

## A ICT specialists

ICT specialists are **defined** as persons who have the ability to develop, operate and maintain ICT systems and for whom ICTs constitute the main part of their job. The occupations of ICT specialists are subdivided into **two major groups** 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;
- Note: The 1330, 2152, 2153 and 2434 subgroups are merged into one category called **ICT managers, engineers and sales professionals**.*
- 25 Information and communications technology professionals**
- 251 Software and applications developers and analysts;
  - 252 Database and network professionals.

### ICT technicians, installers and servicers

- 3114 Electronics engineering technicians;
- 35 Information and communications 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://esco.ec.europa.eu/en/about-esco/escopedia/escopedia/international-standard-classification-occupations-isco>

### Numbers of ICT specialists

The data on the numbers of ICT specialists are taken from the **Labour Force Survey (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 2022 is calculated as an average from the values for 2021, 2022, and 2023).*

For further information on the **Czech LFS** see:

<https://csu.gov.cz/vykazy/labour-force-sample-survey-lfss>

The **Eurostat LFS Database** was used for the **international comparison**.

*Note: Data for the Czech Republic from Eurostat **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.*

### Wages of ICT specialists

Data on wages (average gross monthly wage) of the ICT specialists come from the **Structure of Earnings Survey (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://www.ispv.cz/en/homepage.aspx>.

For further information on the **Czech SES** see:

<https://csu.gov.cz/produkty/structure-of-earnings-survey-2023>

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>

## A ICT specialists

Table A1 ICT specialists in Czechia

	Thousand persons		
	2020	2021	2022
<b>Total</b>	<b>219,8</b>	<b>226,3</b>	<b>226,1</b>
Women	20,8	22,1	23,6
<b>Occupation</b>			
professionals	119,1	125,0	129,3
ICT technicians, installers and servicers	100,6	101,2	96,8
<b>Age group</b>			
Under 25 years	9,9	10,0	11,0
25–34 years	66,4	66,0	65,5
35–44 years	79,8	79,4	76,8
45–54 years	41,9	47,7	48,8
55 + years	21,8	23,1	24,0
<b>Highest level of education attainment</b>			
Tertiary	123,5	129,2	128,8
Secondary with A-level examination	86,2	87,1	86,4
Other (lower)	10,1	10,0	10,9

Figure A1 ICT specialists

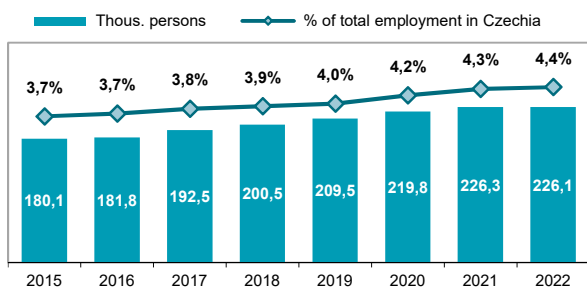
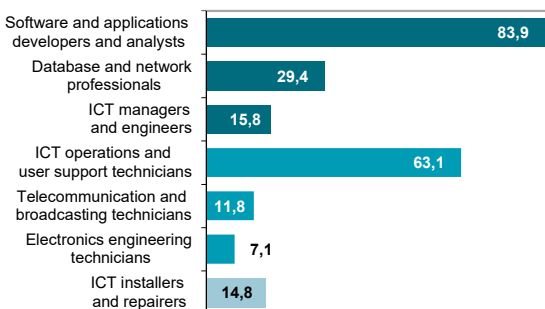


