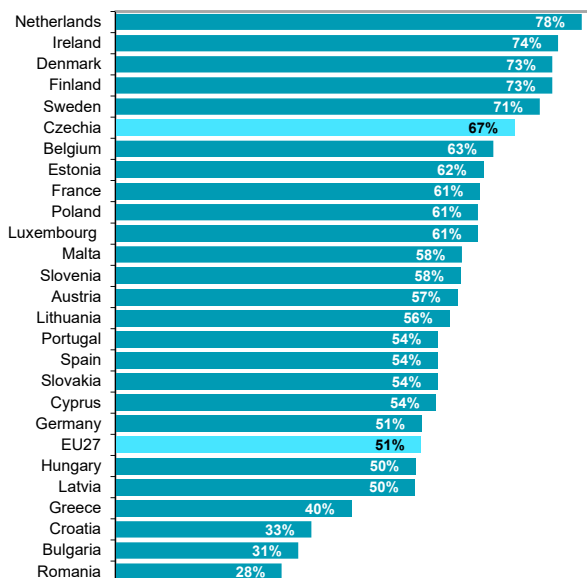
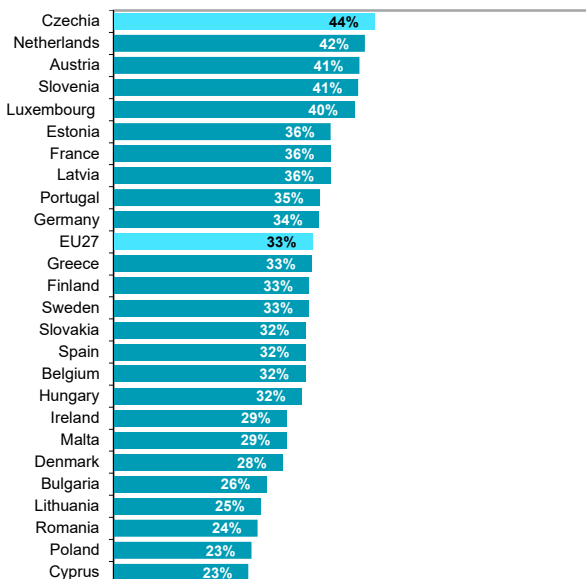


Figure C16 Persons aged 16–74 years in EU countries using desktop computer to access the internet; 2021



Source: Eurostat

C Persons and ICT

Table C6 Persons in Czechia using social networks

	Percentage		
	2010	2015	2021
Total (aged 16+)	9,4	37,4	56,3
Men	10,5	37,6	54,4
Women	8,3	37,3	58,0
Age group (years)			
16–24	30,6	88,7	95,4
25–34	16,2	72,3	92,9
35–44	7,2	46,9	75,7
45–54	4,5	23,9	59,9
55–64	1,2	10,1	37,6
65+	0,4	3,3	10,6
Education attainment (aged 25–64)			
Primary	2,6	15,8	55,1
Secondary without A-level examination	4,0	30,2	56,3
Secondary with A-level examination	10,3	43,9	70,3
Tertiary	13,7	55,3	79,4

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

Figure C17 Persons aged 16+ using social networks

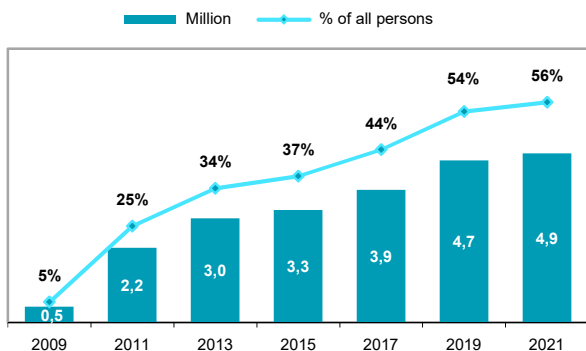
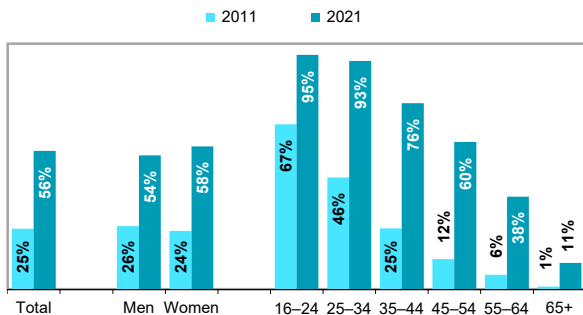


Figure C18 Use of social networks by gender and age



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

Source: Czech Statistical Office, ICT use survey in households

Figure C19 Persons aged 16–74 years in EU countries using social networks; 2021

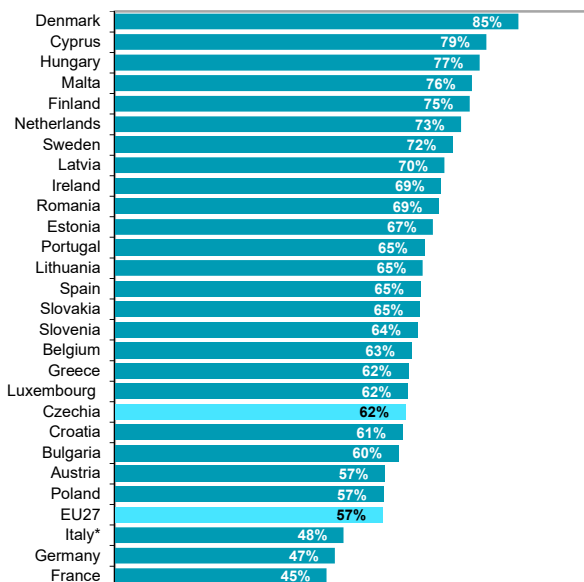
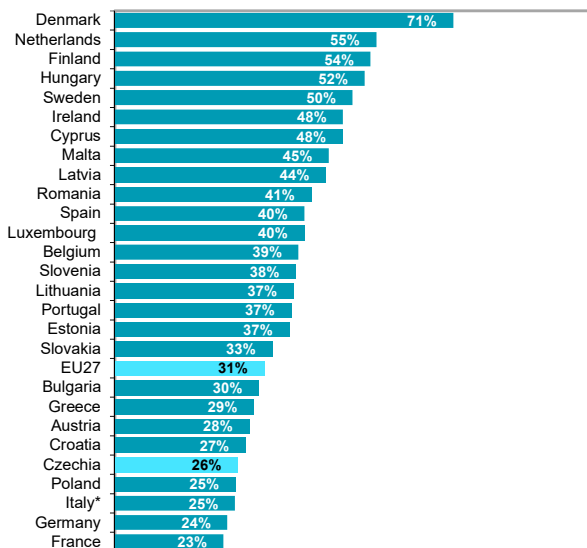


Figure C20 Persons aged 55–74 years in EU countries using social networks; 2021



* data for 2020

Source: Eurostat

C Persons and ICT

Table C7 Persons in Czechia using the internet for selected activities related to travelling; 2021

	Percentage		
	Searching info about travelling	Purchasing accommodation	Purchasing travel tickets
Total (aged 16+)	43,9	7,2	6,9
Men	43,7	6,9	6,1
Women	44,1	7,4	7,6
Age group (years)			
16–24	50,6	6,2	18,7
25–34	65,9	12,0	14,0
35–44	58,8	12,2	6,5
45–54	50,1	8,2	4,9
55–64	39,0	4,7	3,8
65+	14,0	1,3	1,2
Education attainment (aged 25–64)			
Primary	28,9	3,8	1,1
Secondary without A-level examination	38,3	3,7	2,5
Secondary with A-level examination	57,8	10,1	7,1
Tertiary	75,0	17,7	15,4

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

Figure C21 Persons aged 16+ using the internet for searching information about travel and accommodation

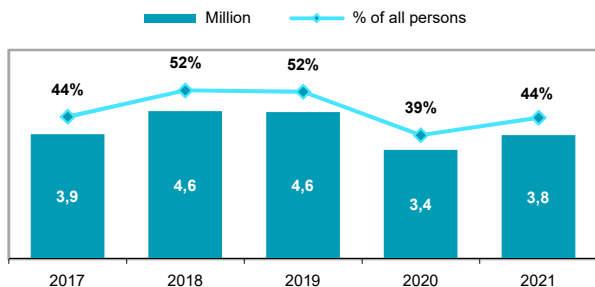
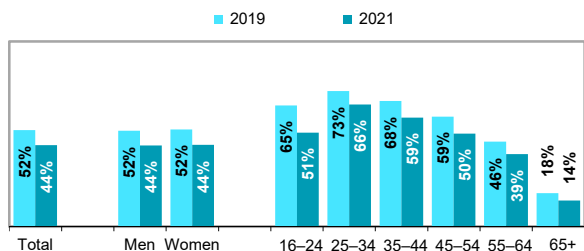


Figure C22 Internet use for searching information about travel and accommodation by gender and age



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

Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Figure C23 Persons aged 16–74 years in EU countries purchasing travel tickets on the internet; 2021

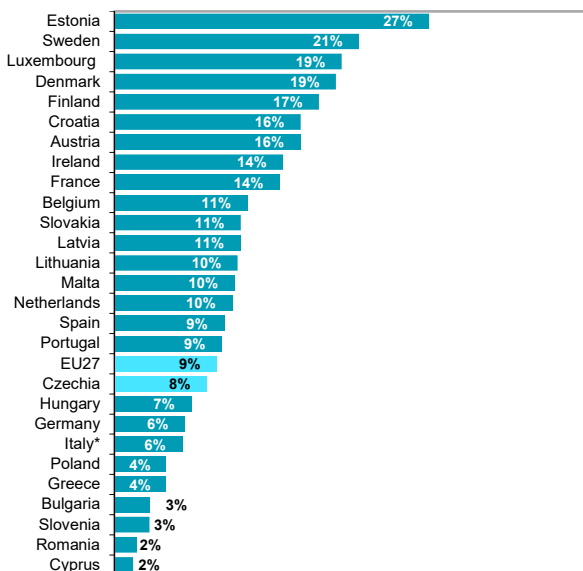
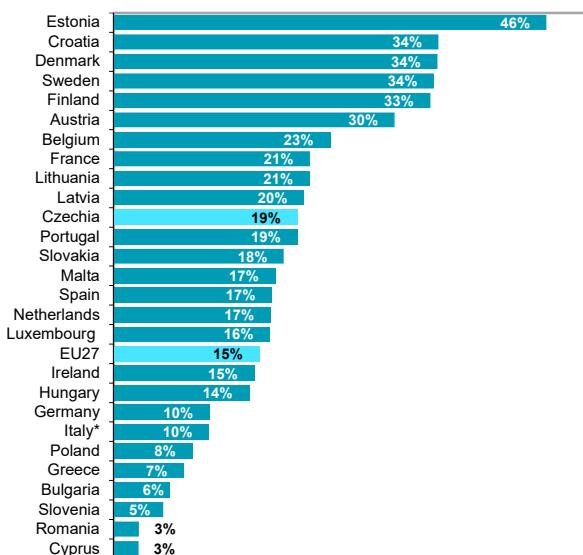


Figure C24 Persons aged 16–29 years in EU countries purchasing travel tickets on the internet; 2021



* data for 2020

Source: Eurostat

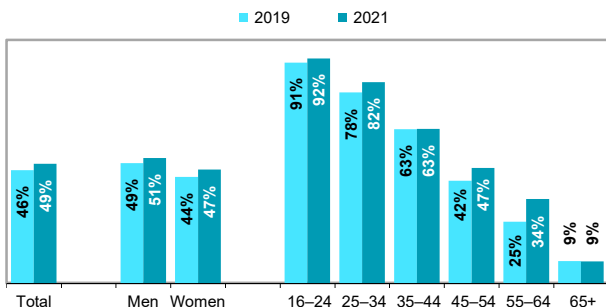
C Persons and ICT

Table C8 Persons in Czechia using the internet for selected entertainment activities; 2021

	Percentage		
	Reading news sites	Listening to music	Playing games
Total (aged 16+)	75,7	48,9	19,7
Men	78,0	51,4	26,5
Women	73,6	46,6	13,3
Age group (years)			
16–24	86,7	92,3	56,8
25–34	89,7	82,5	34,5
35–44	90,0	63,3	23,5
45–54	90,6	47,2	14,2
55–64	78,1	34,4	8,6
65+	38,6	8,8	2,9
Education attainment (aged 25–64)			
Primary	65,6	39,3	21,7
Secondary without A-level examination	81,8	43,1	19,0
Secondary with A-level examination	91,0	60,6	19,2
Tertiary	95,3	74,9	22,9

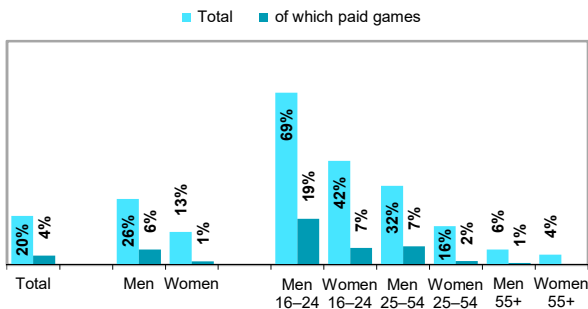
as a percentage of all persons in a given socio-demographic group

Figure C25 Listening to music online by gender and age



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

Figure C26 Playing games online by gender and age; 2021



Source: Czech Statistical Office, ICT use survey in households

Figure C27 Persons aged 16–74 years in EU countries reading news sites on the internet; 2021

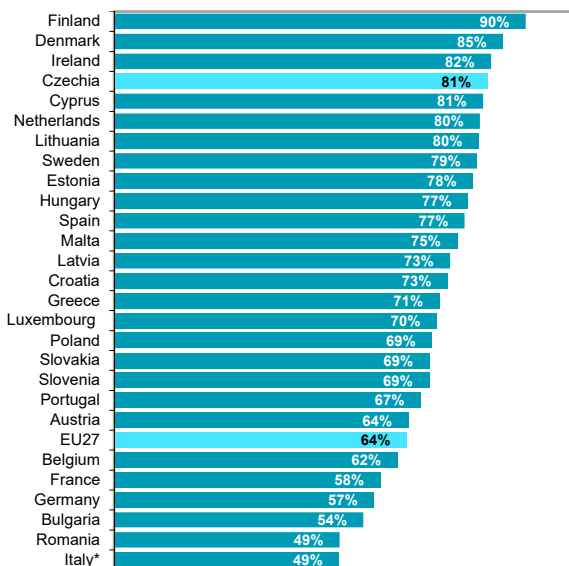
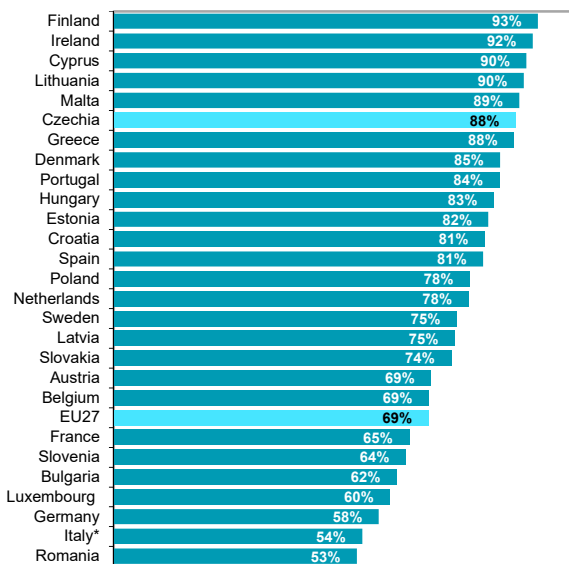


Figure C28 Persons aged 16–29 years in EU countries reading news sites on the internet; 2021



* data for 2020

Source: Eurostat

C Persons and ICT

Table C9 Persons in Czechia using the internet for watching TV programmes, movies or videos; 2021

	Percentage		
	Total	Via YouTube or similar sharing sites	Video on Demand
Total (aged 16+)	63,2	58,2	15,4
Men	65,7	60,7	16,3
Women	60,9	55,9	14,5
Age group (years)			
16–24	94,7	93,3	25,5
25–34	91,8	88,1	29,0
35–44	82,3	76,6	22,3
45–54	69,5	62,9	14,7
55–64	53,1	46,4	9,4
65+	18,9	14,3	1,4
Education attainment (aged 25–64)			
Primary	54,5	51,4	10,1
Secondary without A-level examin.	62,1	55,9	10,9
Secondary with A-level examination	79,7	73,5	18,3
Tertiary	89,0	83,9	33,4

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

Figure C29 Watching video content online by gender and age

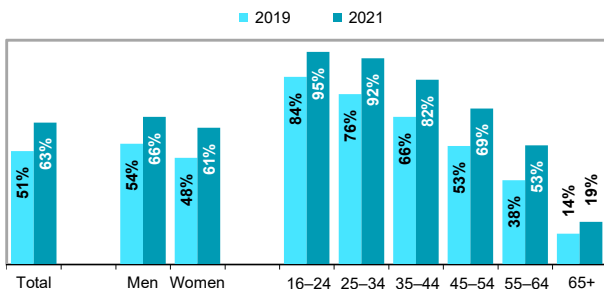
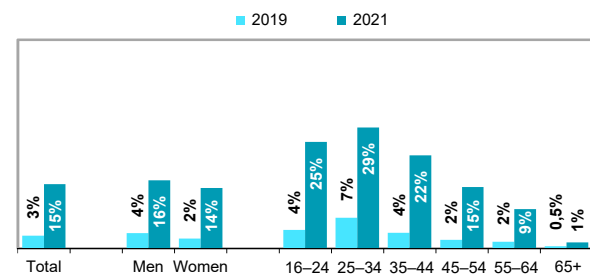


Figure C30 Watching Video on Demand via Netflix, HBO GO or similar commercial services by gender and age

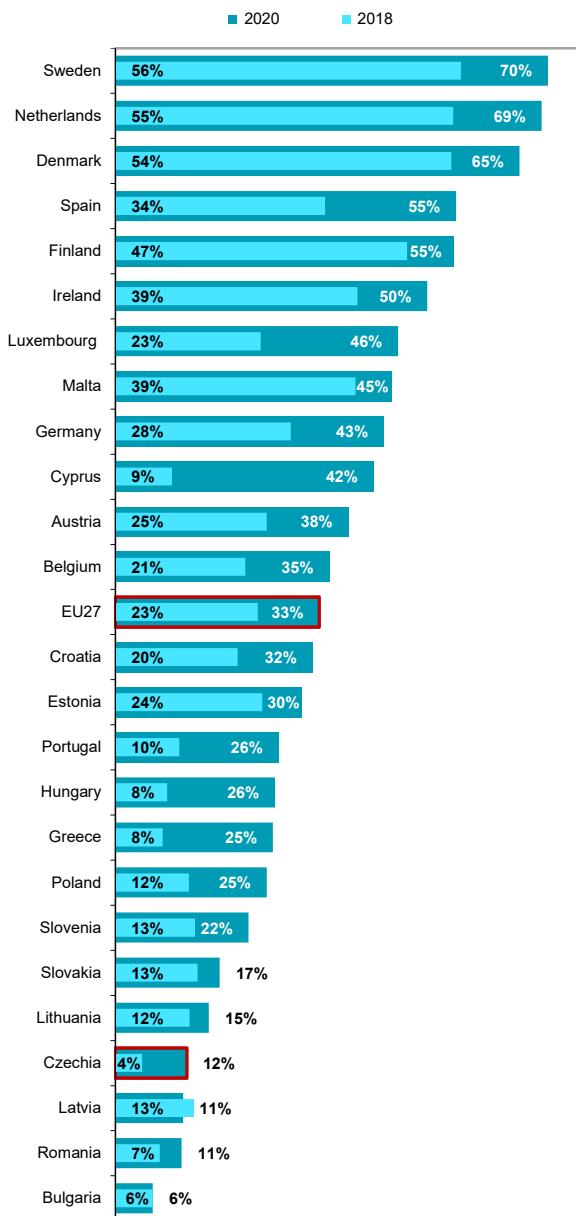


as a percentage of all persons in a given socio-demographic group

Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Figure C31 Persons aged 16–74 years in EU countries watching Video on Demand via Netflix, HBO GO or similar commercial services



