

## 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 2020 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](https://www.czso.cz/csu/czso/investice_v_ict)

## C ICT investment

Table C1 ICT investment in Czechia

	CZK million		
	2019	2020	2021
<b>Total</b>	<b>268 874</b>	<b>287 958</b>	<b>298 849</b>
ICT equipment	87 703	88 434	81 399
Software	181 171	199 524	217 450
<b>Industry (CZ-NACE Section)</b>			
Agriculture, forestry and fishing	3 099	3 614	1 650
Mining and quarrying	650	628	256
Manufacturing	65 166	67 656	62 327
Electricity, gas and water supply	7 257	8 809	8 967
Construction	6 572	5 856	8 407
Wholesale and retail trade	18 699	20 227	18 396
Transportation and storage	8 881	8 440	8 208
Accommodation and food service activities	2 768	2 194	2 423
Information and communication	80 261	94 648	107 250
Financial and insurance activities	33 026	32 705	35 369
Real estate activities	3 033	3 448	2 858
Professional, scientific and technical activ.	15 654	15 139	18 032
Administrative and support service activ.	4 298	3 681	3 588
Public administration and defence	9 292	10 801	10 344
Education	3 069	3 129	2 711
Human health and social work activities	4 375	4 365	5 833
Arts, entertainment and recreation	2 104	1 916	1 776
Other services	670	702	454

Figure C1 ICT investment

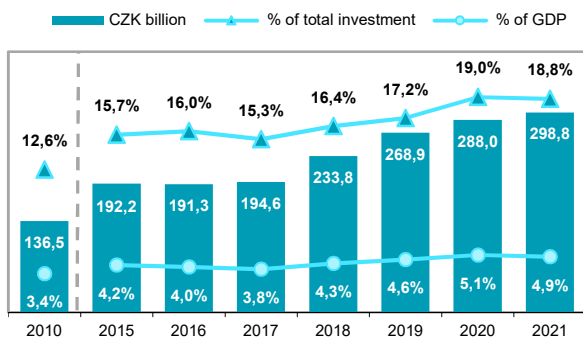
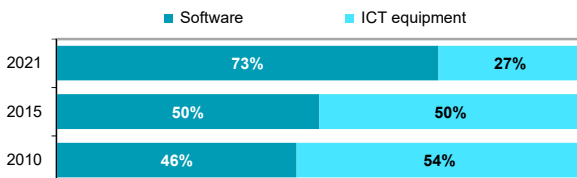


Figure C2 ICT investment, by asset



Source: CZSO, Annual National Accounts Statistics

## C ICT investment

Figure C3 ICT investment; 2020\* (% of GDP)

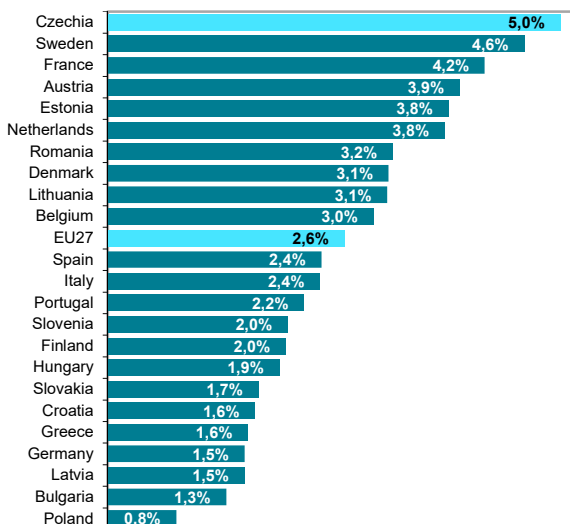
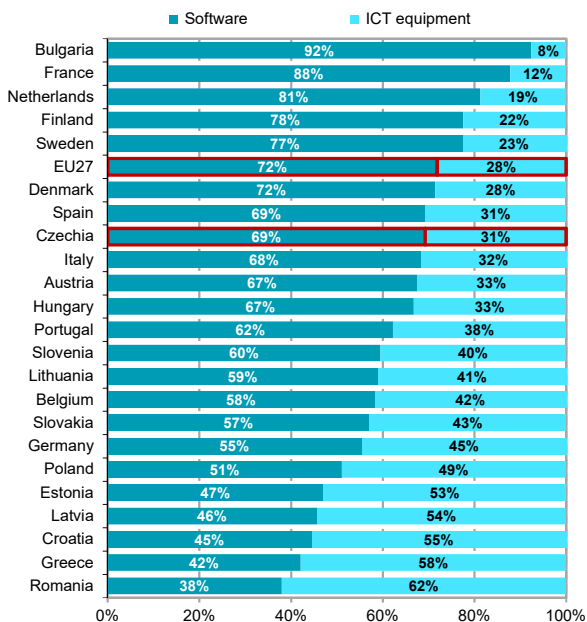