Figure A2 ICT specialists, by occupation (thousands); 2022

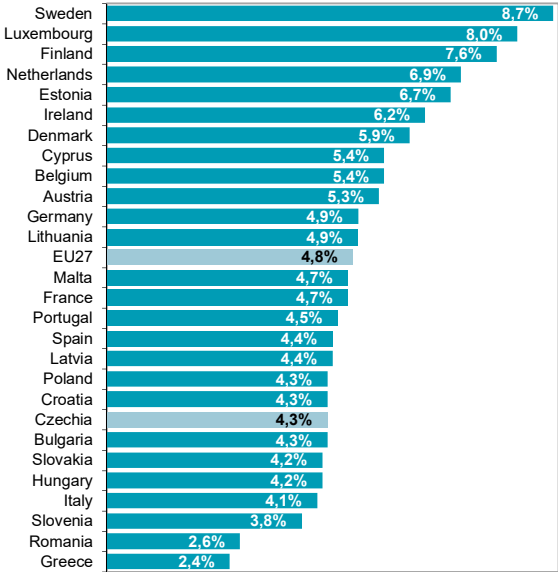


Note: The numbers of ICT experts are calculated from three-year moving averages for reasons of higher reliability (e.g. 2022 is the average of data for the years 2021 to 2023).

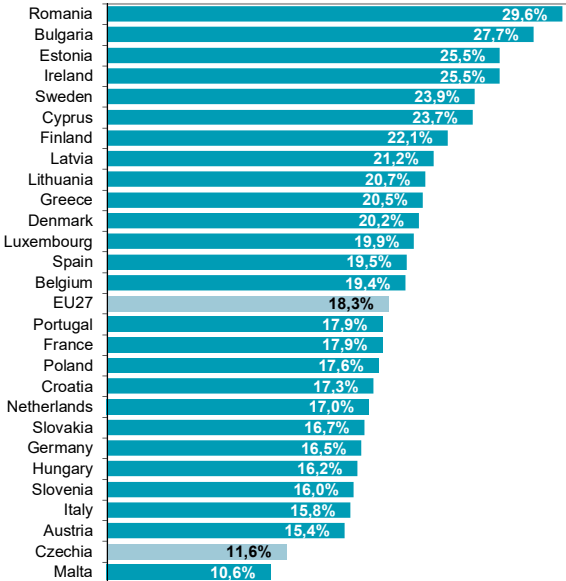
Source: CZSO, Labour Force Survey

## A ICT specialists

**Figure A3 ICT specialists; 2023**  
(% of total employment)



**Figure A4 Share of women among ICT specialists; 2023**



Source: CZSO calculation based on the Eurostat LFS Database

## A ICT specialists

Tab. A2 ICT managers, engineers and professionals in Czechia

	Thousand persons		
	2020	2021	2022
<b>Total</b>	<b>119,1</b>	<b>125,0</b>	<b>129,3</b>
Women	13,0	14,6	15,6
<b>Occupation</b>			
<b>ICT professionals, total</b>	<b>106,1</b>	<b>109,8</b>	<b>113,4</b>
Software and app. developers and analysts	76,2	79,0	83,9
Database and network professionals	29,8	30,7	29,4
<b>ICT managers, engineers and sales professionals</b>	<b>13,0</b>	<b>15,2</b>	<b>15,8</b>
<b>Age group</b>			
25–34 years	38,3	38,6	39,5
35–44 years	44,0	45,1	45,9
45–54 years	23,1	27,4	28,9
55 + years	11,0	11,6	12,4
<b>Highest level of education attainment</b>			
Master's and Doctoral	77,6	82,5	83,6
Bachelor's and Higher professional	19,9	22,0	23,9
Other (lower)	21,4	20,3	21,1

Figure A5 ICT professionals

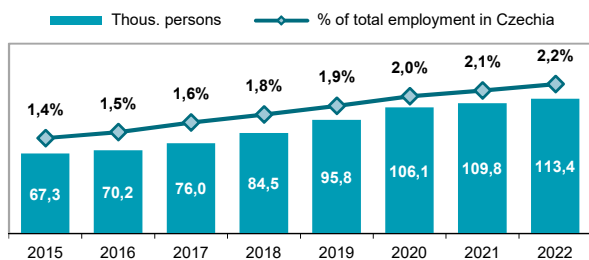


Figure A6 ICT professionals, by gender

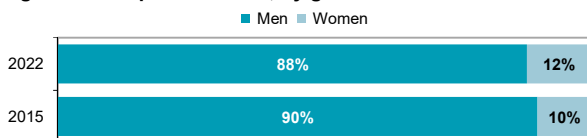
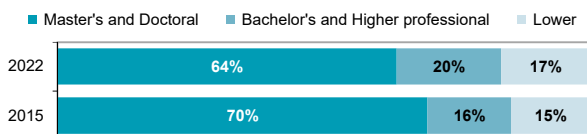