Source: Eurostat

C Persons and ICT

Table C10 Persons in Czechia using internet banking

	Percentage		
	2010	2015	2021
Total (aged 16+)	21,1	44,9	66,8
Men	24,4	47,0	67,6
Women	18,1	43,0	66,1
Age group (years)			
16–24	17,7	36,1	68,0
25–34	36,6	68,4	90,5
35–44	32,7	68,5	86,7
45–54	24,4	54,8	81,3
55–64	10,9	33,4	66,6
65+	2,7	10,2	25,2
Education attainment (aged 25–64)			
Primary	4,5	22,0	44,4
Secondary without A-level examination	14,2	51,4	70,1
Secondary with A-level examination	34,7	75,5	89,0
Tertiary	53,4	88,6	95,9

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

Figure C32 Persons aged 16+ using internet banking

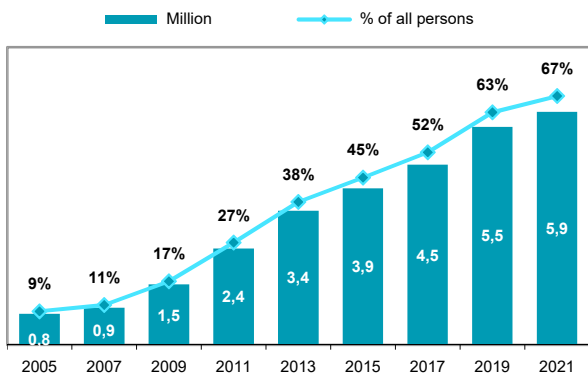
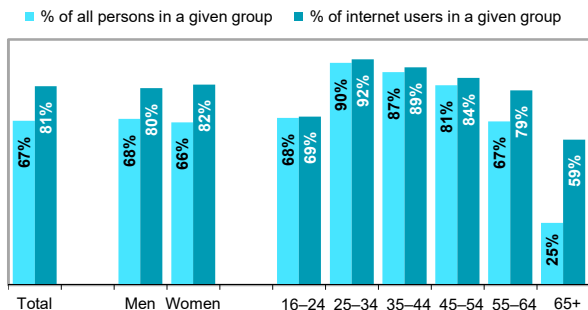


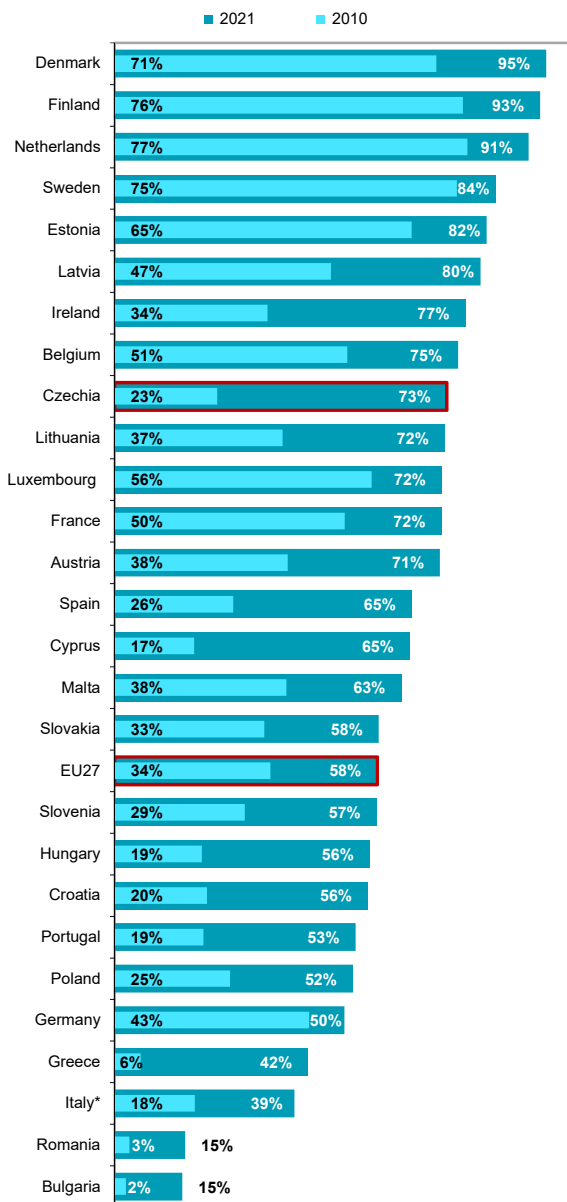
Figure C33 Internet banking use by gender and age; 2021



Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Figure C34 Persons aged 16–74 years in EU countries using internet banking



* data for 2020

Source: Eurostat

C Persons and ICT

Table C11 Persons in Czechia performing selected security activities on the internet; 2021

	Percentage	
	Requesting the deletion of personal data	Change of browser settings to limit cookies
Total (aged 16+)	11,0	22,2
Men	12,0	26,1
Women	10,2	18,6
Age group (years)		
16–24	14,5	30,1
25–34	18,6	39,1
35–44	14,8	32,2
45–54	12,7	23,1
55–64	8,2	15,2
65+	2,5	4,3
Education attainment (aged 25–64)		
Primary	3,1	7,9
Secondary without A-level examination	8,1	14,1
Secondary with A-level examination	15,1	29,6
Tertiary	21,9	48,2

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

Figure C35 Persons who changed internet browser settings to prevent or limit cookies; 2021

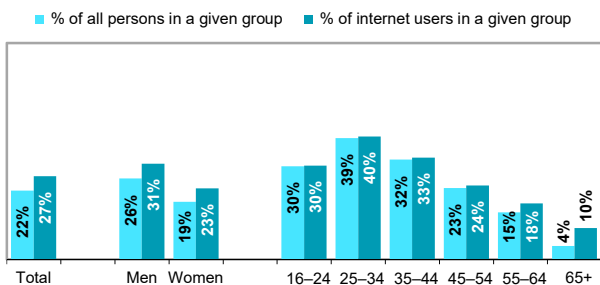
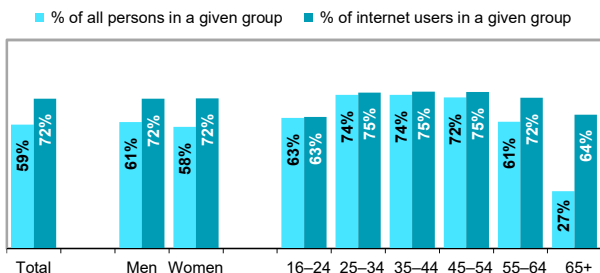


Figure C36 Persons having concerns about online activities being recorded to provide tailored advertising; 2021



Source: Czech Statistical Office, ICT use survey in households

Figure C37 Persons aged 16–74 years in EU countries who requested the deletion of personal data on the internet; 2021

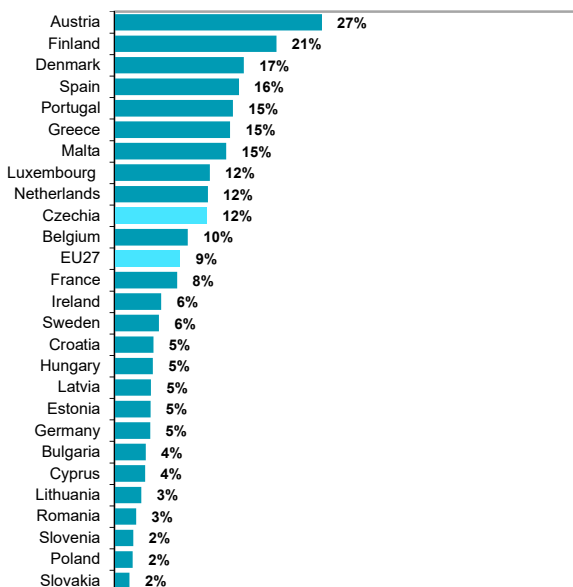
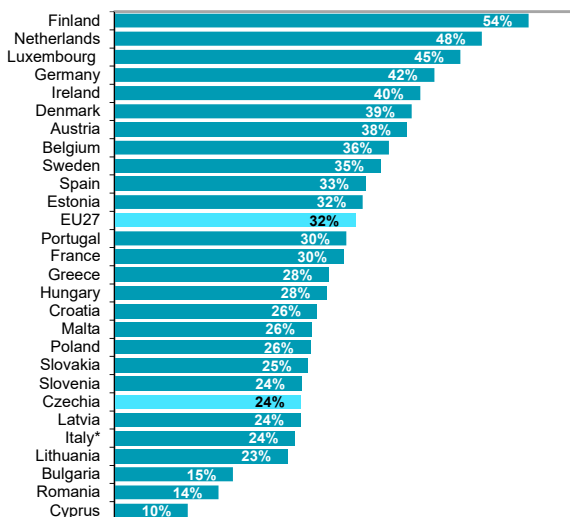


Figure C38 Persons aged 16–74 years in EU countries who changed browser settings to limit cookies; 2021



* data for 2020

Source: Eurostat

C Persons and ICT

Table C12 Persons in Czechia purchasing on the internet

	Percentage		
	2010	2015	2021
Total (aged 16+)	13,6	24,3	57,5
Men	15,0	23,5	55,7
Women	12,4	25,0	59,1
Age group (years)			
16–24	21,4	36,3	73,5
25–34	24,0	41,9	83,2
35–44	18,2	34,2	78,2
45–54	11,5	22,4	65,4
55–64	5,4	13,9	49,1
65+	1,8	3,8	17,7
Education attainment (aged 25–64)			
Primary	3,2	5,7	43,5
Secondary without A-level examination	8,0	18,1	50,8
Secondary with A-level examination	20,5	34,0	77,6
Tertiary	29,0	46,3	89,4

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

Figure C39 Persons aged 16+ purchasing on the internet

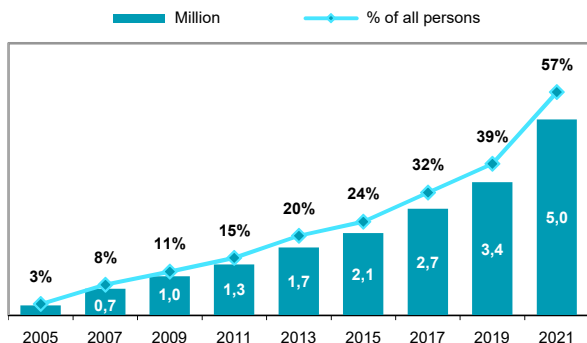
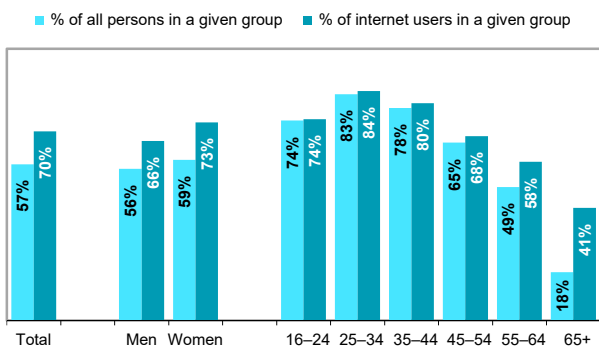


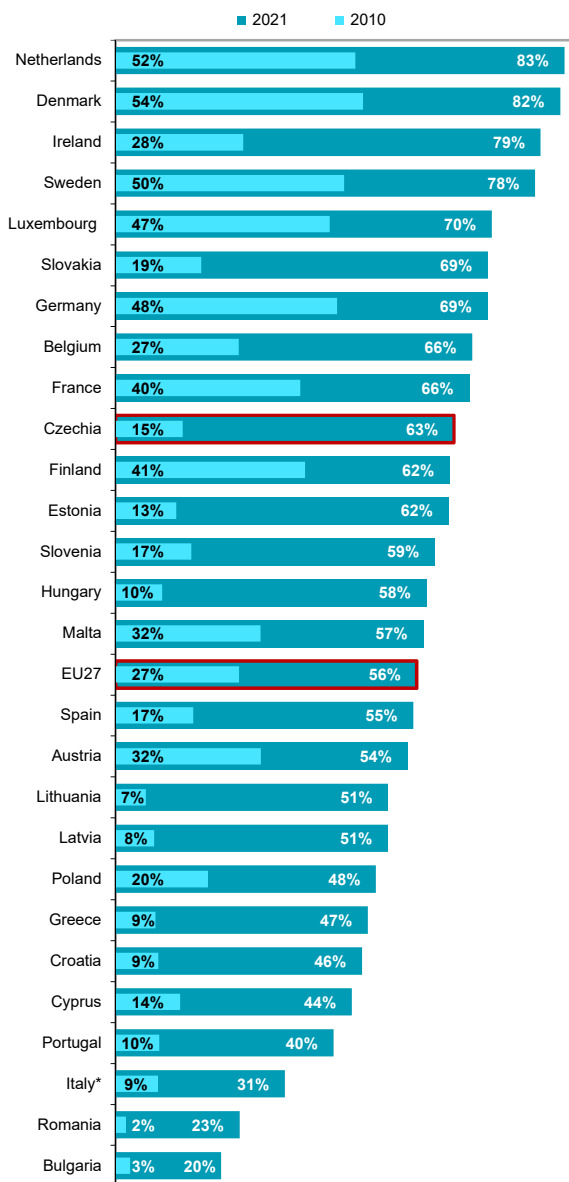
Figure C40 Online purchases by gender and age; 2021



Source: Czech Statistical Office, ICT use survey in households

C Persons and ICT

Figure C41 Persons aged 16–74 in EU countries purchasing on the internet



* data for 2020

Source: Eurostat

C Persons and ICT

Table C13 Persons in Czechia who purchased on the internet selected goods; 2021

	Percentage		
	Clothes, shoes	Food or beverages	Meals from restaurants
Total (aged 16+)	38,9	14,5	20,4
Men	28,8	11,5	21,5
Women	48,5	17,2	19,3
Age group (years)			
16–24	53,8	10,9	34,9
25–34	62,9	21,7	37,9
35–44	57,4	25,0	30,7
45–54	44,0	16,4	18,6
55–64	26,5	11,2	11,2
65+	7,2	3,8	2,2
Education attainment (aged 25–64)			
Primary	26,5	4,6	16,3
Secondary without A-level examination	31,9	9,5	12,7
Secondary with A-level examination	54,8	19,8	26,8
Tertiary	66,3	34,3	40,6

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

Figure C42 Persons who purchased on the internet clothes, shoes or accessories

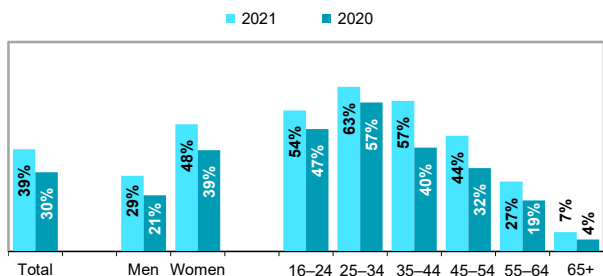
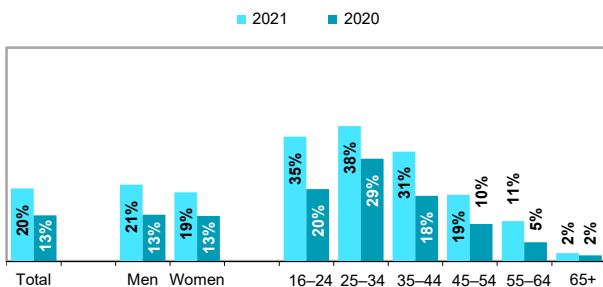


Figure C43 Persons who purchased on the internet meals from restaurants



Source: Czech Statistical Office, ICT use survey in households



C Persons and ICT

Figure C44 Persons aged 16–74 years in EU countries purchasing clothes, shoes or accessories online; 2021

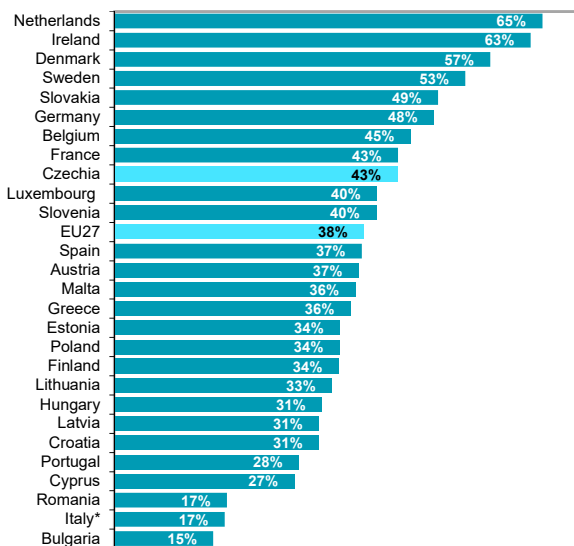
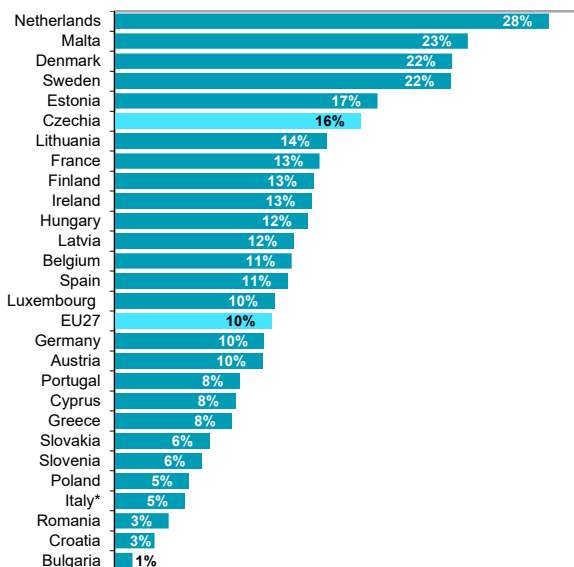


Figure C45 Persons aged 16–74 years in EU countries purchasing food or beverages from stores online; 2021



* data for 2020

Source: Eurostat

C Persons and ICT

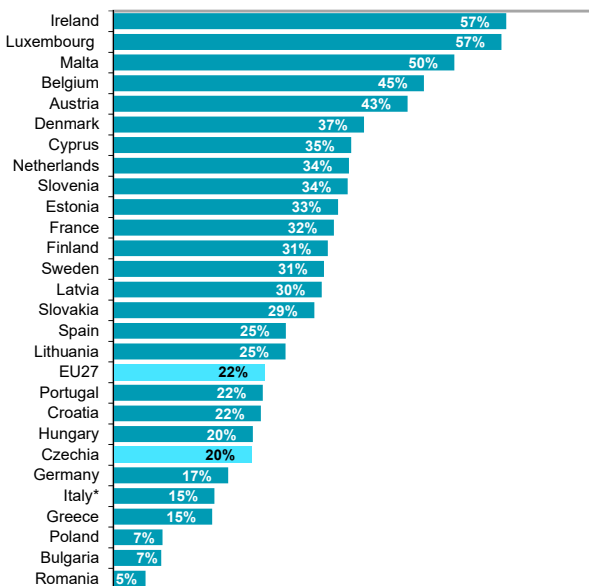
Table C14 Persons in Czechia purchasing on the internet by country of origin of the seller; 2021

Percentage

	National sellers	Foreign sellers	
		from other EU countries	from countries out of EU
Total (aged 16+)	49,7	15,1	8,3
Men	47,4	13,2	8,4
Women	51,8	16,8	8,1
Age group (years)			
16–24	58,4	24,0	18,5
25–34	71,7	26,2	16,2
35–44	68,6	22,2	9,5
45–54	57,1	14,7	7,3
55–64	43,1	9,6	4,7
65+	16,0	2,5	1,0
Education attainment (aged 25–64)			
Primary	33,2	8,9	6,0
Secondary without A-level examination	44,8	10,8	6,5
Secondary with A-level examination	67,7	19,1	9,6
Tertiary	78,2	30,1	14,0

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

Figure C46 Persons aged 16–74 years in EU countries purchasing on the internet from foreign sellers; 2021



* data for 2020

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

D Enterprises and ICT

Data given in this chapter are based on results of the **Annual Statistical Survey on the ICT Use in Enterprises (ICT 5-01)**, which has been carried out by the Czech Statistical Office (CZSO) since 2002.

