Digital Economy in Figures 2025

Czechia and EU

CZECH STATISTICAL OFFICE

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CZECHIA AND EU

Digital economy

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Contents

Introduction

Information and communication technologies (hereinafter **ICT**) are considered one of the key driving forces for increasing competitiveness and building an innovative and knowledge-based society.

One approach to monitoring developments in ICT and its impact on the economy is to compile a set of **key statistical indicators** in this field. For this reason, the Czech Statistical Office publishes this annual statistical overview of the digital economy in Czechia and other EU countries.

This brochure provides a comprehensive set of **internationally comparable** indicators on ICT investment intensity, R&D expenditure in this area, as well as international trade and production of ICT equipment and services. These economic indicators are complemented by data on ICT specialists and their wages, as well as information on students of and graduates from ICT fields of education at tertiary education.

The brochure consists of the following **seven chapters:**

A. **ICT specialists:** this chapter provides information about numbers and wages of ICT professionals and ICT technicians. This data is available, not only by gender, age or education of ICT specialists but also by occupation, sphere, or industry these employees are active in.

B. **ICT students:** this chapter contains data on the number and structure of students and graduates from ICT fields of education at universities by **gender, age, citizenships** or selected **characteristics of their studies**.

C. **ICT investments:** this chapter includes detail information about investment intensity into ICT equipment and software **by type of asset** and **industry**.

D. **ICT research and development:** this chapter provides both data on the total financial resources invested in research and development (R&D) in ICT equipment and software and data about R&D expenditures and personnel in the ICT sector.

E. **International trade in ICT goods:** this chapter includes both the data based on the ownership change of goods between residents and non-residents, as well as the cross-border movements of ICT goods.

F. **International trade in ICT services:** this chapter informs the reader about the export and import of ICT services, both as a whole and broken down into different categories.

G. **ICT sector:** this chapter consists of main economic indicators for industries that are primarily engaged in the production of ICT goods and services.

In addition to detailed data for Czechia, each chapter contains a **methodological introduction** and, for most indicators, an available **international comparison**.

Data given in this brochure were acquired from **official statistics.** For more information on digital economy statistics, visit our website: https://csu.gov.cz/digital-economy

In addition to this publication, the Czech Statistical Office also publishes an annual report on **the development of the information society** in Czechia and other EU member states. This brochure provides key indicators on the use of digital technologies across different sectors of society. For more information see: https://csu.gov.cz/produkty/information-society-in-figures-v5yawboq9v

In Prague, December 2025

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Department of Research, Development and Information Society Statistics

Chapter A: ICT specialists

ICT specialists are **defined** as persons who have the ability to develop, operate and maintain ICT systems and for whom ICT constitute the main part of their job. The occupations of ICT specialists are subdivided into **two main categories** and from 2011 are **assigned** to the groups, and subgroups of the **Classification of Occupations (CZ-ISCO)** as follows:

ICT managers, engineers and professionals

1330 Information and communications technology service managers;
2152 Electronics engineers;
2153 Telecommunications engineers;
2434 Information and communications technology sales professionals;
251 Software and applications developers and analysts and
252 Database and network professionals.

ICT technicians, installers and servicers

3114 Electronics engineering technicians;
351 ICT operations and user support technicians;
352 Telecommunications and broadcasting technicians;
742 Electronics and telecommunications (ICT) installers and repairers.

Note: Some data for the ICT specialists, such as wages, are available only for the ICT specialists defined **rather narrow**, which includes only two sub-major groups of CZ-ISCO: **25 ICT professionals** and **35 ICT technicians.**

Detail description of ISCO occupations is available here:
https://ilostat.ilo.org/methods/concepts-and-definitions/classification-occupation/

A narrow group of specialists called information and communications technology professionals (hereinafter only referred to as **ICT professionals**) plays a key role among ICT specialists. According to the CZ-ISCO classification, these ICT professionals consist of employees of sub-major group 25, which comprises two above-mentioned minor groups of employees (CZ-ISCO 251 and 252).

Numbers of ICT specialists

The data on the numbers of ICT specialists are taken from **the Labour Force Survey (LFS)**. For further information on the **Czech LFS** see:
https://csu.gov.cz/employment-and-unemployment-lfs

Note: In order to ensure higher reliability and to eliminate considerable year-on-year fluctuations of values for this group of employees, data is here provided as **three-year moving averages** (i.e., for example, the value for 2023 is calculated as an average from the values for 2022, 2023, and 2024).

The **Eurostat LFS Database** was used for the **international comparison**. Data for Czechia from the Eurostat LFS Database **differ slightly** from the data published by the Czech Statistical Office. For instance, data from Eurostat are given for the relevant year and not as three-year moving averages. For more information see: https://ec.europa.eu/eurostat/web/lfs

Wages of ICT specialists

Data on wages (average gross monthly wage) of the ICT specialists come from **the Structure of Earnings Statistics (SES)** which is generated by merging of databases of the sample survey of the Information System on Average Earnings (ISPV) which covers the **wage sphere**, and from the database of the Salary Information System which covers the **salary sphere**. For more information see: https://csu.gov.cz/structure-of-earnings

Data about ICT specialists is available by **several breakdowns**: by occupation and industry or by individual characteristics of ICT specialists such as gender, citizenship, age or highest education attainment.

For further information on ICT specialists see:
https://csu.gov.cz/ict-specialists-and-their-wages

Chapter A: ICT specialists

Table A.1 ICT specialists in Czechia

Thousand persons

	2015	2020	2023
Total	**180,1**	**219,8**	**223,2**
Men	163,0	199,0	197,8
Women	17,1	20,8	25,5
Occupation			
ICT managers, engineers and professionals	86,4	119,1	137,4
of which ICT proffesionals (CZ-ISCO 25)	67,3	106,1	121,8
ICT technicians, installers and servicers	93,7	100,6	85,9
of which ICT technicians (CZ-ISCO 35)	51,0	63,4	56,6
Age group			
Under 35 years	71,1	76,2	76,4
35–44 years	59,7	79,8	74,6
45–54 years	32,4	41,9	47,0
55 + years	17,0	21,8	25,3
Highest level of education attainment			
Tertiary	99,1	123,5	128,1
Secondary with A-level examination	70,9	86,2	84,6
Other (lower)	10,1	10,1	10,5

Chart A.1 ICT specialists in Czechia

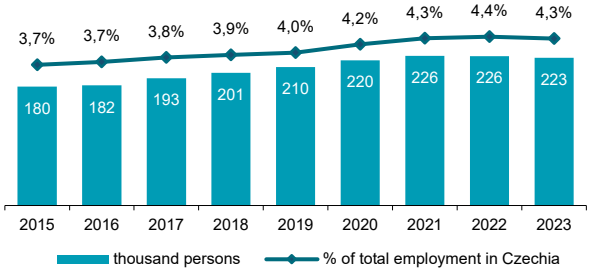
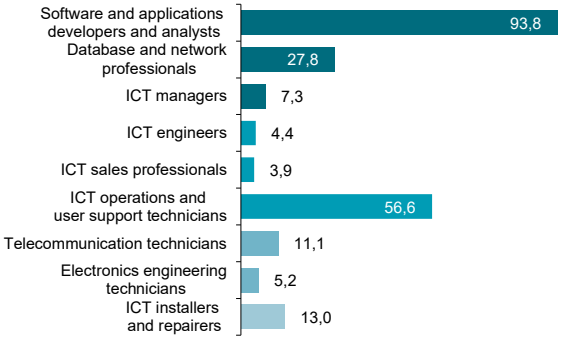


Chart A.2 ICT specialists in Czechia by occupation

(thousands) in **2024**



Note: For greater reliability, the numbers of ICT specialists are calculated as three-year moving averages (e.g. 2023 is the average of 2022 to 2024)

Source: Czech Statistical Office, Labour Force Survey

Chart A.3 ICT specialists in EU countries in 2024
(% of total employment)

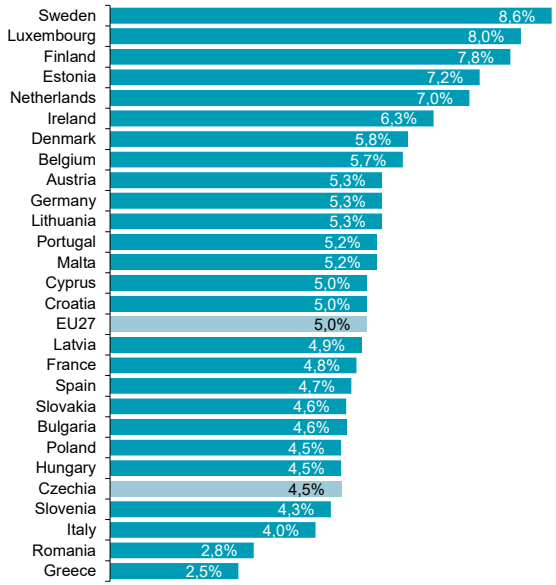
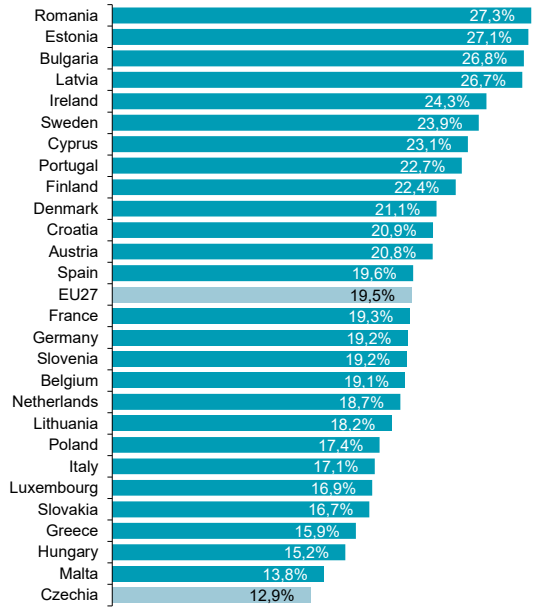


Chart A.4 Share of women in EU countries among ICT specialists in 2024



Source: Eurostat LFS database and Czech Statistical Office own calculations

Chapter A: ICT specialists

Table A.2 ICT professionals in Czechia

Thousand persons

	2015	2020	2023
ICT professionals (CZ-ISCO 25), total	**67,3**	**106,1**	**121,8**
Men	60,6	95,0	106,8
Women	6,7	11,1	14,9
Occupation (CZ-ISCO)			
Software and app. developers and analysts (251)	45,5	76,2	93,8
Database and network professionals (252)	21,6	29,8	27,8
Employment status			
Self-employed	13,2	23,4	29,8
Employees	54,1	82,7	92,0
Age group			
Under 35 years	29,0	37,8	42,1
35–44 years	21,2	39,7	42,7
45–54 years	11,8	19,7	25,5
55 + years	5,3	9,0	11,5
Highest level of education attainment			
Master's and Doctoral	46,2	68,0	75,5
Higher professional or Bachelor's	10,4	18,7	23,0
Secondary	10,7	19,4	23,3

Chart A.5 ICT professionals in Czechia

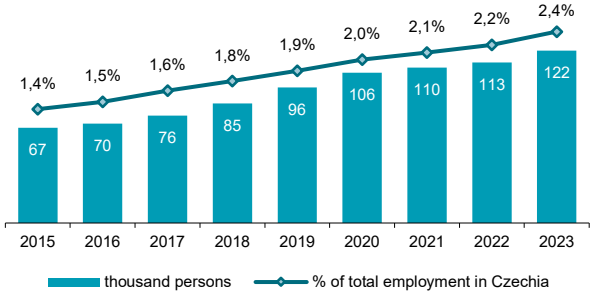


Chart A.6 ICT professionals in Czechia by gender

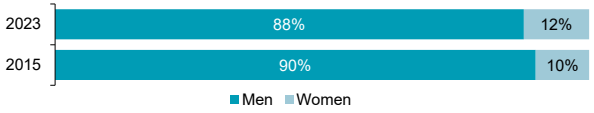
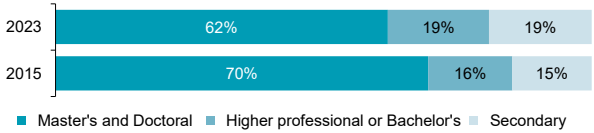


Chart A.7 ICT professionals in Czechia by level of education



Note: For greater reliability, the numbers of ICT specialists are calculated as three-year moving averages (e.g. 2023 is the average of 2022 to 2024)

Source: Czech Statistical Office, Labour Force Survey

Chart A.8 ICT professionals in EU countries in 2024
(% of total employment)

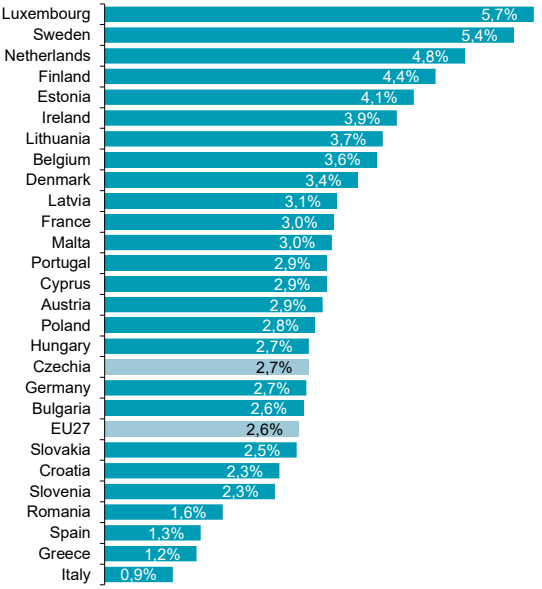
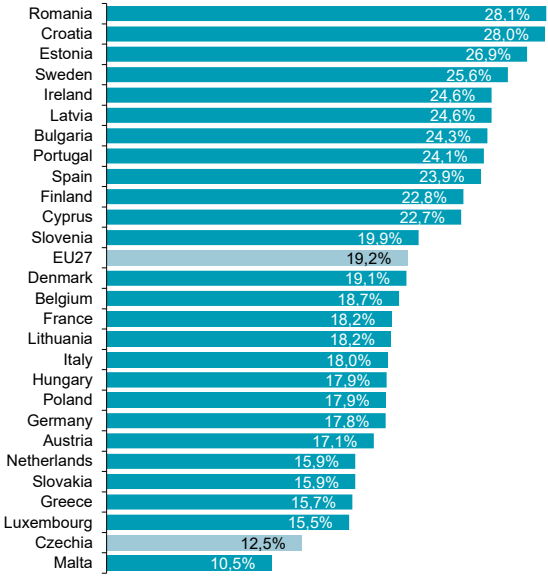


Chart A.9 Share of women among ICT professionals in 2024



Source: Eurostat LFS database and Czech Statistical Office own calculations

Chapter A: ICT specialists

Table A.3 ICT technicians in Czechia

Thousand persons

	2015	2020	2023
ICT technicians (CZ-ISCO 35), total	**65,4**	**74,9**	**67,7**
Men	59,8	69,0	60,4
Women	5,6	5,9	7,3
Occupation (CZ-ISCO)			
ICT operations and user support technicians (351)	51,0	63,4	56,6
Telecommunications and broadcasting technicians (352)	14,4	11,5	11,1
Employment status			
Self-employed	12,0	15,5	14,9
Employees	53,4	59,4	52,7
Age group			
Under 35 years	27,1	26,9	27,2
35–44 years	23,8	28,5	20,7
45–54 years	10,3	13,4	11,8
55 + years	4,2	6,1	8,0
Highest level of education attainment			
Tertiary	21,5	22,6	15,0
Secondary with A-level examination	40,6	48,1	48,2
Other (lower)	3,3	4,2	4,4

Chart A.10 ICT technicians in Czechia

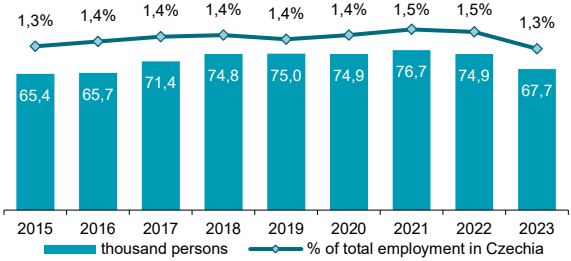


Chart A.11 ICT technicians in Czechia by gender

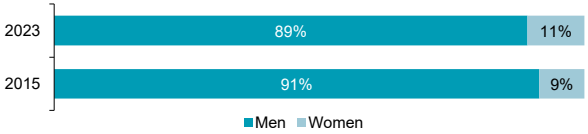
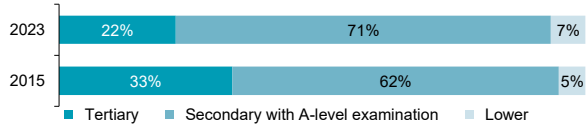


Chart A.12 ICT technicians in Czechia by level of education



Note: For greater reliability, the numbers of ICT specialists are calculated as three-year moving averages (e.g. 2023 is the average of 2022 to 2024)

Source: Czech Statistical Office, Labour Force Survey

Chart A.13 ICT technicians in 2024 (% of total employment)

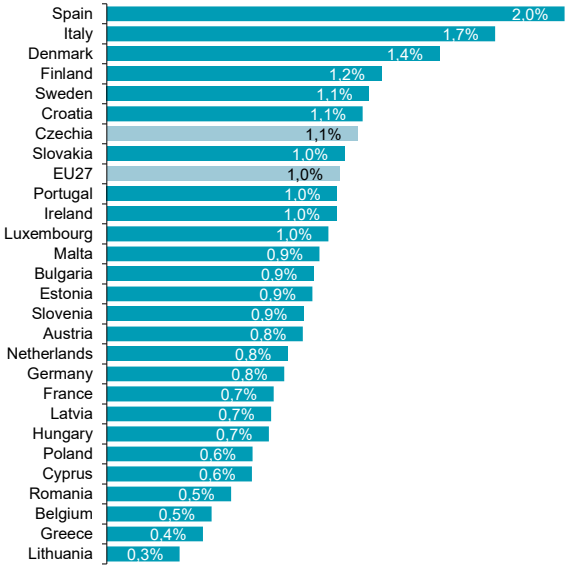
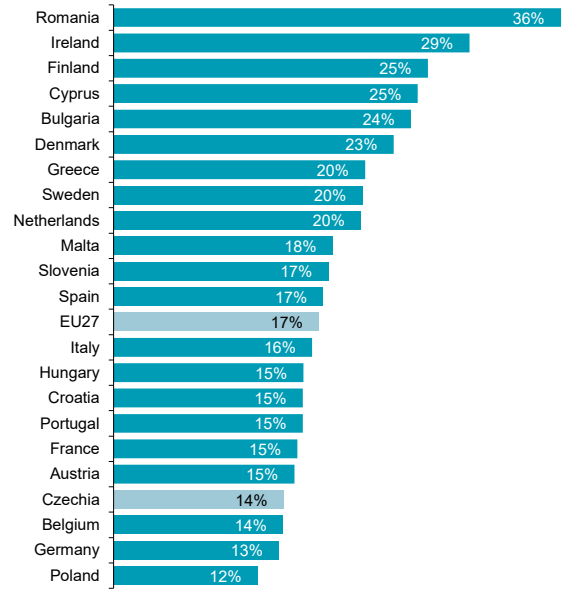


Chart A.14 Share of women among ICT technicians in 2024



Source: Eurostat LFS database and Czech Statistical Office own calculations

Table A.4 Wages of ICT professionals in Czechia

Average gross monthly wage in CZK

	2022	2023	2024
ICT professionals (CZ-ISCO 25), total	**82 441**	**88 025**	**94 197**
Men	84 526	90 633	97 156
Women	70 492	74 394	79 571
Citizenship			
Czech citizens	78 013	83 898	89 830
Foreigners	104 184	105 636	113 020
Sphere of activity (remuneration)			
Business (wage) sphere	84 052	89 651	96 130
Government (salary) sphere	49 736	52 907	53 981
Age group			
25–34 years	74 824	79 970	84 226
35–44 years	92 140	96 912	105 202
45–54 years	89 164	97 178	102 404
55 + years	72 319	76 992	82 851
Highest level of education attainment			
Master's and Doctoral	90 757	96 352	102 559
Bachelor's and Higher professional	78 783	84 997	91 631
Secondary with A-level examination	69 472	74 996	79 216

Chart A.15 Average gross monthly wage of ICT professionals in Czechia

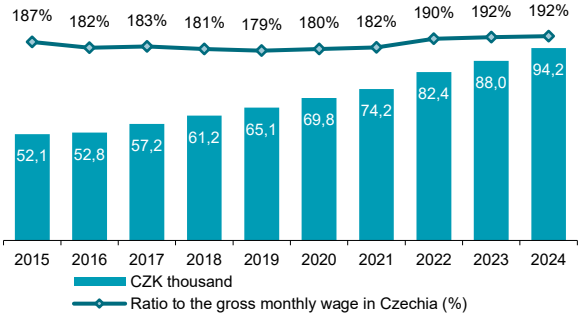
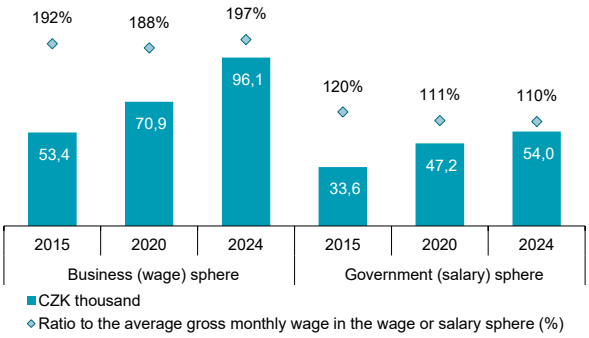