Figure A7 ICT professionals, by level of education

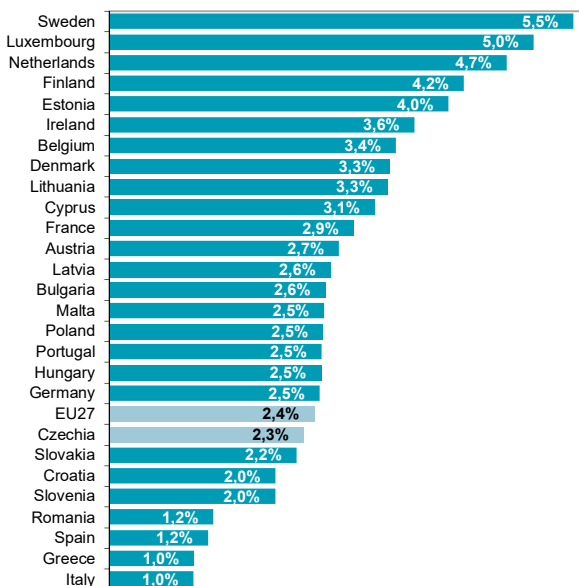


Note: The numbers of ICT experts are calculated from three-year moving averages for reasons of higher reliability (e.g. 2022 is the average of data for the years 2021 to 2023).

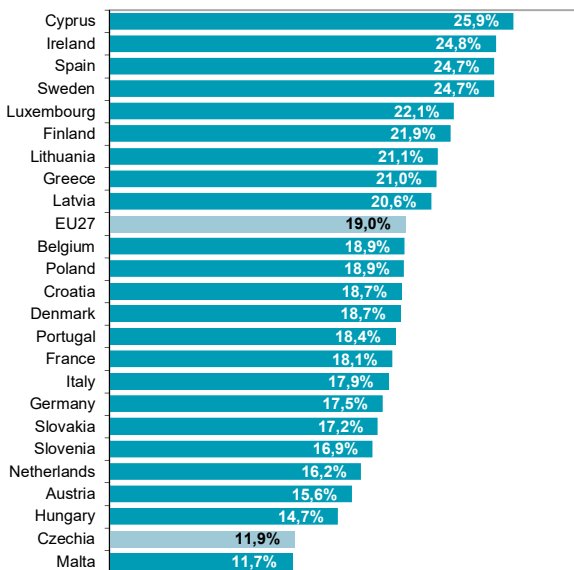
Source: CZSO, Labour Force Survey

## A ICT specialists

**Figure A8 ICT professionals; 2023**  
(% of total employment)



**Figure A9 Share of women among ICT professionals; 2023**



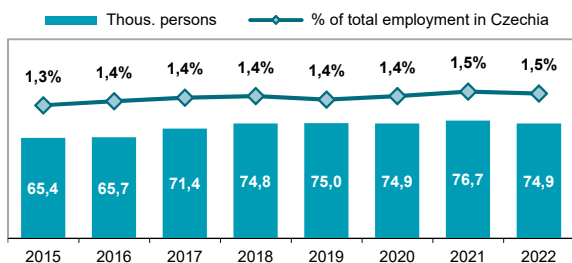
Source: CZSO calculation based on the Eurostat LFS Database

