

B ICT expenditure and investment

B. 1 Investment in ICT equipment and software

Investments into ICT equipment and software (hereafter **ICT investment**) in the tables shall mean the **gross fixed capital formation** (GFCF: P.51), which includes mainly acquisitions of fixed assets (P.511) used in the production processes repeatedly or continuously for more than one year. The definition of GFCF used here follows **The European System of Regional and National Accounts (ESA 2010)**.

ICT investment has **three components**: **information technology (IT) equipment** (computers and related hardware), **communications equipment** and computer software and databases (hereafter **software**). Software includes acquisition of pre-packaged software, customized software and software developed in-house (own-account software).

ICT assets can be also classified to the groups of the **Classification of Products by Activity (CZ-CPA)** as follows:

- **ICT equipment**: Computers and peripheral equipment (26.2); Communication equipment (26.3) and Consumer electronics (26.4)
- **IT services (software)**: Software publishing services (58.2); Computer programming, consultancy and related services (62.0) and Data processing, hosting and related services; web portals (63.1).

Investments into **computer** and **telecommunication equipment** became according to ESA 2010 a part of a newly created item of non-financial assets as **ICT equipment (AN.1132)**.

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

B. 2 Households expenditures on ICT equipment and ICT services

Data on the total ICT investment in this chapter are supplemented with data on **Final ICT consumption expenditure of households**. The final consumption expenditure of households is recorded in international classification COICOP. This is a classification where individual items of consumption are divided according to its purpose.

ICT equipment and ICT services according to this classification include the following items:

- **ICT equipment**: Telephone and telefax equipment (08.2); Audio-visual, photographic and information processing equipment (09.1)
- **Telecommunication (ICT) services**: Telephone and telefax services (08.3). This category contains primarily payments for calls via landline, mobile phone and payments for Internet connection.

The both data, the total ICT investment and final household consumption expenditure on ICT equipment and ICT services come from the **Annual National Accounts Statistics** of the Czech Statistical Office. **2015 data are preliminary**. For more information see:

<http://apl.czso.cz/pll/rocenka/rocenka.indexnu?mylang=EN>

For the **international comparison OECD and Eurostat** data sources were used.

Further information on ICT investment can be found at (only in Czech): https://www.czso.cz/csu/czso/investice_v_ict

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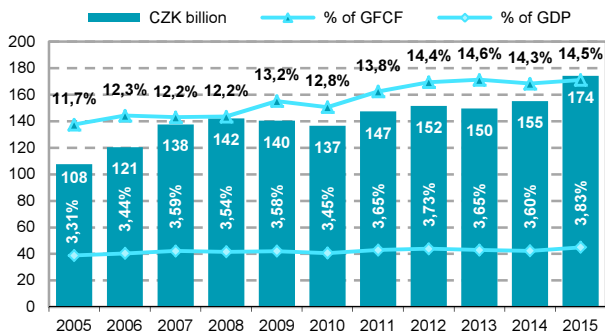
Table B1 ICT investment in the Czech Republic

CZK million

	2013	2014	2015*
Total	149 588	155 156	174 309
ICT equipment	73 986	77 338	84 325
Computer software and databases	75 602	77 818	89 984
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	616	951	2 210
Mining and quarrying	670	542	646
Manufacturing	37 009	44 469	53 651
Electricity, gas and water supply	4 925	4 524	6 232
Construction	1 842	2 986	3 289
Wholesale and retail trade	11 458	9 326	10 976
Transportation and storage	3 355	3 759	4 728
Accommodation and food service activities	999	1 535	1 752
Information and communication	38 739	41 599	34 615
Financial and insurance activities	14 121	13 569	17 236
Real estate activities	1 871	1 476	1 796
Professional, scientific and technical activ.	8 423	8 267	9 638
Administrative and support service activ.	2 229	1 482	1 673
Public administration and defence	10 907	9 902	11 787
Education	7 623	4 988	5 350
Human health and social work activities	2 480	3 768	6 054
Arts, entertainment and recreation	1 044	902	1 201
Other services	1 277	1 111	1 475