Figure C4 ICT investment, by asset (%); 2020\*



\* or the nearest available year

Source: CZSO calculations based on Eurostat data

## C ICT investment

Table C2 ICT equipment investment in Czechia

CZK million

	2019	2020	2021
<b>Total</b>	<b>87 703</b>	<b>88 434</b>	<b>81 399</b>
Computer equipment	69 021	68 049	.
Communication equipment	18 682	20 385	.
<b>Industry (CZ-NACE Section)</b>			
Agriculture, forestry and fishing	2 505	2 961	880
Mining and quarrying	559	539	161
Manufacturing	42 993	45 541	37 910
Electricity, gas and water supply	4 101	4 633	3 453
Construction	4 894	4 131	6 556
Wholesale and retail trade	4 577	4 492	1 565
Transportation and storage	2 794	2 267	1 277
Accommodation and food service activities	2 143	1 553	1 724
Information and communication	5 210	6 331	7 124
Financial and insurance activities	4 316	3 101	5 545
Real estate activities	829	919	196
Professional, scientific and technical activ.	4 073	3 655	6 639
Administrative and support service activ.	773	566	131
Public administration and defence	2 719	3 101	2 629
Education	1 832	1 911	1 447
Human health and social work activities	2 480	1 788	3 321
Arts, entertainment and recreation	606	613	566
Other services	299	332	275

Figure C5 ICT equipment investment

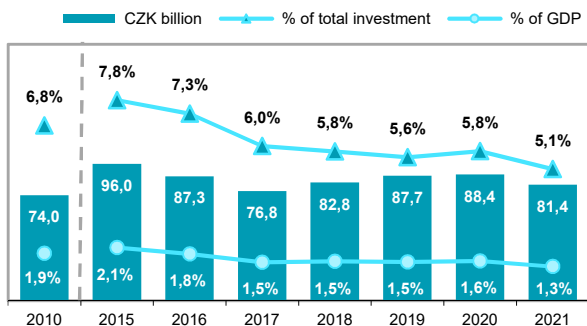
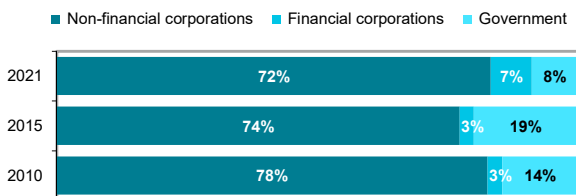


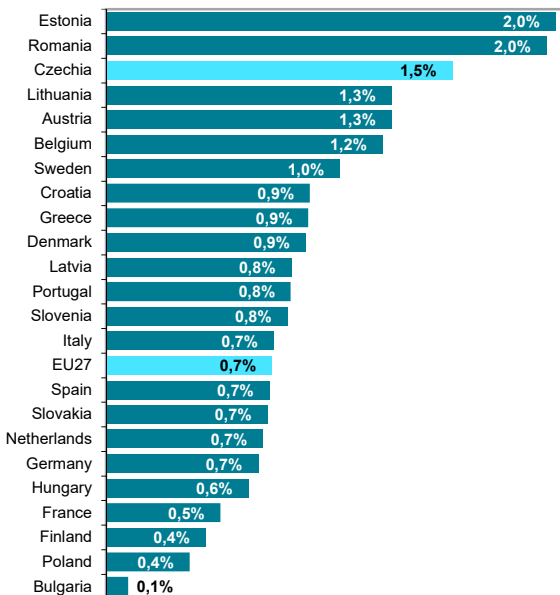
Figure C6 ICT equipment investment, by sector



