

C ICT investment

Investments into ICT equipment and software

Investment into ICT equipment and software (hereafter **ICT investment**) is **defined** as the acquisition of equipment and computer software that is used in production for more than one year. ICT has **three components**: information technology equipment (computers and related hardware); communications equipment; and software.

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>

According to **the ESA 2010**, the investments into computer and communication equipment became a part of a newly created item of non-financial assets as **ICT equipment (AN.1132)**.

Computer software and databases (AN.1173) involve according to the ESA 2010 two sub-items as follows: **Computer software (AN.11731)** involves computer programs, program descriptions and supporting materials for both systems & application SW and **Databases (AN.11732)** that include data files organized so as to enable cost-effective data access and use.

ICT equipment can be also **classified** to the groups of **the Classification of Products by Activity (CZ-CPA)** as follows: 26.2 Computers and peripheral equipment and 26.3 Communication equipment.

Detail description of **CZ-CPA** is available here (*only in Czech*):

<https://www.czso.cz/csu/czso/klasifikace-produkce-cz-cpa->

Data on investments into ICT equipment and software are available by **Sector** (ESA 2010 Institutional Sectors Classification) and **Industry** (CZ NACE classification) of the monitored entities.

Household consumption expenditures on ICT equipment and services

Data on ICT investment in this chapter are supplemented with data on the final consumption of households in the **national concept**, which includes expenditure of residents in Czechia and abroad spent on ICT dedicated to direct satisfaction of personal needs and wishes of individuals.

ICT is **classified** here to the **International standard of the Classification of Individual Consumption by Purpose (CZ-COICOP)** as follows:

- **ICT equipment:** 08.2 Telephone equipment and 09.1 Audio-visual and information processing equipment (Computers and consumer electronics).
- **ICT services:** 08.3 Telephone services that include primarily payments for calls via landline, mobile phone and payments for Internet connection.

Detail description of CZ- COICOP is available here (*only in Czech*):

<https://www.czso.cz/csu/czso/klasifikace-individualni-spotreby-cz-coicop->

The both data, the total ICT investment and final household consumption expenditure on ICT come from **the Annual National Accounts Statistics**. **Data for the 2022 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.

For more information on ICT investment see (*only in Czech*):

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

C ICT investment

Table C1 ICT investment in Czechia

	CZK million		
	2020	2021	2022
Total	287 958	299 037	343 660
ICT equipment	88 434	81 493	69 094
Software	199 524	217 544	274 566
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	3 614	1 677	1 691
Mining and quarrying	628	226	360
Manufacturing	67 656	66 159	68 442
Electricity, gas and water supply	8 809	7 573	10 605
Construction	5 856	6 832	5 196
Wholesale and retail trade	20 227	18 392	23 416
Transportation and storage	8 440	7 964	9 018
Accommodation and food service activities	2 194	2 742	1 488
Information and communication	94 648	106 143	132 061
Financial and insurance activities	32 705	35 033	37 734
Real estate activities	3 448	2 867	4 700
Professional, scientific and technical activ.	15 139	19 092	18 757
Administrative and support service activ.	3 681	3 429	6 185
Public administration and defence	10 801	10 367	12 322
Education	3 129	2 630	2 645
Human health and social work activities	4 365	5 663	6 239
Arts, entertainment and recreation	1 916	1 798	2 165
Other services	702	450	636