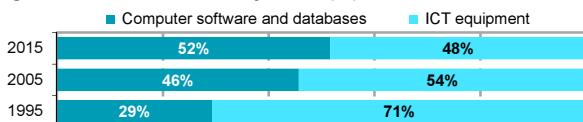
* Preliminary data

Figure B1 Total ICT investment



GFCF - Gross Fixed Capital Formation (total investment)

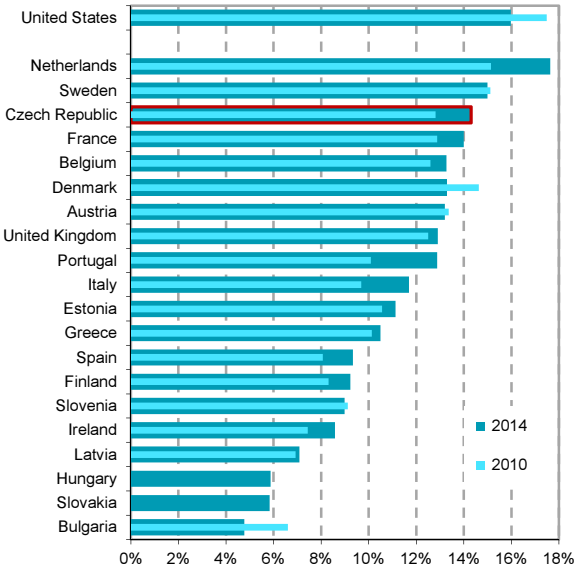
Figure B2 ICT investment by asset (%)



Source: CZSO, Annual National Accounts Statistics

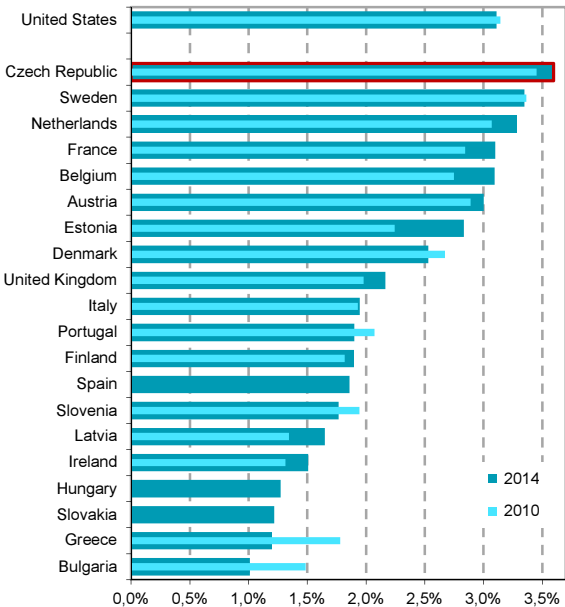
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Figure B3 ICT investment (% of total GFCF)



GFCF - Gross Fixed Capital Formation (total investment)

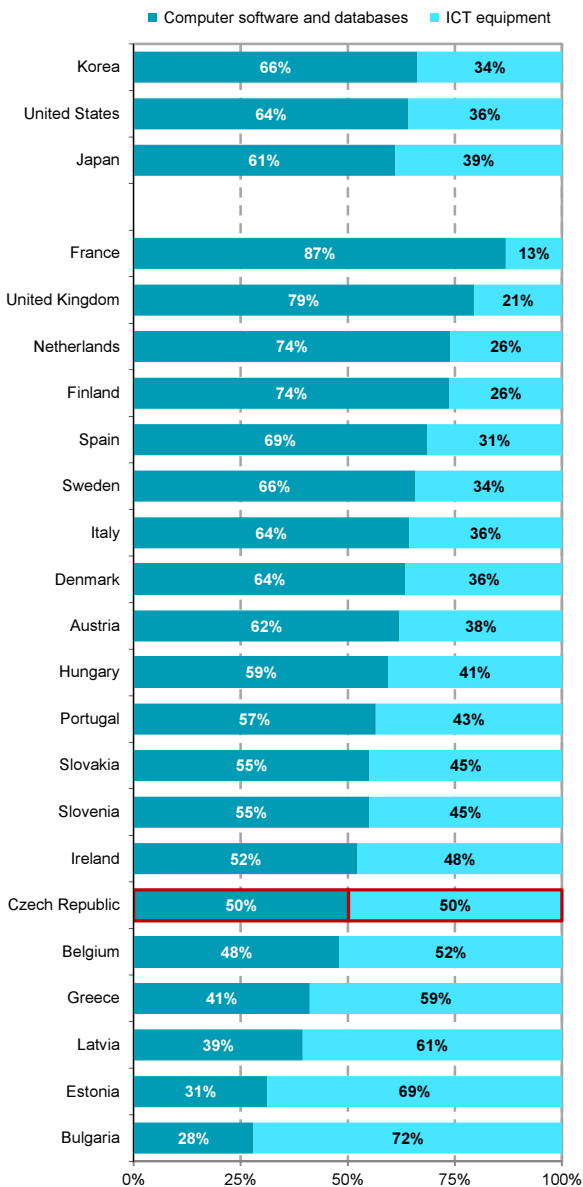
Figure B4 ICT investment (% GDP)