The survey has been conducted in accord with the **Regulation (EC) No 2019/2152** of the European Parliament and of the Council. This allows obtaining of internationally comparable data within the EU27 Member States.

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 activities 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, ICT security incidents and providing of IT training the reference period is the entire relevant year (in this issue it is 2020 although the survey was carried out in 2021).

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/Comprehensive_database

Definitions (sorted alphabetically)

- **A configuration of goods or services** is a possibility for visitors of web pages to customise products or to design tailored products according to their wishes or requirements. E.g. choice of composition, materials used.
- **A CRM (Customer Relationship Management)** is based in an intensive use of IT to collect, integrate, process and analyse information related to the customers.
- **A SCM (Supply Chain Management)** is an integrated information system and business software enabling real-time supply chain management. It includes the storage and transfer of materials, semi-finished and finished products from the place of production to the place of consumption. SCM is often part (extension) of the ERP system.
- **A virtual server/computing power** is e.g. processor power, RAM, hard disk space, or the operating system.
- An **access to the internet total** includes any type of fixed internet connection (e.g. xDSL line, leased data line, fiber) or connection via mobile telephone networks (via a data tariff in a mobile phone).
- **An Artificial Intelligence (AI)** are machines, programs, and systems designed to perform tasks efficiently and facilitate human labor. AI mimics the function of human intelligence and has the potential to learn further. It allows machines to think and decide independently. It is used, for example, to predict the development of events, in process automation, in business management.
- An **enterprise website** shall mean a web page(s) presenting the enterprise on the internet. The enterprise is expected to have control over the contents - it may be changed or modified by authorised persons only. Information on only enterprises' contacts published in internet databases or catalogues of enterprises are excluded.
- **An ERP (Enterprise Resource Planning)** is an information system/business SW application used to manage and share information among

business functions (typically manufacturing, logistics, purchasing, warehousing, sales, distribution, asset management, invoicing and accounting). ERP can be a software package or a tailor-made application with the possibility of using only some of its modules / adapting the system to the specific activities of enterprises.

- **Cloud computing** refers to ICT services that are used over the internet to access software, computing power, storage capacity, etc. where the services have all of the following characteristics: are delivered from servers of service providers, can be easily scaled up or down, can be used on-demand by the user and are paid for (either per user, by capacity used or they are pre-paid).
- Enterprises using **online communication platforms** (e.g. Skype, MS Teams, Google Meet, Hangouts, Zoom) are those whose employees use video call, chat or online lecture applications. They are used via the Internet, users can be connected from anywhere and communication can take place internally, but also among the enterprise and its clients or business partners.
- **Electronic commerce, e-commerce (purchase or sale)** shall mean placing or accepting electronic orders via the internet or other computer networks by means of websites or EDI regardless of the method of payment or delivery. *Purchases (sales) implemented on the basis of orders prepared from information obtained on the internet but placed in a traditional way (by phone, fax, or written order) or by e-mail are not included.*
- **Mobile connection (Internet access via mobile telephone networks)** 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.
- **Social networks (e.g. LinkedIn, Facebook)** shall mean online communication tools enabling the enterprises to create their own user profiles by means of which they can communicate with other users, share information or multimedia content. Due to the international comparability of the data in this survey, enterprises' blogs or microblogs (e.g. Twitter) and websites for sharing multimedia content (e.g. YouTube, Instagram) are not considered social networks.
- The **electronic data interchange (EDI)** refers to the transmission of structured messages, as orders, invoices, etc., for instance, between two computer applications, information or database systems, implemented over the internet or other network using in advance agreed format of the data messages based on standards enabling their automatic processing (EDI, EDIFACT, XML, cXML, etc.). That means the EDI is always implemented without any manual typing, retyping, or copying of the messages.
- **The Internet of Things** refers to interconnected devices or systems, often called "smart" devices or systems. They collect and exchange data and can be monitored or remotely controlled via the internet. Examples of usage are smart thermostats, RFID or IP tags applied or incorporated into a product in order to track them. Another example is sensors for tracking the movement of vehicles or their maintenance needs.
- The **maximum contracted download speed** is the contractually determined download speed for a **fixed internet connection**. It is given in megabits per second (Mbit / s).

Detailed information on methodology of the survey can be found in the publication **Information and Communication Technologies in the Business Sphere in 2020** (code **062005-21**) accessible on the CZSO website at www.czso.cz/publikaceict_podniky2021 (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 and ICT

Table D1 Enterprises in Czechia with internet access; 2021

Percentage

	Total	Type of connection:	
		fixed	mobile
Total (10 or more employees)	96,0	91,9	88,5
Small enterprises (10-49 employees)	95,2	90,4	86,4
Medium enterprises (50-249 employees)	98,9	97,1	95,4
Large enterprises (250 or more employees)	99,8	99,7	98,8
Industry (10 or more employees)			
Manufacturing	97,3	93,7	89,7
Electricity, gas and water supply	98,5	96,9	95,6
Construction	94,3	89,6	89,8
Sale and repair of motor vehicles	99,6	99,0	95,8
Wholesale trade	98,4	94,2	93,0
Retail trade	91,6	89,6	76,7
Transport and storage	97,1	87,4	89,1
Accommodation	97,7	95,7	86,9
Food and beverage services	90,6	83,2	77,7
Travel agency and related activities	98,8	98,8	96,0
Media industries including publishing activ.	100,0	99,4	93,9
Telecommunications	99,3	99,3	97,8
Computer programming and related activ.	100,0	99,2	97,1
Professional, scientific and technical activ.	97,2	95,4	89,2

Figure D1 Enterprises with fixed internet connection

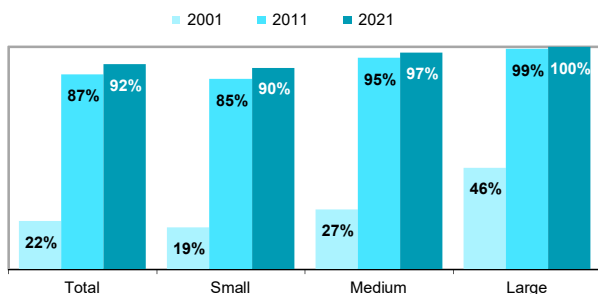
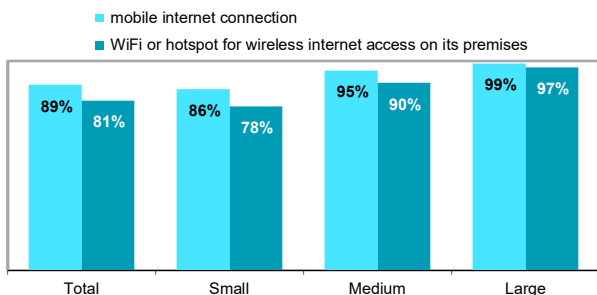


Figure D2 Enterprises using; 2021



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 and ICT

Table D2 Contracted download speed of the fixed internet connection used by enterprises in Czechia; 2021

	Percentage		
	Less than 30 Mbit/s	30–99,9 Mbit/s	At least 100 Mbit/s
Total (10 or more employees)	17,2	36,4	38,3
Small enterprises (10-49 employees)	18,0	35,2	37,1
Medium enterprises (50-249 employees)	15,6	42,9	38,6
Large enterprises (250 or more empl.)	7,8	30,8	61,1
Industry (10 or more employees)			
Manufacturing	20,6	39,7	33,4
Electricity, gas and water supply	22,2	36,1	38,5
Construction	18,0	34,2	37,4
Sale and repair of motor vehicles	16,0	36,5	46,5
Wholesale trade	18,1	40,2	35,9
Retail trade	14,2	33,1	42,3
Transport and storage	20,3	31,6	35,4
Accommodation	12,1	39,3	44,4
Food and beverage services	11,8	32,2	39,3
Travel agency and related activities	17,5	36,1	45,1
Media industries incl. publishing activities	10,2	32,8	56,4
Telecommunications	2,0	12,6	84,8
Computer programming and related act.	4,2	30,0	65,0
Professional, scientific and technical act.	12,3	39,8	43,3

Figure D3 Contracted download speed of the fixed internet connection used by enterprises; 2021

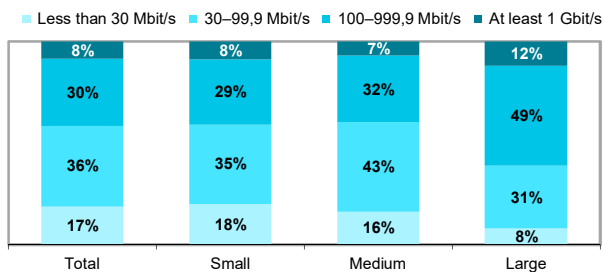
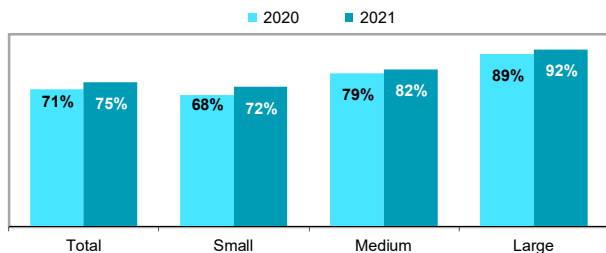


Figure D4 Enterprises with internet connection of 30 Mbit/s or more



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 and ICT

Figure D5 Enterprises in EU countries with internet connection of 100 Mbit/s or more; 2021

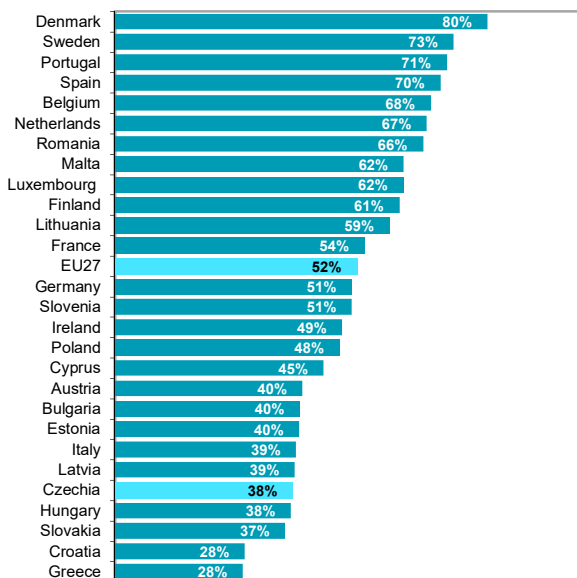
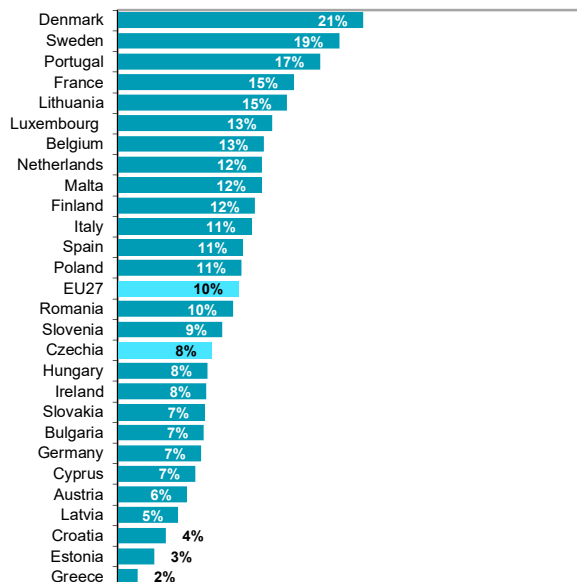


Figure D6 Enterprises in EU countries with internet connection of 1 Gbit/s or more; 2021



Source: Eurostat

D Enterprises and ICT

Table D3 Enterprises in Czechia having a website

	Percentage		
	2010	2015	2021
Total (10 or more employees)	74,0	82,7	82,8
Small enterprises (10-49 employees)	70,2	80,4	80,3
Medium enterprises (50-249 employees)	88,1	90,2	91,7
Large enterprises (250 or more employees)	92,2	94,0	94,0
Industry (10 or more employees)			
Manufacturing	76,9	83,0	85,3
Electricity, gas and water supply	73,3	87,9	87,4
Construction	72,0	86,0	80,8
Sale and repair of motor vehicles	84,8	94,6	93,5
Wholesale trade	83,3	90,6	94,3
Retail trade	53,5	58,5	67,8
Transport and storage	66,4	70,2	67,4
Accommodation	88,9	98,1	94,5
Food and beverage services	56,9	74,7	80,6
Travel agency and related activities	96,9	96,6	95,9
Media industries incl. publishing activities	96,3	98,0	96,8
Telecommunications	99,1	97,5	95,7
Computer programming and related activ.	95,0	95,3	93,4
Professional, scientific and technical activ.	85,3	90,4	87,2

Figure D7 Enterprises having a website

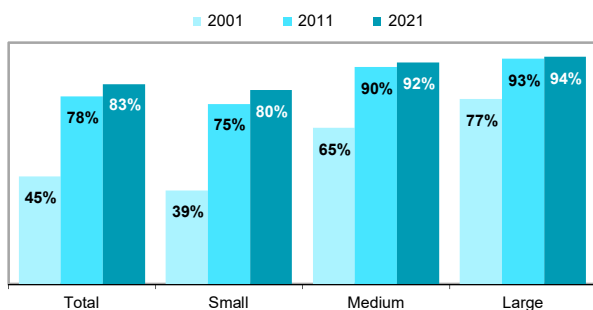
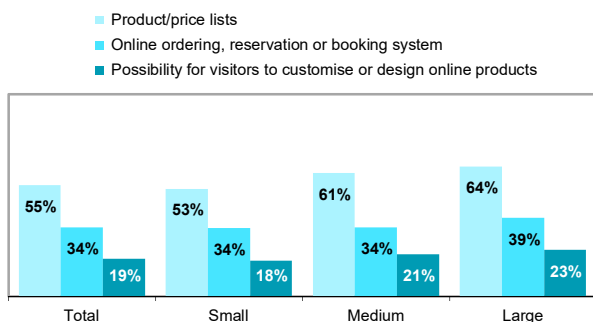


Figure D8 Enterprises with selected website facilities; 2021



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 and ICT

Figure D9 Enterprises in EU countries having a website; 2021

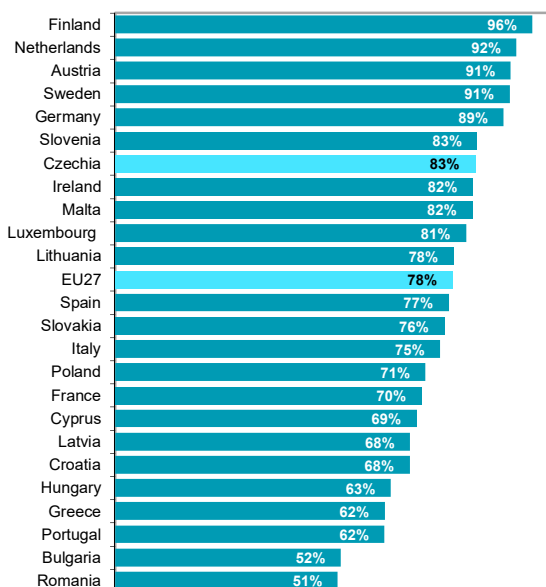
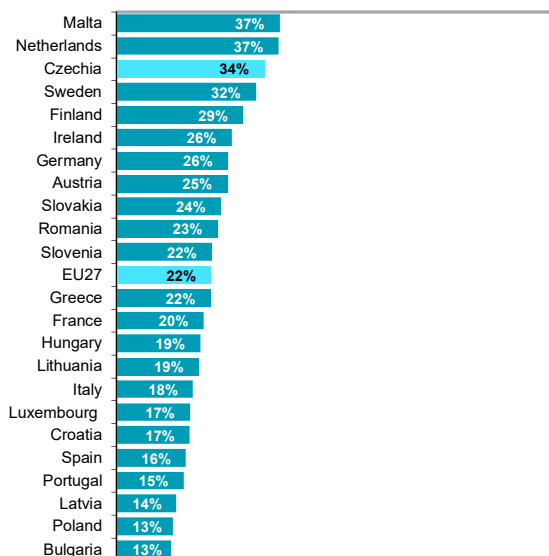


Figure D10 Enterprises in EU countries having online ordering, reservation or booking system on the website; 2021



Source: Eurostat

D Enterprises and ICT

Tab.D4 Enterprises in Czechia making web sales; 2020

	Percentage	
	Total	> 10 % of their total turnover
Total (10 or more employees)	20,8	13,5
Small enterprises (10-49 employees)	19,9	13,5
Medium enterprises (50-249 employees)	23,2	12,7
Large enterprises (250 or more employees)	28,6	17,1
Industry (10 or more employees)		
Manufacturing	17,4	9,2
Electricity, gas and water supply	10,1	5,6
Construction	4,7	3,7
Sale and repair of motor vehicles	37,2	25,0
Wholesale trade	40,1	25,8
Retail trade	41,2	25,5
Transport and storage	10,5	5,8
Accommodation	65,8	57,1
Food and beverage services	26,1	20,8
Travel agency and related activities	70,6	64,6
Media industries incl. publishing activities	56,8	42,9
Telecommunications	44,9	32,8
Computer programming and related act.	21,8	17,1
Professional, scientific and technical act.	8,7	4,1

Figure D11 Enterprises making web sales

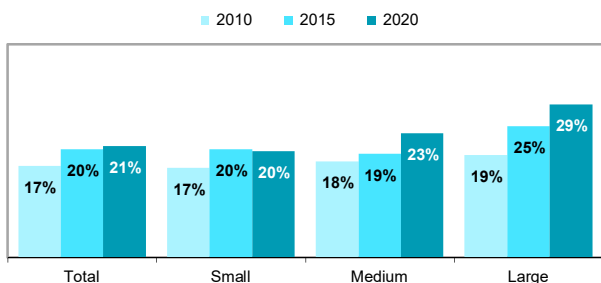
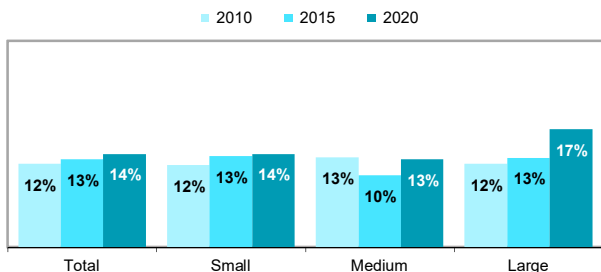


Figure D12 Enterprises where web sales making more than 10 % of their total turnover



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 and ICT

Figure D13 Enterprises in EU countries making web sales; 2020

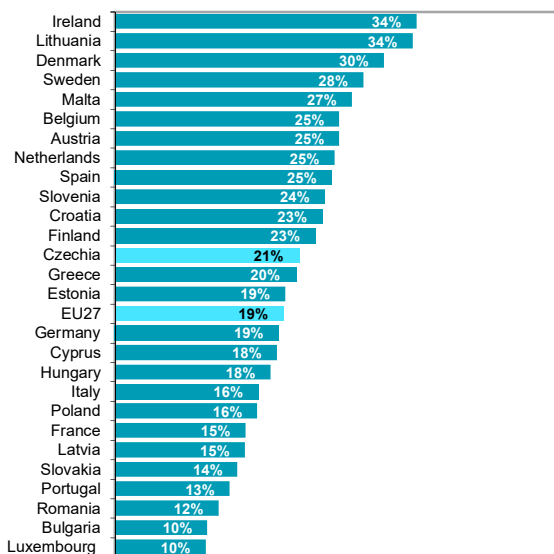
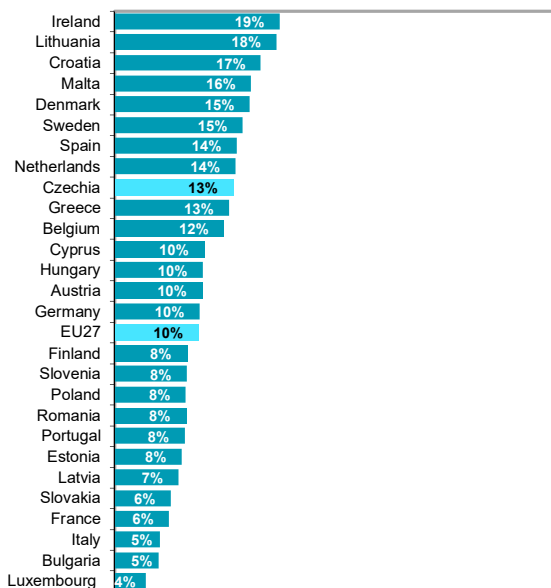