Figure C1 ICT investment

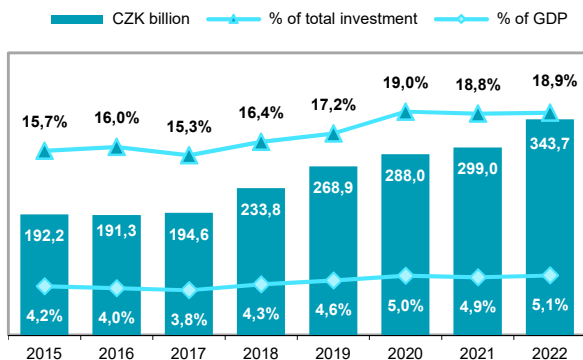
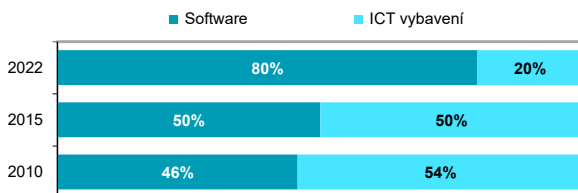


Figure C2 ICT investment, by asset



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C3 ICT investment; 2021* (% of GDP)

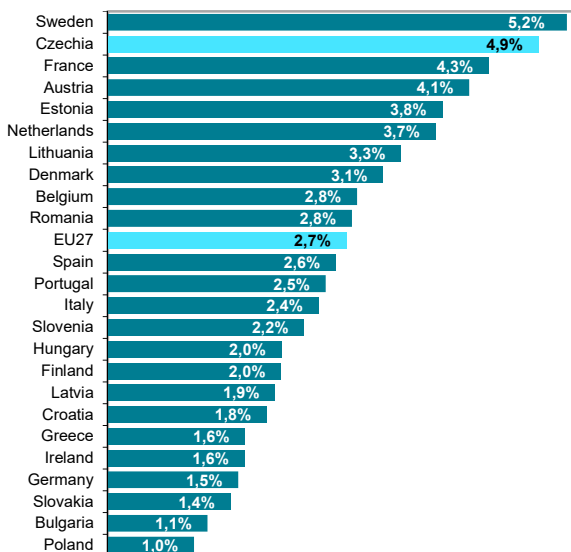
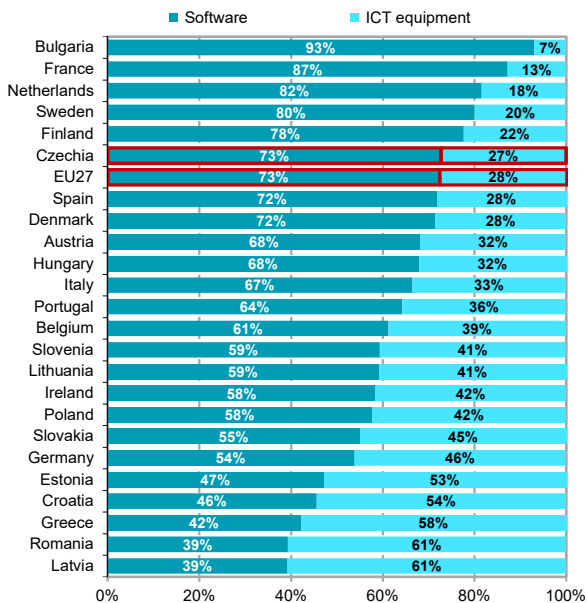


Figure C4 ICT investment, by asset (%); 2021*



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C2 ICT equipment investment in Czechia

CZK million

	2020	2021	2022
Total	88 434	81 493	69 094
in government institutions	7 797	6 188	7 576
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	2 961	907	815
Mining and quarrying	539	131	62
Manufacturing	45 541	41 766	38 415
Electricity, gas and water supply	4 633	2 830	922
Construction	4 131	4 998	2 401
Wholesale and retail trade	4 492	1 554	2 494
Transportation and storage	2 267	1 032	1 366
Accommodation and food service activities	1 553	2 072	587
Information and communication	6 331	5 623	2 837
Financial and insurance activities	3 101	5 195	5 996
Real estate activities	919	193	920
Professional, scientific and technical activ.	3 655	7 167	3 531
Administrative and support service activ.	566	107	482
Public administration and defence	3 101	2 566	3 241
Education	1 911	1 362	1 261
Human health and social work activities	1 788	3 170	2 795
Arts, entertainment and recreation	613	578	529
Other services	332	242	440