Source: CZSO calculations based on Eurostat and OECD data, 2016

B ICT expenditure and investment

Figure B5 ICT investment by asset; 2014* (%)

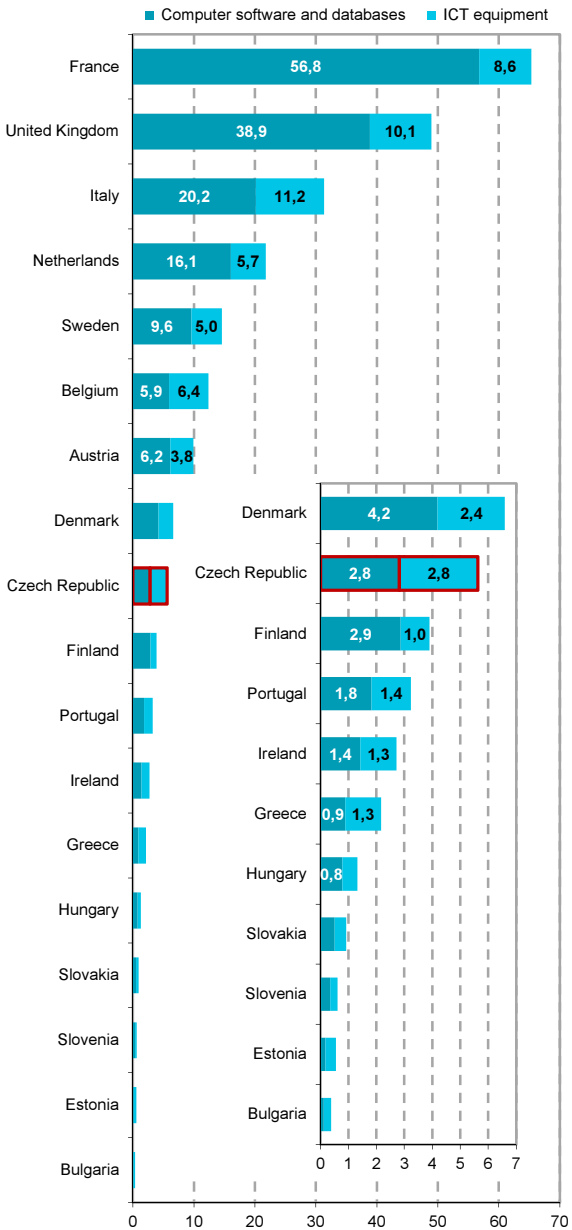


* or the latest year available

Source: CZSO calculations based on Eurostat and OECD data, 2016

B ICT expenditure and investment

Figure B6 ICT investment by asset; 2014* (mld. EUR)



* or the latest year available

Source: CZSO calculations based on Eurostat and OECD data, 2016

B ICT expenditure and investment

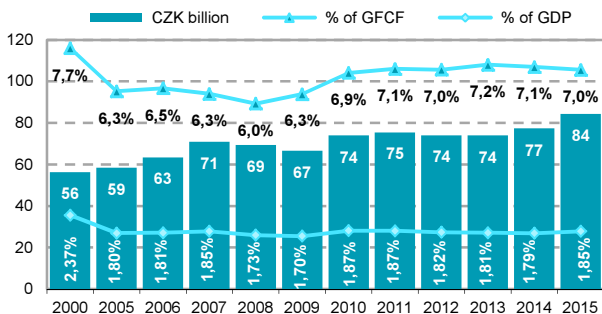
Table B2 ICT equipment investment in the Czech Republic