Chart A.16 Average gross monthly wage of ICT professionals in Czechia by sphere



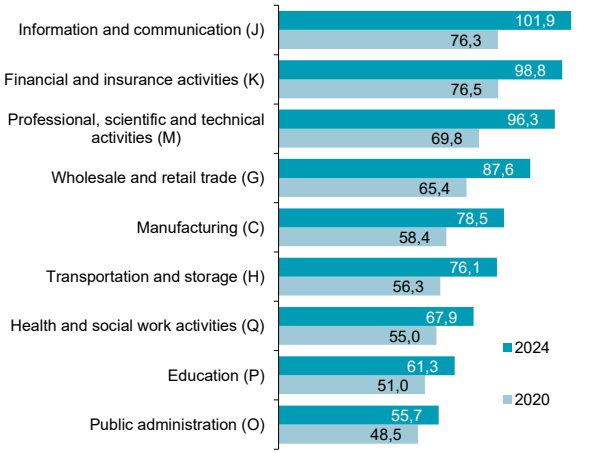
Source: Czech Statistical Office, Structural Earnings Statistics

Table A.5 Wages of ICT professionals in Czechia by occupation and industry

Average gross monthly wage in CZK

	2022	2023	2024
ICT professionals (CZ-ISCO 25), total	**82 441**	**88 025**	**94 197**
Occupation (CZ-ISCO)			
Software and applications developers and analysts (251)	**86 473**	**92 332**	**98 810**
Systems Analysts (2511)	82 521	83 735	89 745
Software Developers (2512)	93 017	102 875	108 951
Web and Multimedia Developers (2513)	63 172	80 568	84 448
Applications Programmers (2514)	81 813	84 977	92 862
Software testers (2519)	84 542	80 344	87 209
Database and network professionals (252)	**72 033**	**76 675**	**81 780**
Database Designers and Administrators (2521)	73 234	74 468	81 973
Systems Aministrators (2522)	68 462	73 870	78 938
Computer Network Professionals (2523)	81 458	84 834	88 598
Data security specialists (2529)	83 350	85 637	88 952
Industry by CZ-NACE section			
Manufacturing (C)	68 028	73 879	78 530
Wholesale and retail trade (G)	80 375	88 276	87 613
Transportation and storage (H)	65 510	71 386	76 104
Information and communication (J)	89 641	95 462	101 902
Financial and insurance activities (K)	86 134	92 718	98 762
Professional, scientific and technical activities (M)	82 735	90 978	96 259
Public administration (O)	51 040	54 376	55 738
Education (P)	52 567	57 101	61 322
Health and social work activities (Q)	59 473	63 014	67 872
Arts, entertainment and recreation (R)	60 769	68 383	70 198

Chart A.17 Average gross monthly wage of ICT professionals in Czechia in selected industries (CZK thousand)



Source: Czech Statistical Office, Structural Earnings Statistics

Tables A.6 Wages of ICT technicians in Czechia

Average gross monthly wage in CZK

	2022	2023	2024
ICT technicians (CZ-ISCO 35), total	**51 688**	**56 024**	**59 555**
Men	52 428	56 685	60 084
Women	46 823	51 699	56 061
Occupation (CZ-ISCO)			
ICT operations and user support technicians (351), total	**52 489**	**57 417**	**61 226**
ICT operations technicians (3511)	52 921	57 140	61 257
ICT user support technicians (3512)	54 897	61 854	65 444
Computer network and systems technicians (3513)	50 756	54 180	58 157
Web technicians (3514)	37 275	54 489	56 723
Telecommunications and broadcasting technicians (352)	**45 505**	**45 726**	**46 836**
Sphere of activity (remuneration)			
Business (wage) sphere	52 368	56 777	60 330
Government (salary) sphere	42 379	45 559	48 126
Highest level of education attainment			
Master's and Doctoral	60 426	63 768	68 843
Bachelor's and Higher professional	55 333	60 034	64 768
Secondary with A-level examination	47 467	52 730	55 756
Secondary without A-level examination	43 568	45 415	46 545

Chart A.18 Average gross monthly wage of ICT technicians in Czechia

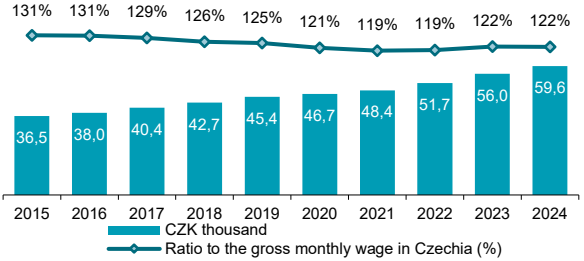
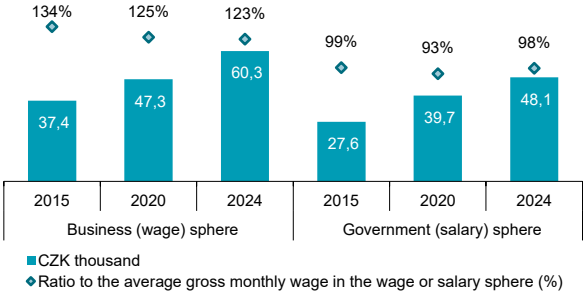


Chart A.19 Average gross monthly wage of ICT technicians in Czechia by sphere



Source: Czech Statistical Office, Structural Earnings Statistics

Chapter B: ICT students and graduates

Students of and graduates from ICT fields of education (in short ICT students and graduates) are **defined** by the International Standard Classification of Education: Fields of Education and Training 2013 used in the Czech Republic **(CZ-ISCED-F 2013).** ICT-related studies correspond to the broad filed of education **Information and Communication Technologies (class 06)** of this classification that involves detailed defined fields of education as follows:

Database and network design and administration (0612);

Software and applications development and analysis (0613);

ICT not elsewhere classified (0619) and

Inter-disciplinary programmes and qualifications involving ICT (0688).

Note: The 0619 and 0688 fields of education are merged into one category called here Inter-disciplinary and other ICT fields.

Detail description of **ISCED-F 2013** is available here:
https://unesdoc.unesco.org/ark:/48223/pf0000235049

Education at universities presented in this chapter for Czechia belongs to the tertiary level of education and **includes bachelor, follow-up master, master and doctoral study programmes.** Master and follow-up master study programmes together are called here master programmes. Studies can be delivered in full-time, distance, or combined type of education.

Data for the Czech Republic were obtained from data sources of the **Ministry of Education, Youth, and Sports (MEYS)**, namely from **the Union Information from Students' Registers (SIMS)**. The source database of SIMS is continually completed and updated, including retrospective corrections. Detailed information about the SIMS database is available here *(only in Czech)*: https://msmt.gov.cz/vzdelavani/vysoke-skolstvi/sdruzene-informace-matrik-studentu-sims

Data on university students are always as at **31 December of the reference year**; data on graduates are **for the entire calendar year**.

Numbers of students and graduates are given **as headcount**, i.e. each student is included in a particular piece of data only once, including students, who study in more study programmes or fields of education at the same time. The total numbers of students and graduates thus do not have to be equal to the sums of students and graduates of respective types of study programmes or field of education.

Eurostat database was used for **the international comparisons.** Data about number of students of and graduates from ICT fields of education contain information for tertiary level of education, i.e. including, for example, higher vocational schools. For this reason, the data for the Czech Republic from Eurostat differ from the data published by the CZSO available in the SIMS database. The main reason is a slightly different definition of levels of tertiary education.

For more information on ICT students see*:*
https://csu.gov.cz/students-of-ict-fields

Chapter B: ICT students and graduates

Table B.1 University students of ICT fields of education in Czechia by gender, age and citizenship

Number of students

	2022	2023	2024
Total	**23 494**	**24 508**	**24 933**
Men	19 318	20 111	20 315
Women	4 176	4 397	4 618
Age			
Under 20 years	3 039	3 056	3 021
20-24 years	15 303	16 133	16 780
25-29 years	3 554	3 642	3 562
30-34 years	884	900	837
35 + years	714	777	733
Citizenship			
Czech citizens, total	**15 895**	**16 540**	**16 974**
Men	13 530	14 034	14 255
Women	2 365	2 506	2 719
Foreigners, total	**7 599**	**7 968**	**7 960**
Slovakia	3 146	3 304	3 417
Ukraine	1 082	1 255	1 398
Russia	1 340	1 161	931
other countries	2 031	2 248	2 214

Chart B.1 University students of ICT fields of education in Czechia

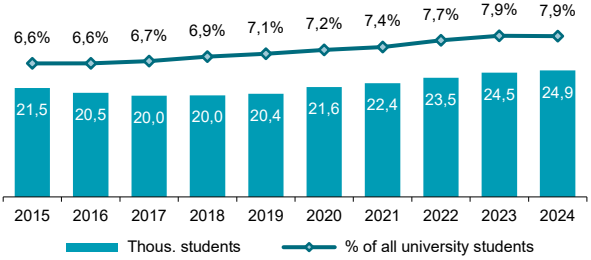


Chart B.2 University students of ICT fields of education in Czechia by gender

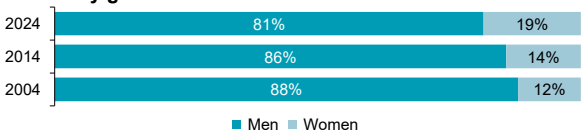
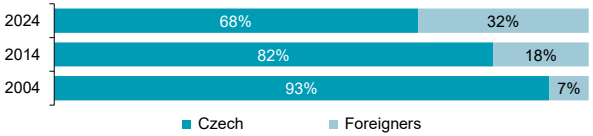


Chart B.3 University students of ICT fields of education in Czechia by citizenship



Source: Czech Statistical Office calculation based on MEYS database

Chart B.4 Tertiary students of ICT fields of education in 2023 (% of all tertiary students)

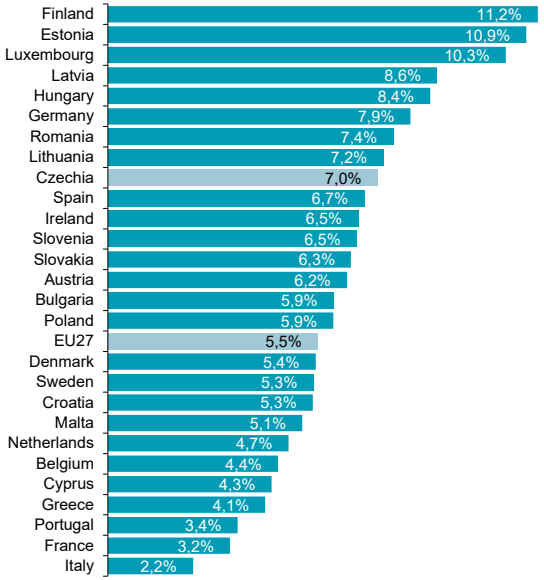
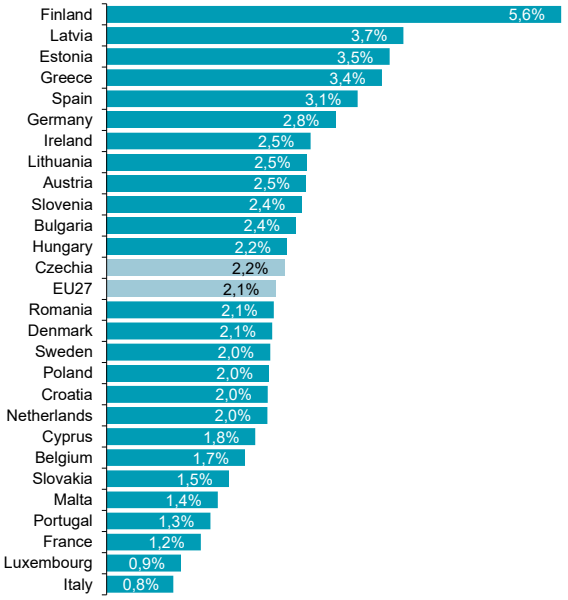


Chart B.5 Tertiary students of ICT fields of education in 2023 (% of population aged 20 to 29 years)



Source: Eurostat and Czech Statistical Office own calculations

Table B.2 University students of ICT fields of education in Czechia by selected characteristics

Number of students

	2022	2023	2024
Total	**23 494**	**24 508**	**24 933**
Students of public universities	22 639	23 471	23 846
Students of private universities	861	1 053	1 100
Studies			
Full-time studies	20 926	21 828	22 279
Distance and combined studies	2 586	2 715	2 680
Study programme			
Bachelor	17 200	17 953	18 319
Master	5 411	5 635	5 692
Doctoral	893	926	932
Field of study			
Software and applications development and analysis	17 467	18 598	18 910
Database and network design and administration	945	937	956
Inter-disciplinary and other ICT fields	5 114	5 028	5 109

Chart B.6 University students of ICT fields of education in Czechia by studies

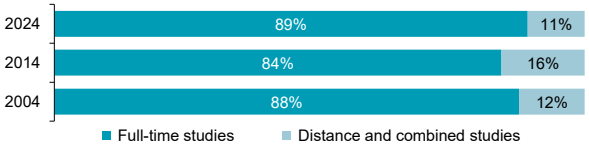


Chart B.7 University students of ICT fields of education in Czechia by study programme

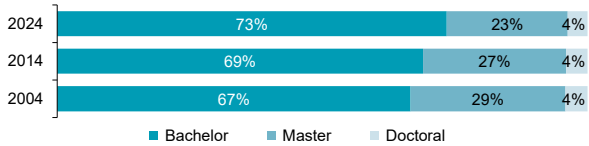
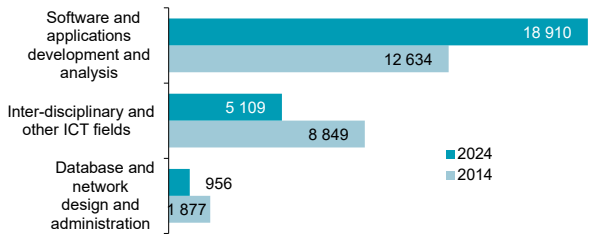
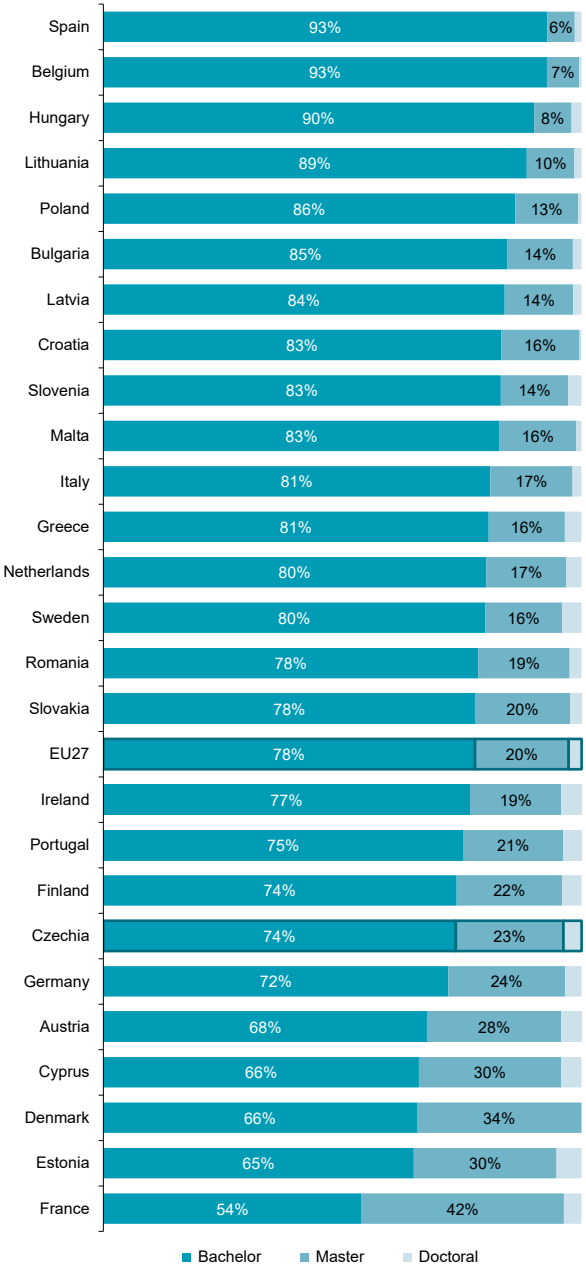


Chart B.8 University students of ICT fields of education in Czechia by field of study



Source: Czech Statistical Office calculation based on MEYS database

Chart B.9 Tertiary students of ICT fileds of education by study programme in 2023



Source: Eurostat and Czech Statistical Office own calculations

Chapter B: ICT students and graduates

Table B.3 University graduates from ICT fields of education in Czechia by gender, age and citizenship

Number of graduates

	2022	2023	2024
Total	**3 585**	**3 947**	**4 466**
Men	2 962	3 216	3 689
Women	623	731	777
Age			
20-24 years	1 936	2 057	2 253
25-29 years	1 383	1 590	1 789
30-34 years	154	174	261
35 + years	112	126	162
Citizenship			
Czech citizens, total	**2 579**	**2 846**	**3 165**
Men	2 206	2 417	2 691
Women	373	429	474
Foreigners, total	**1 006**	**1 101**	**1 301**
Slovakia	683	679	710
Russia	111	126	167
Ukraine	58	74	104
other countries	154	222	320

Chart B.10 University graduates from ICT fields of education in Czechia

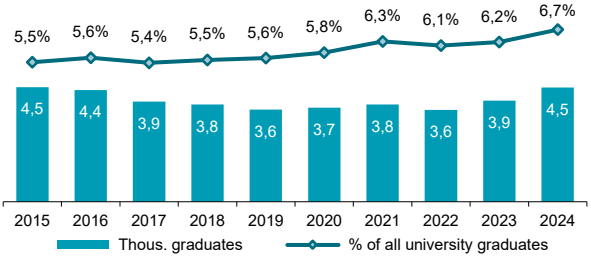


Chart B.11 University graduates from ICT fields of education in Czechia by gender

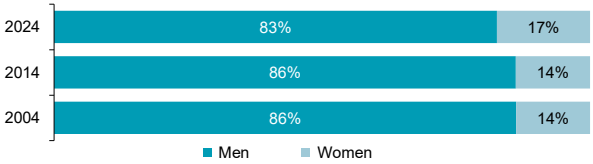
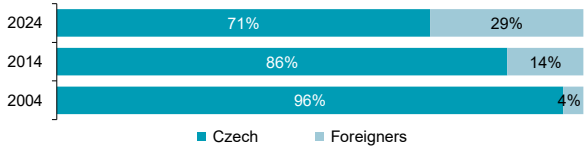
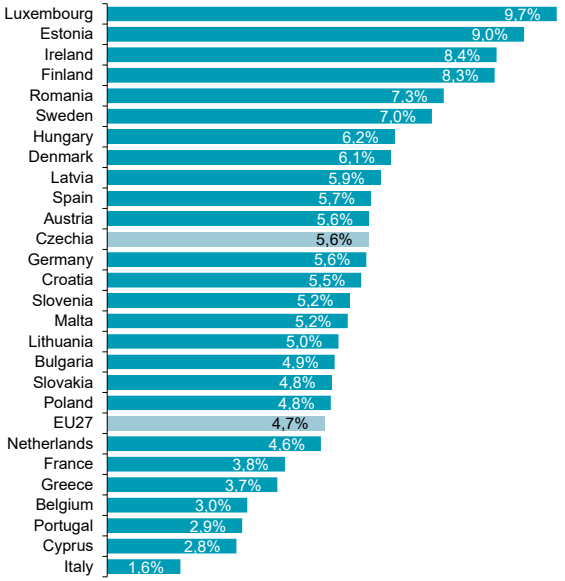


Chart B.12 University graduates from ICT fields of education in Czechia by citizenship

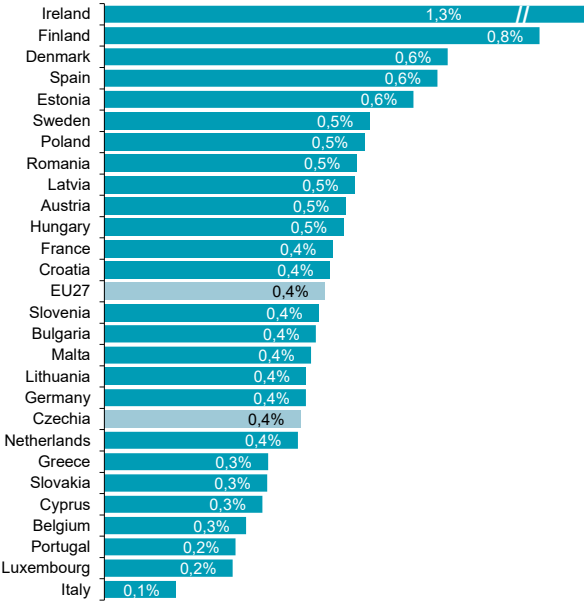


Source: Czech Statistical Office calculation based on MEYS database

Chart B.13 Tertiary graduates from ICT fields of education in 2023 (% of all tertiary graduates)