Figure C5 ICT equipment investment

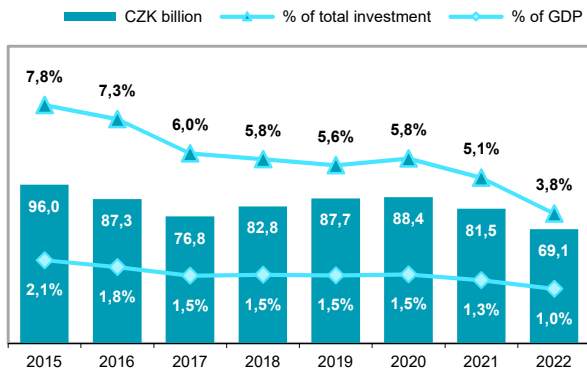
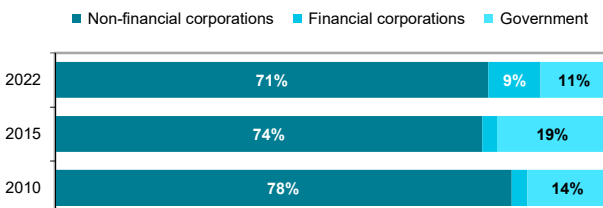


Figure C6 ICT equipment investment, by sector



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C7 ICT equipment investment; 2021* (% GDP)

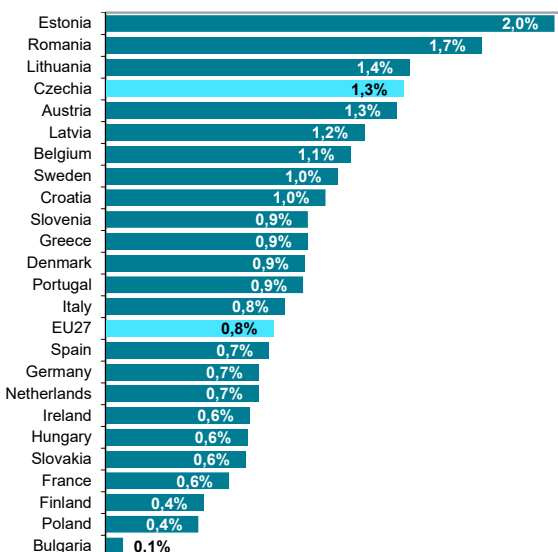
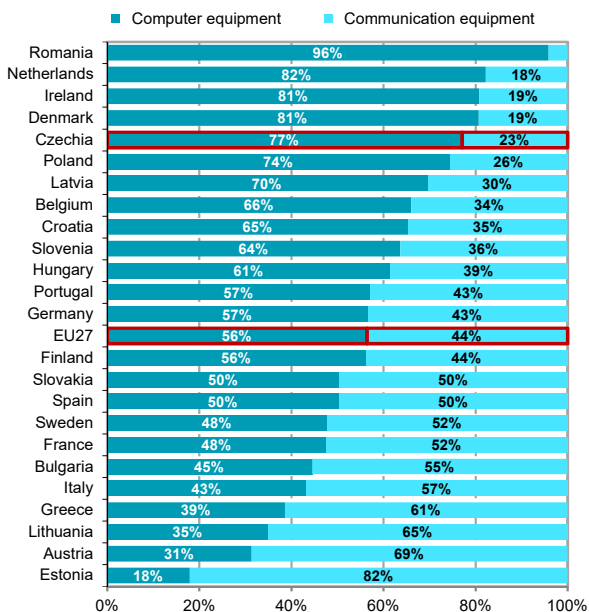


Figure C8 ICT equipment investment, by asset (%); 2021*



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C3 Software investment in Czechia