CZK million

	2013	2014	2015*
Total	73 986	77 338	84 325
Computer (IT) equipment	56 971	55 680	60 714
Communication equipment	17 015	21 658	23 611
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	392	683	1 912
Mining and quarrying	407	419	510
Manufacturing	28 842	34 135	41 484
Electricity, gas and water supply	3 304	2 836	4 331
Construction	1 055	2 142	2 315
Wholesale and retail trade	5 231	2 791	3 172
Transportation and storage	892	1 266	1 872
Accommodation and food service activities	847	1 310	1 496
Information and communication	11 648	14 245	4 215
Financial and insurance activities	1 098	933	1 224
Real estate activities	1 169	531	653
Professional, scientific and technical activ.	3 887	3 209	4 034
Administrative and support service activ.	518	381	442
Public administration and defence	5 609	4 837	6 304
Education	6 345	3 868	4 278
Human health and social work activities	1 807	2 986	5 034
Arts, entertainment and recreation	673	544	804
Other services	262	222	245

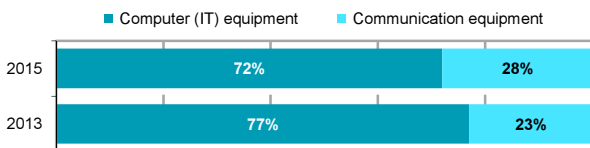
* Preliminary data

Figure B7 Total ICT equipment investment



GFCF - Gross Fixed Capital Formation (total investment)

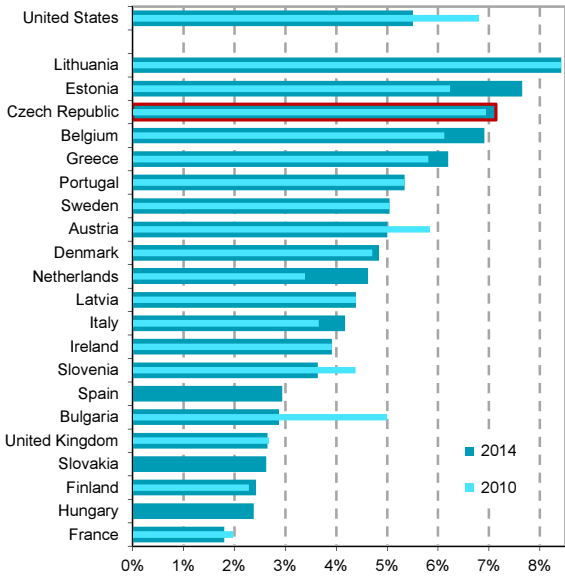
Figure B8 ICT equipment investment by asset



Source: CZSO, Annual National Accounts Statistics

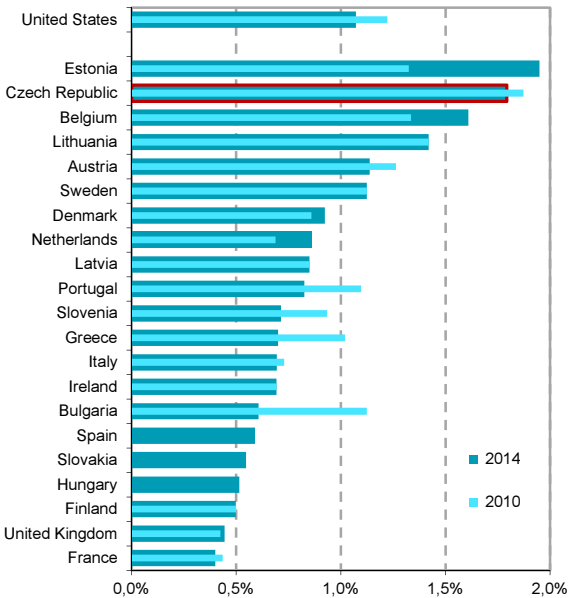
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Figure B9 ICT equipment investment (% of total GFCF)