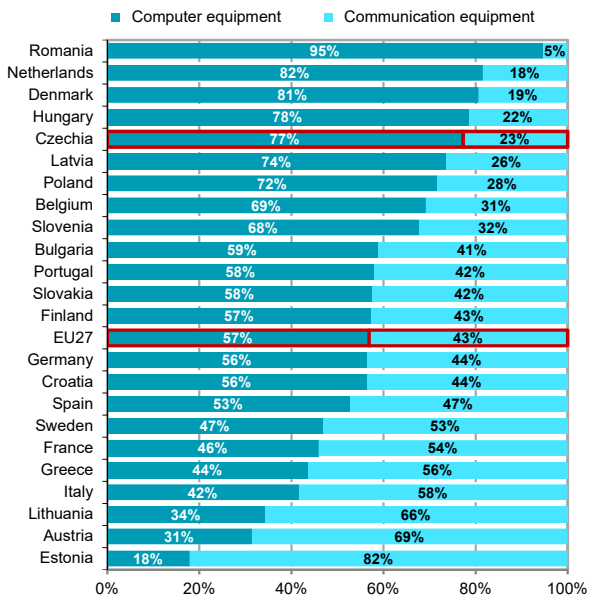
Source: CZSO, Annual National Accounts Statistics

## C ICT investment

**Figure C7 ICT equipment investment; 2020\* (% GDP)**



**Figure C8 ICT equipment investment, by asset (%); 2020\***



\* or the nearest available year

Source: CZSO calculations based on Eurostat data

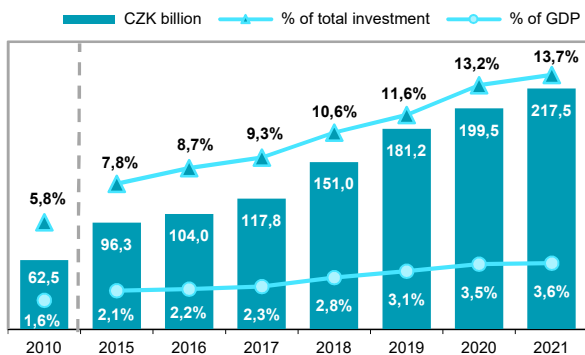
## C ICT investment

**Table C3 Software investment in Czechia**

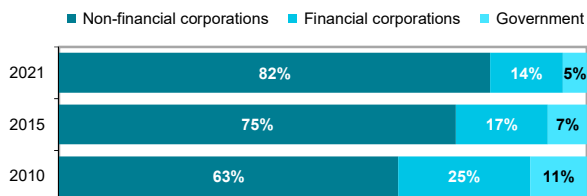
CZK million

	2019	2020	2021
<b>Total</b>	<b>181 171</b>	<b>199 524</b>	<b>217 450</b>
<b>Industry (CZ-NACE Section)</b>			
Agriculture, forestry and fishing	594	653	770
Mining and quarrying	91	89	95
Manufacturing	22 173	22 115	24 417
Electricity, gas and water supply	3 156	4 176	5 514
Construction	1 678	1 725	1 851
Wholesale and retail trade	14 122	15 735	16 831
Transportation and storage	6 087	6 173	6 931
Accommodation and food service activities	625	641	699
Information and communication	75 051	88 317	100 126
Financial and insurance activities	28 710	29 604	29 824
Real estate activities	2 204	2 529	2 662
Professional, scientific and technical activ.	11 581	11 484	11 393
Administrative and support service activ.	3 525	3 115	3 457
Public administration and defence	6 573	7 700	7 715
Education	1 237	1 218	1 264
Human health and social work activities	1 895	2 577	2 512
Arts, entertainment and recreation	1 498	1 303	1 210
Other services	371	370	179

**Figure C9 Software investment**



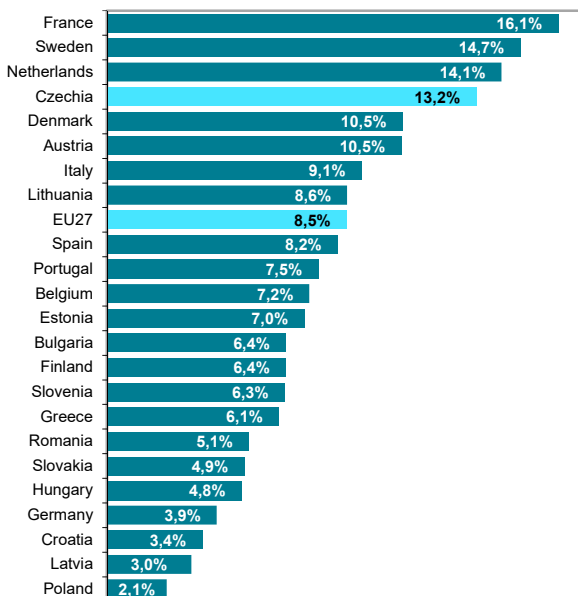
**Figure C10 Software investment, by sector**