CZK million

	2020	2021	2022
Total	199 524	217 544	274 566
in government institutions	10 016	10 034	11 478
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	653	770	876
Mining and quarrying	89	95	298
Manufacturing	22 115	24 393	30 027
Electricity, gas and water supply	4 176	4 743	9 683
Construction	1 725	1 834	2 795
Wholesale and retail trade	15 735	16 838	20 922
Transportation and storage	6 173	6 932	7 652
Accommodation and food service activities	641	670	901
Information and communication	88 317	100 520	129 224
Financial and insurance activities	29 604	29 838	31 738
Real estate activities	2 529	2 674	3 780
Professional, scientific and technical activ.	11 484	11 925	15 226
Administrative and support service activ.	3 115	3 322	5 703
Public administration and defence	7 700	7 801	9 081
Education	1 218	1 268	1 384
Human health and social work activities	2 577	2 493	3 444
Arts, entertainment and recreation	1 303	1 220	1 636
Other services	370	208	196

Figure C9 Software investment

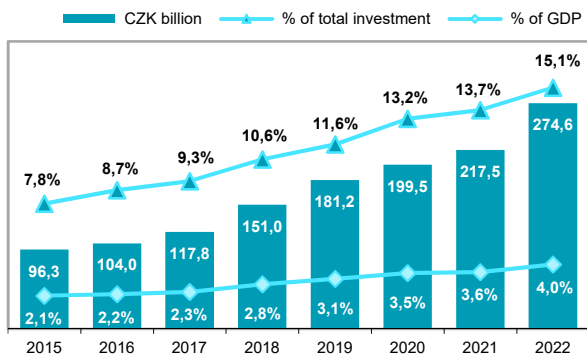
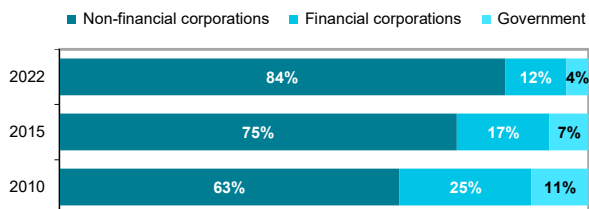


Figure C10 Software investment, by sector



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C11 Software investment; 2021*
(% of total investment)

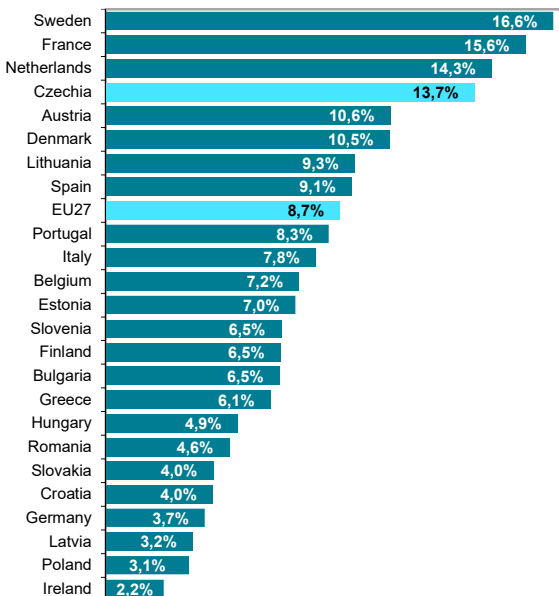
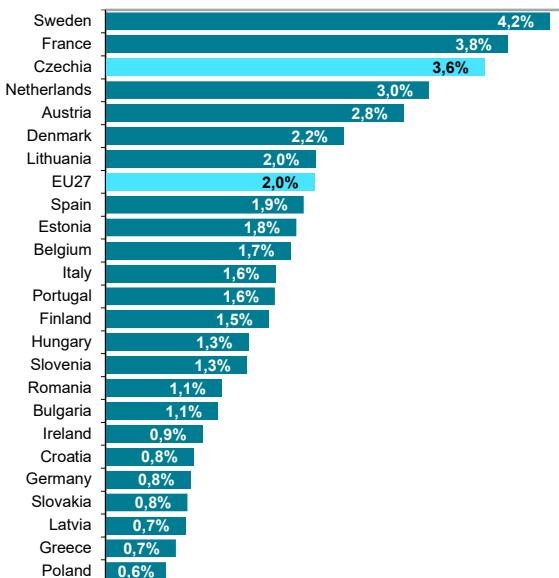