Graf B14 Tertiary graduates from ICT fields of education in 2023 (% of population aged 20 to 29 years)



Source: Eurostat and Czech Statistical Office own calculations

Table B.4 University graduates from ICT fields of education in Czechia by selected characteristics

Number of graduates

	2022	2023	2024
Total	**3 585**	**3 947**	**4 466**
Graduates from public universities	3 535	3 875	4 339
Graduates from private universities	50	72	127
Studies			
Full-time studies	3 269	3 602	4 046
Distance and combined studies	316	345	420
Study programme			
Bachelor	2 197	2 395	2 664
Master	1 302	1 477	1 686
Doctoral	86	75	116
Field of study			
Software and applications development and analysis	2 264	2 663	3 133
Database and network design and administration	279	240	244
Inter-disciplinary and other ICT fields	1 042	1 044	1 091

Chart B.15 University graduates from ICT fields of education in Czechia by studies

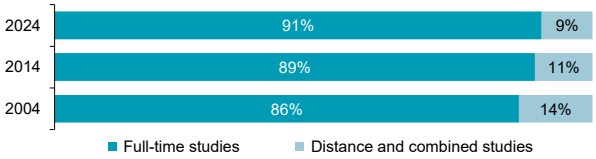


Chart B.16 University graduates from ICT fields of education in Czechia by study programme

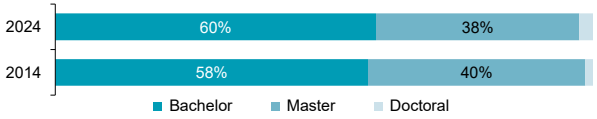
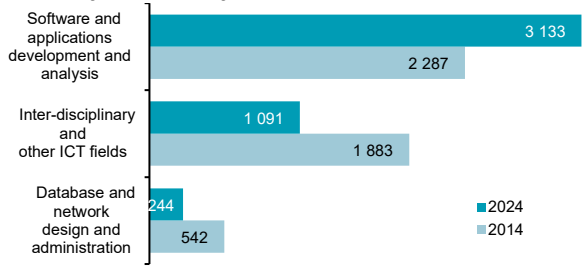
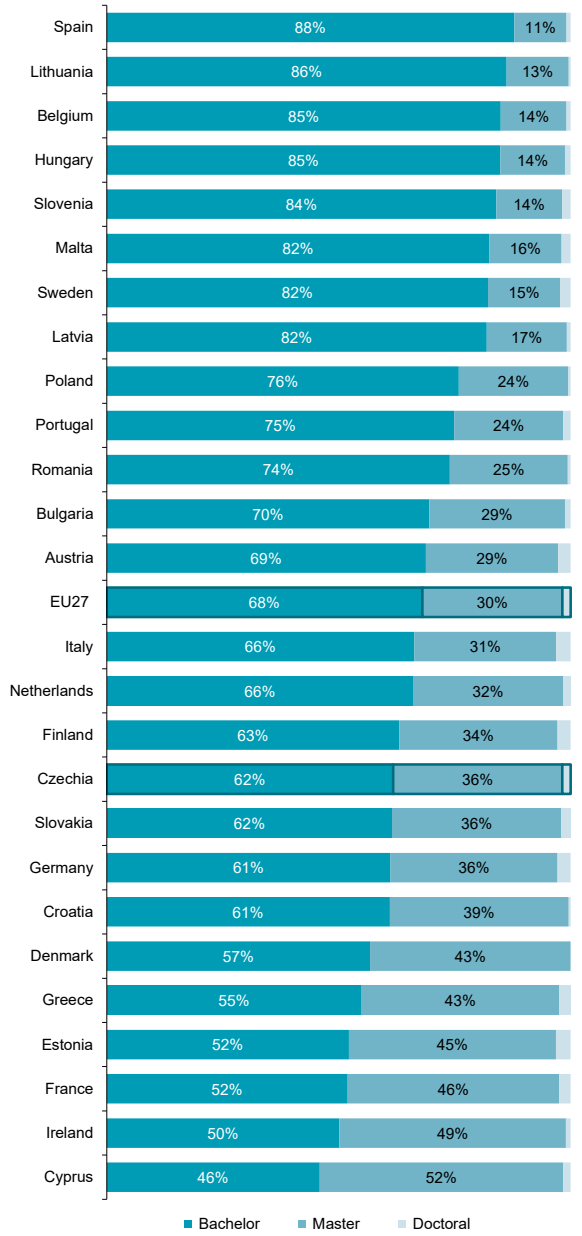


Chart B.17 University graduates from ICT fields of education in Czechia by field of study



Source: Czech Statistical Office calculation based on MEYS database

Chart B.18 Tertiary graduates from ICT fields of education by study programme in 2023



Source: Eurostat and Czech Statistical Office own calculations

Chart B.19 Share of women among all tertiary students of ICT fields of education in 2023

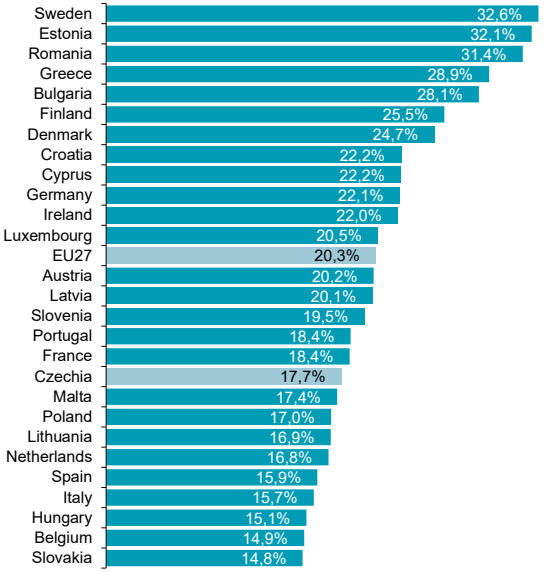
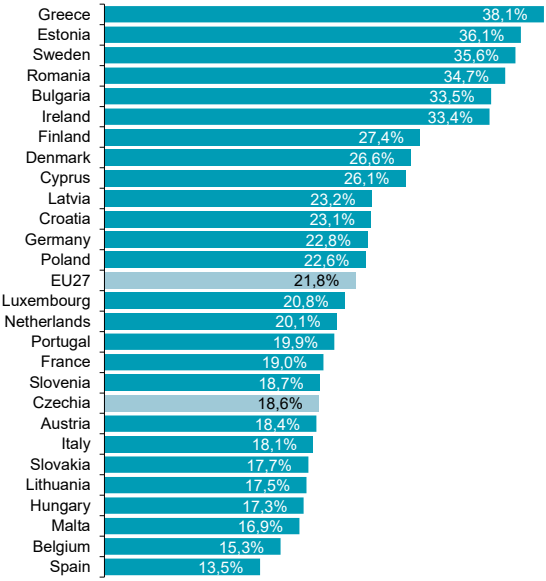


Chart B.20 Share of women in EU countries among all tertiary graduates from ICT fields of education in 2023



Source: Eurostat and Czech Statistical Office own calculations

Chapter C: ICT investment

Investments in information and telecommunication technologies (hereafter **ICT investment**) are the main channel through which digital transformation unfolds. Businesses and government institutions adopt digital tools and new business models enabled by digitalisation by investing in computer hardware, software and databases.

Investment here shall mean the **gross fixed capital formation** (GFCF: P.51), which includes mainly acquisitions of fixed assets (P.511) and expenses for transition of non-produced assets into ownership (P.512). The definition of GFCF follows **The European System of Regional and National Accounts** (ESA 2010): http://ec.europa.eu/eurostat/web/esa-2010

ICT investment is **defined** as the acquisition of ICT assets that have been used in production for more than one year. According to the System of National Accounts (SNA) and the ESA 2010, the following two items of non-financial assets (AN) should be classified as ICTs:

– **ICT equipment** (AN.1132) that includes two sub-items as follows:
  – **Computer hardware** (AN.11321)
  – **Telecommunications equipment** (AN.11322)

– **Software** (Computer software and databases = AN.1173) that includes two sub-items as follows:
  – **Computer software** (AN.11731) includes computer programmes, programme descriptions, and supporting materials for both systems and application software, including original development of software and its subsequent version as well as making copies.
  – **Databases** (AN.11732) include data files organised for cost-effective data access and use.

Data on investment in ICTs is available in the breakdown by **sector** based on the ESA 2010 Institutional Sectors Classification and by i**ndustry based on** CZ NACE classification.

Detail data for Czechia come from the **Annual National Accounts Statistics. Data for the 2024 are preliminary.** For more information, see: http://apl.czso.cz/pll/rocenka/rocenka.indexnu?mylang=EN

Data for the **international comparisons** come from the **Eurostat database** and refer to the reported or nearest available year. Measuring prices and volumes of ICT investment is a challenging task, due to frequent changes in quality and specifications of ICT asset. The ICT investment intensity is main indicator used for international comparison. This indicator measures ICT investment as a share of gross domestic product (GDP). It provides a measure of ICT diffusion throughout the economy.

For more information on ICT investment see*:*
https://csu.gov.cz/investment-in-ict

Chapter C: ICT investment

Table C.1 Total ICT investment in Czechia

CZK billion

	2022	2023	2024
Total	**317,4**	**345,3**	**372,4**
ICT equipment	90,3	84,0	95,6
Software	227,1	261,2	276,9
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	2,9	1,1	1,1
Mining and quarrying	0,5	0,8	0,3
Manufacturing	67,0	61,3	84,9
Electricity, gas and water supply	9,7	7,7	8,2
Construction	6,8	7,9	7,1
Wholesale and retail trade	23,7	24,6	22,3
Transportation and storage	9,6	8,5	8,2
Accommodation and food service activities	1,9	1,7	1,4
Information and communication	117,6	143,2	151,1
Financial and insurance activities	28,7	33,8	35,2
Real estate activities	3,9	3,8	2,4
Professional, scientific and technical activ.	17,0	17,2	20,7
Administrative and support service activities	5,0	7,0	6,5
Public administration and defence	12,4	14,2	12,2
Education	2,7	2,9	2,9
Human health and social work activities	4,7	6,2	4,3
Arts, entertainment and recreation	2,5	2,5	2,6
Other services	0,9	0,9	1,0

Chart C.1 Total ICT investment in Czechia

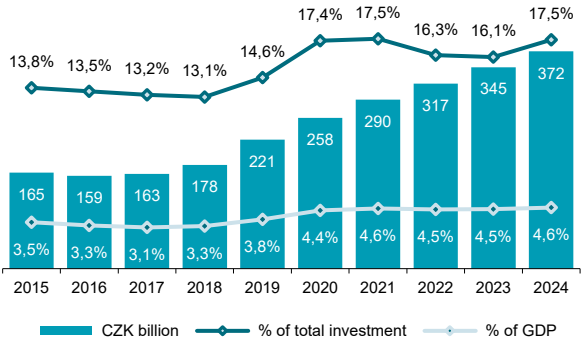
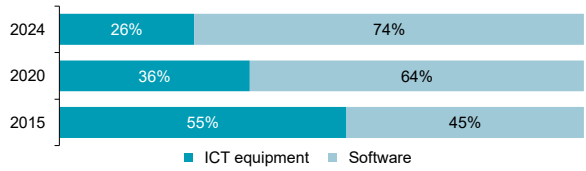


Chart C.2. ICT investment in Czechia by type of asset



Source: Czech Statistical Office, National Accounts

Chart C.3 Total ICT investment intensity in 2024
(ICT investment as % of GDP)

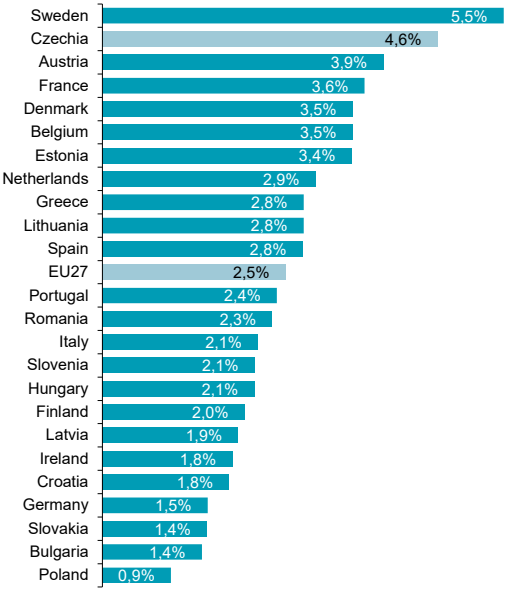
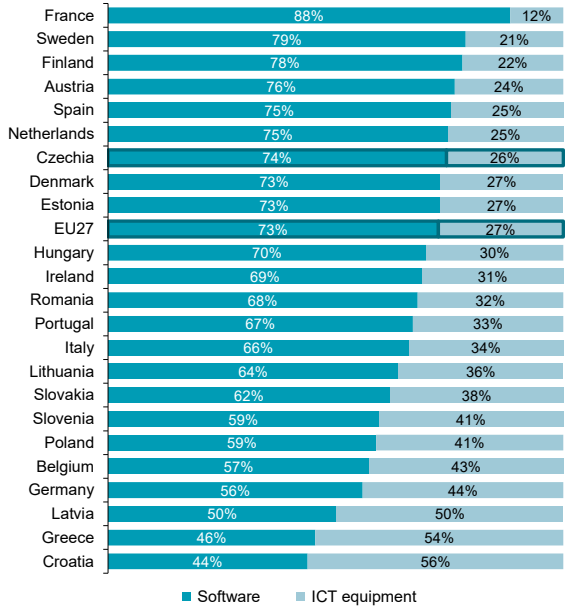


Chart C.4 ICT investment by type of asset in 2024



Source: The Eurostat National Accounts Database

Table C.2 ICT equipment investment in Czechia

CZK billion

	2022	2023	2024
Total	**90,3**	**84,0**	**95,6**
in government institutions	7,6	10,5	7,1
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	2,6	0,5	0,5
Mining and quarrying	0,2	0,6	0,1
Manufacturing	44,0	37,9	59,2
Electricity, gas and water supply	4,0	1,9	1,6
Construction	5,0	5,6	4,5
Wholesale and retail trade	7,3	6,7	3,4
Transportation and storage	2,3	2,0	0,9
Accommodation and food service activities	1,2	0,9	0,5
Information and communication	4,2	3,9	2,3
Financial and insurance activities	4,2	4,6	5,6
Real estate activities	1,9	2,7	1,2
Professional, scientific and technical activ.	3,6	3,7	6,4
Administrative and support service activities	1,2	1,7	0,9
Public administration and defence	3,2	4,1	2,9
Education	1,5	1,8	1,6
Human health and social work activities	2,5	4,0	2,4
Arts, entertainment and recreation	0,6	0,7	0,7
Other services	0,5	0,6	0,7

Chart C.5 ICT equipment investment in Czechia

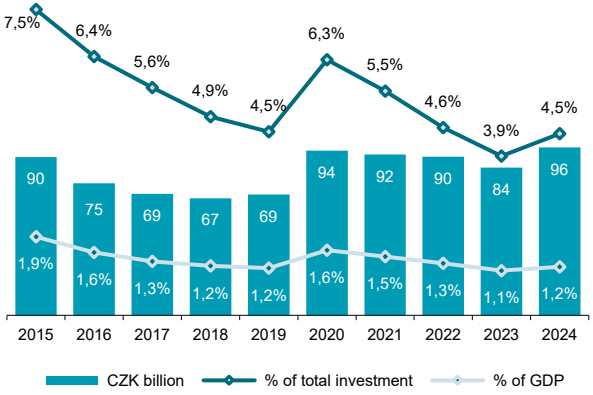
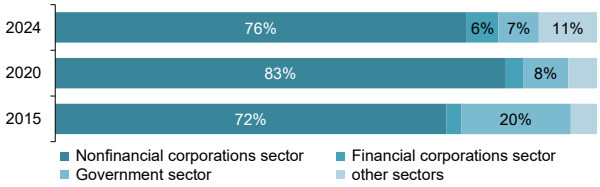


Chart C.6 ICT equipment investment in Czechia by sector



Source: Czech Statistical Office, National Accounts

Chart C.7 ICT equipment investment intensity in 2024
(ICT equipment investment as % of GDP)

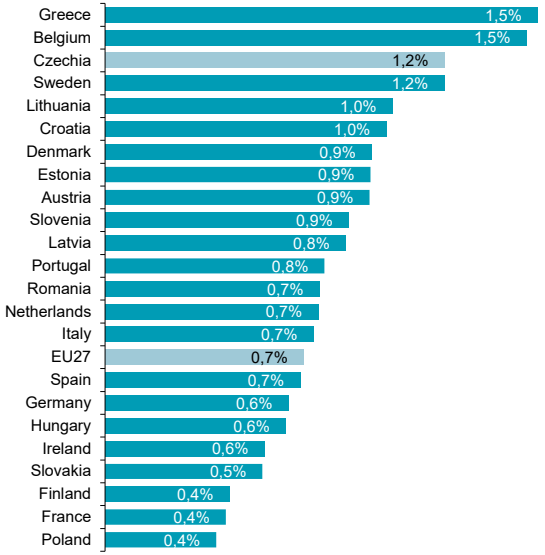
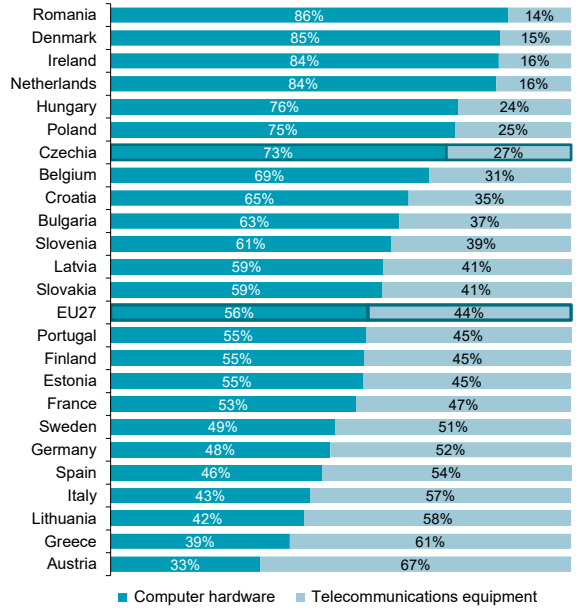


Chart C.8 ICT equipment investment by type of asset in 2024



Source: The Eurostat National Accounts Database

Table C.3 Software investment in Czechia

CZK billion

	2022	2023	2024
Total	**227,1**	**261,2**	**276,9**
in government institutions	11,7	13,6	12,7
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	0,2	0,5	0,6
Mining and quarrying	0,2	0,2	0,2
Manufacturing	23,0	23,5	25,7
Electricity, gas and water supply	5,7	5,8	6,6
Construction	1,8	2,3	2,5
Wholesale and retail trade	16,3	17,9	18,9
Transportation and storage	7,3	6,5	7,3
Accommodation and food service activities	0,7	0,8	0,9
Information and communication	113,4	139,2	148,7
Financial and insurance activities	24,5	29,2	29,5
Real estate activities	2,0	1,1	1,2
Professional, scientific and technical activ.	13,3	13,5	14,3
Administrative and support service activities	3,9	5,2	5,6
Public administration and defence	9,2	10,2	9,4
Education	1,3	1,1	1,3
Human health and social work activities	2,2	2,1	1,9
Arts, entertainment and recreation	1,9	1,8	2,0
Other services	0,3	0,3	0,3

Chart C.9 Software investment in Czechia

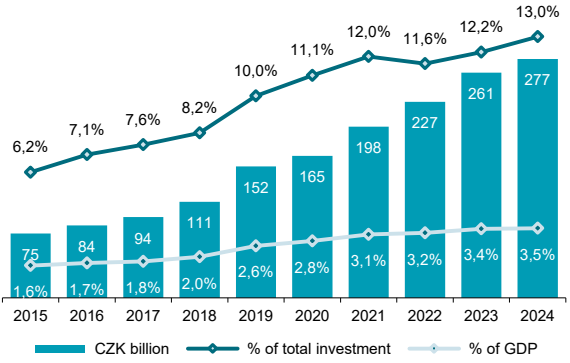
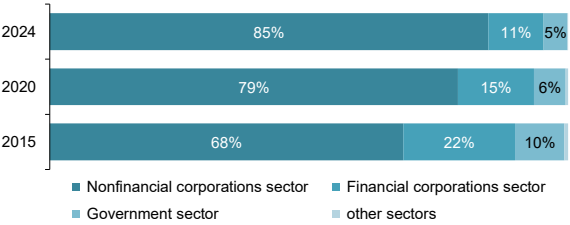


Chart C.10 Software investment in Czechia by sector



Source: Czech Statistical Office, National Accounts

Chart C.11 Software investment in 2024
(% of total investment)

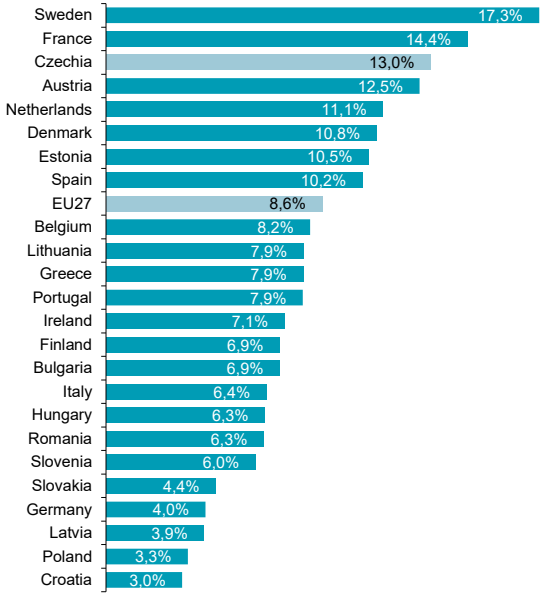
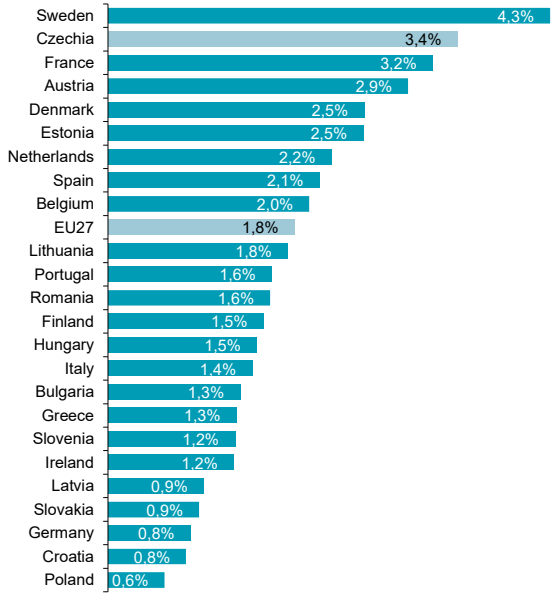


Chart C.12 Software investment intensity in 2024
(Software investment as % of GDP)



Source: The Eurostat National Accounts Database

Chapter D: ICT research and development

Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge (OECD 2015, Frascati manual).