## A ICT specialists

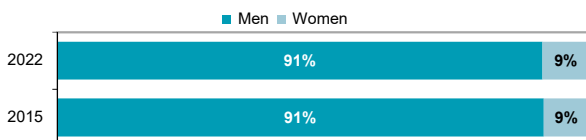
**Table A3 ICT technicians, installers and servicers in Czechia**

	Thousand persons		
	2020	2021	2022
<b>Total</b>	<b>100,6</b>	<b>101,2</b>	<b>96,8</b>
Women	7,8	7,5	8,0
<b>Occupation</b>			
ICT operations and user support technicians	63,4	65,5	63,1
Telecomm. and broadcasting technicians	11,5	11,2	11,8
Electronics engineering technicians	8,6	8,4	7,1
ICT installers and repairers	17,1	16,2	14,8
<b>Age group</b>			
Under 25 years	7,2	7,6	8,5
25–34 years	28,1	27,4	25,9
35–44 years	35,8	34,3	30,9
45–54 years	18,8	20,4	19,9
55 + years	10,8	11,5	11,6
<b>Highest level of education attainment</b>			
Tertiary	26,0	24,7	21,3
Secondary with A-level examination	64,8	66,8	65,2
Other (lower)	9,8	9,8	10,3

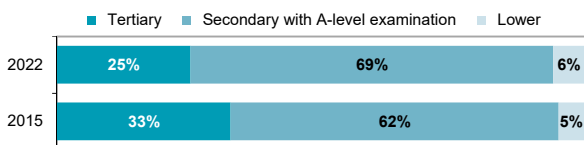
**Figure A10 ICT technicians**



**Figure A11 ICT technicians, by gender**



**Figure A12 ICT technicians, by level of education**

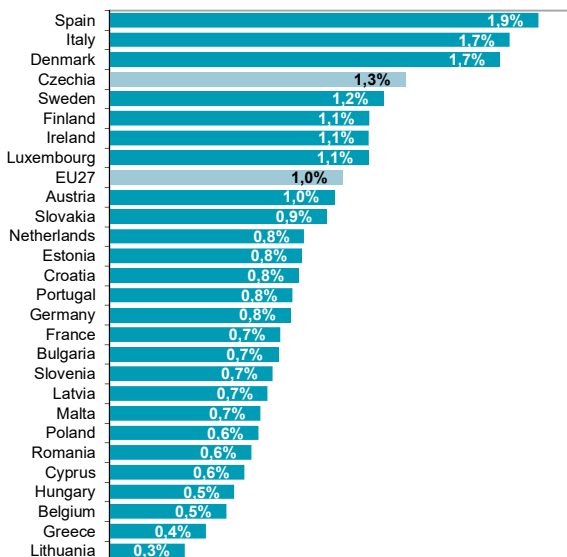


Note: The numbers of ICT experts are calculated from three-year moving averages for reasons of higher reliability (e.g. 2022 is the average of data for the years 2021 to 2023).