Figure D14 Enterprises in EU countries with web sales making more than 10 % of their total turnover; 2020



Source: Eurostat

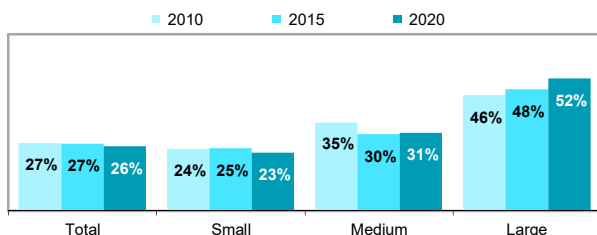
D Enterprises and ICT

Table D5 The enterprises' turnover generated from electronic sales in Czechia; 2020

	Total	Percentage carried out via:	
		EDI-type sales	Web sales
Total (10 or more employees)	30,0	21,4	8,6
Small enterprises (10-49 employees)	15,9	8,1	7,8
Medium enterprises (50-249 employees)	17,2	9,8	7,4
Large enterprises (250 or more employees)	40,4	31,0	9,4
Industry (10 or more employees)			
Manufacturing	33,7	28,8	4,9
Electricity, gas and water supply	52,7	44,8	7,9
Construction	3,8	2,0	1,8
Sale and repair of motor vehicles	23,2	10,1	13,1
Wholesale trade	26,7	15,5	11,2
Retail trade	23,7	3,6	20,0
Transport and storage	28,7	19,5	9,2
Accommodation	35,3	2,2	33,1
Food and beverage services	10,7	1,6	9,1
Travel agency and related activities	68,6	3,0	65,6
Media industries incl. publishing activities	40,1	7,4	32,7
Telecommunications	28,0	18,4	9,6
Computer programming and related activit.	17,8	5,8	12,0
Professional, scientific and technical activ.	4,9	2,3	2,6

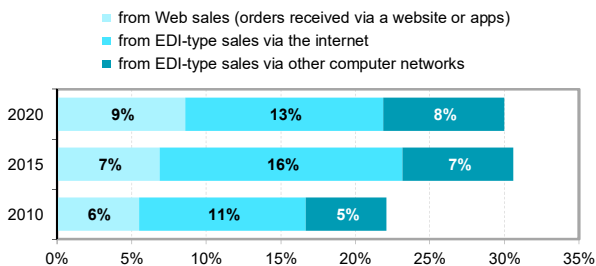
as a percentage of total enterprises' turnover in a given group

Figure D15 Enterprises making e-sales over computer networks



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

Figure D16 The enterprises' turnover generated from e-sales



as a percentage of total enterprises' turnover in a given group

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

D Enterprises and ICT

Figure D17 The enterprises' turnover generated from electronic sales in EU countries; 2020
(as a % of total enterprises' turnover)

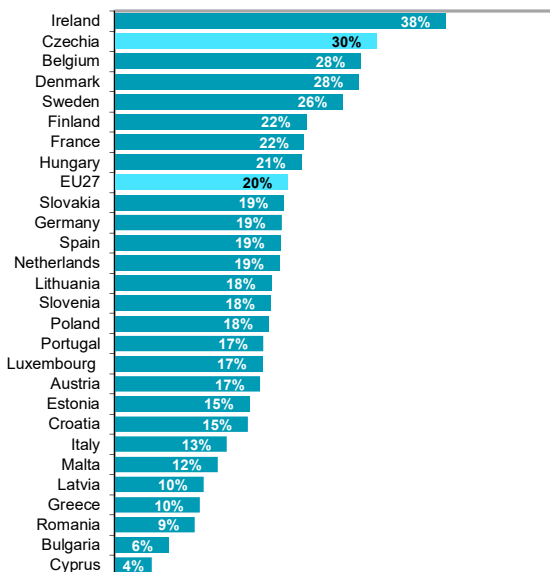
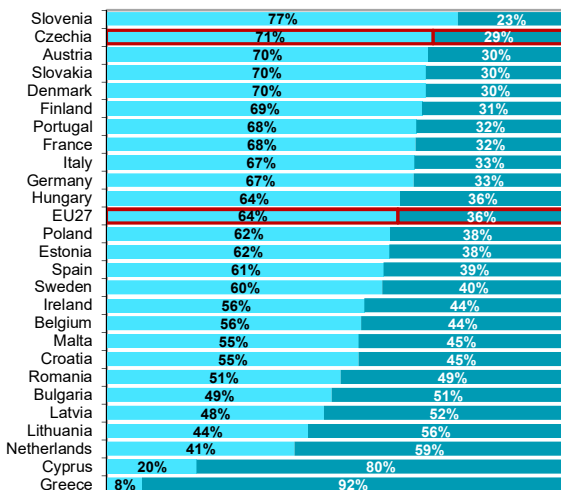


Figure D18 Structure of enterprises' turnover generated from electronic sales in EU countries by type of order; 2020

- Automated orders received via EDI-type messages (EDI-type sales)
- Orders received via a website or apps (Web sales)



Source: Eurostat

D Enterprises and ICT

Table D6 Enterprises in Czechia buying cloud computing services

	Percentage		
	2016	2018	2021
Total (10 or more employees)	18,0	26,5	43,7
Small enterprises (10-49 employees)	16,6	23,8	42,1
Medium enterprises (50-249 employees)	21,9	34,3	47,2
Large enterprises (250 or more employees)	29,5	44,9	61,8
Industry (10 or more employees)			
Manufacturing	14,7	23,4	39,2
Electricity, gas and water supply	13,5	23,2	34,5
Construction	16,9	21,0	42,9
Sale and repair of motor vehicles	18,3	19,9	49,6
Wholesale trade	25,6	29,4	51,4
Retail trade	15,9	26,2	40,1
Transport and storage	13,6	20,5	41,3
Accommodation	13,9	26,7	57,0
Food and beverage services	9,1	18,2	30,2
Travel agency and related activities	34,2	41,0	56,5
Media industries incl. publishing activities	34,1	45,7	61,0
Telecommunications	24,5	31,1	57,8
Computer programming and related activit.	45,4	60,1	75,8
Professional, scientific and technical activit.	23,8	44,4	53,5

Figure D19 Enterprises buying cloud computing services

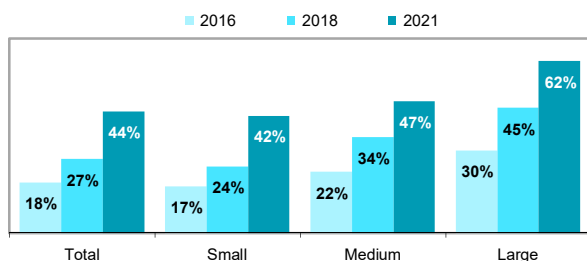
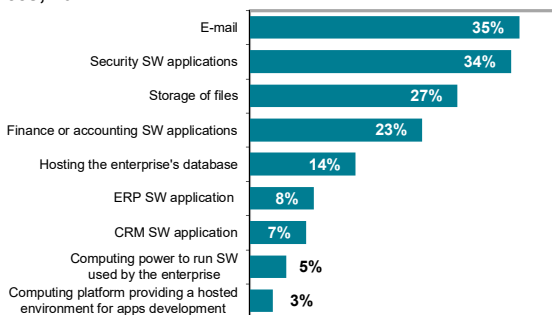


Figure D20 Enterprises that bought selected cloud computing services; 2021



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 and ICT

Figure D21 Enterprises with 10 or more employees in EU countries buying cloud computing services; 2021

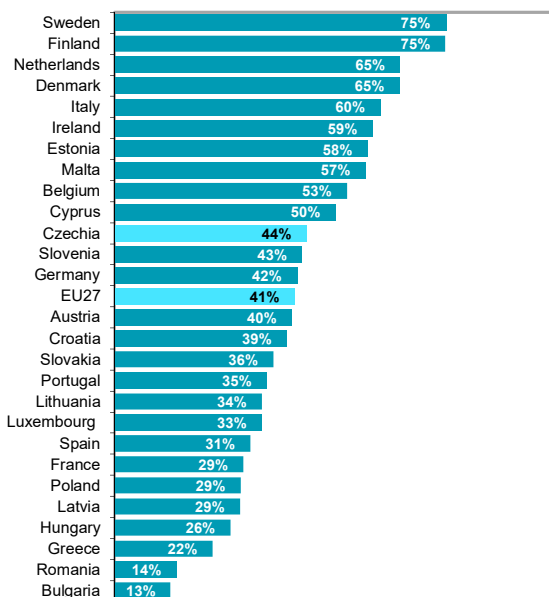
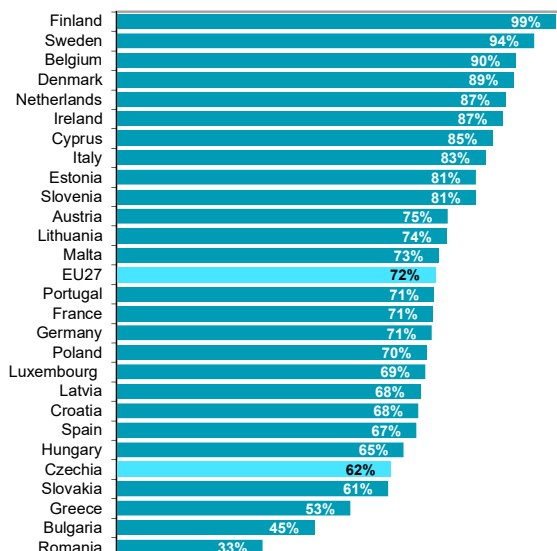


Figure D22 Enterprises with 250 or more employees in EU countries buying cloud computing services; 2021



Source: Eurostat

D Enterprises and ICT

Table D7 Enterprises in Czechia using social networks*

	Percentage		
	2015	2018	2021
Total (10 or more employees)	23,5	42,3	49,4
Small enterprises (10-49 employees)	21,7	38,4	45,5
Medium enterprises (50-249 employees)	27,6	54,0	59,8
Large enterprises (250 or more employees)	39,9	68,4	83,4
Industry (10 or more employees)			
Manufacturing	17,3	36,9	43,0
Electricity, gas and water supply	13,2	26,8	32,3
Construction	10,7	23,9	26,7
Sale and repair of motor vehicles	36,7	61,7	65,8
Wholesale trade	30,8	48,0	64,9
Retail trade	28,9	46,6	60,5
Transport and storage	13,2	31,6	40,8
Accommodation	66,1	77,3	88,7
Food and beverage services	40,5	63,8	70,5
Travel agency and related activities	72,9	80,8	87,9
Media industries incl. publishing activities	69,9	82,8	87,6
Telecommunications	55,8	69,9	75,7
Computer programming and related activit.	45,2	68,6	77,0
Professional, scientific and technical activit.	28,0	50,9	50,3

Figure D23 Enterprises using social networks*

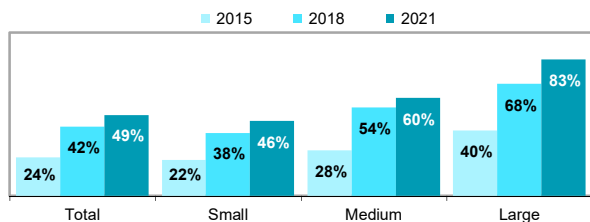
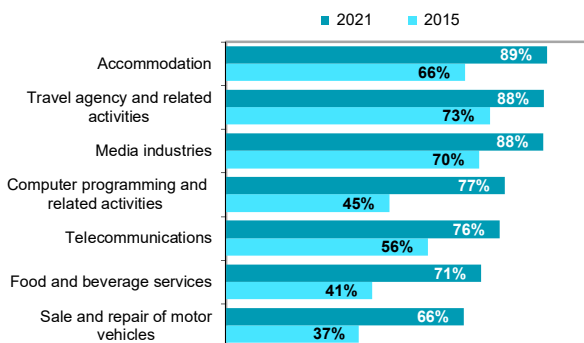


Figure D24 Industries with the highest share of enterprises using social networks*



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

* Having a user profile on Facebook, LinkedIn or similar social networks.

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

Figure D25 Enterprises in EU countries using social networks*; 2021

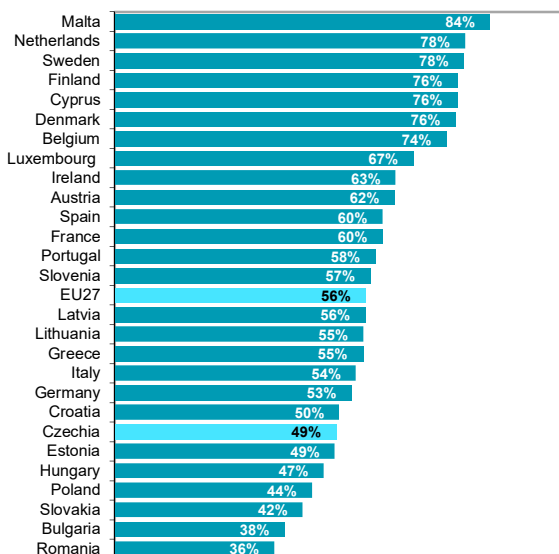
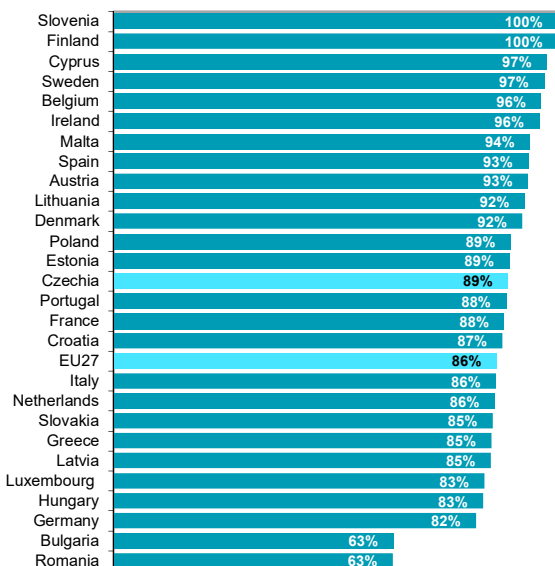


Figure D26 Enterprises in Accommodation industry in EU countries using social networks*; 2021



* Having a user profile on Facebook, LinkedIn or similiar social networks.

Source: Eurostat

D Enterprises and ICT

Table D8 Enterprises in Czechia using business software; 2021

Percentage

	ERP	CRM	SCM
Total (10 or more employees)	37,7	18,1	7,3
Small enterprises (10-49 employees)	29,2	14,1	5,0
Medium enterprises (50-249 employees)	63,7	28,7	12,2
Large enterprises (250 or more employees)	92,7	51,8	32,1
Industry (10 or more employees)			
Manufacturing	45,0	16,3	8,4
Electricity, gas and water supply	37,0	17,6	3,9
Construction	21,0	6,1	3,7
Sale and repair of motor vehicles	51,7	32,8	24,3
Wholesale trade	62,3	34,4	15,6
Retail trade	29,4	14,7	4,0
Transport and storage	22,4	8,8	4,4
Accommodation	21,7	17,3	3,8
Food and beverage services	14,5	3,9	3,0
Travel agency and related activities	39,2	38,6	9,8
Media industries incl. publishing activities	53,6	46,9	13,2
Telecommunications	55,6	49,1	14,6
Computer programming and related activit.	61,8	58,8	8,6
Professional, scientific and technical activit.	38,2	20,7	4,1

Figure D27 Enterprises using an ERP software

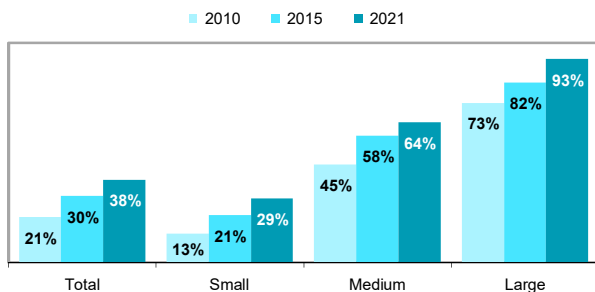
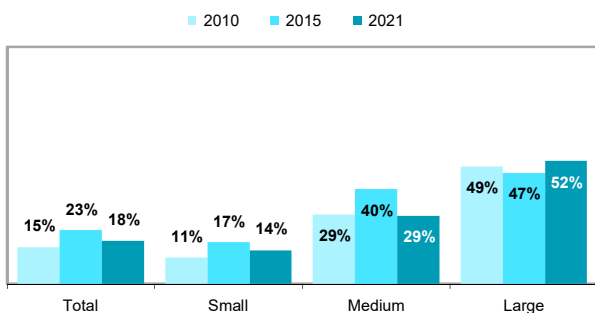


Figure D28 Enterprises using a CRM software



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 and ICT

Figure D29 Enterprises in EU countries using an ERP software; 2021

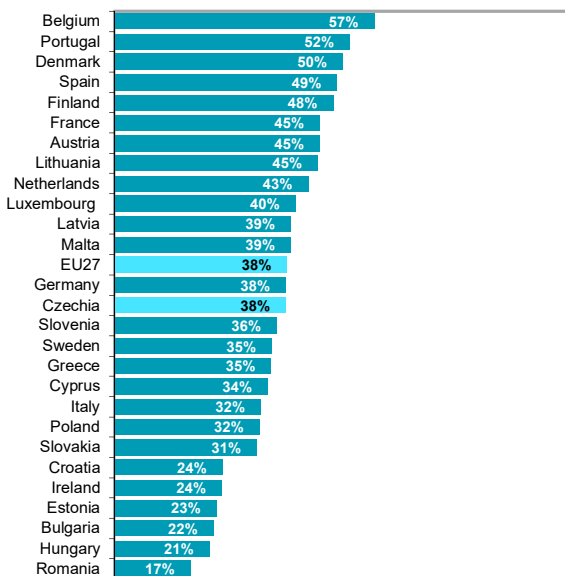
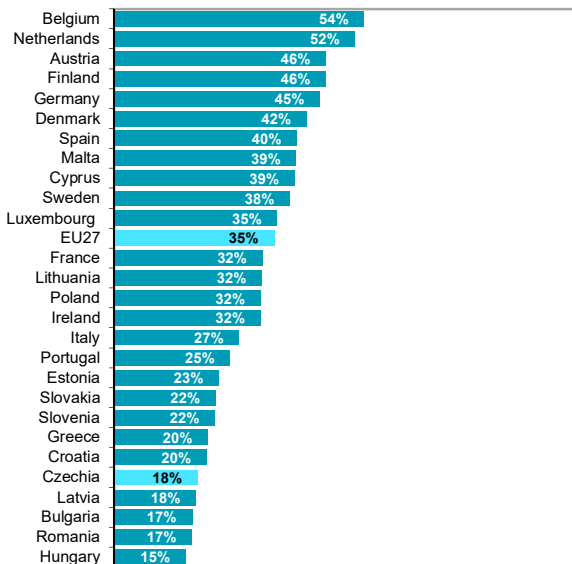


Figure D30 Enterprises in EU countries using a CRM software; 2021



Source: Eurostat

D Enterprises and ICT

Table D9 Enterprises in Czechia using the Internet of Things or Artificial Intelligence technologies; 2021