ICT R&D expenditure

This sub-chapter presents data on financial resources devoted to the research and development of ICT equipment and software (hereafter **ICT R&D expenditure**) regardless of the main economic activity and sector of R&D performers. ICT is **classified** here into two main categories according to the groups of **the Classification of Products by Activity (CZ-CPA)** as follows:

- **ICT equipment includes:** 26.1 Electronic components and boards; 26.2 Computers and peripheral equipment; 26.3 Communication equipment; 26.4 Consumer electronics and 26.8 Magnetic and optical media.
- **ICT services, applications, data and software (**hereafter **software) include:** 58.2 Software publishing; 61 Telecommunications services; 62 Computer programming, consultancy & related services and 63.1 Data processing, hosting & related services; web portals.

Detailed explanations of individual items in the CZ-CPA classification are available here: https://ec.europa.eu/eurostat/web/cpa

Data in this sub-chapter are based on the results of **the special module** on R&D expenditures in selected **technological areas** that is included in the Czech annual questionnaire on R&D. ICT R&D expenditure figures **are available** by sectors of R&D performance and industry (CZ-NACE) classification. **International comparison is not available** for this data set. For more information see: https://csu.gov.cz/research-and-development-rad

R&D expenditures and personnel in the ICT sector industries

This sub-chapter focuses on R&D expenditures and R&D personnel in enterprises with the main economic activity that belongs to the **ICT sector.** In general, the term ICT sector includes both: **ICT manufacturing** and **ICT services** which are associated with the production and/or distribution of information and communication technologies (ICT) and provision of related services.

Industries of ICT sector include all enterprises with the prevailing economic activity according to the codes of the Classification of Economic Activities (**CZ-NACE**) that fulfill the official OECD definition of ICT sector. For more information, see **Chapter G.**

Data for the **international comparisons** come from the **Eurostat database** and refer to the reported or nearest available year.

Note: Data on R&D expenditure in the ICT sector has less predictive value than the figures for the total ICT R&D expenditure included in first sub-chapter. Enterprises within the ICT sector can perform their R&D activities in areas other than ICT and vice versa enterprises outside the ICT sector can exercise their R&D activities in the ICT field.

For detailed data and information for the ICT sector see:
https://csu.gov.cz/ict-sector

Chapter D: ICT research and development

Table D.1 Research and development expenditures related to ICT in Czechia - Total ICT R&D expenditures

CZK million

	2022	2023	2024
Total	**31 643**	**33 556**	**36 863**
financed from the government funds	1 668	1 810	2 229
Product of R&D activity			
ICT equipment	8 164	9 278	8 737
ICT services, apps or software (software)	23 479	24 278	28 126
R&D performer (sector)			
Enterprises (BES), total	**30 469**	**31 651**	**34 599**
Domestic-controlled enterprises	9 822	9 511	10 741
Foreign-controlled enterprises	20 647	22 140	23 858
Universities (HES)	**1 049**	**885**	**1 477**
Other R&D performers	**126**	**1 020**	**787**

Chart D.1 Total ICT related R&D expenditures in Czechia

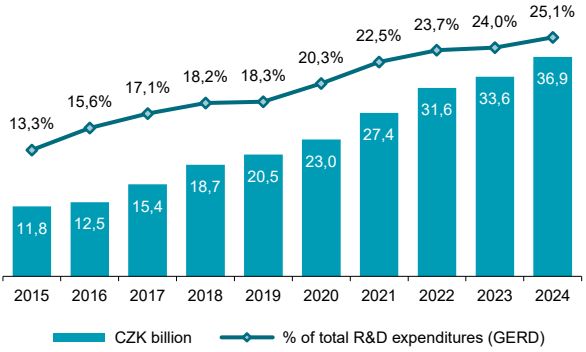


Chart D.2 ICT R&D expenditures in Czechia by product of R&D

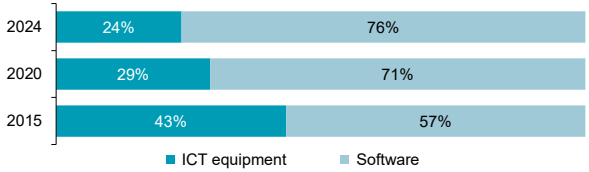
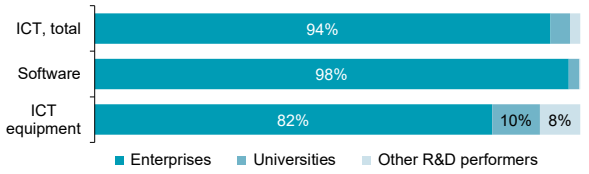


Chart D.3 ICT R&D expenditures in Czechia by performer; 2024



Source: The Czech Statistical Office, Annual R&D survey

Table D.2 R&D expenditures related to software in Czechia - Software R&D expenditures

CZK million

	2022	2023	2024
Total	**23 479**	**24 278**	**28 126**
financed from the government funds	581	551	823
R&D performer (sector)			
Enterprises (BES), total	**23 108**	**23 978**	**27 451**
Domestic-controlled enterprises	7 331	7 872	9 059
Foreign-controlled enterprises	15 777	16 107	18 392
Universities (HES)	**298**	**231**	**615**
Other R&D performers	**73**	**69**	**61**

Chart D.4 Software related R&D expenditures in Czechia

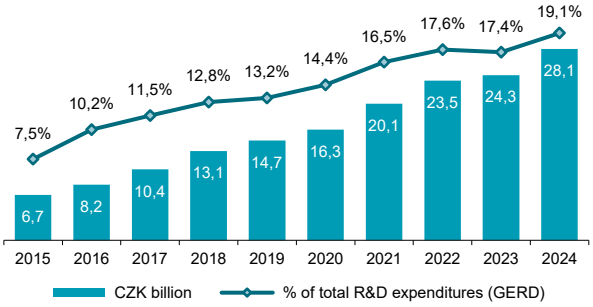


Chart D.5 Software R&D expenditures by performer in 2024

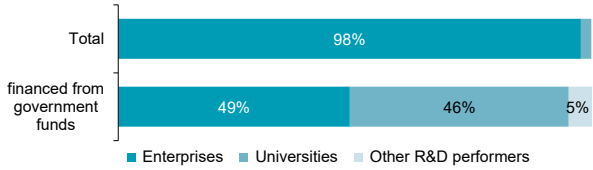
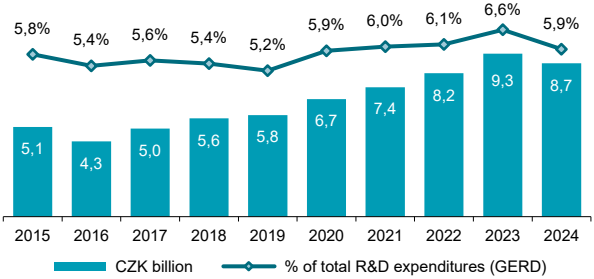


Chart D.6 ICT equipment related R&D expenditures in Czechia



Source: The Czech Statistical Office, Annual R&D survey

Table D.3 ICT R&D expenditures in the Czech business enteprise sector - ICT R&D expenditures in enterprises

CZK million

	2022	2023	2024
Total	**30 469**	**31 651**	**34 599**
financed from government funds	849	545	584
Product of R&D activity			
ICT equipment	7 361	7 673	7 149
ICT services, apps or software (software)	23 108	23 978	27 451
Size group of enterprises (employees)			
Small enterprises (0-49)	3 436	3 810	4 172
Medium enterprises (50-249)	4 819	5 133	5 788
Large enterprises (250+)	22 214	22 708	24 639
Ownership of enterprises			
Domestic-controlled enterprises	9 822	9 511	10 741
Foreign-controlled enterprises	20 647	22 140	23 858
Industry (CZ-NACE) of enterprises			
ICT sector industries, total	**21 895**	**22 233**	**24 285**
ICT manufacturing	484	530	654
ICT services	21 412	21 703	23 632
Other industries	**8 574**	**9 418**	**10 314**

Chart D.7 ICT R&D expenditures in enteprises in Czechia

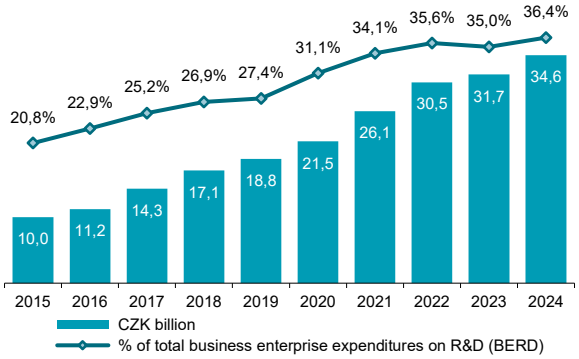
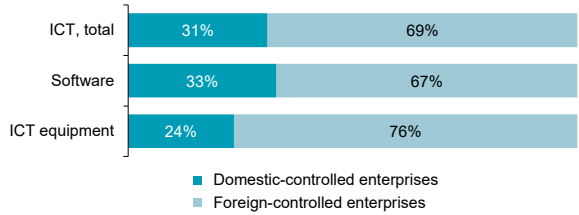


Chart D.8 ICT R&D expenditures in Czechia by product of R&D activity and ownership of enterprises in 2024



Source: The Czech Statistical Office, Annual R&D survey

Table D.3 ICT R&D expenditures in enteprises in Czechia by product of R&D activity in 2024

CZK million

	Total	ICT equipment	Software
Total	**34 599**	**7 149**	**27 451**
financed from government funds	584	182	402
Size group of enterprises (employees)			
Small enterprises (0-49)	4 172	758	3 414
Medium enterprises (50-249)	5 788	1 340	4 448
Large enterprises (250+)	24 639	5 050	19 589
Ownership of enterprises			
Domestic-controlled enterprises	10 741	1 682	9 059
Foreign-controlled enterprises	23 858	5 466	18 392
Industry (CZ-NACE) of enterprises			
ICT sector industries, total	**24 285**	**1 637**	**22 649**
ICT manufacturing	654	424	229
ICT services	23 632	1 212	22 419
Other industries	**10 314**	**5 512**	**4 802**

Chart D.9 ICT R&D expenditures in enteprises in Czechia by product of R&D activity

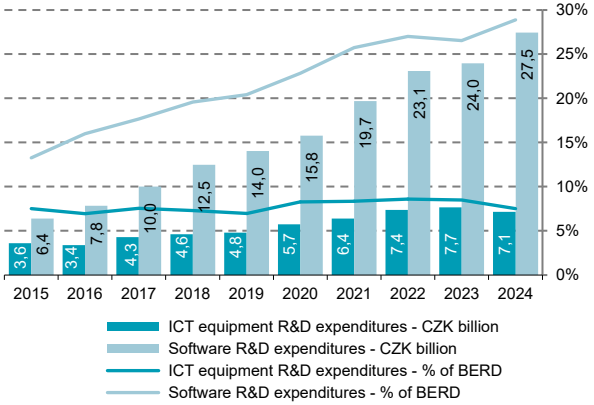
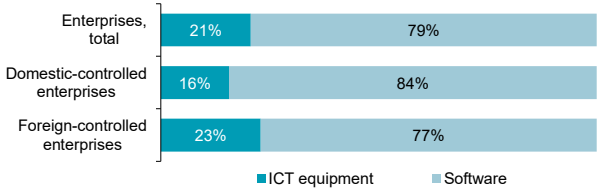


Chart D.10 ICT R&D expenditures in Czechia by ownership of enterprises and product of R&D activity



Source: The Czech Statistical Office, Annual R&D survey

Table D.5 R&D expenditures in the Czech business enterprise ICT sector - R&D expenditures in the ICT sector

CZK million

	2022	2023	2024
Total	**23 035**	**23 530**	**26 301**
financed from government funds	802	486	502
Product of R&D activity			
ICT equipment	1 789	1 322	1 637
ICT services, apps or software (software)	20 107	20 911	22 649
Other non ICT related products	1 140	1 298	2 016
Size group of enterprises (employees)			
Small enterprises (0-49)	2 918	3 643	3 736
Medium enterprises (50-249)	3 959	3 948	4 633
Large enterprises (250+)	16 159	15 939	17 932
Ownership of enterprises			
Domestic-controlled enterprises	8 134	7 688	8 899
Foreign-controlled enterprises	14 901	15 842	17 402
Subsectors of the ICT sector			
ICT manufacturing, total	**1 054**	**1 172**	**1 293**
Manufacture of electronic components	498	569	573
Manufacture of ICT equipments	556	603	721
ICT services, total	**21 982**	**22 359**	**25 008**
Computer programming, consultancy and related activities	17 624	18 644	20 583
Other industries of ICT services	4 358	3 714	4 425

Chart D.11 R&D expenditures in the ICT sector in Czechia

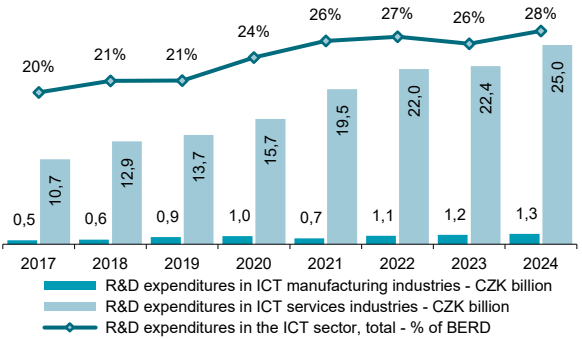
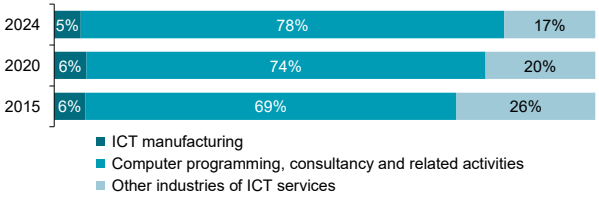


Chart D.12 R&D expenditure in ICT sector in Czechia by industry



Source: The Czech Statistical Office, Annual R&D survey

Chart D.13 R&D expenditures in the ICT sector in 2023
(% of GDP)

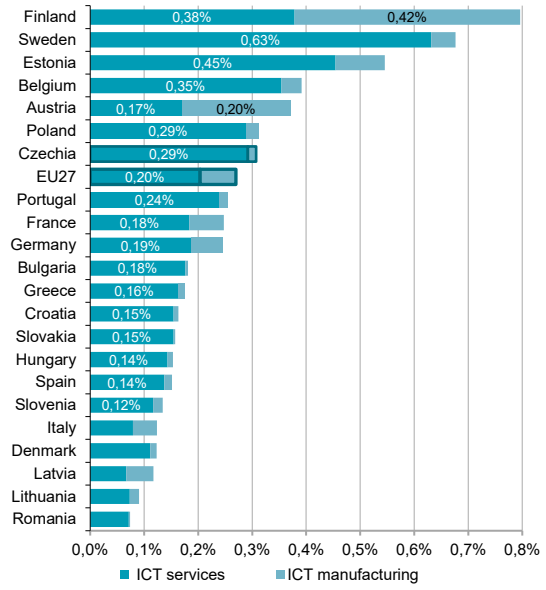
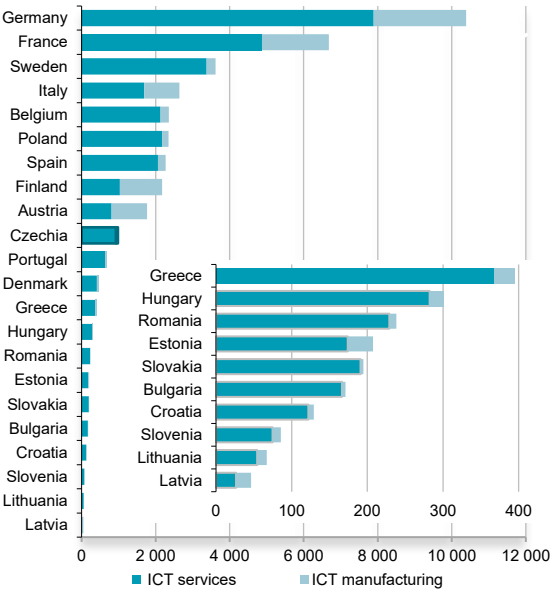


Chart D.14 R&D expenditures in the ICT sector in 2023
(EUR million)



Source: Eurostat R&D Database and Czech Statistical Office own calculations

Table D.6 R&D personnel in the Czech business enterprise ICT sector - R&D personnel in the ICT sector

Full Time Equivalent Numbers (FTE)

	2022	2023	2024
Total	**14 132**	**12 826**	**13 702**
men	11 911	10 912	11 613
women	2 221	1 914	2 089
Size group of enterprises (employees)			
Small enterprises (0-49)	2 588	2 672	2 527
Medium enterprises (50-249)	2 779	2 574	2 814
Large enterprises (250+)	8 765	7 580	8 361
Ownership of enterprises			
Domestic-controlled enterprises	6 070	5 056	5 631
Foreign-controlled enterprises	8 062	7 770	8 071
Subsectors of the ICT sector			
ICT manufacturing, total	**857**	**620**	**630**
Manufacture of electronic components	350	154	177
Manufacture of ICT equipments	506	466	453
ICT services, total	**13 276**	**12 206**	**13 072**
and related activities	10 947	10 327	10 849
Other industries of ICT services	2 329	1 879	2 224

Chart D.15 R&D personnel in ICT sector in Czechia

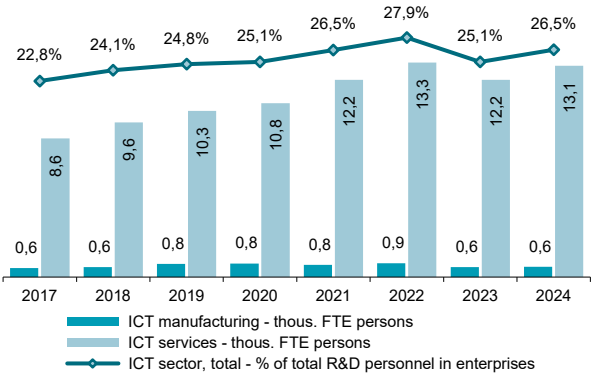
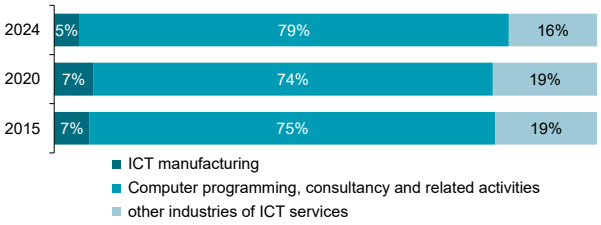


Chart D.16 R&D personnel in ICT sector in Czechia by industry



Source: The Czech Statistical Office, Annual R&D survey

Chapter E: International trade in ICT goods

Goods in the field of information and communication technologies (hereinafter referred to as ICT goods) are defined as goods whose main function is to carry out or enable communication or processing of information, including their recording, transmission and display by electronic means (OECD 2009).