GFCF - Gross Fixed Capital Formation (total investment)

Figure B10 ICT equipment investment (% of GDP)



Source: CZSO calculations based on Eurostat and OECD data, 2016

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Table B3 Software investment in the Czech Republic

CZK million

	2013	2014	2015*
Total	75 602	77 818	89 984
own-account software	16 343	17 815	19 354
Type			
Computer Software	59 324	63 584	74 116
Databases	16 278	14 234	15 868
Industry (CZ-NACE Section)			
Agriculture, forestry and fishing	224	268	298
Mining and quarrying	263	123	136
Manufacturing	8 167	10 334	12 167
Electricity, gas and water supply	1 621	1 688	1 901
Construction	787	844	974
Wholesale and retail trade	6 227	6 535	7 804
Transportation and storage	2 463	2 493	2 856
Accommodation and food service activities	152	225	256
Information and communication	27 091	27 354	30 400
Financial and insurance activities	13 023	12 636	16 012
Real estate activities	702	945	1 143
Professional, scientific and technical activ.	4 536	5 058	5 604
Administrative and support service activ.	1 711	1 101	1 231
Public administration and defence	5 298	5 065	5 483
Education	1 278	1 120	1 072
Human health and social work activities	673	782	1 020
Arts, entertainment and recreation	371	358	397
Other services	1 015	889	1 230

* Preliminary data

Figure B11 Total software investment

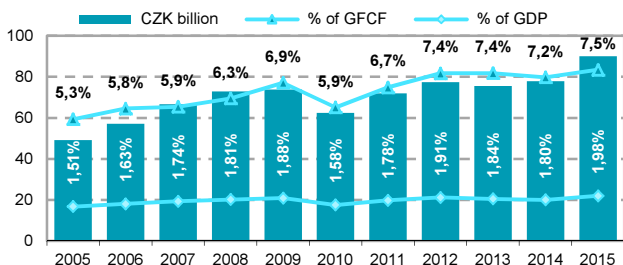
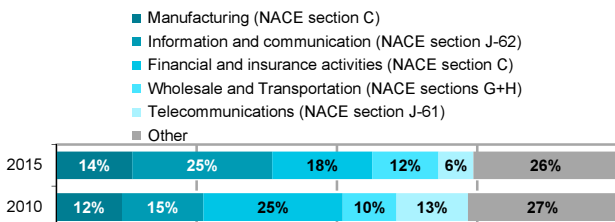


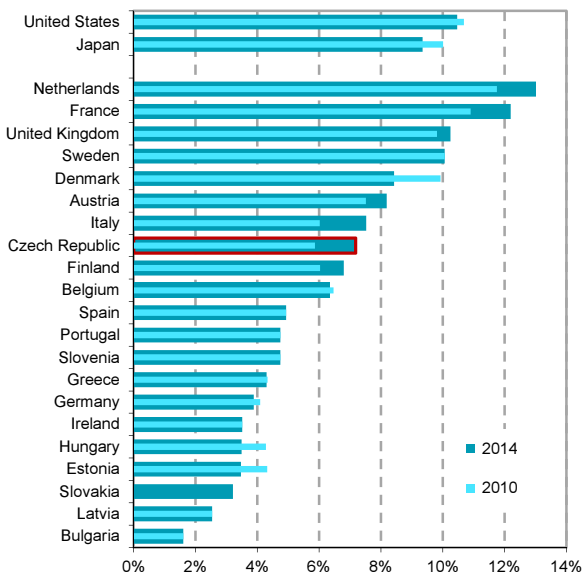
Figure B12 Software investment by industry (NACE sections)