	Percentage	
	Internet of Things	Artificial Intelligence
Total (10 or more employees)	31,4	4,5
Small enterprises (10-49 employees)	28,2	2,7
Medium enterprises (50-249 employees)	40,8	7,6
Large enterprises (250 or more employees)	54,9	24,5
Industry (10 or more employees)		
Manufacturing	36,9	4,2
Electricity, gas and water supply	42,6	4,1
Construction	30,0	0,3
Sale and repair of motor vehicles	38,3	3,9
Wholesale trade	34,1	4,1
Retail trade	21,6	4,5
Transport and storage	36,5	3,3
Accommodation	33,3	1,9
Food and beverage services	22,7	0,6
Travel agency and related activities	18,7	7,9
Media industries including publishing activities	26,0	13,6
Telecommunications	47,0	11,4
Computer programming and related activities	29,3	23,7
Professional, scientific and technical activities	24,4	9,3

Figure D31 Enterprises using the Internet of Things or Artificial Intelligence technologies; 2021

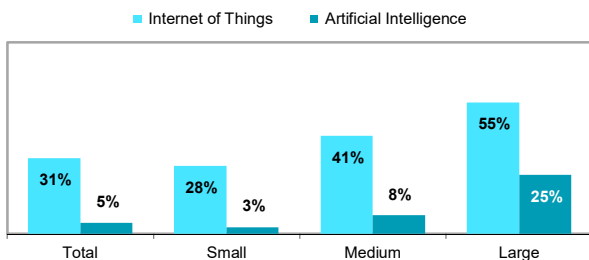
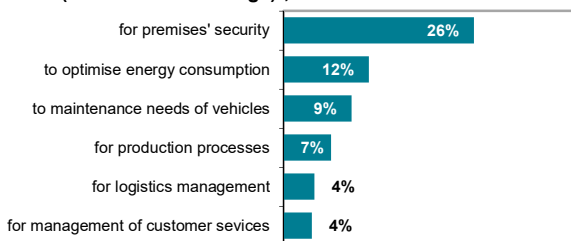


Figure D32 Enterprises using interconnected devices or systems that can be monitored or remotely controlled via the internet (the Internet of Things); 2021



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

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

Figure D33 Enterprises in EU countries using the Internet of Things; 2021

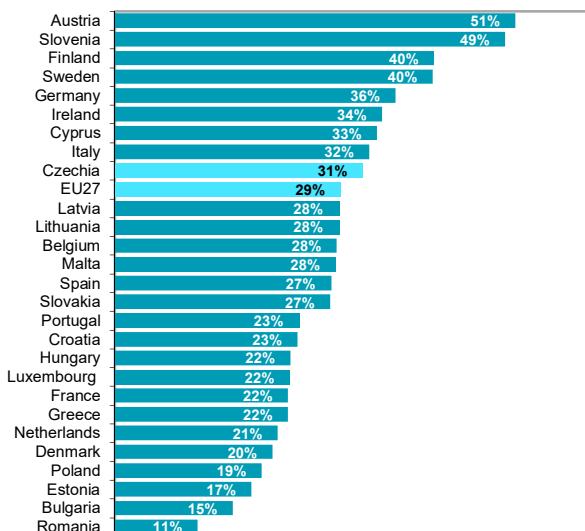
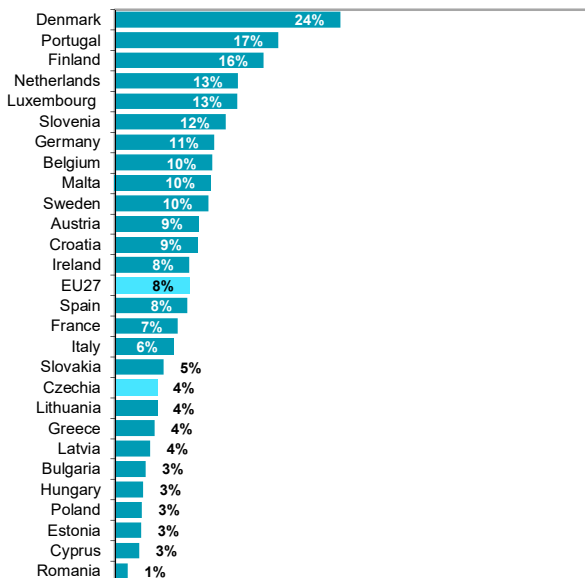


Figure D34 Enterprises in EU countries using Artificial Intelligence technologies; 2021



Source: Eurostat

D Enterprises and ICT

Tab. D10 Enterprises in Czechia providing access to the internet and IT training for employees; 2021

	Percentage		
	Access to the internet for business purposes		IT training (2020)
	Total	via mobile networks	
Total (10 or more employees)	96,0	88,5	20,5
Small enterprises (10-49 employees)	95,2	86,4	14,6
Medium enterprises (50-249 empl.)	98,9	95,4	35,5
Large enterprises (250 or more empl.)	99,8	98,8	72,6
Industry (10 or more employees)			
Manufacturing	97,3	89,7	22,1
Electricity, gas and water supply	98,5	95,6	25,6
Construction	94,3	89,8	9,4
Sale and repair of motor vehicles	99,6	95,8	22,0
Wholesale trade	98,4	93,0	28,0
Retail trade	91,6	76,7	10,2
Transport and storage	97,1	89,1	9,4
Accommodation	97,7	86,9	9,2
Food and beverage services	90,6	77,7	3,7
Travel agency and related activities	98,8	96,0	15,6
Media industries	100,0	93,9	39,7
Telecommunications	99,3	97,8	53,3
Computer programming	100,0	97,1	69,5
Professional, S&T activities	97,2	89,2	35,2

Figure D35 Enterprises providing mobile internet on smartphones or other portable devices for employees

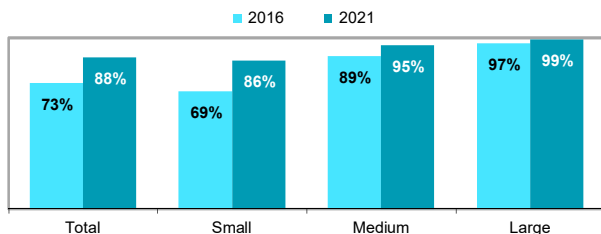
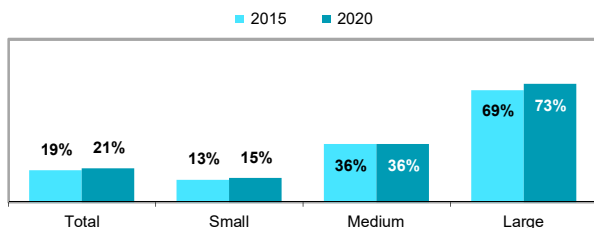


Figure D36 Enterprises providing IT training for employees



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 and ICT

Figure D37 Enterprises in EU countries providing mobile internet on smartphones or other portable devices for employees; 2021

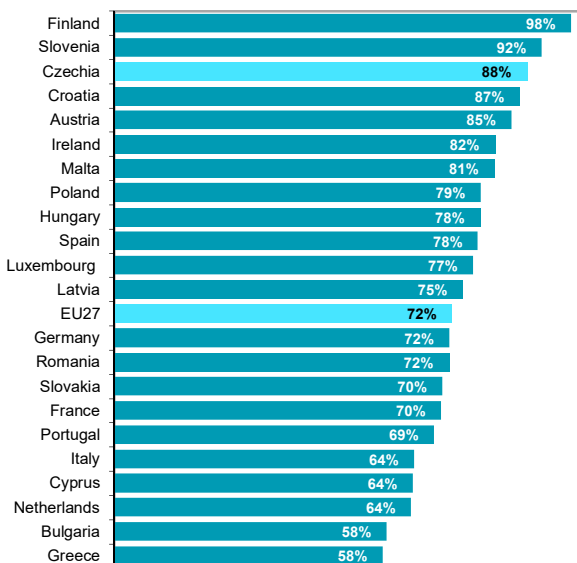
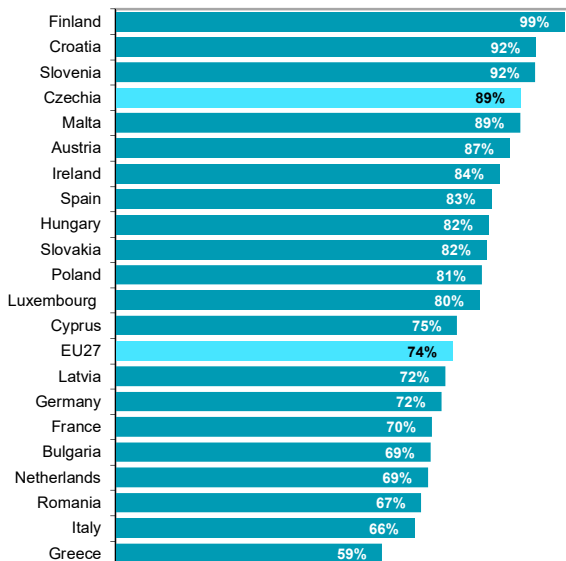


Figure D38 Enterprises in Transport and storage industry in EU countries providing mobile internet on smartphones or other portable devices for employees; 2021



Source: Eurostat

D Enterprises and ICT

Table D11 Employees of enterprises in Czechia with internet access provided for business purposes; 2021

	Total	Percentage via mobile networks
Total (10 or more employees)	49,8	32,4
Small enterprises (10-49 employees)	48,8	35,5
Medium enterprises (50-249 employees)	47,7	32,1
Large enterprises (250 or more employees)	51,6	30,8
Industry (10 or more employees)		
Manufacturing	43,8	25,5
Electricity, gas and water supply	57,9	40,8
Construction	48,4	38,6
Sale and repair of motor vehicles	75,0	46,0
Wholesale trade	70,5	50,3
Retail trade	42,1	18,3
Transport and storage	46,3	32,8
Accommodation	42,1	25,0
Food and beverage services	30,3	19,1
Travel agency and related activities	78,6	43,7
Media industries including publishing activities	91,9	67,0
Telecommunications	97,0	89,6
Computer programming and related activities	93,7	74,1
Professional, scientific and technical activities	84,0	61,0

Figure D39 Employees with internet access at work

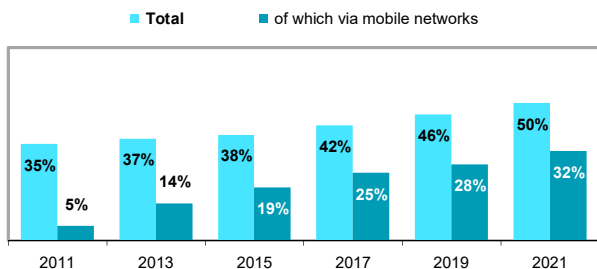
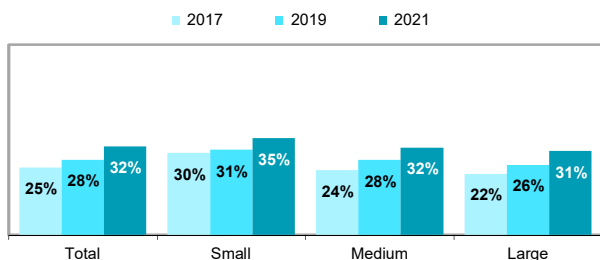


Figure D40 Employees with access to mobile internet on smartphones or other devices provided for business purposes



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

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

D Enterprises and ICT

Figure D41 Employees of enterprises in EU countries with internet access at work provided for business purposes; 2021

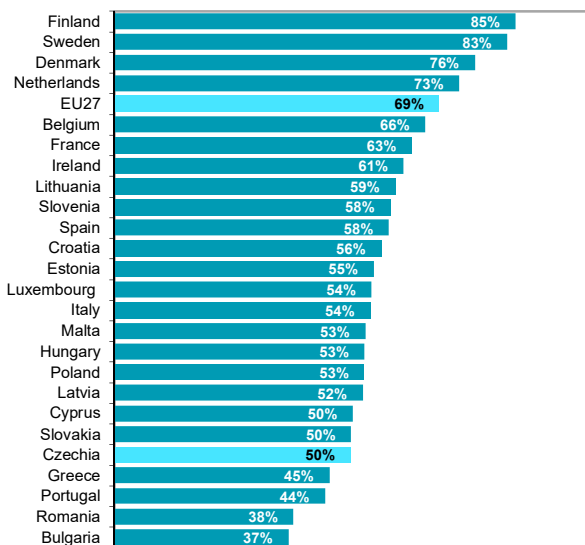
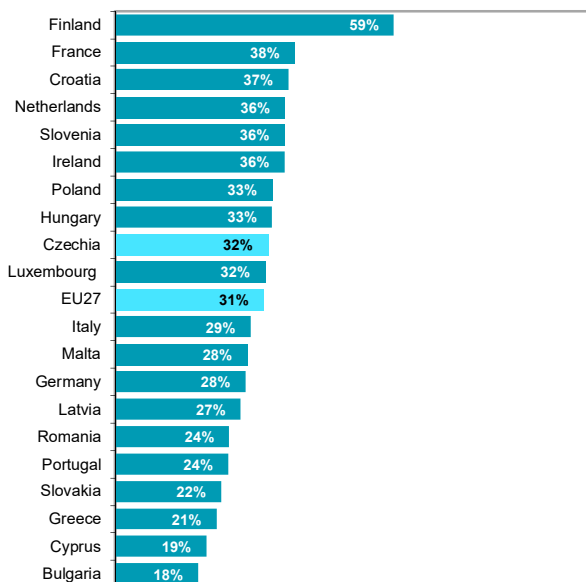


Figure D42 Employees of enterprises in EU countries with access to mobile internet on smartphones or other devices provided for business purposes; 2021



Source: Eurostat

D Enterprises and ICT

Table D12 Employees of enterprises in Czechia who can work from home; 2021

	Percentage	
	Even without COVID-19 restrictions	During the COVID-19 restrictions
Total (10 or more employees)	9,1	12,0
Small enterprises (10-49 employees)	1,9	2,6
Medium enterprises (50-249 employees)	4,2	5,7
Large enterprises (250 or more employees)	15,9	20,7
Industry (10 or more employees)		
Manufacturing	6,5	9,9
Electricity, gas and water supply	18,3	19,8
Construction	4,4	6,5
Sale and repair of motor vehicles	5,0	8,1
Wholesale trade	7,2	9,2
Retail trade	5,5	6,9
Transport and storage	5,3	8,2
Accommodation	3,6	5,1
Food and beverage services	1,3	1,7
Travel agency and related activities	31,8	42,3
Media industries incl. publishing activities	52,2	58,7
Telecommunications	59,5	68,7
Computer programming and related activities	46,4	52,8
Professional, scientific and technical activities	21,4	24,7

Figure D43 Employees who can work from home; 2021

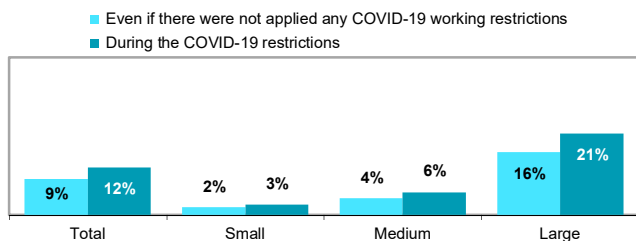
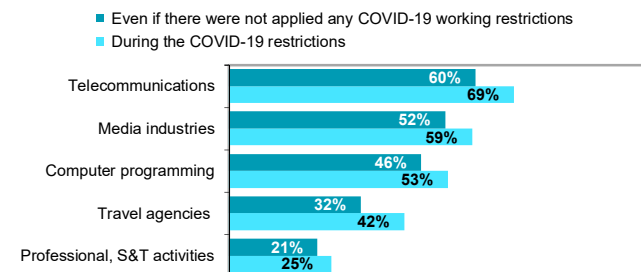


Figure D44 Industries with the highest share of employees who can work from home; 2021



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

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

D Enterprises and ICT

Table D13 Enterprises in Czechia using online communication platforms; 2021

	Total	Percentage for remote meetings:	
		with clients or business partners	among employees
Total (10 or more employees)	49,7	44,0	40,9
Small enterprises (10-49 employees)	42,4	36,8	33,8
Medium enterprises (50-249 employees)	72,6	66,1	62,2
Large enterprises (250 or more empl.)	94,5	90,5	89,1
Industry (10 or more employees)			
Manufacturing	51,8	45,9	39,7
Electricity, gas and water supply	47,1	39,8	35,0
Construction	27,7	24,2	20,6
Sale and repair of motor vehicles	58,0	51,7	37,6
Wholesale trade	64,2	59,1	57,6
Retail trade	37,9	32,7	33,2
Transport and storage	39,8	34,2	34,3
Accommodation	44,6	31,7	35,2
Food and beverage services	21,5	15,5	16,2
Travel agency and related activities	81,5	68,8	74,5
Media industries incl. publishing activit.	81,3	72,6	79,3
Telecommunications	79,7	66,0	74,7
Computer programming and related act.	98,1	94,1	96,1
Professional, scientific and technical act.	76,4	71,4	65,2

Figure D45 Enterprises providing remote access via the internet for employees to:

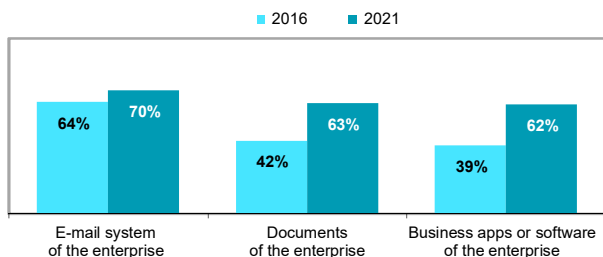
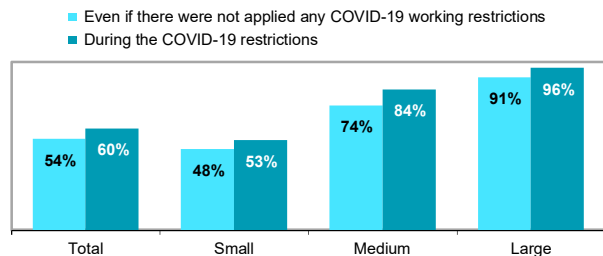


Figure D46 Enterprises allowing employees to work from home



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 and ICT

Table D14 Enterprises in Czechia that experienced ICT related security incidents; 2020

	Percentage		
	Unavailability of ICT services	Destruction or corruption of data	Disclosure of confidential data
Total (10 or more employees)	11,5	5,2	1,3
Small enterprises (10-49 empl.)	9,6	4,5	1,0
Medium enterprises (50-249 empl.)	17,2	7,6	1,8
Large enterprises (250+ empl.)	25,7	8,7	4,5
Industry (10 or more employees)			
Manufacturing	10,5	4,7	1,6
Electricity, gas and water supply	11,3	4,8	0,9
Construction	7,8	4,4	0,9
Sale and repair of motor vehicles	19,9	7,6	1,0
Wholesale trade	14,7	4,8	0,7
Retail trade	13,8	5,8	1,3
Transport and storage	8,8	4,9	1,1
Accommodation	6,3	5,2	0,4
Food and beverage services	4,3	4,5	0,4
Travel agency and related activ.	18,3	6,0	3,4
Media industries	18,0	7,2	2,6
Telecommunications	36,2	10,9	4,0
Computer programming	23,3	9,2	2,6
Professional, S&T activities	15,7	5,6	1,4

Figure D47 Enterprises that experienced ICT related security incident; 2020

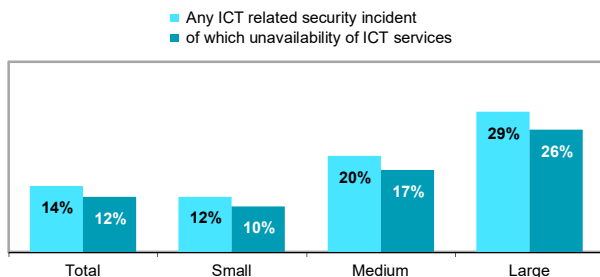
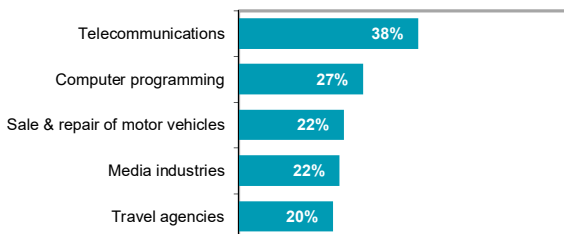


Figure D48 Industries with the highest share of enterprises with ICT related security incidents; 2020



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

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

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 new established data boxes, and on the number of performed transactions by means of the data boxes from open data of the **Ministry of the Interior**. 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**.