Statistics on international trade in goods track actual trade in goods between Czech and foreign entities, i.e. trade where there is a change of ownership between residents and non-residents. For more information see: https://csu.gov.cz/international-trade-in-goods-change-of-ownership

These data **differ** from international data published by Eurostat, which provides international trade statistics on the physical movement of goods across borders. The international comparison on international trade in ICT goods based on the concept of change of ownership between residents and non-residents is not available.

Statistics on Cross-border movements of goods tell exclusively about the physical movement of goods across the borders of the Czech Republic, regardless of whether there is trade between Czech and foreign entities. These data are available for international comparison and in a more detailed breakdown, however, they do not indicate the actual trade in these goods. For more information see: https://csu.gov.cz/cross-border-movements-of-goods

More detailed information on the issue of the dual concept of international trade can be found on the link: https://csu.gov.cz/2-vzonu_m

The main link to CZSO International trade statistics is available here: https://csu.gov.cz/international-trade-in-goods-change-of-ownership

The list of ICT goods was first defined in 2003 by the OECD according to the International Customs Nomenclature of the **Harmonized Commodity Description** and Coding System of the World Customs Organization of 2002. At present, the list of ICT goods from the HS is based on 2022.

The Czech Statistical Office has grouped individual items of ICT goods defined according to the HS 2022 nomenclature and the **Combined Nomenclature** (CN) of the European Union into the following five main categories:

- **Computer equipment and peripherals,**
- **Communication equipment,**
- **Consumer electronics,**
- **Electronic components,**
- **ICT parts n.e.s.**

Detailed data for **Czechia** comes from External Trade Statistics Database (https://apl.czso.cz/pll/stazo/STAZO_ZO.STAZO) and the Cross-border movements of goods database (http://apl.czso.cz/pll/stazo/STAZO.STAZO).

Data for **international comparisons** come from **Eurostat** data sources. Data for international comparisons refer to the reported or nearest available year. More information at:
https://ec.europa.eu/eurostat/web/international-trade-in-goods/overview

For further information on ICT external trade see:
https://csu.gov.cz/international-trade-in-ict-goods

Chapter E: International trade in ICT goods

Table E.1 International trade in ICT goods in Czechia

CZK million

	2022	2023	2024
Exports of ICT goods, total	**336 736**	**280 713**	**335 568**
Computers and peripheral equipment	147 426	111 395	161 801
Communication equipment	58 437	59 781	67 423
Consumer electronics	50 655	46 630	42 323
Electronic components	31 189	27 926	29 128
ICT parts n.e.s.	49 028	34 981	34 893
% of total goods exports from Czechia	**7,6%**	**6,3%**	**7,2%**
Imports of ICT goods, total	**406 026**	**370 152**	**431 034**
Computers and peripheral equipment	125 220	104 046	131 539
Communication equipment	86 352	92 821	101 919
Consumer electronics	44 333	39 524	42 032
Electronic components	98 728	91 791	100 426
ICT parts n.e.s.	51 392	41 969	55 116
% of total goods imports to Czechia	**8,8%**	**8,6%**	**9,7%**

Chart E.1 International trade in ICT goods in Czechia by commodities in 2024

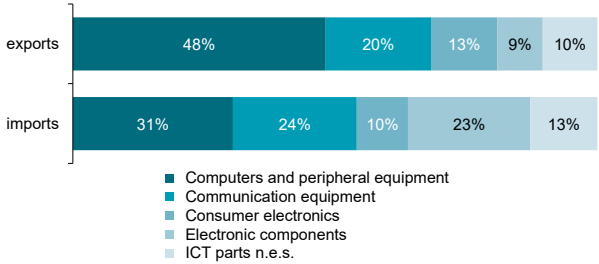


Chart E.2 ICT goods exports from Czechia by countries

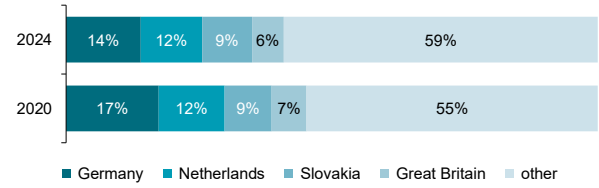
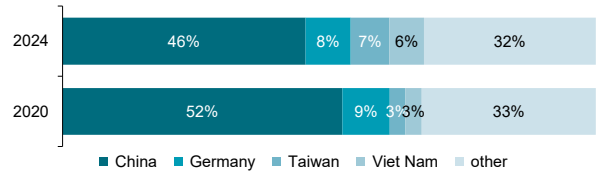


Chart E.3 ICT goods imports to Czechia by countries



n.e.s. = not elsewhere specified

Source: The Czech Statistical Office, International Trade Database

Table E.2 International trade in Computers and peripheral equipment in Czechia

CZK million

	2022	2023	2024
Exports of Computers and p. e., total	**147 426**	**111 395**	**161 801**
Portable computers	10 764	11 993	12 099
Other computers	78 012	54 253	85 877
Computer peripherals, total	58 650	45 149	63 825
Storage units	32 461	12 826	29 286
Sound, video, network and similar cards	13 922	15 513	16 025
Printers, copying or faxing machines	3 703	7 161	8 194
Other input or output peripherals (keybords, monitors, scanners etc.)	8 564	9 649	10 319
% of total goods exports from Czechia	**3,3%**	**2,5%**	**3,5%**
Imports of Computers and p. e., total	**125 220**	**104 046**	**131 539**
Portable computers	33 080	26 684	32 276
Other computers	34 295	25 624	32 416
Computer peripherals, total	57 845	51 738	66 848
Storage units	21 655	14 734	22 656
Sound, video, network and similar cards	18 301	15 472	20 316
Printers, copying or faxing machines	5 754	7 357	7 650
Other input or output peripherals (keybords, monitors, scanners etc.)	12 135	14 174	16 226
% of total goods imports to Czechia	**2,7%**	**2,4%**	**3,0%**

Chart E.4 International trade in Computers and peripheral equipment in Czechia by commodities in 2024

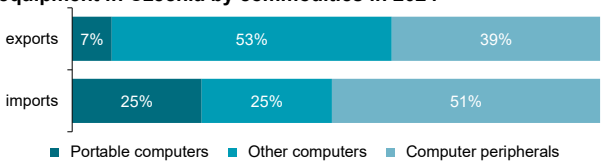


Chart E.5 Computers and peripheral equipment exports from Czechia by countries

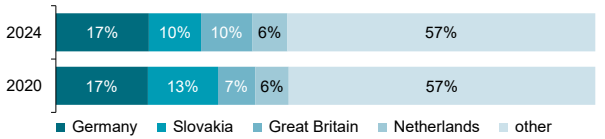
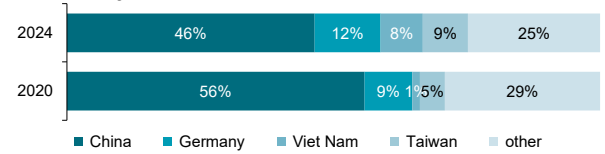


Chart E.6 Computers and peripheral equipment imports to Czechia by countries



Source: The Czech Statistical Office, International Trade Database

Table E.3 International trade in Communication equipment in Czechia

CZK million

	2022	2023	2024
Exports of Communic. equipment, total	**58 437**	**59 781**	**67 423**
Mobile phones	24 568	28 695	35 926
Telecommunication and internet signal transmitters and repeaters	30 615	27 773	27 982
Other communication equipment	3 254	3 313	3 515
% of total goods exports from Czechia	**1,3%**	**1,3%**	**1,4%**
Imports of Communic. equipment, total	**86 352**	**92 821**	**101 919**
Mobile phones	48 942	51 204	57 515
Telecommunication and internet signal transmitters and repeaters	34 604	37 784	41 169
Other communication equipment	2 806	3 833	3 235
% of total goods imports to Czechia	**1,9%**	**2,1%**	**2,3%**

Chart E.7 International trade in Communication equipment in Czechia by commodities in 2024

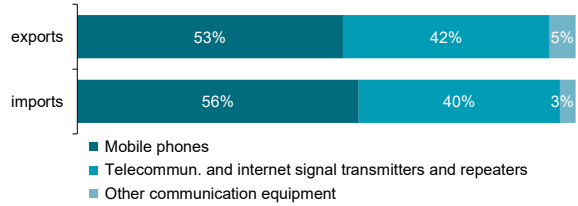


Chart E.8 Communication equipment exports from Czechia by countries

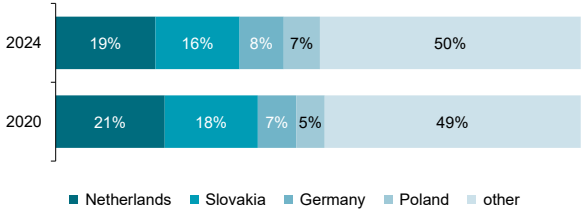
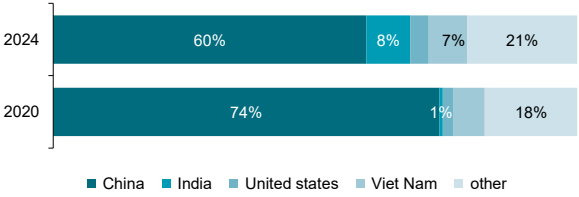


Chart E.9 Communication equipment imports to Czechia by countries



Source: The Czech Statistical Office, International Trade Database

Table E.4 International trade in Consumer electronics in Czechia

CZK million

	2022	2023	2024
Exports of Consumer electronics, total	**50 655**	**46 630**	**42 323**
Radio receivers	2 100	4 094	3 429
TV receivers	7 546	4 640	5 703
Digital cameras	3 933	4 880	4 691
Gaming consoles	6 870	6 358	4 985
Other sound and image recording and reproducing apparatuses	2 526	828	760
Non-recorded media	4 325	4 323	4 210
Consumer electronics accessories*	23 354	21 508	18 545
% of total goods exports from Czechia	**1,1%**	**1,0%**	**0,9%**
Imports of Consumer electronics, total	**44 333**	**39 524**	**42 032**
Radio receivers	2 081	762	658
TV receivers	8 991	7 727	8 209
Digital cameras	9 139	9 050	10 793
Gaming consoles	5 787	5 498	3 455
Other sound and image recording and reproducing apparatuses	2 102	1 225	1 306
Non-recorded media	1 639	1 228	1 449
Consumer electronics accessories*	14 595	14 034	16 162
% of total goods imports to Czechia	**1,0%**	**0,9%**	**0,9%**

** Monitors and projectors; Microphones and stands there for; Loudspeakers; Headphones, earphones and combined microphone/speaker sets; Audio-frequency electric amplifiers; Electric sound amplifier sets*

Chart E.10 International trade in Consumer electronics in Czechia by commodities in 2024

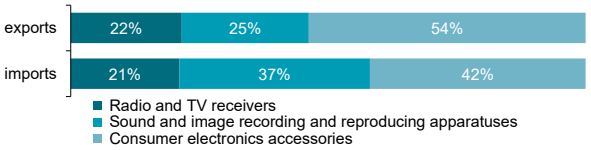


Chart E.11 Consumer electronics exports from Czechia by countries

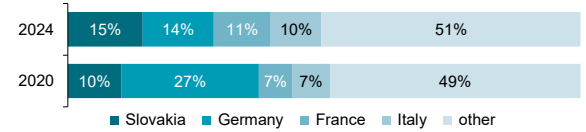
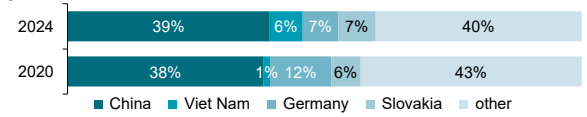


Chart E.12 Consumer electronics imports to Czechia by countries



Source: The Czech Statistical Office, International Trade Database

Table E.5 International trade in Electronic components in Czechia

CZK million

	2022	2023	2024
Exports of Electronic components, total	**31 189**	**27 926**	**29 128**
Processors	12 472	10 864	11 672
Printed circuits	4 042	4 525	4 458
Semiconductors, diodes and transistors	7 993	6 734	5 921
Other electronic components	6 683	5 803	7 076
% of total goods exports from Czechia	**0,7%**	**0,6%**	**0,6%**
Imports of Electronic components, total	**98 728**	**91 791**	**100 426**
Processors	36 530	36 085	41 176
Printed circuits	13 307	11 922	12 935
Semiconductors, diodes and transistors	23 880	18 690	15 008
Other electronic components	25 010	25 094	31 308
% of total goods imports to Czechia	**2,1%**	**2,1%**	**2,3%**

Chart E.13 International trade in Electronic components in Czechia by commodities in 2024

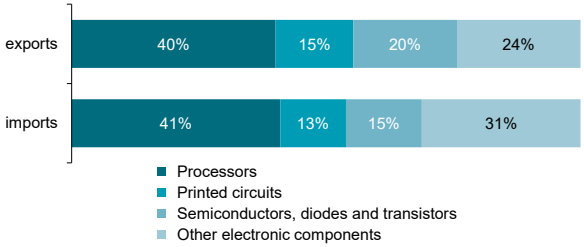


Chart E.14 Electronic components exports from Czechia by countries

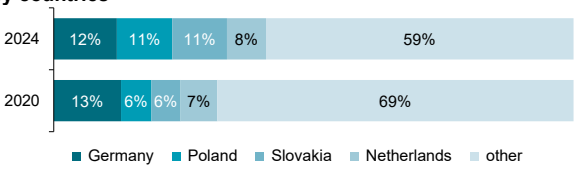
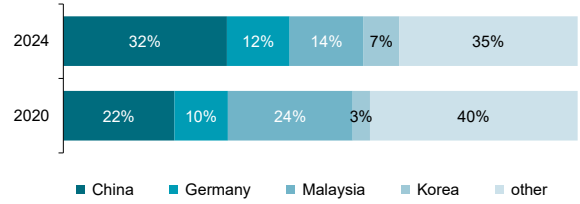


Chart E.15 Electronic components imports to Czechia by countries



Source: The Czech Statistical Office, International Trade Database

Table E.6 International trade in ICT parts n.e.s. in Czechia

CZK million

	2022	2023	2024
Exports of ICT parts n.e.s., total	**49 028**	**34 981**	**34 893**
Parts and accessories n.e.s. of:			
computer equipment	41 925	28 925	27 888
telecommunication equipment	1 611	1 818	2 975
consumer electronics	5 492	4 238	4 030
% of total goods exports from Czechia	**1,1%**	**0,8%**	**0,7%**
Imports of ICT parts n.e.s., total	**51 392**	**41 969**	**55 116**
Parts and accessories n.e.s. of:			
computer equipment	25 891	24 236	36 631
telecommunication equipment	8 541	8 296	9 920
consumer electronics	16 960	9 436	8 565
% of total goods imports to Czechia	**1,1%**	**1,0%**	**1,2%**

Chart E.16 International trade in ICT parts n.e.s. in Czechia by commodities in 2024

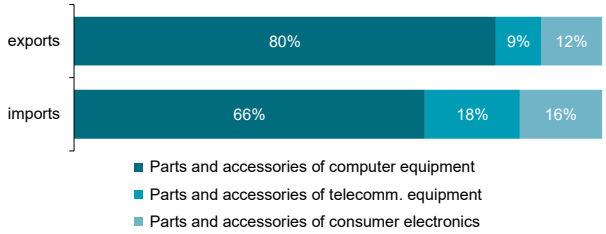


Chart E.17 ICT parts n.e.s. exports from Czechia by countries

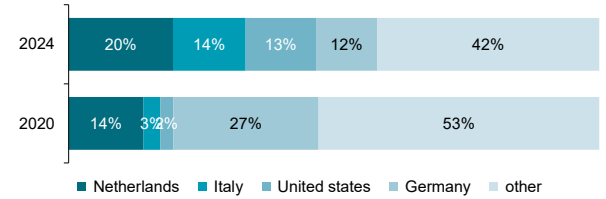
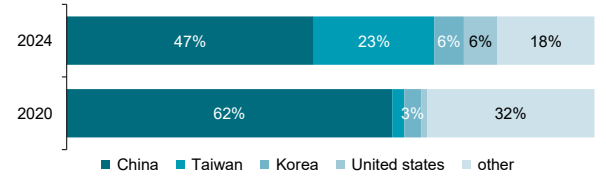


Chart E.18 ICT parts n.e.s. imports to Czechia by countries



n.e.s. = not elsewhere specified

Source: The Czech Statistical Office, International Trade Database

Table E.7 ICT goods exports from Czechia

CZK million

	2022	2023	2024
Exports of ICT goods, total	**922 515**	**831 425**	**996 531**
Computers and peripheral equipment	370 735	299 560	393 946
Communication equipment	366 595	364 758	412 718
Consumer electronics	69 392	65 752	74 847
Electronic components	50 629	47 597	57 317
ICT parts n.e.s.	65 164	53 758	57 704

Chart E.19 ICT goods exports from Czechia

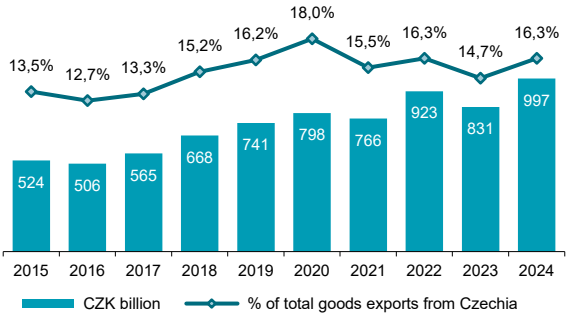


Chart E.20 ICT goods exports from Czechia by commodities

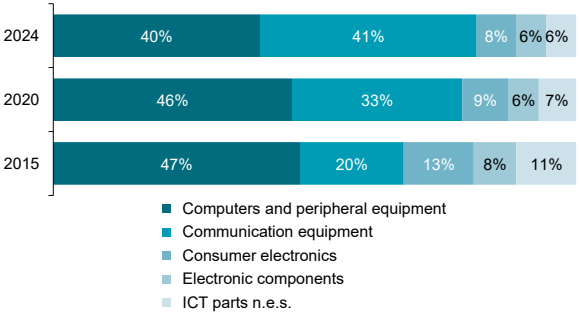
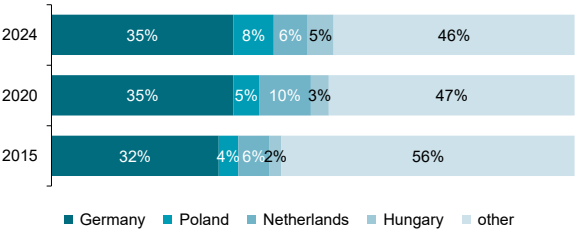


Chart E.21 ICT goods exports from Czechia by countries



n.e.s. = not elsewhere specified

Source: The Czech Statistical Office, International Trade Database

Chart E.22 ICT goods exports in 2024
(% of total goods exports)

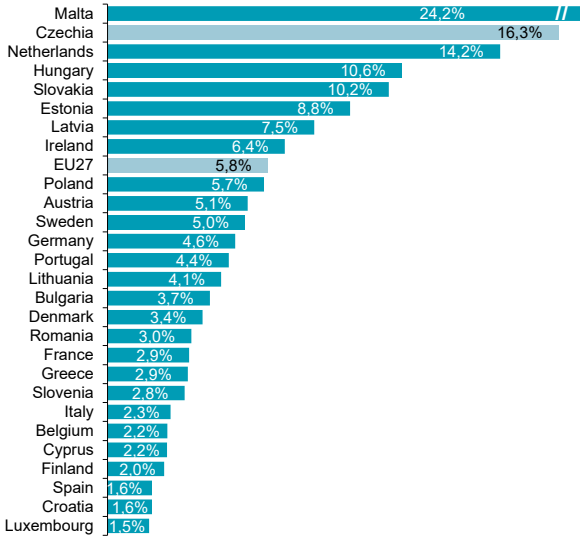
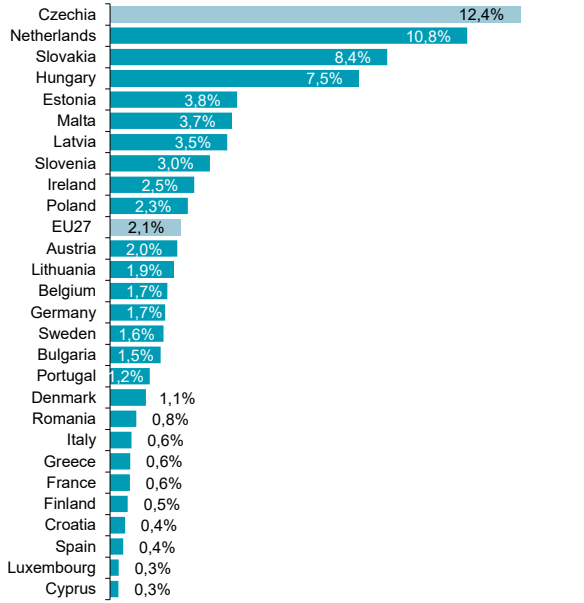


Chart E.23 ICT goods exports in 2024 (% of GDP)



Source: Eurostat, International Trade in Goods Database

Table E.8 ICT goods imports to Czechia

CZK million

	2022	2023	2024
Imports of ICT goods, total	**937 430**	**779 214**	**913 822**
Computers and peripheral equipment	288 730	219 536	277 930
Communication equipment	369 518	327 302	350 932
Consumer electronics	57 481	52 682	63 011
Electronic components	129 916	121 238	144 219
ICT parts n.e.s.	91 785	58 456	77 730