Source: CZSO, Annual National Accounts Statistics

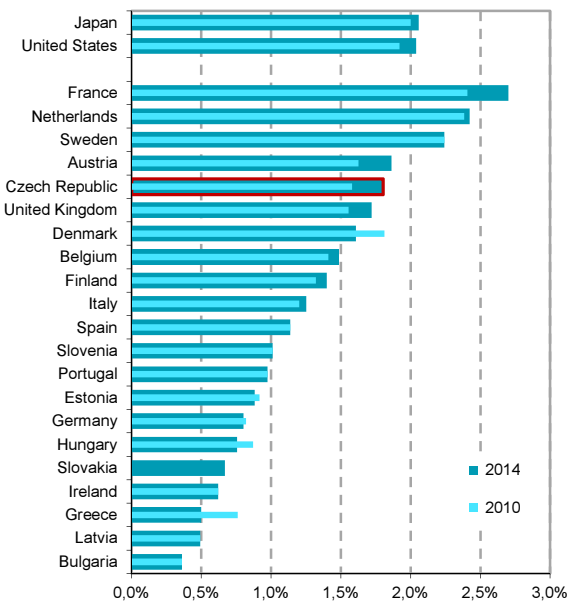
B ICT expenditure and investment

Figure B13 Software investment (% of total GFCF)



GFCF - Gross Fixed Capital Formation (total investment)

Figure B14 Software investment (% of GDP)



Source: CZSO calculations based on Eurostat and OECD data, 2016

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Table B4 Household consumption expenditures on ICT equipment and services in the Czech Republic

CZK million

	2013	2014	2015
Celkem	87 070	86 984	88 354
Total ICT equipment	31 920	31 333	31 722
Telephone equipment	3 059	3 256	3 416
Computers and consumer electronics	28 861	28 077	28 306
Telecommunication (ICT) services	55 150	55 651	56 632

Figure B15 Total household consumption expenditures on ICT

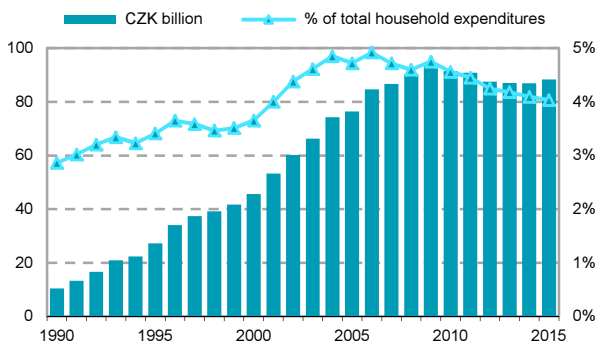


Figure B16 Households ICT expenditures by commodities

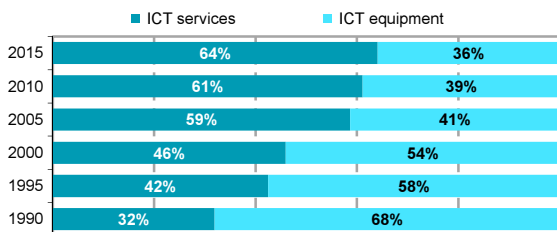
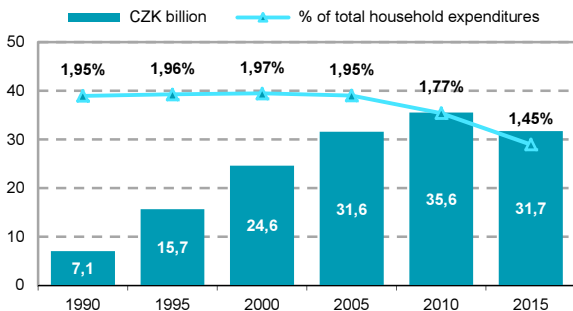


Figure B17 Households ICT equipment expenditures



Source: CZSO, Annual National Accounts Statistics

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Graf B18 Household consumption expenditures on ICT; 2014
(% of total households consumption expenditures)