Data on the number of electronically submitted documents of selected services (e-Submission) to the **Czech Social Security Administration (CSSA)** are taken from open data of the CSSA.

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 to the survey interview. The interviews took place in **Q2 2021**.

Definitions (sorted alphabetically)

- **Citizen Portal** is an access point of the Public administration portal. The portal makes it possible for citizens to manage their registry information or personal documents.
- **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@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.
- **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.
- A **data box** shall serve for secure electronic delivery of documents in between public administration bodies and a legal or natural person.
- A **downloadable form** shall mean a downloadable form, or a form to be downloaded, on a website, most often in doc and/or pdf formats, which citizens or businesses can download from an authority website, can fill in by hand or in computer, put their handwritten signature on, and deliver to the authority and/or office.
- An **electronic submission** (e-Submission) is a form of a submission delivered in the classic way, yet 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.
- **NIA** (National Identity Authority) is a system of electronic identification to government portals and services.
- **On-line filling and submitting forms** shall mean citizens fill in a form right on the web page while if the citizen has filled in the form in a correct way is computer checked. Subsequently, the forms filled this way are electronically submitted right from the webpage.
- **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).

E Government and ICT

Table E1 Czech POINT - number of public contact points

	Number		
	2010	2015	2021
Total	7 747	7 942	7 880
at the municipal authority offices	6 393	6 398	6 398
at post offices	945	981	943
at notary offices	320	399	427
at other places	89	91	112

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

	Thousand		
	2010	2015	2021
Total	1 880	2 139	2 082
Verified copies (extracts), total	1 708	1 584	1 041
from the Criminal Register	790	829	689
from the Land Register	442	352	168
from the Commercial Register	327	241	87
from the Driver Register	85	91	55
from the Trade Register	55	62	32
other verified extracts	8	9	10
Authorized conversion of documents, total	91	441	704
from paper to electronic form	8	139	470
from electronic to paper form	83	302	234
Requests for a Data box registration	12	35	117
Other outputs	68	79	219

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

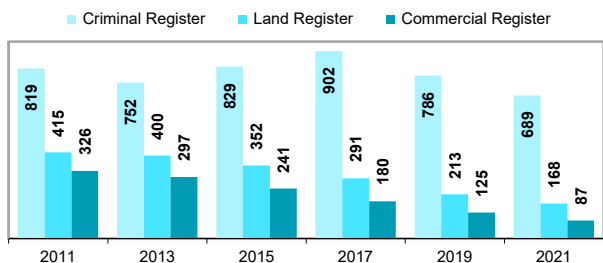
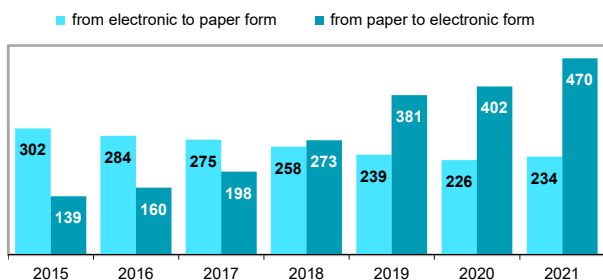


Figure E2 Authorized conversions of documents issued 'at the desk' of the Czech POINT (thousand)



Source: Ministry of the Interior (www.czechpoint.cz)

E Government and ICT

Table E3 Documents issued via CzechPOINT@office interface

Thousand

	2010	2015	2021
Total	5 985	7 795	5 142
Verified copies (extracts) ex officio, total	390	952	1 149
from the Register of Vital Records (e.g. certificates of birth or death)	197	420	447
from the Register of Residents/Citizens (e.g. certificates of permanent residence)	135	424	395
from the Criminal Register	45	48	75
others	13	59	231
Authorized conversion of documents, total	5 595	6 554	3 843
from paper to electronic form	4 587	5 662	3 272
from electronic to paper form	1 008	892	571
Verified extracts from Basic registers	.	289	150

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

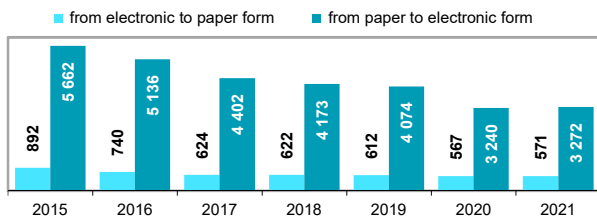
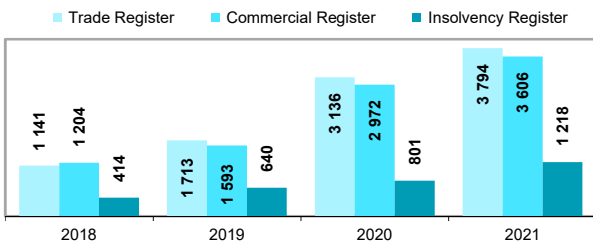


Table E4 Verified copies (extracts) issued from registries via the CzechPOINT@home interface

Number

	2017	2019	2021
Total	14 141	29 156	54 078
Driver Register	5 448	14 027	20 756
Criminal Register - individuals	4 634	8 894	19 783
Criminal Register - legal entities	1 219	2 086	4 630
Trade Register	1 160	1 713	3 794
Commercial Register	1 278	1 593	3 606
Insolvency Register	251	640	1 218
Register of Qualified Contractors	151	203	291

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



Source: Ministry of the Interior (www.czechpoint.cz)

E Government and ICT

Table E5 Newly established Data Boxes in Czechia

Thousand

	2019	2020	2021
Total	93,7	148,6	241,8
Established / activated upon request	62,5	120,6	201,0
Established / activated by law	31,2	28,0	40,8
Owner of newly activated Data Boxes			
Citizen (non-entrepreneur)	38,7	67,6	145,4
Self-employed person (entrepreneur)	21,3	48,3	59,0
Legal person (enterprise)	33,7	32,7	37,4
Public authority body	0,1	0,1	0,1

Figure E5 Newly established Data Boxes of citizens (thousand)

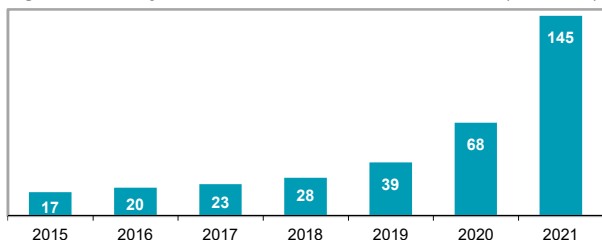


Figure E6 New Data Boxes of self-employed persons (thousand)

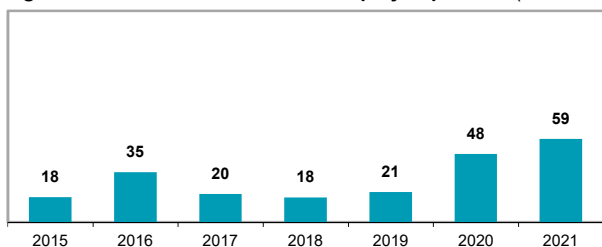
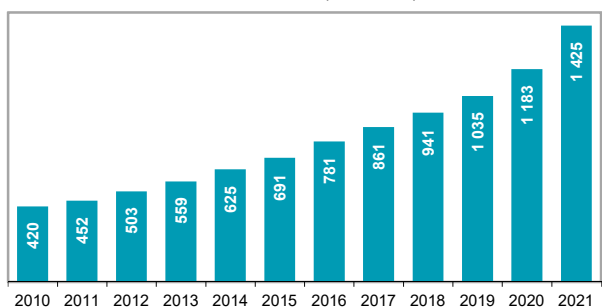


Figure E7 The total cumulative number of activated Data Boxes as of 31st December (thousand)



Source: Ministry of the Interior



E Government and ICT

Tab.E6 Electronic transactions made via Data Boxes in Czechia

	Thousand		
	2019	2020	2021
Total	99 631	112 447	121 541
by Data Box owner			
Public authority body	69 209	76 742	83 466
Legal person (enterprise)	24 959	28 837	30 315
Self-employed person (entrepreneur)	4 739	5 750	6 261
Citizen (non-entrepreneur)	724	1 117	1 499

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

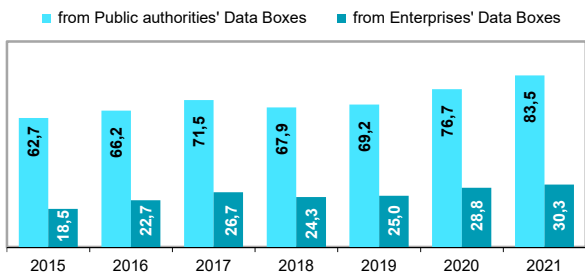


Figure E9 E-transactions made via Data Boxes by type of entities that conducted these transactions (million; %)

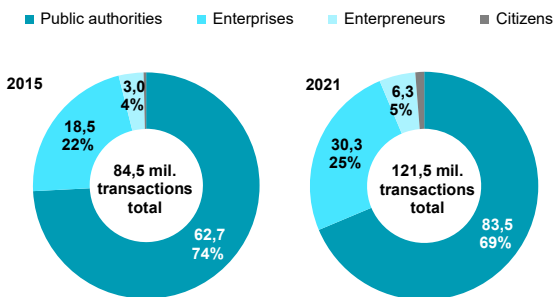
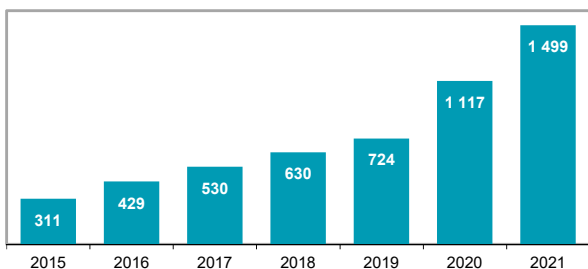


Figure E10 E-transactions made from Citizens' (non-entrepreneur) Data Boxes (thousand)



Source: Ministry of the Interior

E Government and ICT

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

	Thousand		
	2019	2020	2021
Value Added Tax declaration	2 453	2 479	2 539
Personal Income Tax declaration	315	358	504
Corporate Income Tax declaration	225	223	232
Road Tax declaration	225	227	224
Real Estate Tax declaration	37	40	59

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)

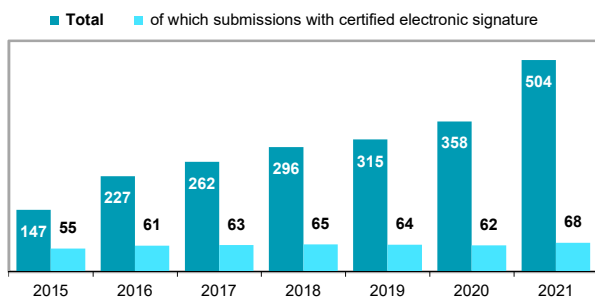
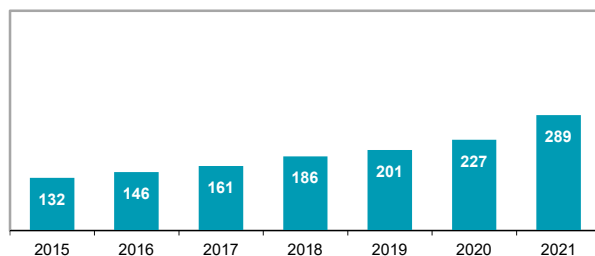


Table E8 Tax forms sent to the Czech Financial Administration electronically via Data Boxes

	Thousand		
	2019	2020	2021
Value Added Tax declaration	2 271	2 411	2 612
Personal Income Tax declaration	201	227	289
Corporate Income Tax declaration	289	295	313
Road Tax declaration	175	181	189
Real Estate Tax declaration	20	20	22

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



Source: Czech Financial Administration

E Government and ICT

Table E9 Forms sent to the Czech Social Security Administration via the e-Submission application

	Thousand		
	2015	2020	2021
Record for Pension Insurance	5 149	5 780	5 946
Announcement of the commencement of employment	2 560	2 761	2 989
Overview of insurance contribution amount	2 041	3 076	3 314
Survey of income and expenses of the self-employed person	45	182	255

Figure E13 Records for Pension Insurance filled in via the e-Submission application

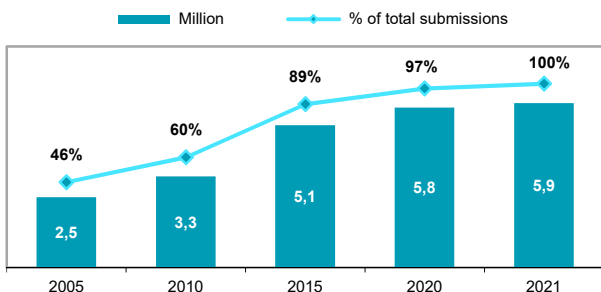
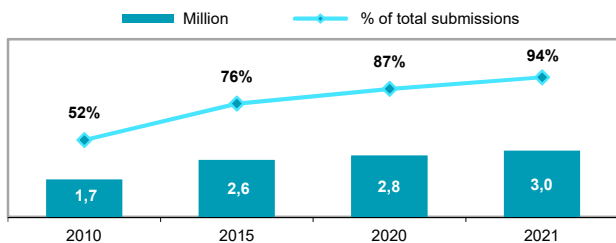


Figure E14 Announcements of the commencement of employment filled in via e-Submission application



Source: Czech Social Security Administration.

Table E10 Citizen Portal in Czechia - selected statistics

	2020	2021
Number of registered users, total	72 200	324 318
of which via National Identity Authority (NIA)	29 789	260 316
Number of authentications, total	385 000	1 583 741
Number of electronic submissions, total	27 690	109 000
of which verified copies issued from selected registers		
Criminal Register - individuals	9 546	48 236
Trade Register	2 291	18 642
Driver Register	8 684	16 000

Source: Ministry of the Interior

E Government and ICT

Table E11 Persons in Czechia who in the last 12 months used the internet in relation to the public administration; 2021

Percentage

	Total	of which with	
		government authorities	other public institutions*
Total (aged 16+)	63,2	46,4	51,7
Activities on websites			
Obtaining information	53,5	41,6	38,8
Downloading forms	28,5	21,2	15,5
Filling and submitting forms online **	48,0	23,4	39,0
Gender			
Men	61,3	46,3	47,1
Women	64,9	46,5	56,0
Age group (years)			
16–24	78,1	35,8	72,6
25–34	77,3	63,1	62,4
35–44	78,5	61,9	63,2
45–54	73,0	57,3	56,7
55–64	62,9	47,3	51,9
65+	28,9	19,5	23,3

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

* Includes public educational institutions, health services or libraries.

Figure E15 Using the internet in relation to the public administration by gender and age; 2021

■ % of all persons in a given group ■ % of internet users in a given group

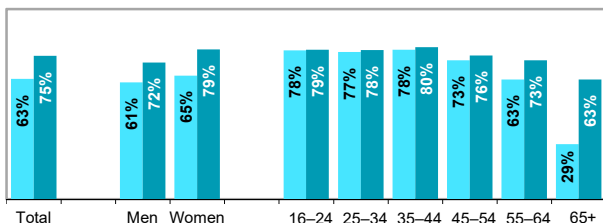
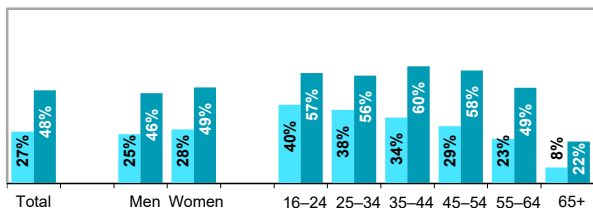


Figure E16 Filling and submitting forms online via public administration websites by gender and age

■ 2020 ■ 2021**



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

** Excludes online filling and submitting of Population Census 2021 forms.

Source: Czech Statistical Office, ICT use survey in households

E Government and ICT

Figure E17 Persons aged 16–74 years in EU countries using the internet in relation to the public administration; 2021

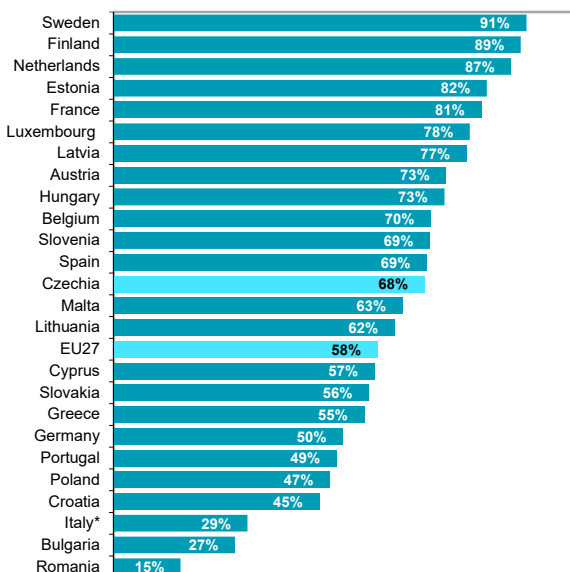
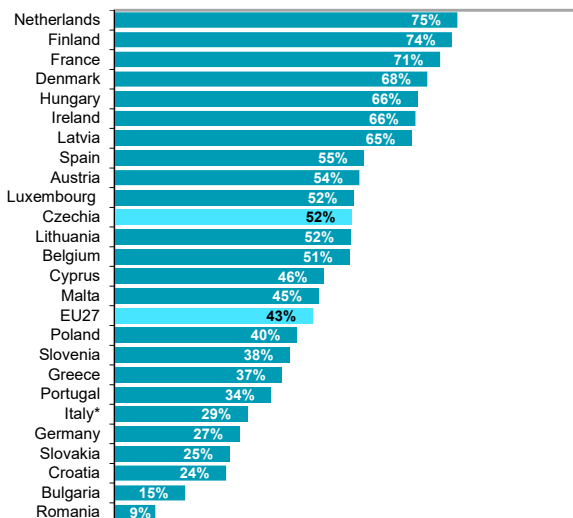


Figure E18 Persons aged 16–74 years in EU countries who filled and submitted forms online via public administration websites; 2021



* data for 2020

Source: Eurostat

E Government and ICT

Table E12 Persons in Czechia who conducted selected activities on websites of government authorities; 2021

	Percentage		
	Obtaining information	Download-ing forms	Filling and submitting forms*
Total (aged 16+)	41,6	21,2	23,4
Men	41,4	22,8	24,5
Women	41,7	19,6	22,3
Age group (years)			
16–24	28,0	14,6	17,6
25–34	57,1	32,1	32,6
35–44	56,0	29,6	32,2
45–54	51,0	28,0	31,8
55–64	43,6	19,9	21,7
65+	17,8	6,0	7,8
Education attainment (aged 25–64)			
Primary	24,0	11,9	13,2
Secondary without A-level exam.	35,2	15,3	18,5
Secondary with A-level examin.	59,1	31,5	33,6
Tertiary	72,2	42,8	44,1

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

Figure E19 Activities conducted on websites of government authorities by gender and age; 2021

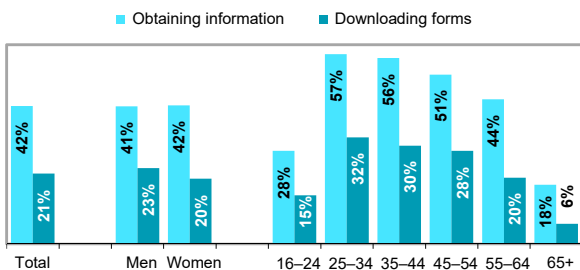
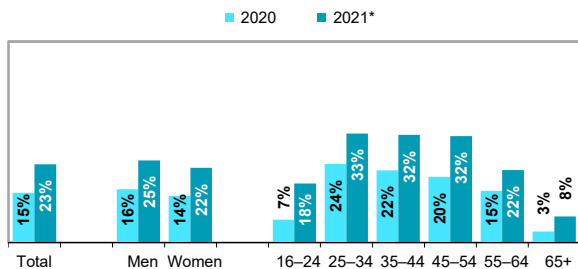


Figure E20 Filling and submitting forms via websites of government authorities by gender and age



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

* Excludes online filling and submitting of Population Census 2021 forms.