Chart E.24 ICT goods imports to Czechia

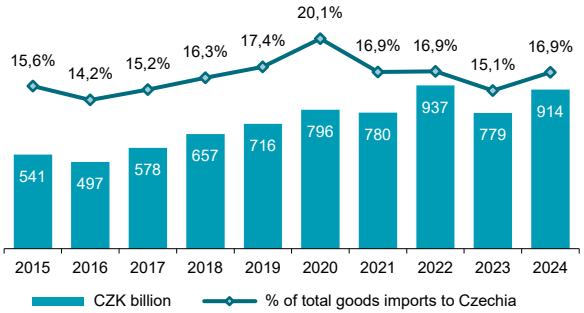


Chart E.25 ICT goods imports to Czechia by commodities

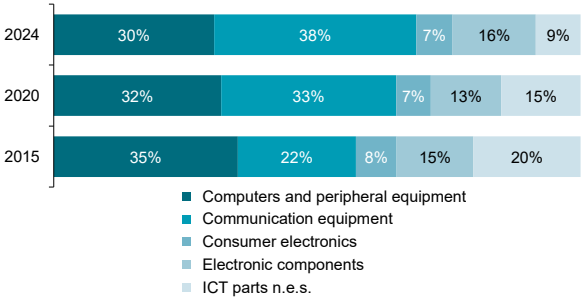
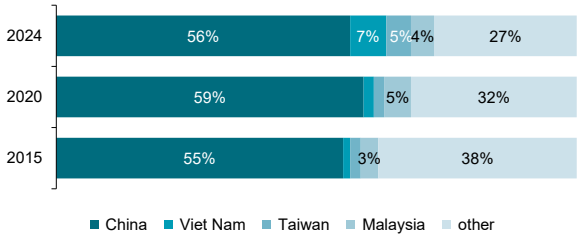


Chart E.26 ICT goods imports to Czechia by countries



n.e.s. = not elsewhere specified

Source: The Czech Statistical Office, International Trade Database

Chart E.27 ICT goods imports in 2024
(% of total goods imports)

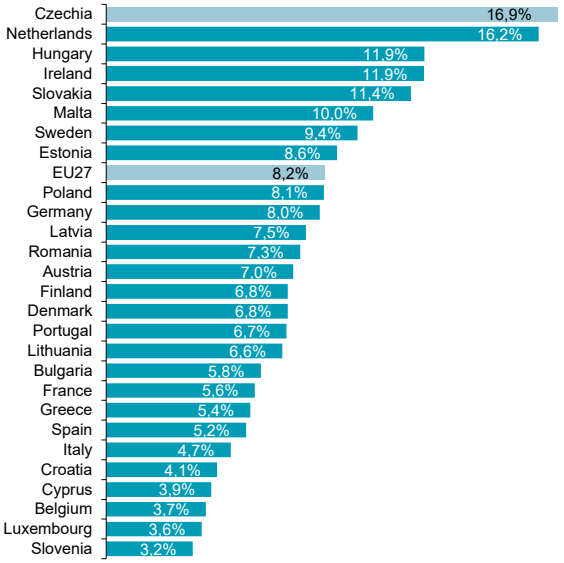
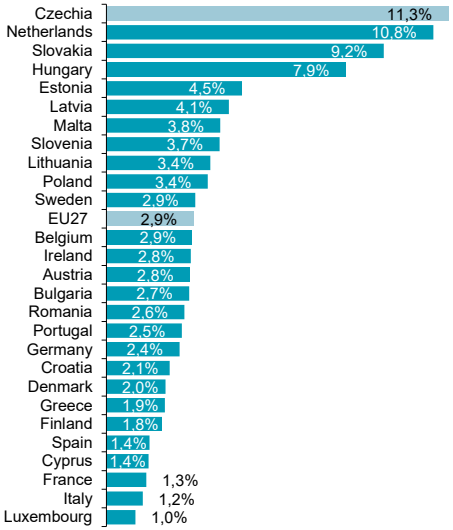
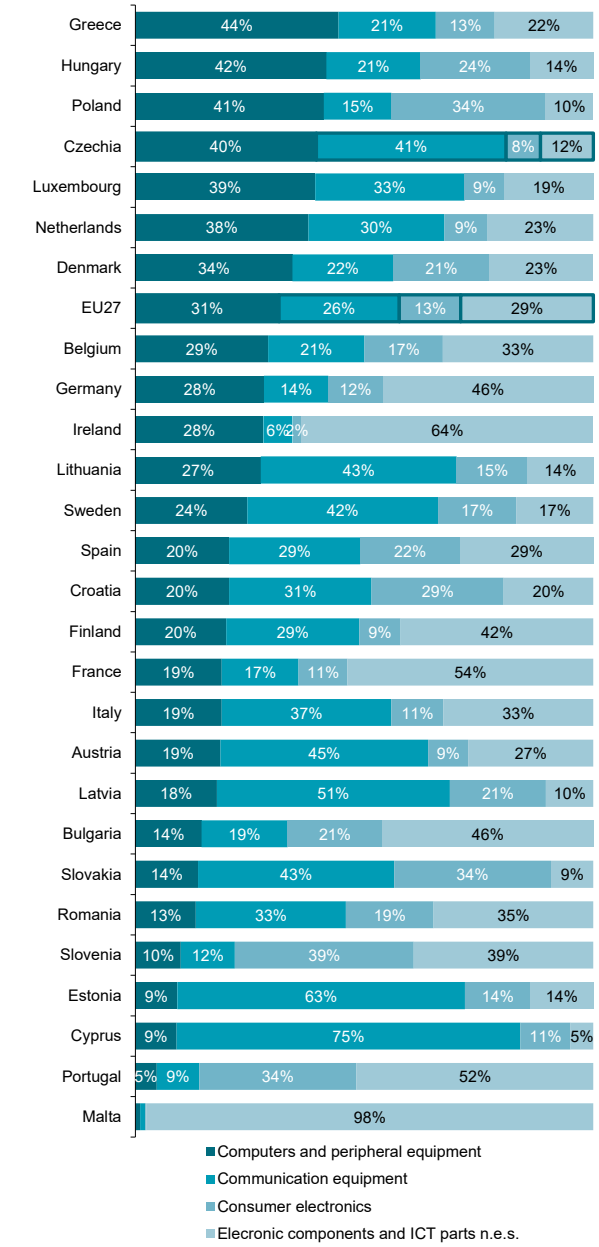


Chart E.28 ICT goods imports in 2024 (% of GDP)



Source: Eurostat, International Trade in Goods Database

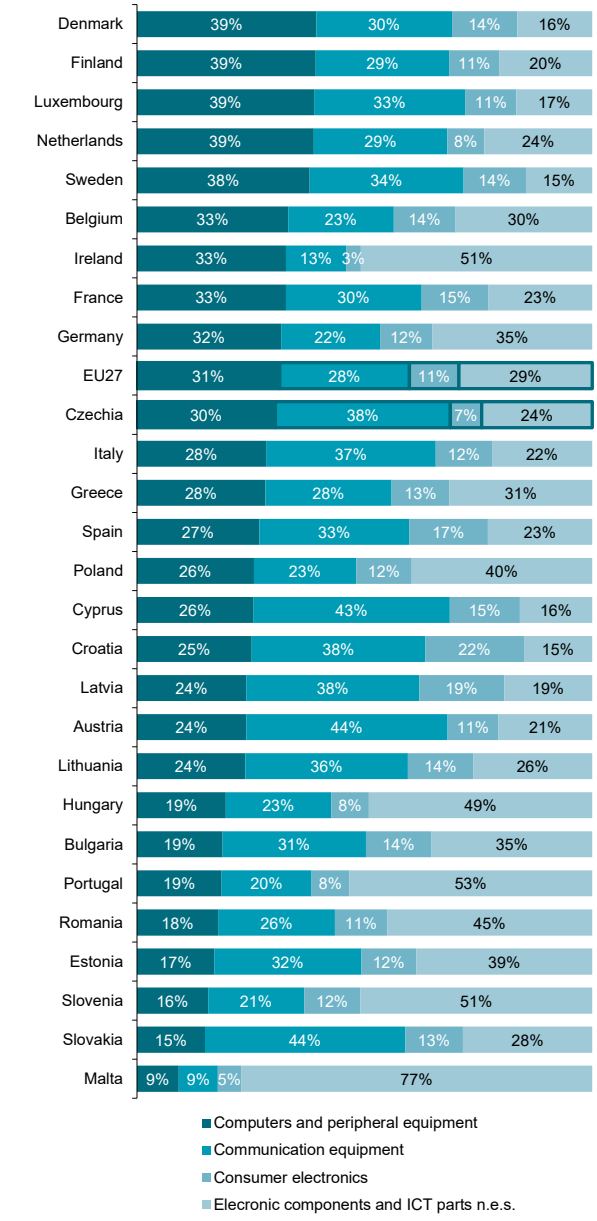
Chart E.29 ICT goods exports by commodities in 2024



n.e.s. = not elsewhere specified

Source: Eurostat, International Trade in Goods Database

Chart E.30 ICT goods imports by commodities in 2024



n.e.s. = not elsewhere specified

Source: Eurostat, International Trade in Goods Database

Chart E.31 Balance of international trade in Computers and peripheral equipment in Czechia (CZK billion)

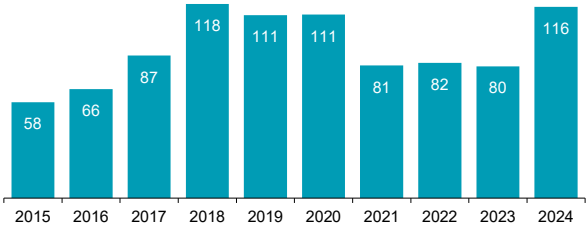


Chart E.32 Balance of international trade in Communication equipment in Czechia (CZK billion)

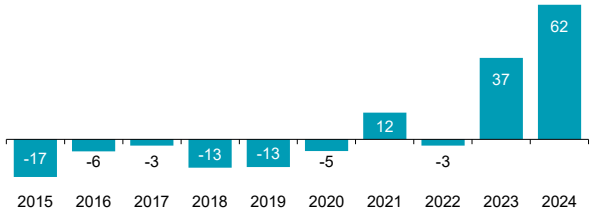


Chart E.33 Balance of international trade in Consumer electronics in Czechia (CZK billion)

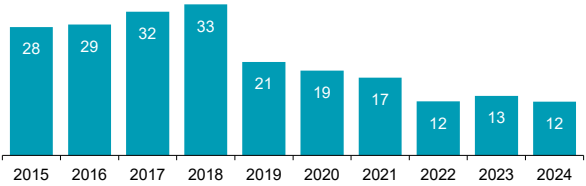
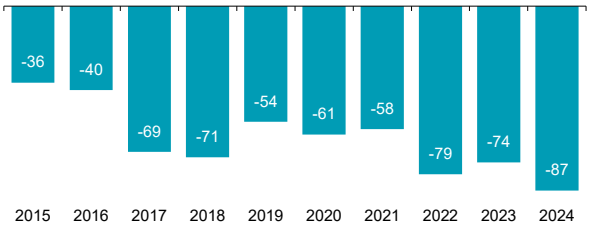


Chart E.34 Balance of international trade in Electronic components in Czechia (CZK billion)



Source: The Czech Statistical Office, International Trade Database

Chapter F: International trade in ICT services

Services in the field of information and communication technologies (hereinafter as the **ICT services**) are defined as services that must primarily be intended to fulfil or enable the function of information processing and communication **by electronic means**, including their record, transmission, and display (OECD, 2009).

Respective items of the ICT services are defined based on the **Extended Balance of Payment Services Classification (EBOPS 2010).** The ICT services include the following items of the category **Telecommunications, computer, and information services (SI)** of this classification:

– **Telecommunications services** (code SI1) include mainly transactions of Czech and foreign telecommunication operators for implemented international calls. Other telecommunications services involve payments for the access to the Internet, cable television, and to other computer networks, including providing of services as electronic mail, video conferences, or transmitting of audio-visual signal over the Internet.

  Note: A payment the Czech operator receives from the foreign operator for the arrangement of the international call from abroad to Czechia is considered exports. A payment from the Czech operator to the foreign operator for the arrangement of the international call is considered imports.

– **Computer services** (code SI2), that are split into:
  - **Computer software** (code SI21) includes purchase and sale of tailor-made software and apps (**software originals**, code SI21z), furthermore, it also includes purchase and sale of standard software and apps supplied over the Internet (**other computer services**, code SI22).

    *Note: Standard software, which is not tailor-made for a concrete customer – e.g. operating systems, office software packages, or antivirus software – supplied on **physical media carriers** (CD-ROMs, flash disks, etc.) or **as a part of hardware** is considered to be goods and is reported within the statistics on international trade in goods. **Licences to reproduce and/or distribute computer software** (code SH3) **are not** part of this item, either.*

– **Information services** (code SI3), that are further split into:
  - **News agency services** (code SI31) and
  - **Other information services** (code SI32) that mainly include data processing and hosting services, web search portals and related services.

*Note: The international trade in ICT services in Czechia is dominated **by transactions of foreign-controlled enterprises**, units of multinationals enterprise groups.*

Detailed data on exports and imports of the ICT services in Czechia come from the **Sample survey on exports and imports of services (ZO 1-04)** carried by the Czech Statistical Office. The data from this survey are used for **balance of payments statistics**.

For more information about **international trade in services** and **balance of payments statistics** see: https://csu.gov.cz/international-trade-in-services or https://www.cnb.cz/en/statistics/bop_stat/

The **Eurostat Balance of Payments Database** was used as a data source for the **international comparison**. Data for international comparisons refer **to the reported or nearest available year**.

For further information on trade in ICT services, see*:*
https://csu.gov.cz/international-trade-in-ict-services

Chapter F: International trade in ICT services

Table F.1 ICT services exports from Czechia

CZK million

	2022	2023	2024
Total	**160 179**	**157 653**	**176 352**
Telecommunication services	24 000	25 119	25 748
Computer services	97 585	95 879	109 061
Information services	38 593	36 656	41 542
by exporter			
Domestic-controlled enterprises	57 102	51 142	60 297
Foreign-controlled enterprises	103 058	106 405	115 909
other	19	107	146
by countries			
EU27, total	**78 635**	**77 247**	**85 814**
Germany	25 263	25 582	28 878
France	4 242	6 330	7 322
Ireland	13 928	5 181	6 145
other EU countries	35 203	40 155	43 469
United states	37 475	33 869	37 258
United Kingdom	15 907	14 537	17 064
Switzerland	6 966	8 871	10 532
other	21 195	23 129	25 684

Chart F.1 ICT services exports from Czechia

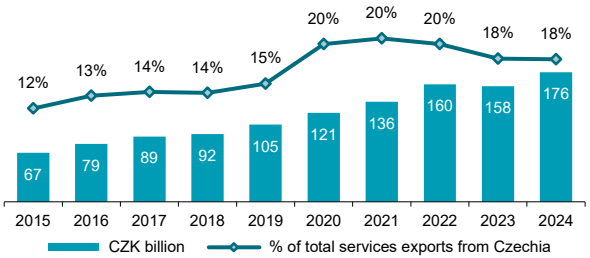


Chart F.2 ICT services exports from Czechia by type of services

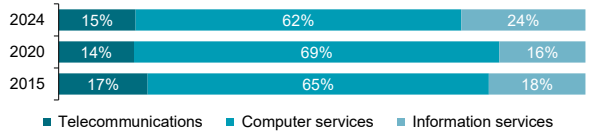
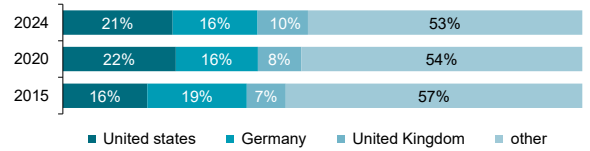


Chart F.3 ICT services exports from Czechia by country



Source: Czech Statistical Office, Survey on exports and imports of services

Chart F.4 ICT services exports in 2024
(% of total services exports)

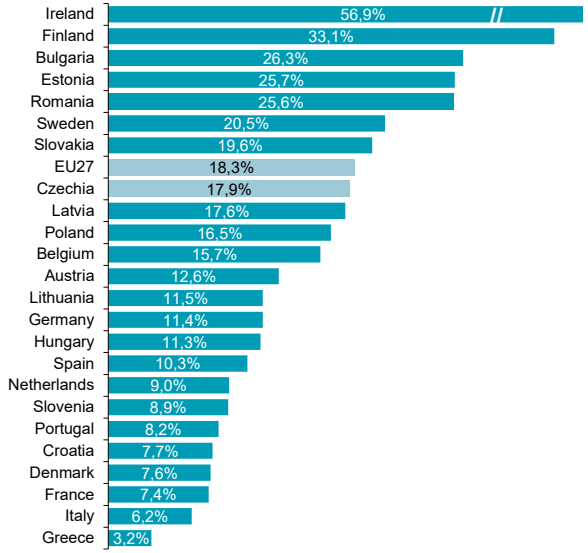
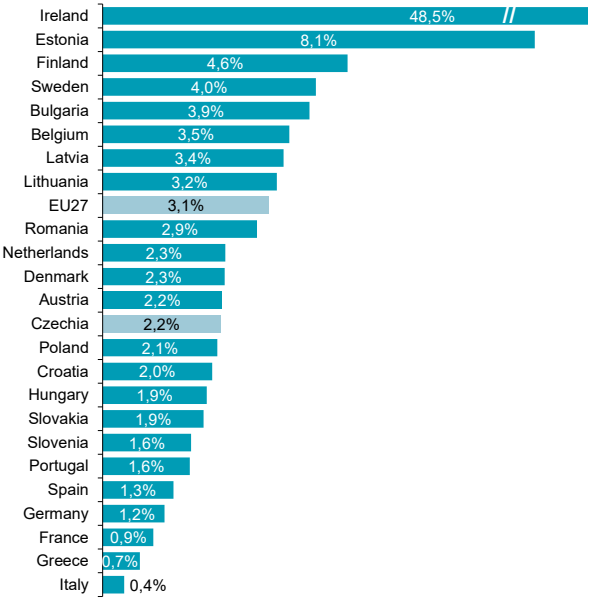


Chart F.5 ICT services exports in 2024 (% of GDP)



Source: Eurostat, International Trade in Services Database

Chapter F: International trade in ICT services

Table F.2 ICT services imports to Czechia

CZK million

	2022	2023	2024
Total	**91 438**	**97 080**	**115 291**
Telecommunication services	20 506	22 337	24 800
Computer services	49 288	51 631	60 658
Information services	21 644	23 113	29 833
by importer			
Domestic-controlled enterprises	25 556	27 957	36 683
Foreign-controlled enterprises	58 590	59 006	64 468
other	7 292	10 117	14 140
by countries			
EU27, total	**62 596**	**67 611**	**76 454**
Ireland	14 276	15 695	20 268
Germany	18 403	18 268	19 439
Netherlands	7 996	10 436	11 173
other EU countries	21 922	23 212	25 575
United Kingdom	7 593	7 341	8 549
Switzerland	2 909	2 946	6 133
United states	4 265	4 706	5 720
other	14 202	14 506	18 436

Chart F.6 ICT services imports to Czechia

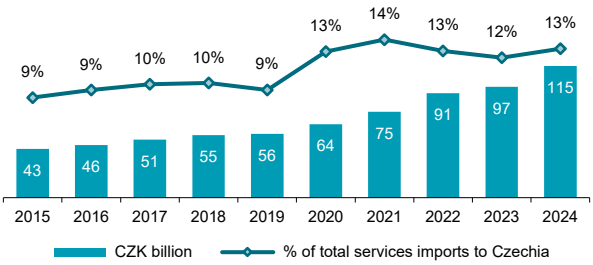


Chart F.7 ICT services imports to Czechia by type of services

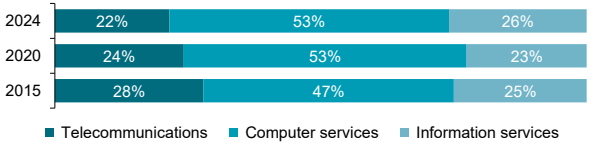
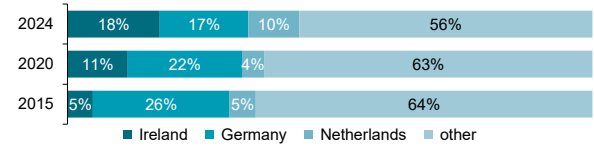


Chart F.8 ICT services imports to Czechia by countries



Source: Czech Statistical Office, Survey on exports and imports of services

Chart F.9 ICT services imports in 2024
(% of total services imports)