Figure C12 Software investment, 2021* (% of GDP)



* or the nearest available year

Source: CZSO calculations based on Eurostat data

C ICT investment

Table C4 Household consumption expenditures on ICT equipment and services in Czechia

	CZK million		
	2020	2021	2022
Total	111 201	117 293	121 257
ICT equipment	40 085	42 677	45 223
Telephone equipment	9 471	8 999	9 694
Computers and consumer electronics	30 614	33 678	35 529
ICT services	71 116	74 616	76 034

Figure C13 Household consumption expenditures on ICT equipment and services

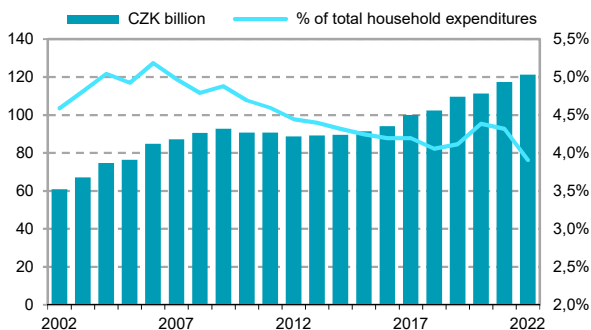


Figure C14 Household expenditures on ICT, by product

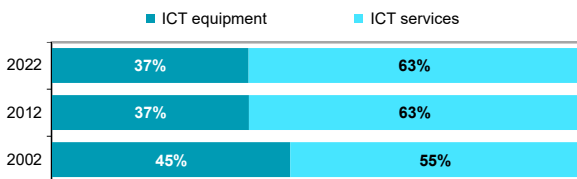
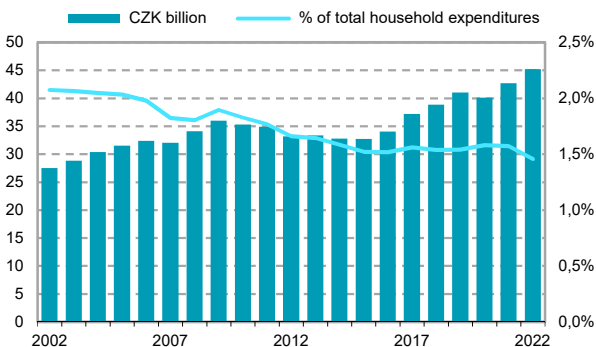


Figure C15 Households expenditures on ICT equipment



Source: CZSO, Annual National Accounts Statistics

C ICT investment

Figure C16 Household expenditures on ICT; 2022
(% of total households consumption expenditures)