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 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**.

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 **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 12 months**.

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.
- **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** 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.
- **School Wireless Network** (school WiFi network) enables students and school staff using 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 Computers in schools in Czechia; 2021

Number of devices per 100 students in a given school type

	Total	Desktop	Portable	Up to age of 2 years
Basic schools - first stage	30,2	14,8	15,4	12,0
Basic schools - second stage	37,5	19,4	18,0	15,3
Secondary schools	28,1	20,4	7,7	8,7

Figure F1 Computers in schools available to students
(number of devices per 100 students in a given school type)

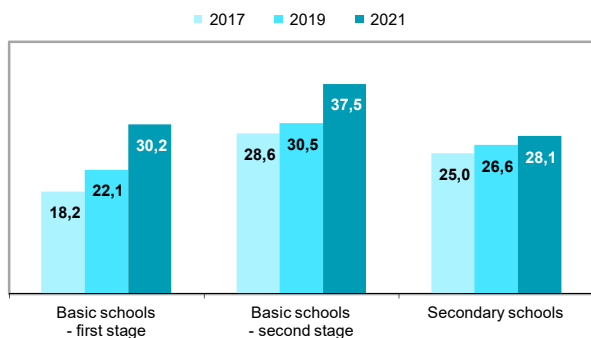
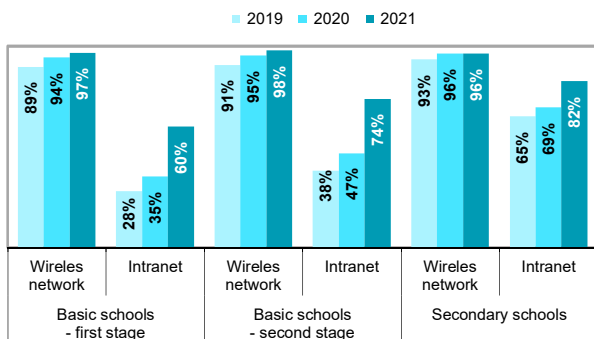


Table F2 Schools in Czechia with wireless network and school intranet

Percentage

	Wireless Network		Intranet	
	2015	2021	2015	2021
Basic schools - first stage	78,7	96,6	14,3	59,8
Basic schools - second stage	81,6	97,7	20,3	73,7
Secondary schools	87,0	97,2	46,1	82,4

Figure F2 Schools with wireless network and school Intranet



as a percentage of all schools of a given stage

Source: Ministry of Education, Youth and Sports

F ICT in Education and Digital Skills

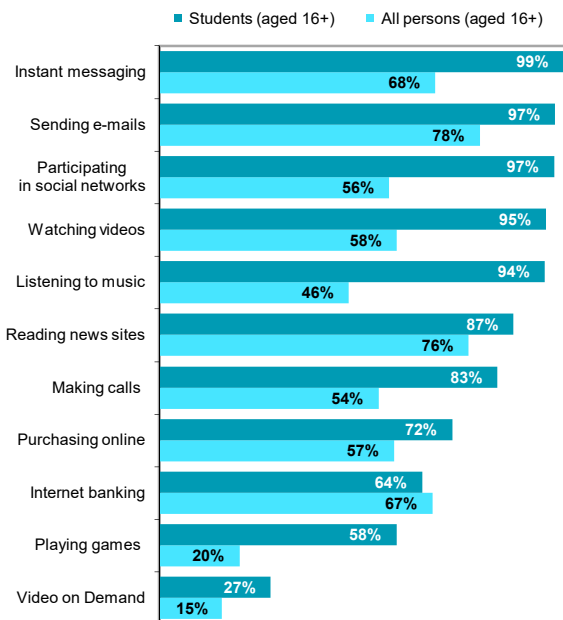
Tab. F3 Students aged 16+ in Czechia using the internet; 2021

	Percentage		
	Total	Men	Women
Using the internet, total	100,0	100,0	100,0
Using the internet several times a day	94,2	96,2	92,2
Using the internet on a mobile phone, total	99,5	99,5	99,5
of which via a mobile network (e. g. LTE)*	87,7	86,0	89,5
Using the internet for selected activities			
Instant messaging	98,9	100,0	97,8
Sending e-mails	96,9	98,5	95,3
Participating in social networks	96,6	97,2	96,1
Watching videos	94,7	97,4	92,0
Listening to music	94,4	94,6	94,2
Reading news sites	86,7	84,6	88,8
Making calls	82,8	83,2	82,3
Purchasing online	71,7	69,2	74,3
Internet banking	64,3	56,1	72,5
Playing games	58,1	71,9	44,3
Watching Video on Demand (e.g. Netflix)	27,3	26,4	28,2

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

* Mobile network stands here for the use of both prepaid and postpaid monthly tariff data and voice subscription from the mobile phone operators.

Figure F3 Students and persons aged 16+ using the internet for selected activities; 2021



Source: Czech Statistical Office, ICT use survey in households

F ICT in Education and Digital Skills

Figure F4 Students aged 16+ in Czechia and other EU countries using the internet for selected activities; 2021

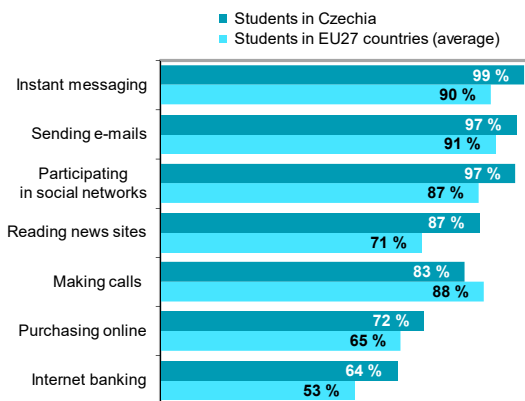
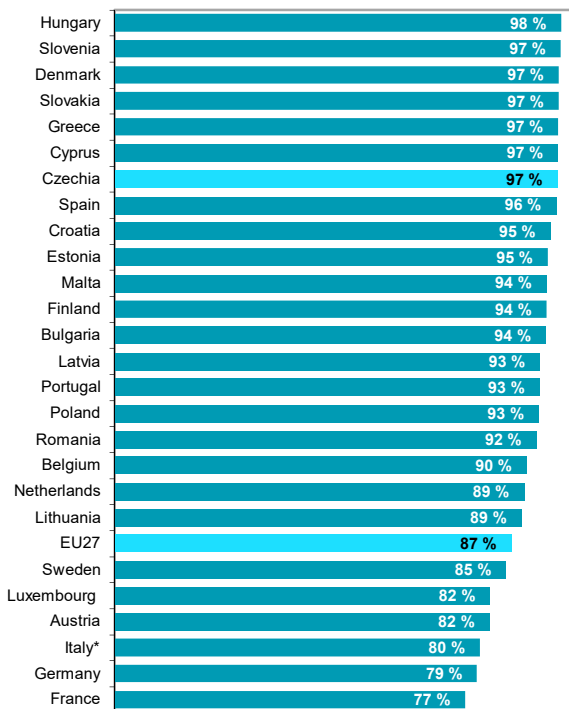


Figure F5 Students aged 16+ in EU countries participating in social networks; 2021



* data for 2020

Source: Eurostat

F ICT in Education and Digital Skills

Table F4 Persons in Czechia using the internet for selected learning activities; 2nd quarter 2021

	Percentage	
	Doing an online course	Using online learning materials
Total (aged 16+)	16,0	15,5
Men	15,5	15,2
Women	16,5	15,8
Age group (years)		
16–34	35,6	34,9
35–54	15,2	14,0
55+	4,1	4,4
Education attainment (aged 25–64)		
Primary	2,6	2,5
Secondary without A-level examination	3,4	3,0
Secondary with A-level examination	14,6	14,0
Tertiary	36,5	34,3

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

Figure F6 Persons aged 16+ doing an online course; 2021

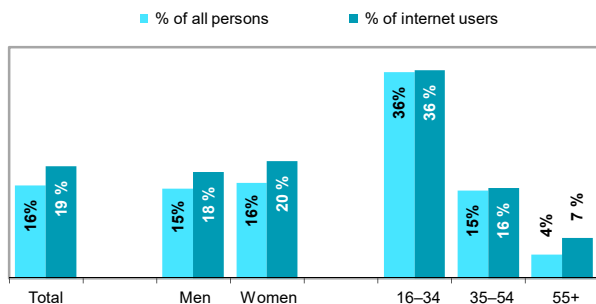
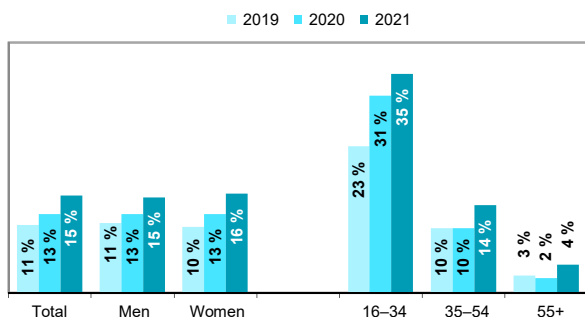


Figure F7 Persons aged 16+ using online learning materials



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 F8 Persons aged 16–74 years in EU countries who attended an online course; 2nd quarter 2021

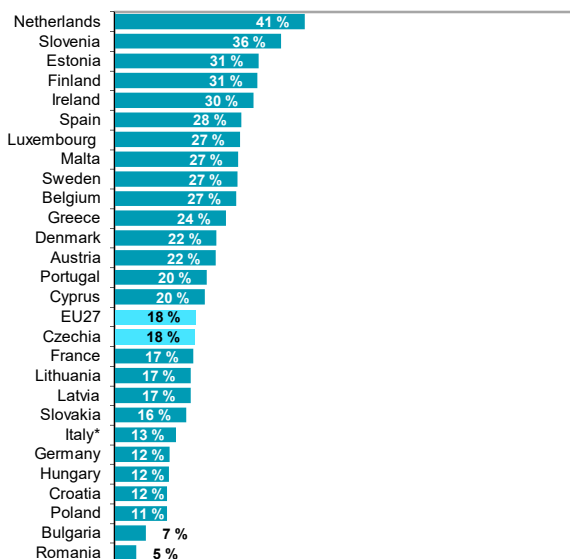
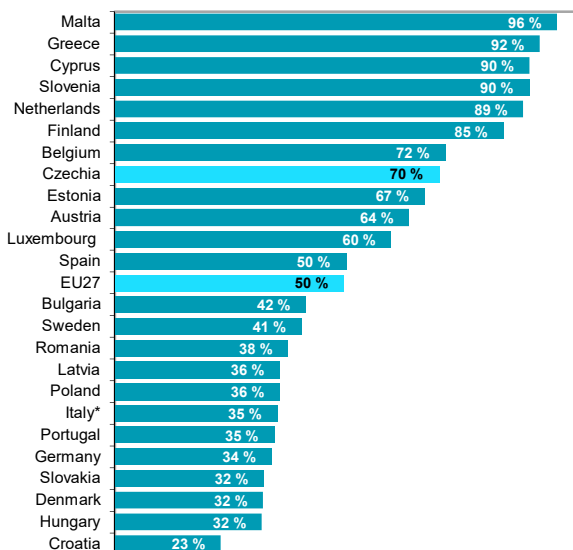


Figure F9 Students aged 16+ in EU countries who attended an online course; 2nd quarter 2021



* data for 2020

Source: Eurostat

F ICT in Education and Digital Skills

Table F5 Persons in Czechia with selected digital skills; 2021

	Percentage		
	Copying files	Editing photos	Program-ming
Total (aged 16+)	52,2	26,0	4,9
Men	54,7	27,2	7,8
Women	49,9	24,9	2,1
Age group (years)			
16–24	84,2	54,1	11,9
25–34	76,2	45,4	10,7
35–44	67,5	36,8	6,8
45–54	58,0	19,8	3,0
55–64	43,5	15,3	1,5
65+	13,0	5,2	0,3
Education attainment (aged 25–64)			
Primary	25,5	12,9	0,8
Secondary without A-level examination	37,5	16,3	0,8
Secondary with A-level examination	70,4	31,0	5,2
Tertiary	90,9	49,5	13,7

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

Figure F10 Installing software and change of settings by gender and age; 2021

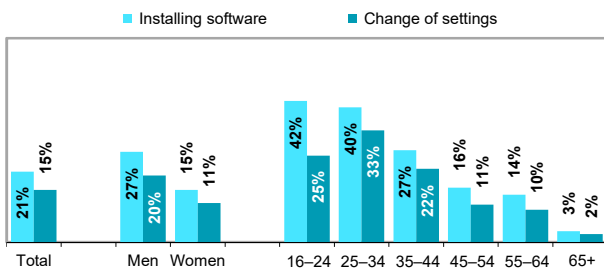
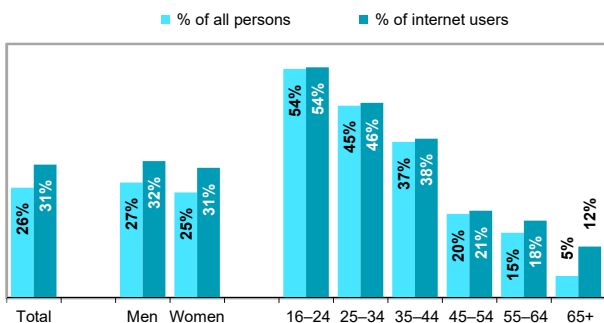


Figure F11 Using photo editing software or apps by gender and age; 2021



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 F12 Persons aged 16–74 years in EU countries who do programming; 2021

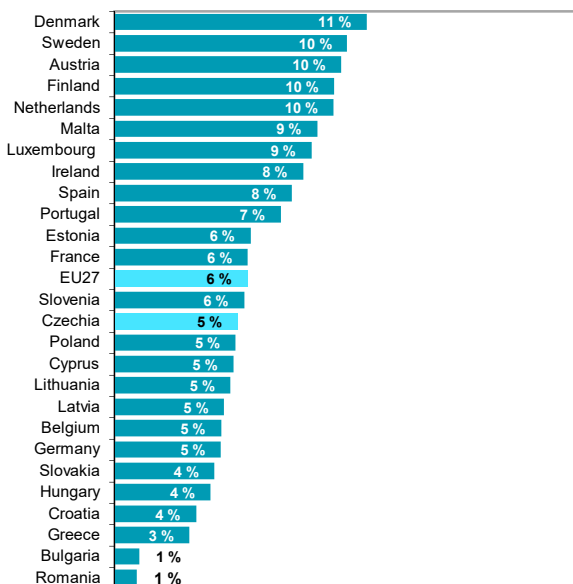
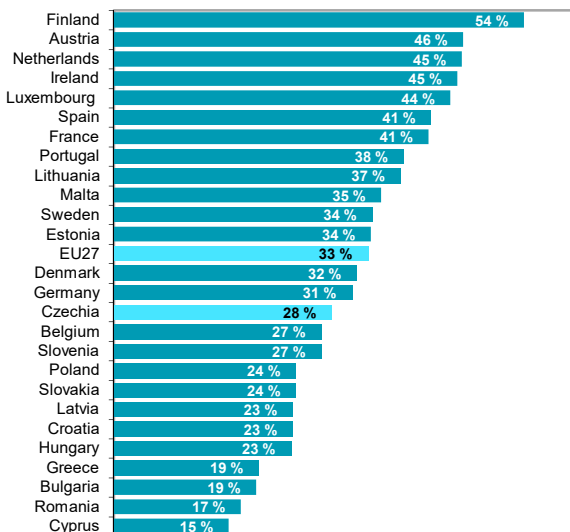


Figure F13 Persons aged 16–74 years in EU countries who used photo editing software or apps; 2021



Source: Eurostat

F ICT in Education and Digital Skills

Tab. F6 Persons in Czechia using office software; 2021

	Percentage		
	Word processing software	Spreadsheet software	Presentation software
Total (aged 16+)	48,9	36,8	16,5
Men	49,9	38,8	18,3
Women	47,9	34,9	14,9
Age group (years)			
16–24	80,1	67,5	55,6
25–34	66,4	52,6	22,9
35–44	64,0	48,4	21,8
45–54	53,9	40,2	12,4
55–64	43,5	30,4	7,0
65+	12,6	6,5	1,2
Education attainment (aged 25–64)			
Primary	18,9	6,9	4,0
Secondary without A-level examin.	29,6	16,7	3,5
Secondary with A-level examination	67,9	51,7	14,5
Tertiary	89,3	76,2	39,9

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

Figure F14 Using word processing software; 2021

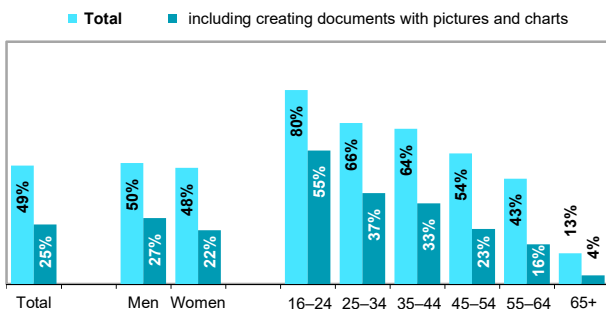
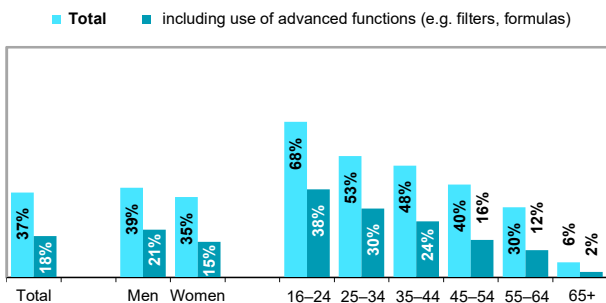


Figure F15 Using spreadsheet software; 2021



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 F16 Persons aged 16–74 years in EU countries who used word processing software; 2021

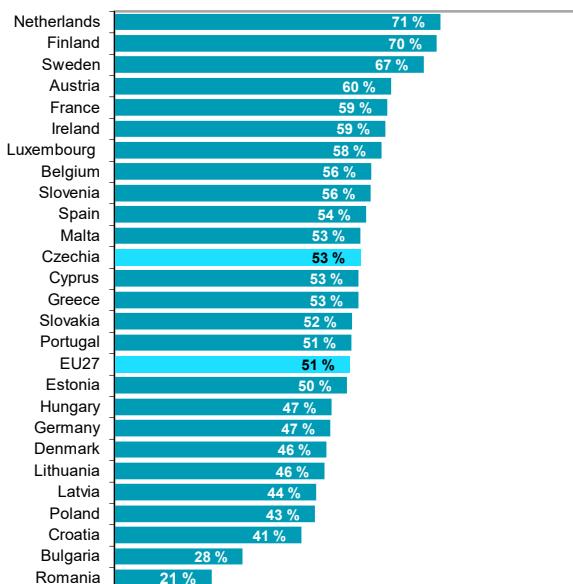
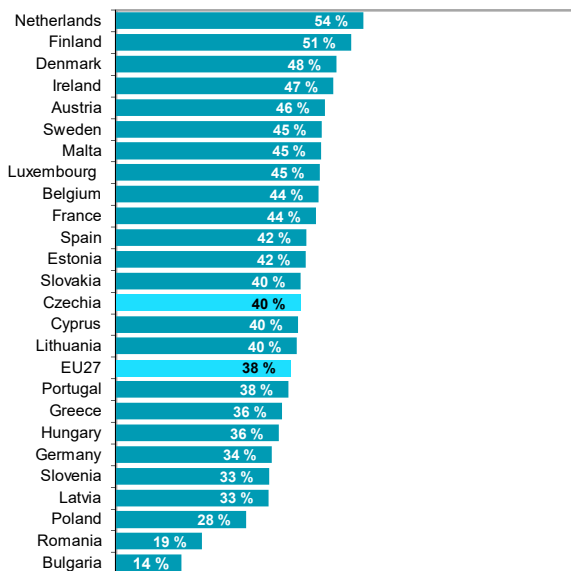


Figure F17 Persons aged 16–74 years in EU countries who used spreadsheet software; 2021



Source: Eurostat

F ICT in Education and Digital Skills

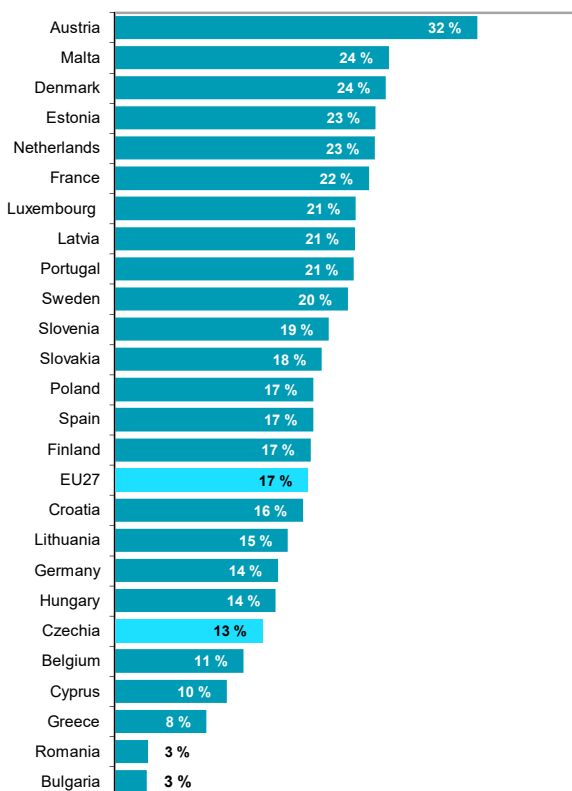
Table F7 Students aged 16+ in Czechia using selected software; 2021

	Percentage		
	Total	Men	Women
Word processing software, total	91,0	90,7	91,3
advanced functions (e.g. inserting pictures or charts)	66,0	65,9	66,2
Spreadsheet software, total	79,5	80,6	78,5
advanced functions (e.g. filtering, formulas usage)	47,7	47,7	47,6
Presentation software	67,2	70,7	63,8
Photo/ video editing software and apps	59,9	56,3	63,5
Programming	12,9	17,2	8,5

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

Source: Czech Statistical Office, ICT use survey in households

Figure F18 Students aged 16+ in EU countries who do programming; 2021



Source: Eurostat

G Health and ICT

Data on e-Health services are processed from the results of 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 basic questions on the ICT equipment of practices (offices/ surgeries) of **independent physicians**. In addition, data on **online services** offered via websites of independent physicians and **keeping health records (documentation) in the electronic form** are taken from this survey.