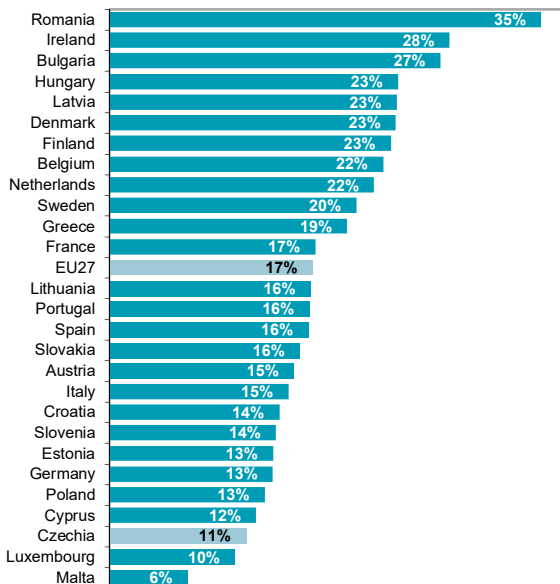
Source: CZSO, Labour Force Survey

## A ICT specialists

**Figure A13 ICT technicians; 2023**  
(% of total employment)



**Figure A14 Share of women among ICT technicians; 2023**



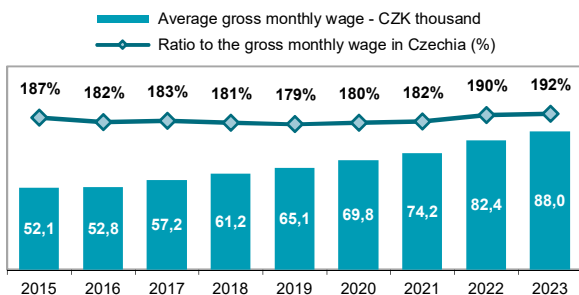
Source: CZSO calculation based on the Eurostat LFS Database

## A ICT specialists

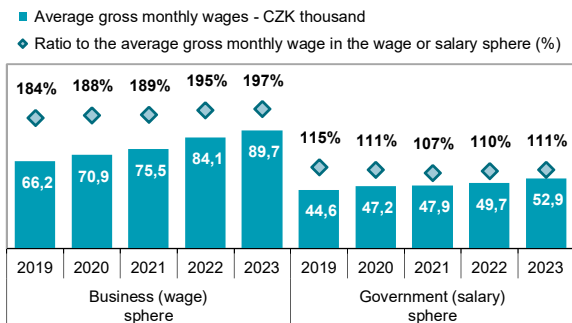
**Table A4 Wages of ICT professionals in Czechia**

	Average gross monthly wage in CZK		
	2021	2022	2023
<b>Total</b>	<b>74 157</b>	<b>82 441</b>	<b>88 025</b>
Men	76 360	84 526	90 633
Women	62 499	70 492	74 394
<b>Citizenship</b>			
Czech citizens	70 622	78 013	83 898
Foreigners	92 358	104 184	105 636
<b>Sphere of activity (remuneration)</b>			
Business (wage) sphere	75 718	84 052	89 651
Government (salary) sphere	47 968	49 736	52 907
<b>Age group</b>			
25–34 years	67 447	74 824	79 970
35–44 years	83 448	92 140	96 912
45–54 years	79 959	89 164	97 178
55 + years	64 402	72 319	76 992
<b>Highest level of education attainment</b>			
Master's and Doctoral	81 694	90 757	96 352
Bachelor's and Higher professional	70 524	78 783	84 997
Secondary with A-level examination	62 720	69 472	74 996