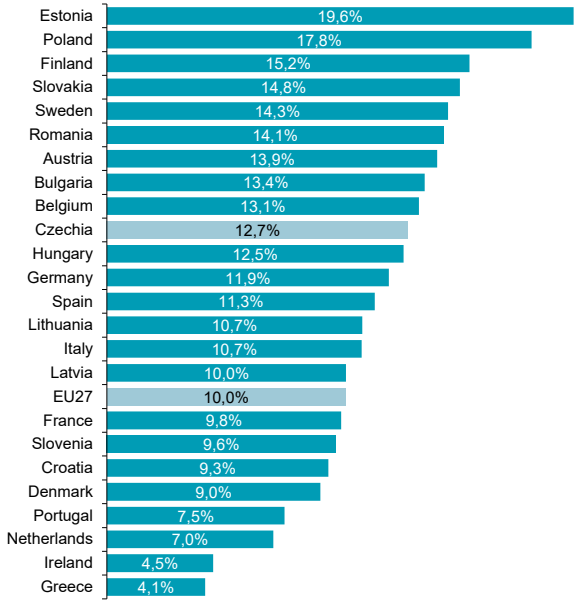
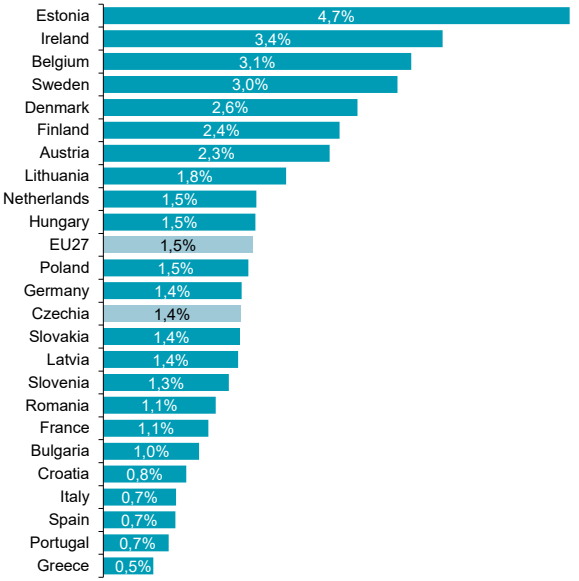


Chart F.10 ICT services imports in 2024 (% of GDP)



Source: Eurostat, International Trade in Services Database

Table F.3 Computer services exports from Czechia

CZK million

	2022	2023	2024
Total	**97 585**	**95 879**	**109 061**
Computer software	49 198	48 519	53 159
Other computer services	48 387	47 360	55 903
by exporter			
Domestic-controlled enterprises	34 703	29 881	31 247
Foreign-controlled enterprises	62 873	65 989	77 807
other	8	9	7
by countries			
EU27, total	**47 883**	**44 790**	**53 731**
Germany	10 693	12 729	16 761
France	2 975	4 927	5 785
Ireland	13 004	3 868	4 324
other EU countries	21 274	23 332	26 958
United states	27 726	23 688	25 903
Switzerland	5 648	7 771	8 789
United Kingdom	6 829	7 855	8 329
other	9 436	11 709	12 212

Chart F.11 Computer services exports from Czechia

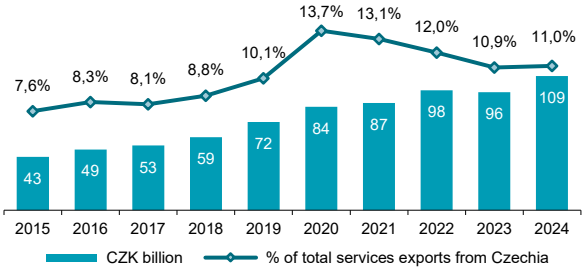


Chart F.12 Computer services exports from Czechia by type of services

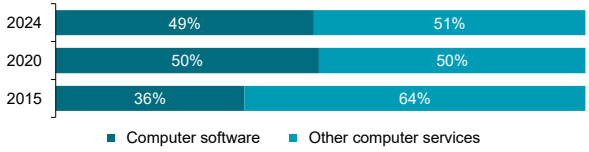
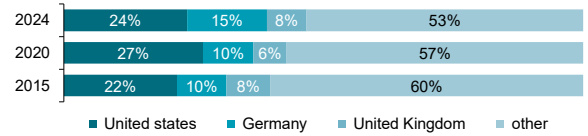


Chart F.13 Computer services exports from Czechia by countries



Source: Czech Statistical Office, Survey on exports and imports of services

Table F.4 Computer services imports to Czechia

CZK million

	2022	2023	2024
Total	**49 288**	**51 631**	**60 658**
Computer software	15 841	15 056	17 593
Other computer services	33 447	36 576	43 065
by importer			
Domestic-controlled enterprises	7 734	9 090	11 980
Foreign-controlled enterprises	36 794	35 695	40 323
other	4 761	6 846	8 355
by countries			
EU27, total	**35 937**	**40 134**	**45 247**
Germany	12 206	12 691	13 365
Ireland	7 709	8 044	10 516
Netherlands	3 812	6 584	6 963
other EU countries	12 365	13 063	14 600
Switzerland	2 425	1 192	3 927
United states	2 687	2 928	3 458
United Kingdom	3 133	2 785	2 247
other	4 951	4 343	5 582

Chart F.14 Computer services imports to Czechia

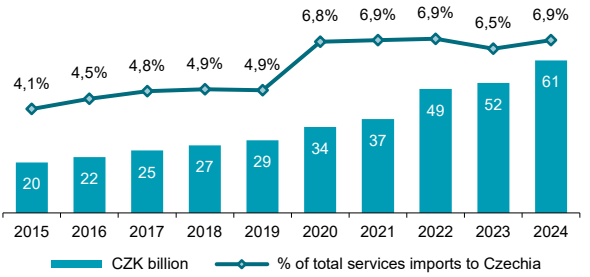


Chart F.15 Computer services imports to Czechia by type of services

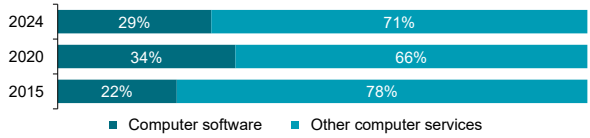
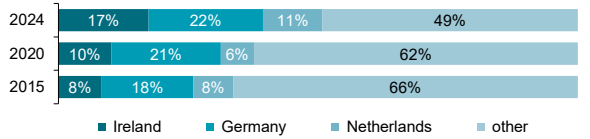


Chart F.16 Computer services imports to Czechia by countries



Source: Czech Statistical Office, Survey on exports and imports of services

Chart F.17 Computer services exports in 2023
(% of GDP)

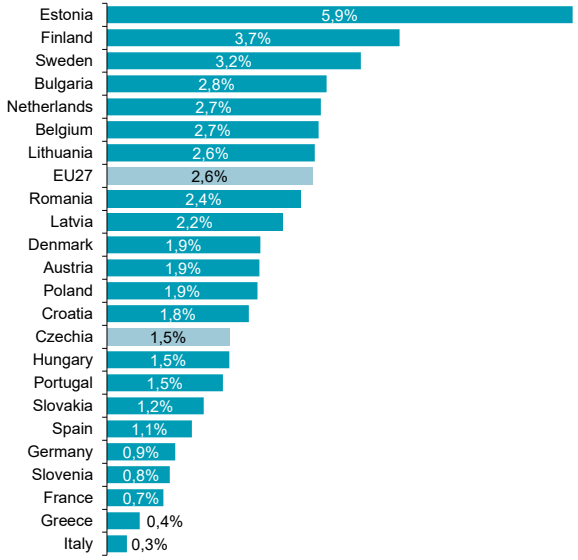
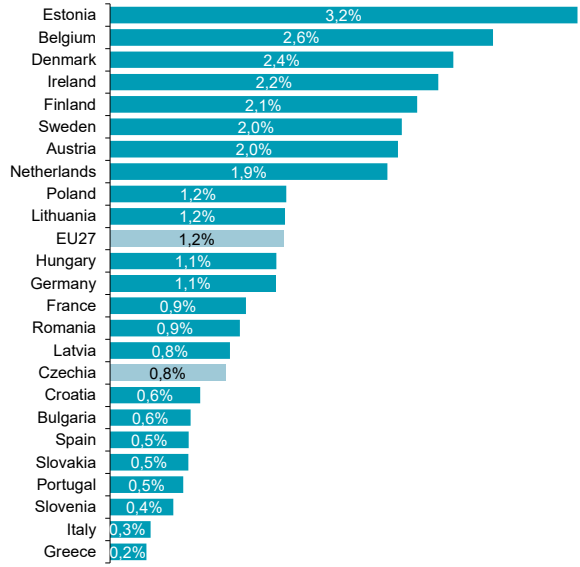


Chart F.18 Computer services imports in 2023
(% of GDP)



Source: Eurostat, International Trade in Services Database

Chapter G: ICT sector

Information and Communication Technology Sector (hereafter **ICT sector**) is **defined** as a combination of **economic activities** of **manufacturing products** and **providing services** primarily dedicated to processing, communication, and distribution of information **electronically**, including information capture, storage, transmission, and display (OECD, 2006).

The ICT sector is the backbone of digital transformation and is essential to support further digital innovation. ICT sector includes a combination of **ICT manufacturing** and **ICT services** industries. ICT sector involves all enterprises whose main economic activity belongs to the divisions and groups of the **Classification of Economic Activities (CZ-NACE)** as follows:

ICT manufacturing that includes following groups of CZ-NACE:

- Manufacture of electronic components and boards (26.1),
- Manufacture of computers and peripheral equipment (26.2),
- Manufacture of communication equipment (26.3) and
- Manufacture of consumer electronics and media (26.4 and 26.8)

ICT services:

- **ICT wholesale** (group 46.5),
- **Telecommunications** (division 61) and
- **IT services** that include following groups of CZ-NACE:
  - Software publishing (58.2)
  - Computer programming, consultancy and related activities (62.0)
  - Data processing, hosting and related activities; web portals (63.1)
  - Repair of computers and communication equipment (95.1)

Telecommunications include transmitting voice, data, text, sound and video. The transmission facilities that carry out these activities may be based on a single technology or a combination of technologies. The commonality of activities classified in this division is the transmission of content, without being involved in its creation or alteration.

IT services primarily include activities of providing expertise in the field of information technologies (IT), designing the structure and content of, and/or writing, modifying, customising, testing and supporting software and apps; planning and designing information systems that integrate computer hardware, software and communication technologies; data processing facilities and computer hardware, software and systems consultancy services. It includes also the provision of computing infrastructure, data processing and hosting activities, as well as activities of web search portals and other activities that primarily supply information.

Detailed information about **classification of economic activities in the EU (NACE)** can be found at: https://ec.europa.eu/eurostat/web/nace

Data for this chapter, except for R&D expenditures (source: **R&D annual survey – see chapter D**), were obtained from the Annual structural survey of business entities from selected production industries (**SBS – Structural Business Statistics).** More information about Czech SBS can be found at: https://csu.gov.cz/annual-structural-business-statistics-methodology

The **Eurostat Structural Business Statistics Database** was used as a data source for the **international comparison**. Data for international comparisons refer to **the reported or nearest available year.** More information about SBS and the ICT sector in EU countries can be found at: http://ec.europa.eu/eurostat/web/structural-business-statistics/overview or at: https://ec.europa.eu/eurostat/cache/metadata/en/isoc_se_esms.htm

Further information on ICT sector can be found at:
https://csu.gov.cz/ict-sector

Chapter G: ICT sector

Table G.1 Employment in the ICT sector in Czechia

Headcount persons

	2022	2023	2024
Total	**197 754**	**202 025**	**198 974**
ICT manufacturing, total	25 853	25 542	24 273
Manuf. of electronic components	9 192	10 189	9 901
Manuf. of computer equipment	7 219	6 867	6 503
Manuf. of communication equipment	5 635	5 511	5 023
Manuf. of consumer electronics	3 807	2 975	2 847
ICT services, total	171 901	176 483	174 701
ICT wholesale	12 120	11 255	10 951
Telecommunications	21 513	21 431	21 361
IT services	138 269	143 797	142 389

Chart G.1 Employment in the ICT sector in Czechia

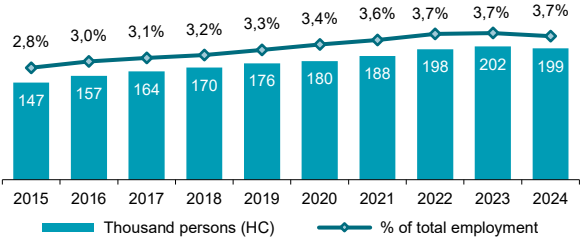


Chart G.2 Employment in the ICT sector in Czechia by industry

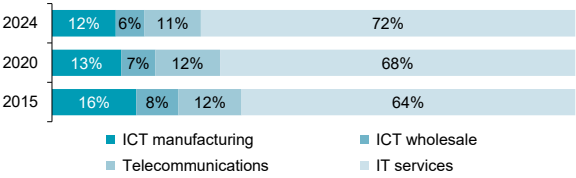


Chart G.3 Employment in the ICT subsectors in Czechia by ownership of enterprises in 2024

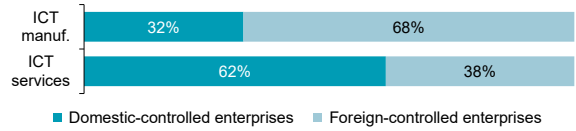
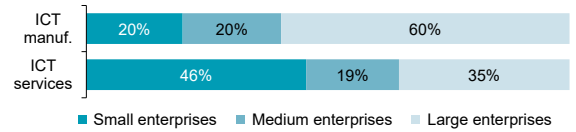


Chart G.4 Employment in the ICT subsectors in Czechia by size group of enterprises in 2024



Source: The Czech Statistical Office, Structural Business Statistics

Chart G.5 Employment in the ICT sector in 2023 (% of total employment)

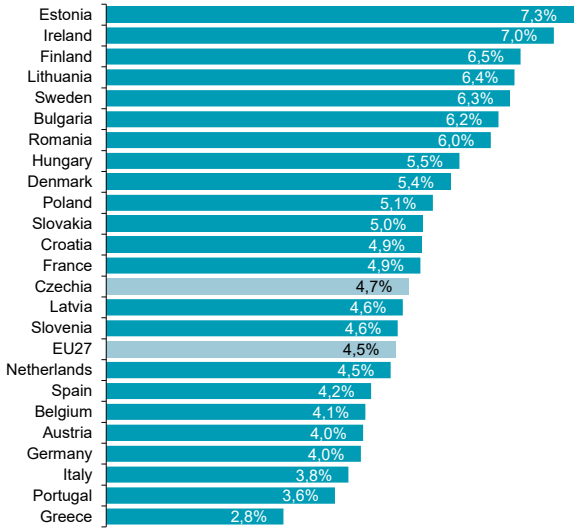
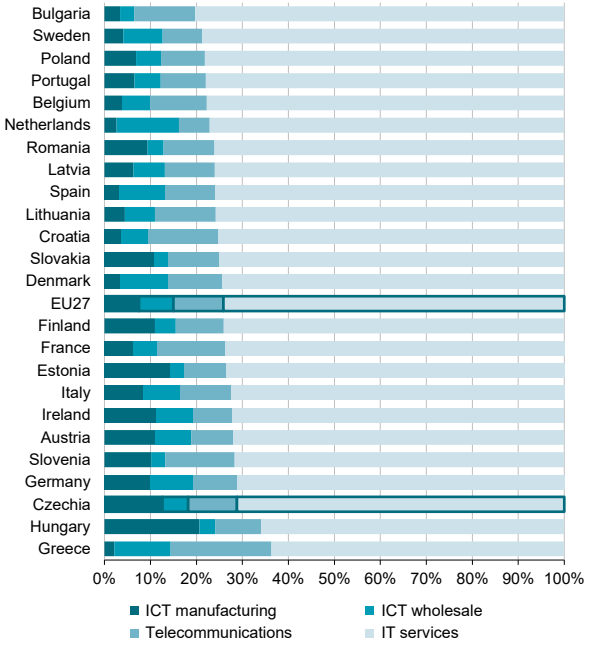


Chart G.6 Employment in the ICT sector by industry in 2023



Source: Eurostat SBS Database and Czech Statistical Office own calculations

Chart G.7 Employment in ICT manufacturing in Czechia

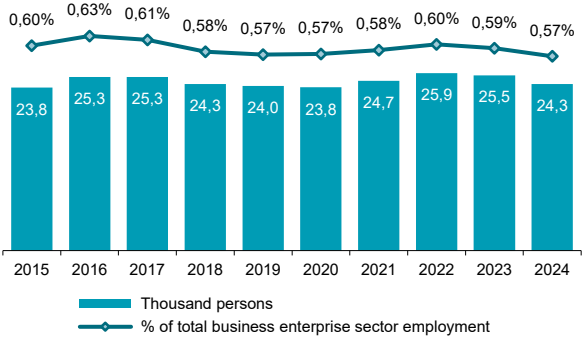


Chart G.8 Employment in Telecommunications in Czechia

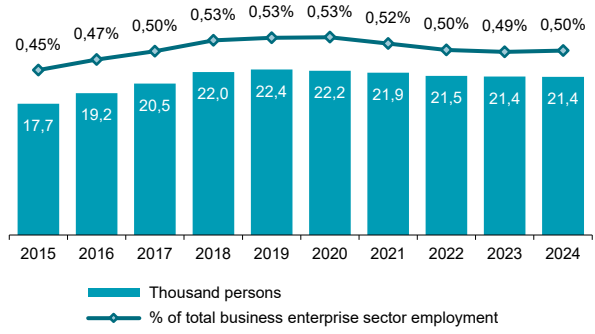
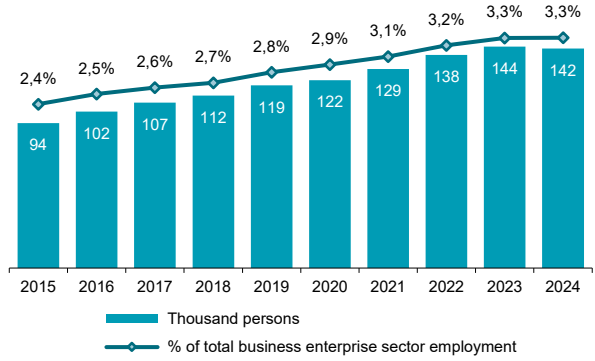


Chart G.9 Employment in IT services in Czechia



Source: The Czech Statistical Office, Structural Business Statistics

Chart G10 Employment in ICT manufacturing in 2023
(% of total business enterprise sector employment)

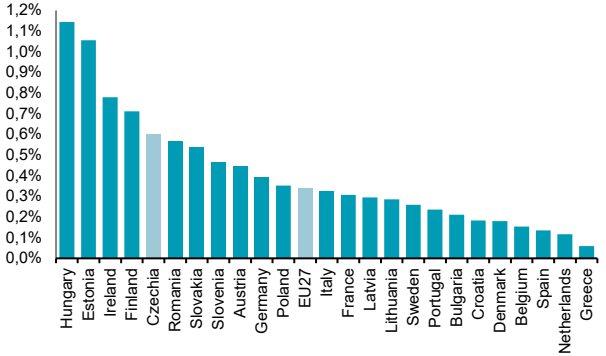


Chart G11 Employment in Telecommunications in 2023
(% of total business enterprise sector employment)

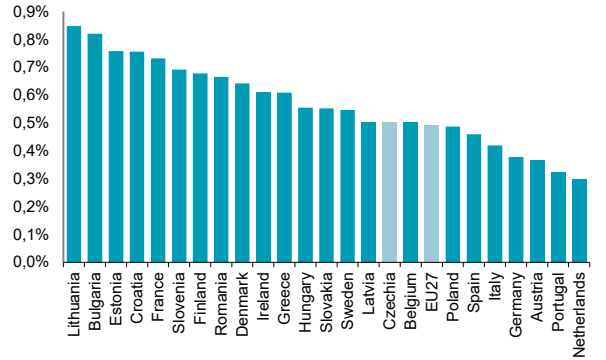
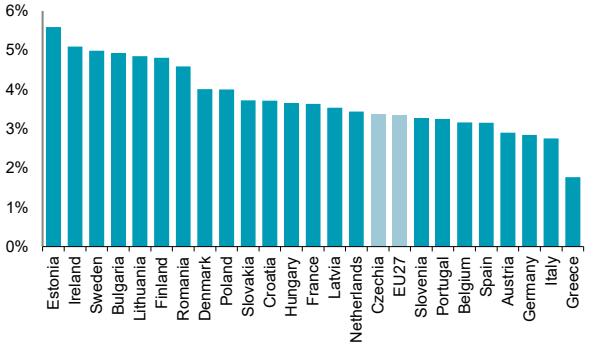


Chart G12 Employment in IT services in 2023
(% of total business enterprise sector employment)



Source: Eurostat SBS Database and Czech Statistical Office own calculations

Table G.2 Turnover in the ICT sector in Czechia

CZK million

	2022	2023	2024
Total	**1 045 980**	**1 065 766**	**1 169 890**
ICT manufacturing, total	240 848	211 188	254 261
Manuf. of electronic components	26 723	32 481	33 022
Manuf. of computer equipment	166 828	136 195	179 367
Manuf. of communication equipment	19 107	19 835	18 542
Manuf. of consumer electronics	28 191	22 677	23 330
ICT services, total	805 132	854 578	915 629
ICT wholesale	205 071	195 733	204 965
Telecommunications	146 234	157 653	160 562
IT services	453 827	501 192	550 101