Since the reference year 2016, 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 who has completed advanced education and training in a specific field of medicine to become an allergist, a dermatologist, an ophthalmologist, a 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.
- **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](https://www.czso.cz/csu/czso/information_technologies_in_the_czech_health_sector)

Table G1 Independent surgeries of physicians in Czechia equipped with selected ICT; 2020

	Computer	Internet	Website
Total	96,8	95,7	46,6
General practitioners (GP) for adults	98,6	97,6	50,5
General practitioners (GP) for children	98,7	98,0	65,9
Dentists	97,2	96,0	31,1
Gynecologists	97,0	96,2	64,2
Specialists	94,7	93,6	48,4

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

Figure G1 Independent surgeries of physicians equipped with selected ICT

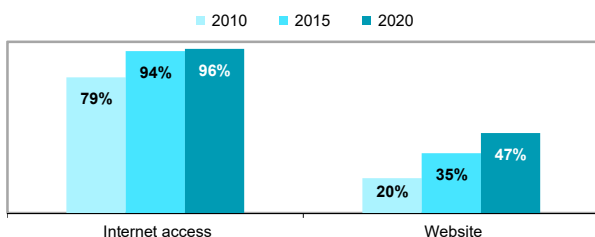


Figure G2 Independent surgeries of physicians with the internet access

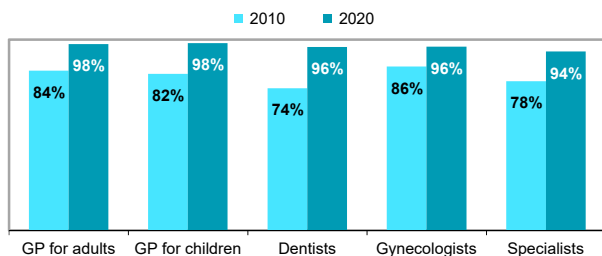
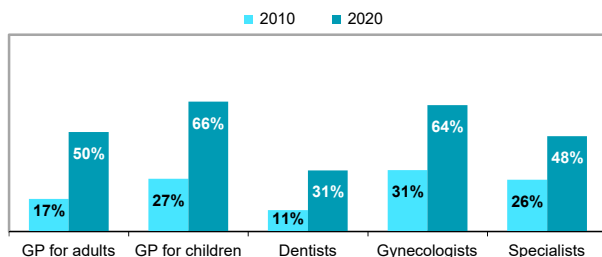


Figure G3 Independent surgeries of physicians having own website



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; 2020

	Percentage	
	Online appointment	Online consultation
Total	20,9	17,3
General practitioners (GP) for adults	29,4	21,3
General practitioners (GP) for children	28,7	30,0
Dentists	8,3	5,4
Gynecologists	34,2	31,8
Specialists	21,3	18,4

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

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

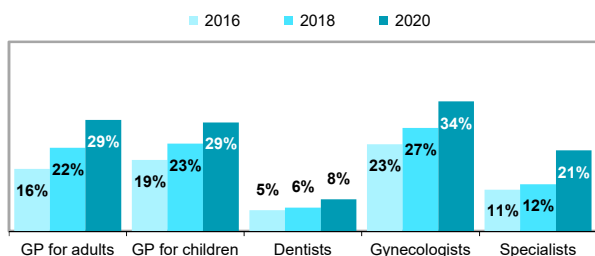


Figure G5 Independent surgeries of physicians having a website application for online consultation

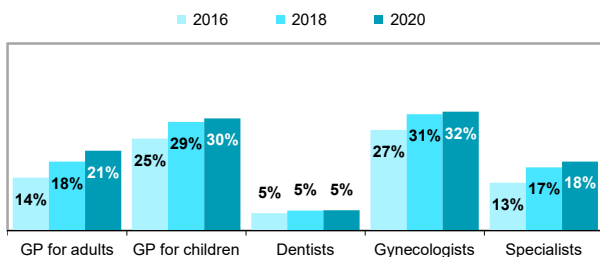
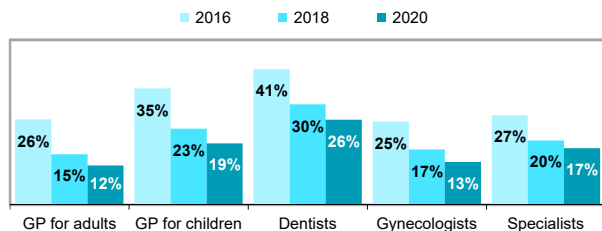


Figure G6 Independent surgeries of physicians keeping the health records in a paper form only



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 systems; 2020

	Percentage		
	Medical prescription	Drug interaction alerts	Laboratory tests ordering
Total	74,3	34,9	38,3
General practitioners for adults	86,1	59,0	69,5
General practitioners for children	79,5	43,3	62,3
Dentists	66,9	15,5	5,8
Gynecologists	82,5	41,6	64,4
Specialists	70,2	32,2	34,2

as a percentage of all independent physicians of a given practice

Figure G7 Independent surgeries of physicians using e-health systems for medical prescription

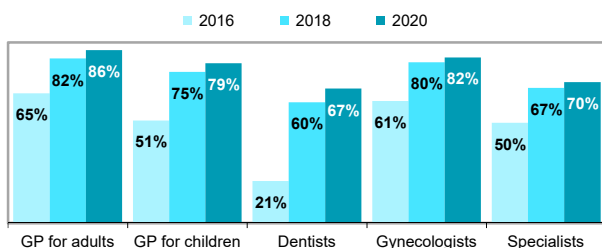


Figure G8 Independent surgeries of physicians using e-health systems for drug interaction alerts

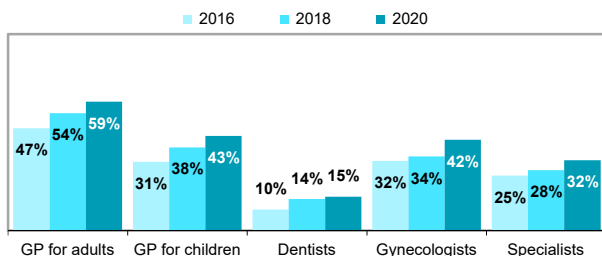
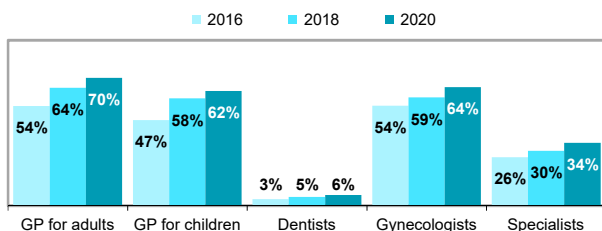


Figure G9 Independent surgeries of physicians using e-health systems for laboratory tests orderings



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 systems for generating patient extracts; 2020

	Percentage		
	Patients for appointment	Patients by diagnosis	Patients by laboratory results
Total	48,6	55,3	29,3
General practitioners for adults	66,4	72,5	47,5
General practitioners for children	60,7	59,8	39,5
Dentists	38,0	33,1	10,3
Gynecologists	68,1	70,5	44,8
Specialists	39,8	58,3	27,7

as a percentage of all independent physicians of a given practice

Figure G10 Independent surgeries of physicians using e-health systems for generating patients for appointment

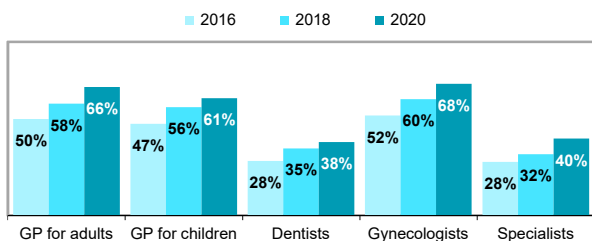


Figure G11 Independent surgeries of physicians using e-health systems for generating patients by diagnosis

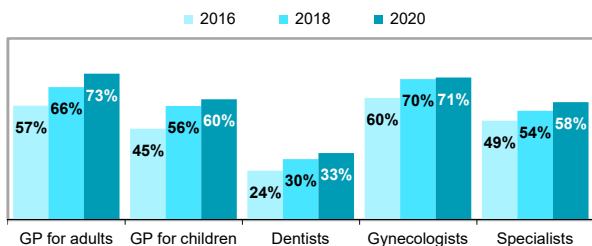
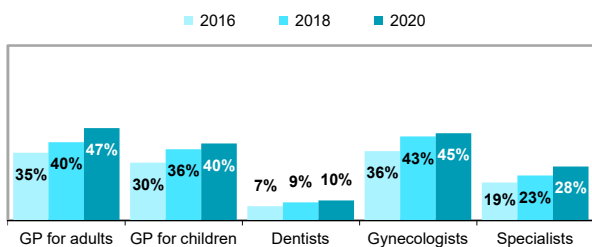


Figure G12 Independent surgeries of physicians using e-health systems for laboratory results of patients



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		
	2010	2015	2021
Total (aged 16+)	19,2	37,3	59,4
Men	12,6	26,4	51,1
Women	25,5	47,9	67,3
Age group (years)			
16–24	13,1	22,9	49,3
25–34	25,0	45,7	69,5
35–44	29,3	48,1	75,5
45–54	23,4	47,5	68,7
55–64	16,3	40,9	64,5
65+	6,7	18,1	34,6
Education attainment (aged 25–64)			
Primary	7,0	20,0	48,9
Secondary without A-level examination	14,6	34,8	59,0
Secondary with A-level examination	30,9	54,8	74,9
Tertiary	40,0	59,2	82,6

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

Figure G13 Persons aged 16+ using the internet for seeking health-related information by gender

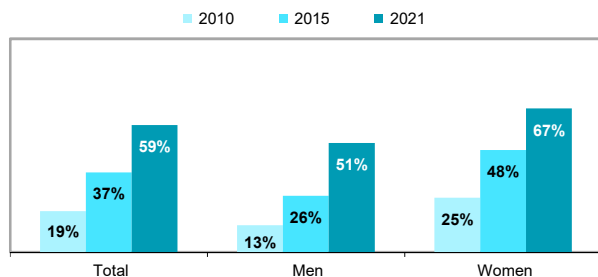
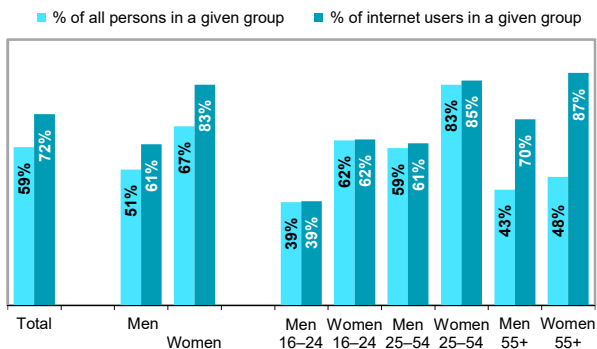


Figure G14 Use of the internet for seeking health-related information by gender and age; 2021



Source: Czech Statistical Office, ICT use survey in households



Figure G15 Men aged 16–74 years in EU countries using the internet for seeking health-related information; 2021

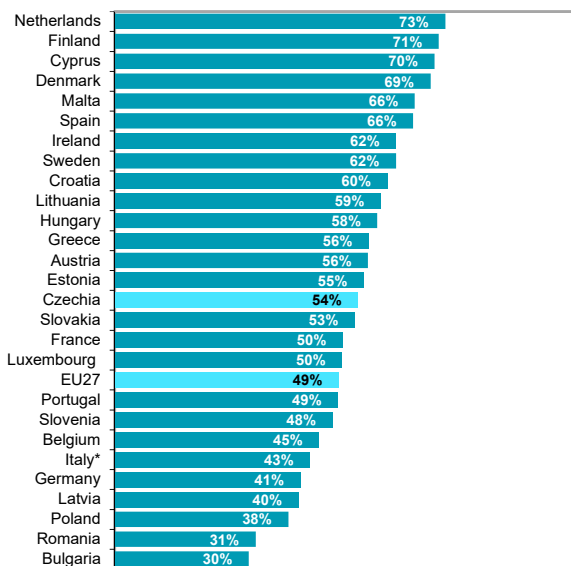
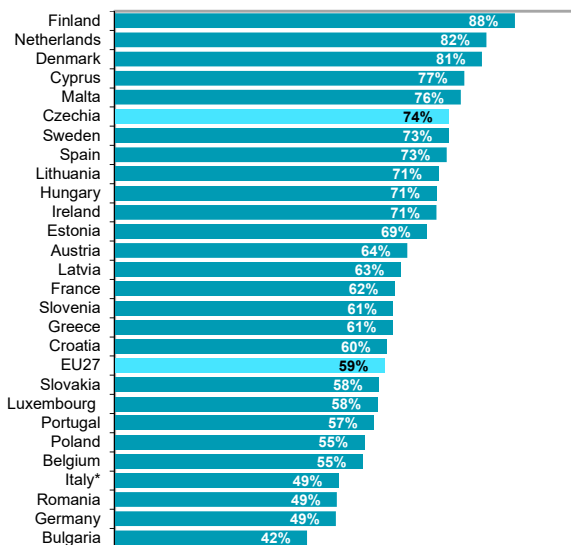


Figure G16 Women aged 16–74 years in EU countries using the internet for seeking health-related information; 2021



* data for 2020

Source: Eurostat

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

	Percentage	
	2020	2021*
Total (aged 16+)	8,6	31,2
Men	6,4	28,7
Women	10,7	33,5
Age group (years)		
16–24	6,2	25,6
25–34	11,5	34,0
35–44	11,4	38,9
45–54	10,2	37,9
55–64	7,6	38,1
65+	5,1	16,5
Education attainment (aged 25–64)		
Primary	2,6	19,9
Secondary without A-level examination	7,3	29,2
Secondary with A-level examination	12,3	40,6
Tertiary	13,5	48,1

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

Figure G17 Persons aged 16+ using the internet for making an appointment with the physician

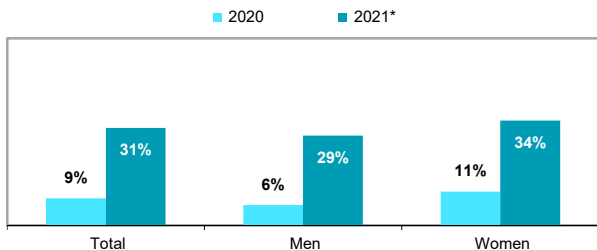
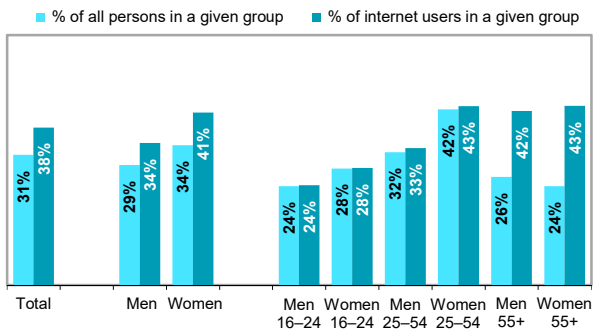


Figure G18 Making appointment via the internet with the physician by gender and age; 2021*



* In 2021 the question included also ordering for samples, tests or vaccinations.

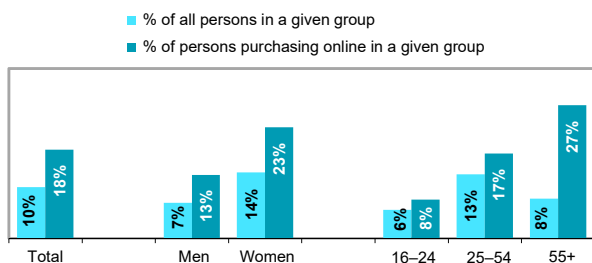
Source: Czech Statistical Office, ICT use survey in households

Table G7 Persons in Czechia purchasing medicine or dietary supplements on the internet; 2021

	Percentage		
	Total	Men	Women
Total (aged 16+)	10,5	7,3	13,5
16–24 years old	5,8	4,5	7,4
25–54 years old	13,1	8,5	17,5
55 years and more	8,1	6,3	9,7

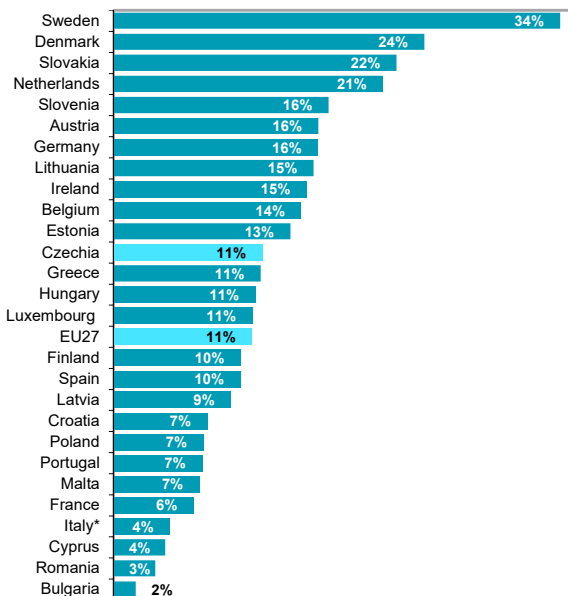
as a percentage of all persons in a given socio-demographic group

Figure G19 Persons aged 16+ purchasing medicine or dietary supplements on the internet; 2021



Source: Czech Statistical Office, ICT use survey in households

Figure G20 Persons aged 16–74 years in EU countries purchasing medicine or dietary supplements online; 2021



* data for 2020

Source: Eurostat