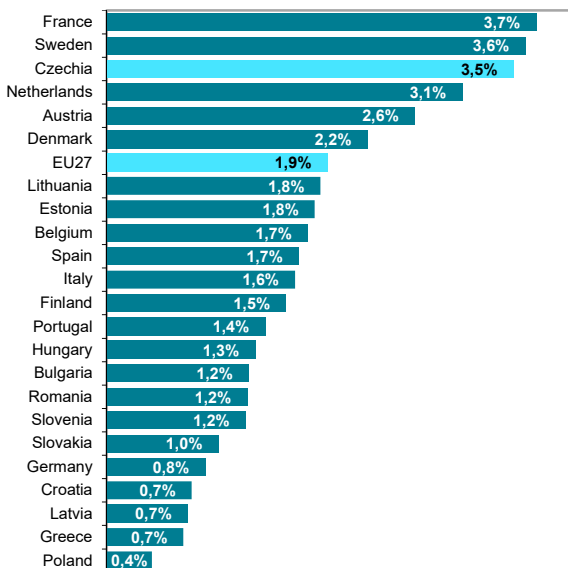
Source: CZSO, Annual National Accounts Statistics

## C ICT investment

**Figure C11 Software investment; 2020\***  
(% of total investment)



**Figure C12 Software investment, 2020\*** (% of GDP)



\* or the nearest available year

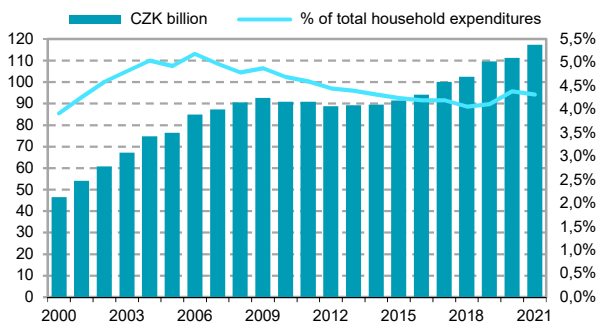
Source: CZSO calculations based on Eurostat data

## C ICT investment

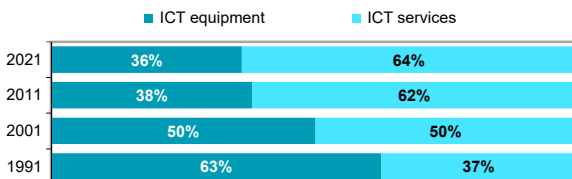
**Table C4 Household consumption expenditures on ICT equipment and services in Czechia**

	CZK million		
	2019	2020	2021
<b>Total</b>	<b>109 608</b>	<b>111 201</b>	<b>117 268</b>
<b>ICT equipment</b>	<b>41 015</b>	<b>40 085</b>	<b>42 672</b>
Telephone equipment	9 432	9 471	8 999
Computers and consumer electronics	31 583	30 614	33 673
<b>ICT services</b>	<b>68 593</b>	<b>71 116</b>	<b>74 596</b>

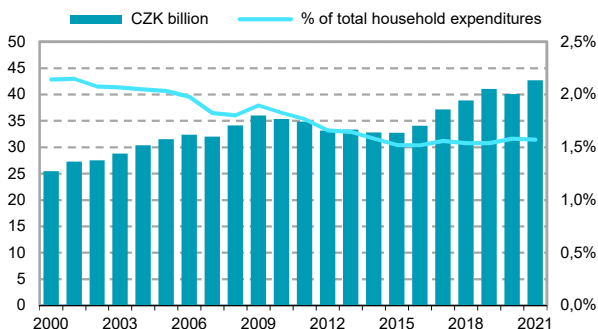
**Figure C13 Household consumption expenditures on ICT equipment and services**