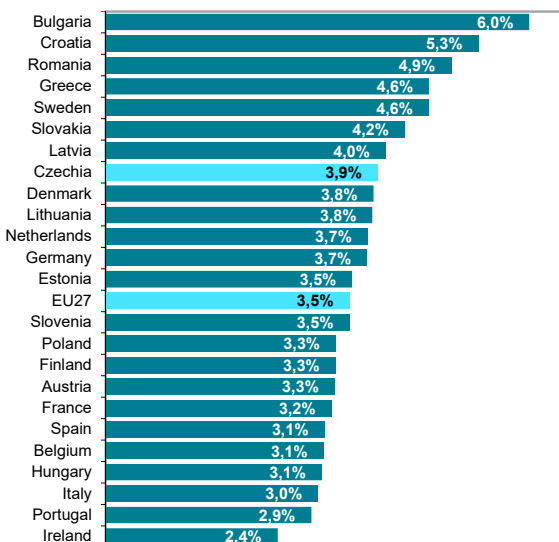
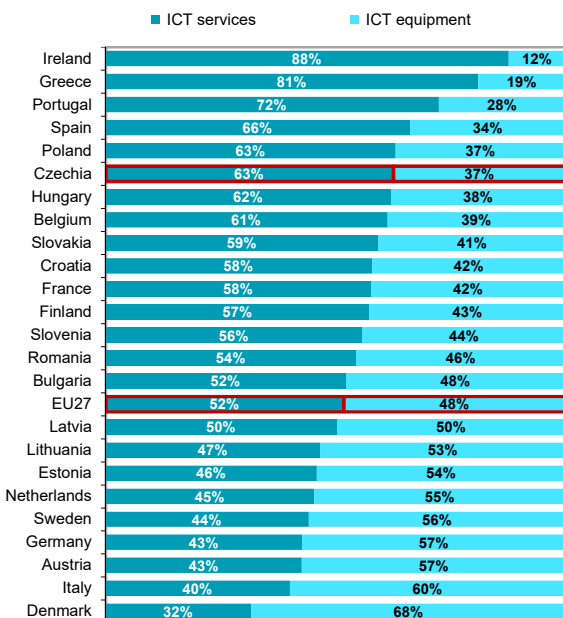


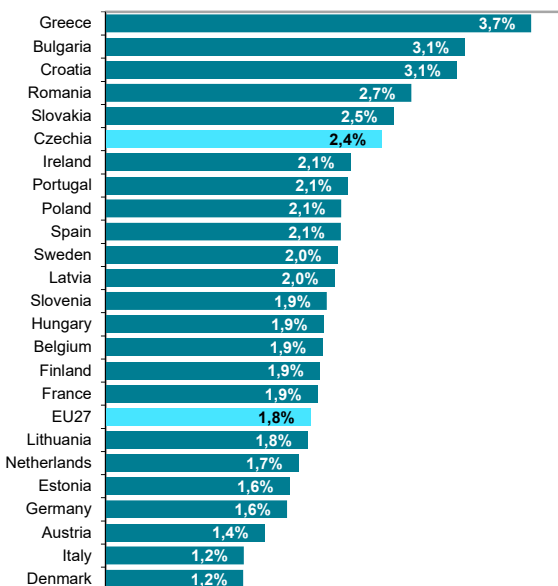
Figure C17 Household expenditures on ICT, by type of product; 2022 (%)



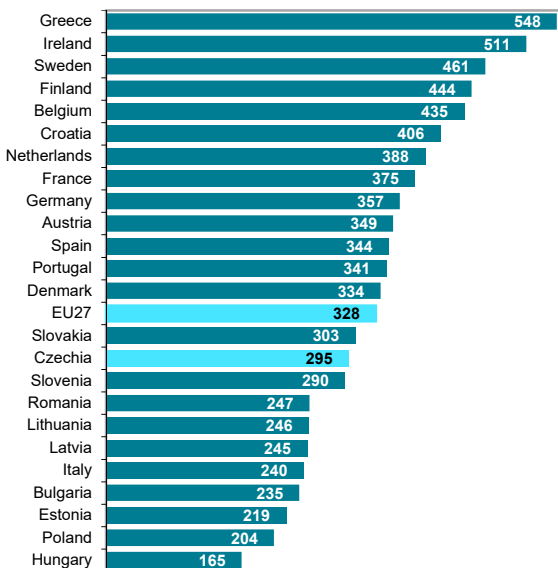
Source: CZSO calculations based on Eurostat data

C ICT investment

Graf C18 Household expenditures on ICT services; 2022
(% of total households expenditures)



Graf C19 Household expenditures on ICT services; 2022
(EUR per capita)



Source: CZSO calculations based on Eurostat data