Chart G.13 Turnover in the ICT sector in Czechia

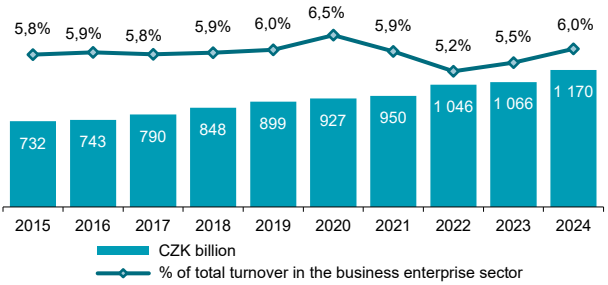


Chart G.14 Turnover in the ICT sector in Czechia by industry

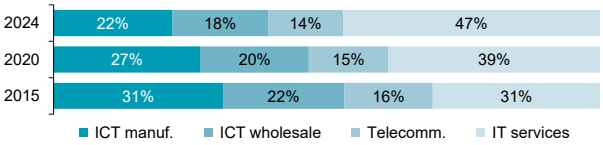


Chart G.15 Turnover in the ICT subsectors in Czechia by ownership of enterprises in 2024

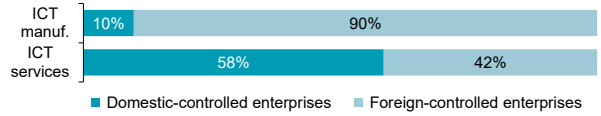
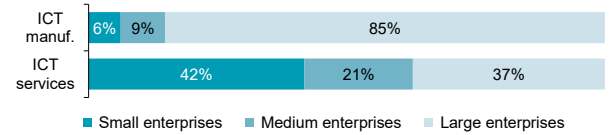


Chart G.16 Turnover in the ICT subsectors in Czechia by ownership of enterprises in 2024



Source: The Czech Statistical Office, Structural Business Statistics

Chart G.17 Turnover in the ICT sector in 2023
(% of the total business enterprise sector turnover)

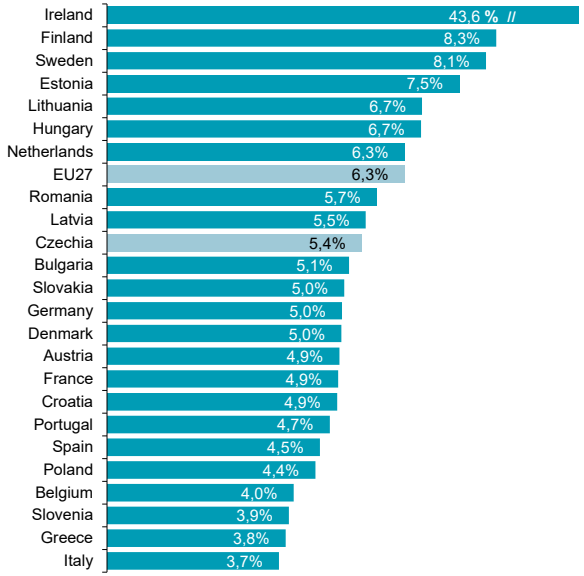
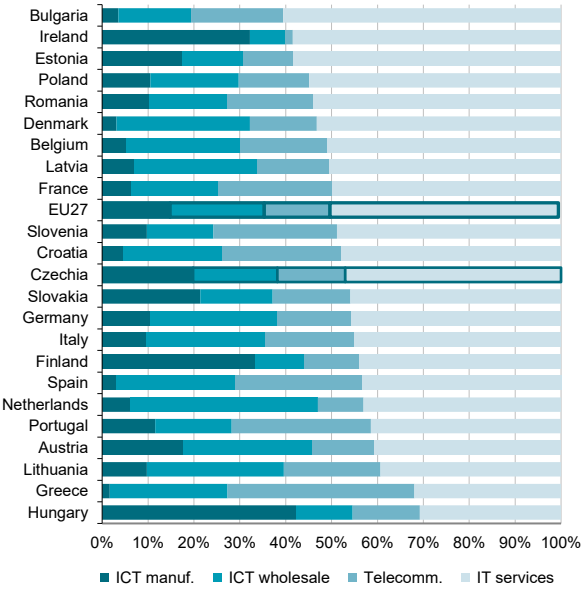


Chart G.18 Turnover in the ICT sector
by industry in 2023



Source: Eurostat SBS Database and Czech Statistical Office own calculations

Chart G.19 Turnover in ICT manufacturing in Czechia

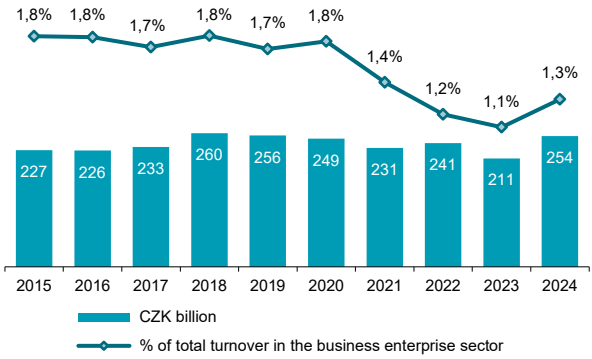


Chart G.20 Turnover in Telecommunications in Czechia

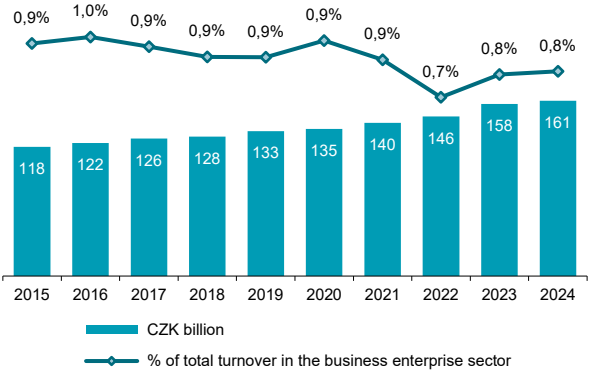
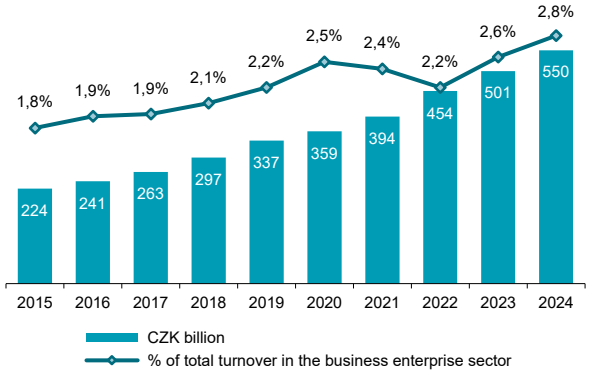


Chart G.21 Turnover in IT services in Czechia



Source: The Czech Statistical Office, Structural Business Statistics

Chart G.22 Turnover in ICT manufacturing in 2023
(% of the total business enterprise sector turnover)

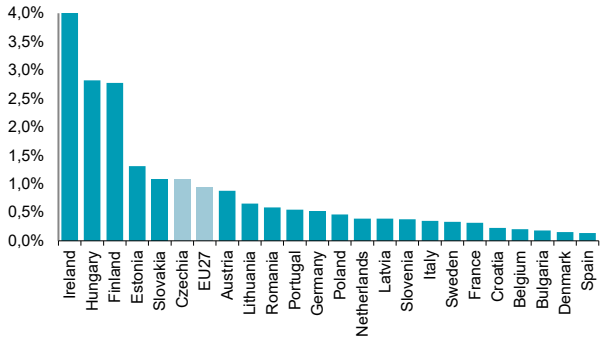


Chart G.23 Turnover in Telecommunications in 2023
(% of the total business enterprise sector turnover)

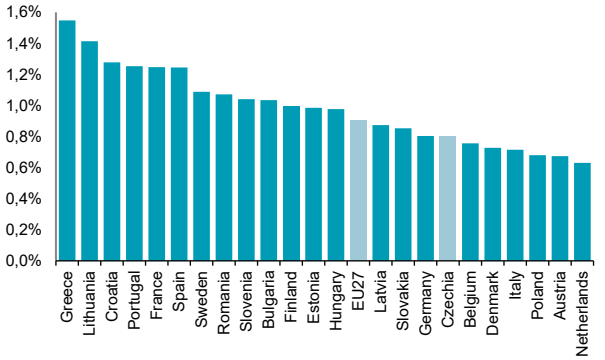
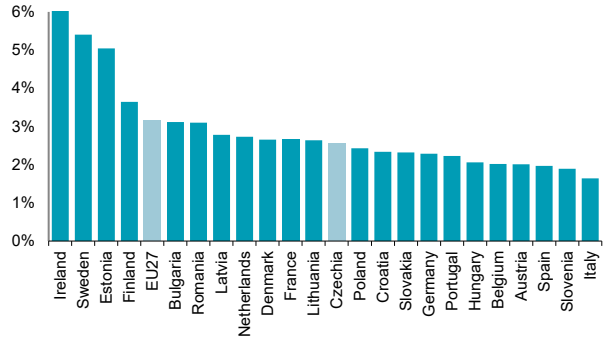


Chart G.24 Turnover in IT services in 2023
(% of the total business enterprise sector turnover)



Source: Eurostat SBS Database and Czech Statistical Office own calculations

Table G.3 R&D expenditure in the ICT sector in Czechia

CZK million

	2022	2023	2024
Total	**23 035**	**23 530**	**26 301**
ICT manufacturing, total	**1 054**	**1 172**	**1 293**
Manuf. of electronic components	498	569	573
Manuf. of computer equipment	37	35	35
Manuf. of communication equipment	466	521	640
Manuf. of consumer electronics	53	47	45
ICT services, total	**21 982**	**22 359**	**25 008**
ICT wholesale	196	342	316
Telecommunications	836	893	855
IT services	20 950	21 124	23 837

Chart G.25 R&D expenditure in the ICT sector in Czechia

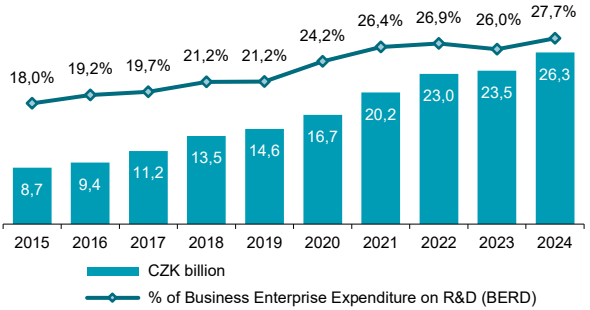


Chart G.26 R&D expenditure in the ICT sector by industry

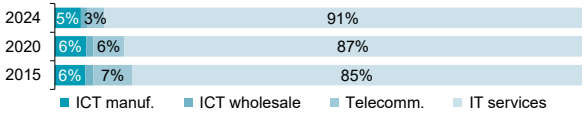


Chart G.27 R&D expenditure in the ICT subsectors in Czechia by ownership of enterprises in 2024

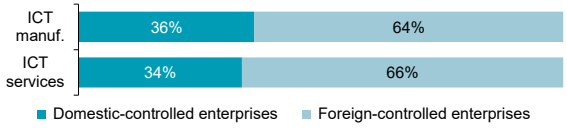
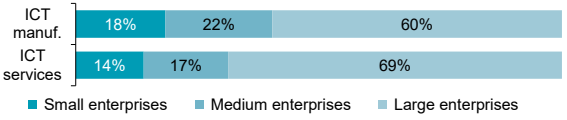


Chart G.28 R&D expenditure in the ICT subsectors in Czechia by size group of enterprises in 2024



Source: The Czech Statistical Office, Annual R&D survey

Chart G.29 R&D expenditure in the ICT sector in 2023
(% of BERD - Business Enterprise Expenditure on R&D)

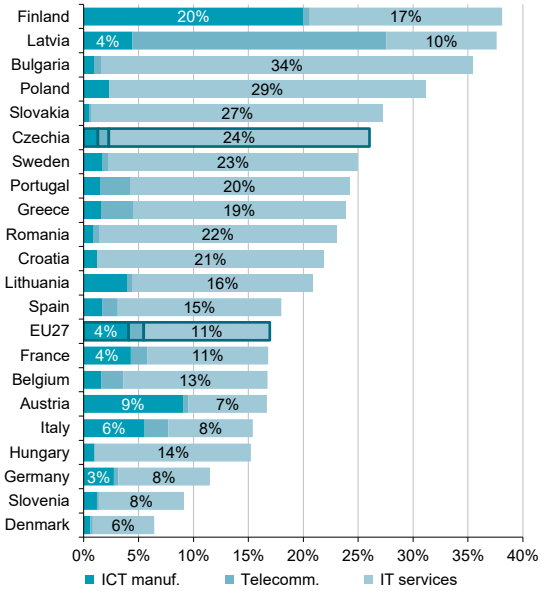
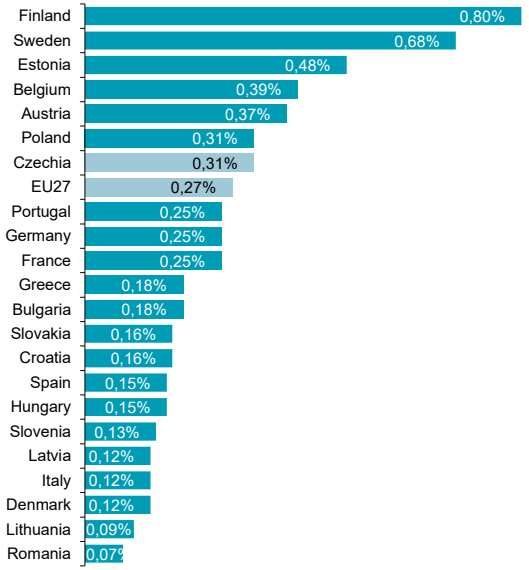


Chart G.30 R&D expenditure in the ICT sector in 2023
(% of GDP)



Source: Eurostat STI Database and Czech Statistical Office own calculations

Chart G.31 R&D expenditure in ICT manufacturing in Czechia

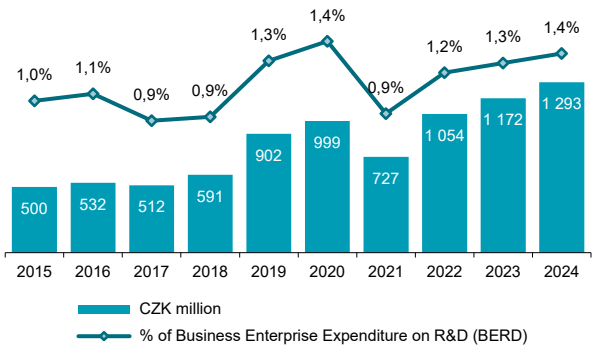


Chart G.32 R&D expenditure in Telecommunications in Czechia

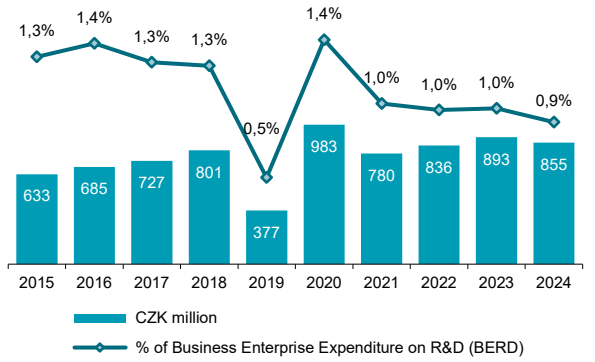
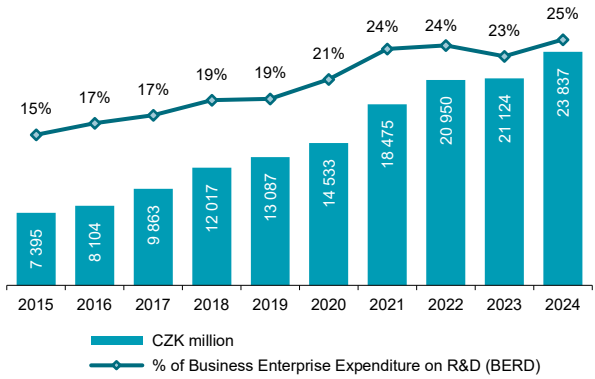


Chart G.33 R&D expenditure in IT services in Czechia



Source: The Czech Statistical Office, Annual R&D survey

Chart G.34 R&D expenditure in ICT manufacturing in 2023
(% of BERD - Business Enterprise Expenditure on R&D)

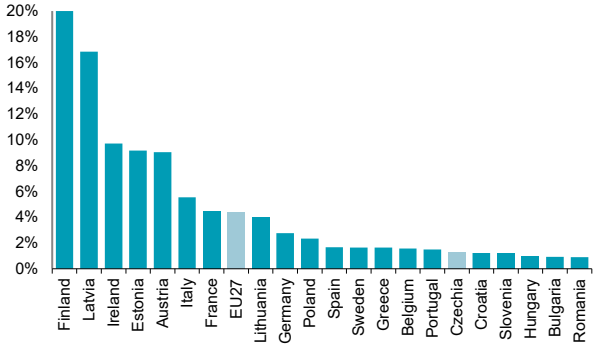


Chart G.35 R&D expenditure in Telecommunication, 2023
(% of BERD - Business Enterprise Expenditure on R&D)

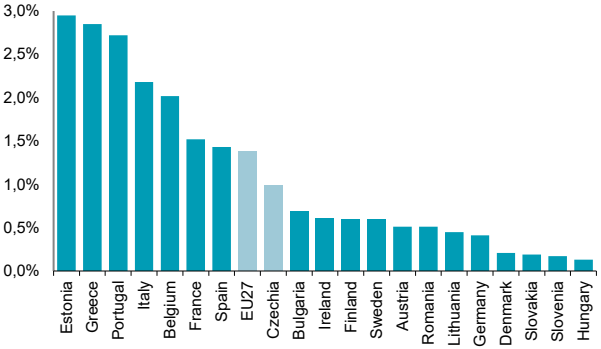
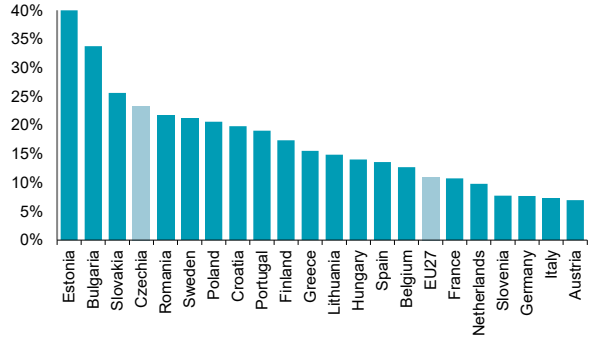


Chart G.36 R&D expenditure in IT services in 2023
(% of BERD - Business Enterprise Expenditure on R&D)



Source: Eurostat STI Database and Czech Statistical Office own calculations

Chart G.37 Value added in the ICT sector in 2023
(% GDP)

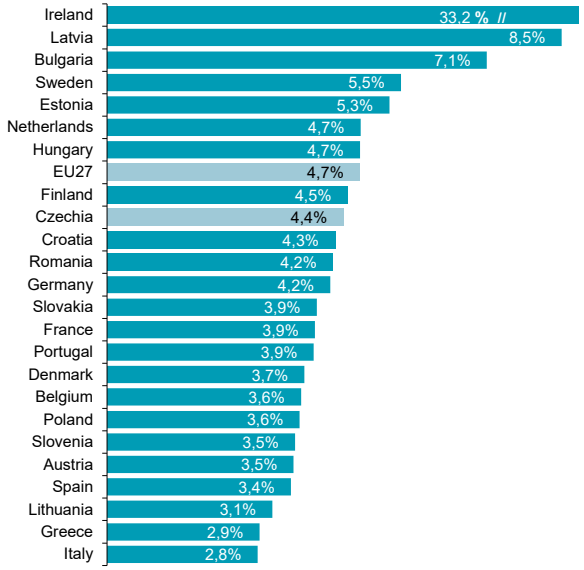
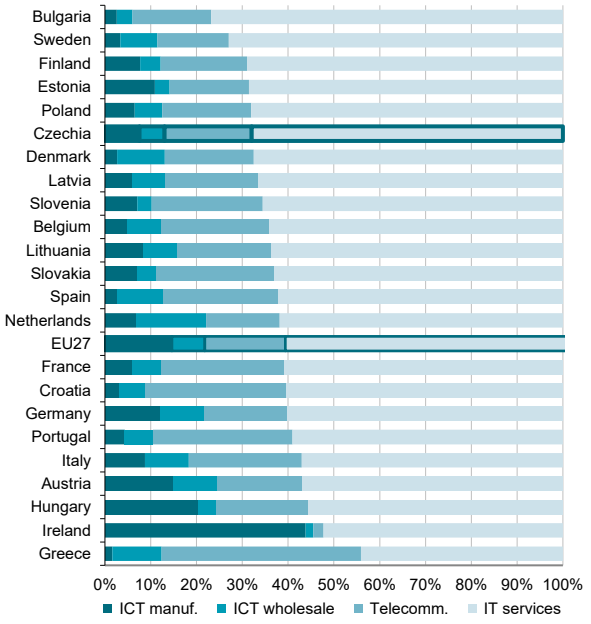


Chart G.38 Value added in the ICT sector by industry in 2023



Source: Eurostat SBS Database and Czech Statistical Office own calculations

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