**Figure A15 Wages of ICT professionals**



**Figure A16 Wages of ICT professionals, by sphere**



Source: CZSO, Structural Earnings Statistics

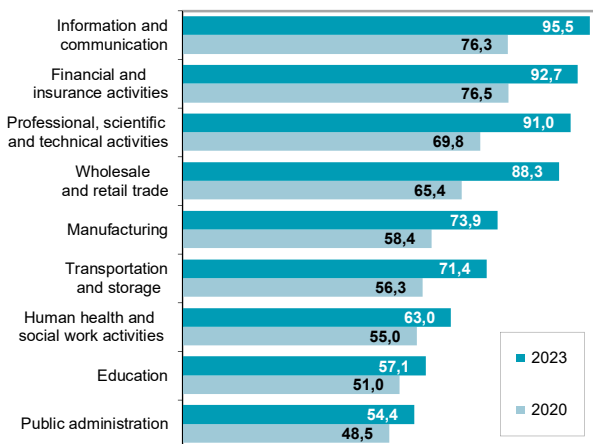


## A ICT specialists

**Table A5 Wages of ICT professionals in Czechia by occupation and industry**

	Average gross monthly wage in CZK		
	2021	2022	2023
<b>Total</b>	<b>74 157</b>	<b>82 441</b>	<b>88 025</b>
<b>Occupation</b>			
<b>Software and app. developers &amp; analysts</b>	<b>77 642</b>	<b>86 473</b>	<b>92 332</b>
Systems analysts	76 049	82 521	83 735
Software developers	83 504	93 017	102 875
Web and multimedia developers	57 992	63 172	80 568
Applications programmers	73 210	81 813	84 977
Other software developers and analysts	73 252	84 542	80 344
<b>Database and network professionals</b>	<b>65 651</b>	<b>72 033</b>	<b>76 675</b>
Database designers	66 790	73 234	74 468
Systems administrators	62 746	68 462	73 870
Computer network professionals	74 647	81 458	84 834
Data security professionals	75 184	83 350	85 637
<b>Industry (CZ-NACE Section)</b>			
Manufacturing (C)	61 486	68 028	73 879
Wholesale and retail trade (G)	72 415	80 375	88 276
Transporting and storage (H)	59 176	65 510	71 386
Information and communication (J)	81 184	89 641	95 462
Financial and insurance activities (K)	77 515	86 134	92 718
Professional, scientific and techn. act. (M)	76 211	82 735	90 978
Public administration (O)	49 029	51 040	54 376
Education (P)	50 788	52 567	57 101
Human health and social work act. (Q)	57 417	59 473	63 014
Arts, entertainment and recreation (R)	56 843	60 769	68 383

**Figure A17 Average gross monthly wage of ICT professionals in selected industries (CZK thousand)**



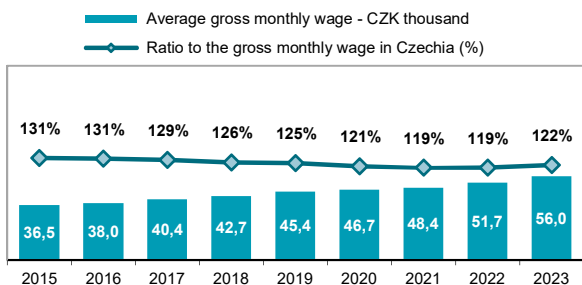
Source: CZSO, Structural Earnings Statistics

## A ICT specialists

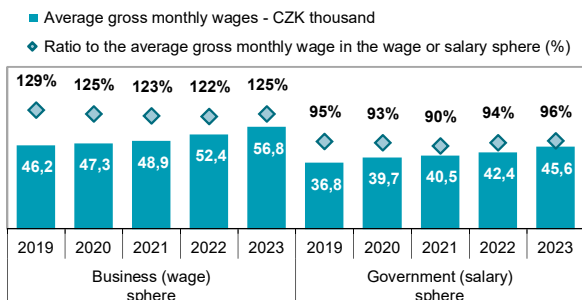
**Table A6 Wages of ICT technicians in Czechia**

	Average gross monthly wage in CZK		
	2021	2022	2023
<b>Total</b>	<b>48 352</b>	<b>51 688</b>	<b>56 024</b>
Men	49 046	52 428	56 685
Women	43 312	46 823	51 699
<b>Citizenship</b>			
Czech citizens	47 033	50 296	54 398
Foreigners	60 029	64 620	71 168
<b>Sphere of activity (remuneration)</b>			
Business (wage) sphere	48 923	52 368	56 777
Government (salary) sphere	40 527	42 379	45 559
<b>Age group</b>			
25–34 years	45 525	49 129	54 802
35–44 years	51 697	55 204	60 826
45–54 years	53 203	56 255	58 255
55 + years	45 724	48 372	50 991
<b>Highest level of education attainment</b>			
Master's and Doctoral	57 542	60 426	63 768
Bachelor's and Higher professional	52 228	55 333	60 034
Secondary with A-level examination	43 658	47 467	52 730
Other (lower)	39 776	43 568	45 415
<b>Occupation</b>			
ICT operations and user support technicians	48 911	52 489	57 417
Telecomm. and broadcasting technicians	43 896	45 505	45 726

**Figure A18 Wages of ICT technicians**



**Figure A19 Wages of ICT technicians, by sphere**



Source: CZSO, Structural Earnings Statistics