**Figure C14 Household expenditures on ICT, by product**



**Figure C15 Households expenditures on ICT equipment**

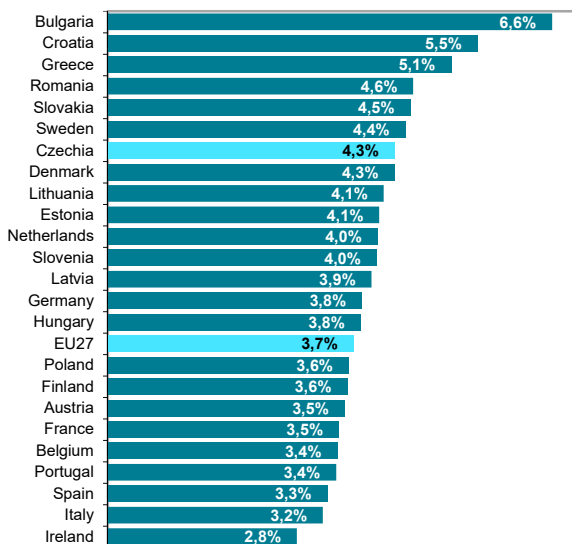


Source: CZSO, Annual National Accounts Statistics

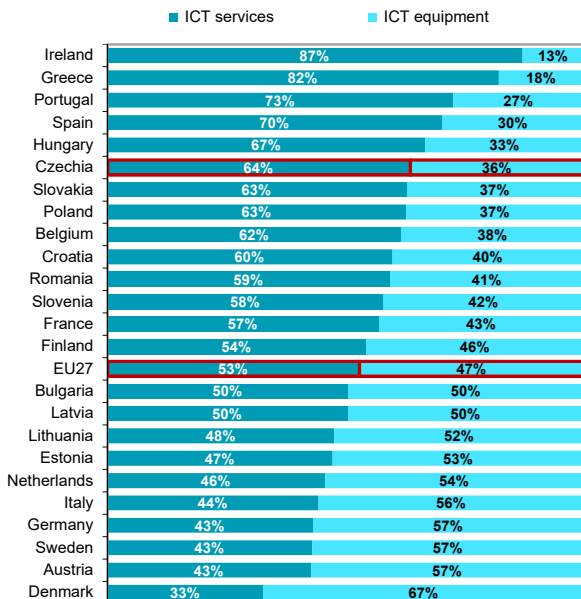


## C ICT investment

**Figure C16 Household expenditures on ICT; 2021**  
(% of total households consumption expenditures)



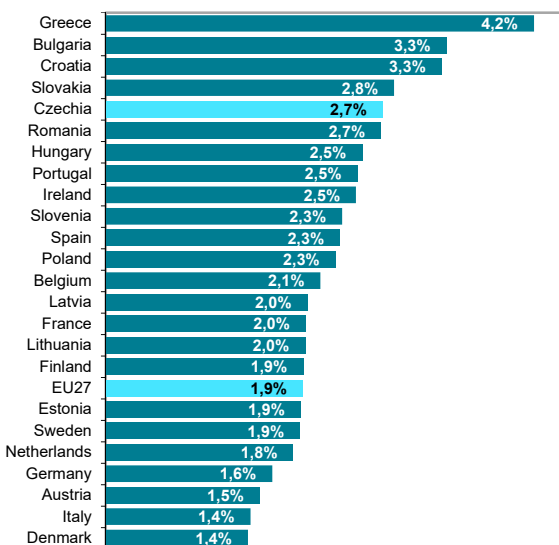
**Figure C17 Household expenditures on ICT, by type of product; 2021\* (%)**



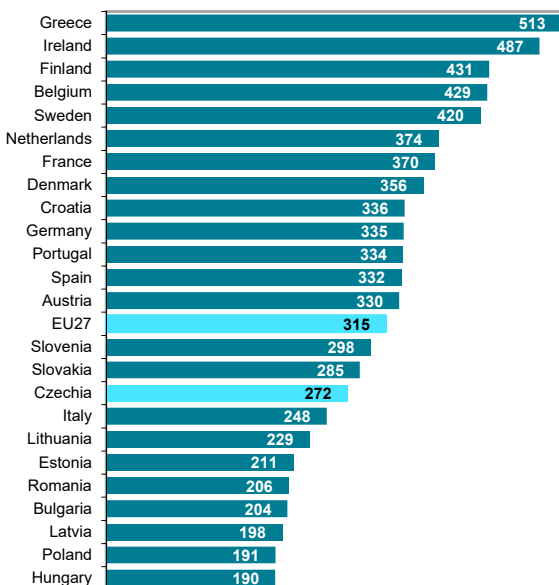
Source: CZSO calculations based on Eurostat data

## C ICT investment

**Graf C18 Household expenditures on ICT services; 2021**  
(% of total households expenditures)



**Graf C19 Household expenditures on ICT services; 2021**  
(EUR per capita)



Source: CZSO calculations based on Eurostat data