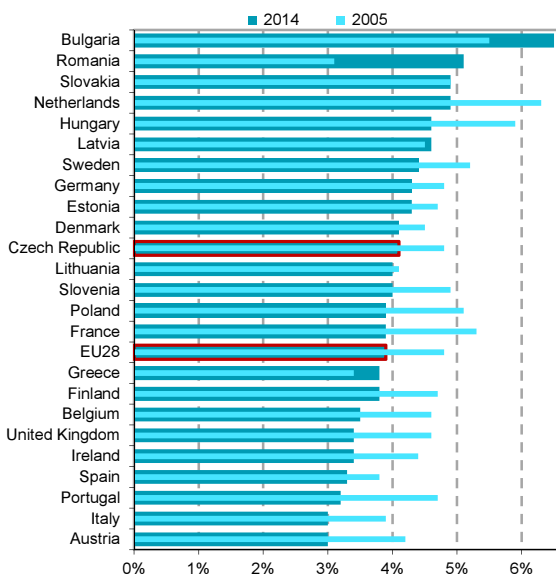
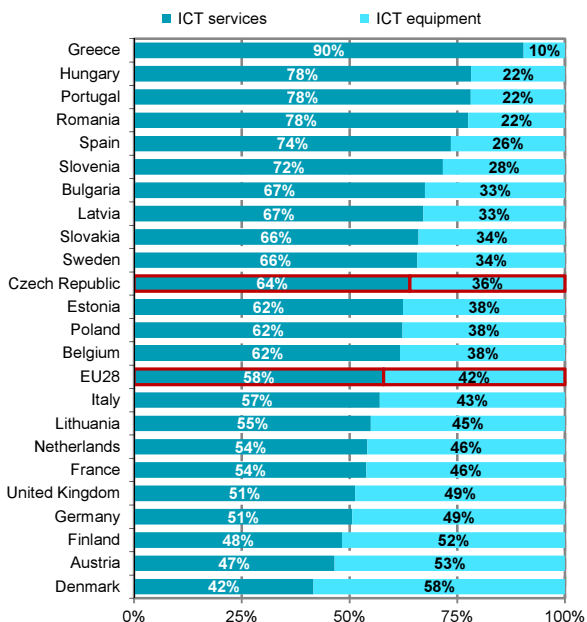


Figure B19 Household ICT expenditures by commodities; 2014



Source: CZSO calculations based on Eurostat data, 2016

B ICT expenditure and investment

Table B5 Household consumption expenditures on telecommunication in the Czech Republic

CZK million

	2013	2014	2015
Celkem	58 209	58 907	60 048
Telephone equipment	3 059	3 256	3 416
Telecommunication services	55 150	55 651	56 632

Figure B20 Household expenditures on telecommunication

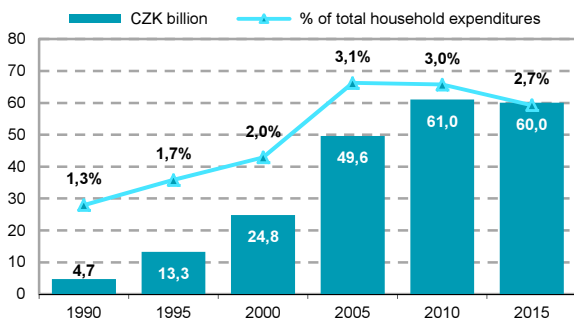


Figure B21 Household expenditures on telecommunication by commodities

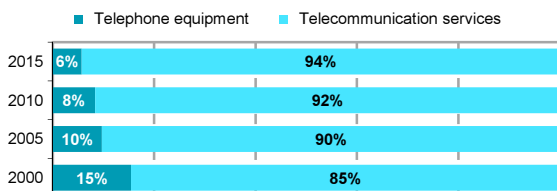
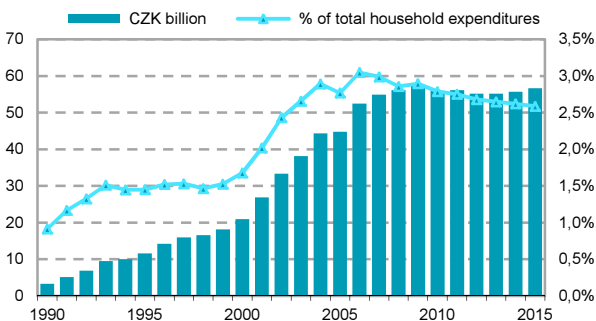


Figure B22 Household expenditures on telecommunication services



Source: CZSO, Annual National Accounts Statistics

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Figure B23 Household expenditures on telecommunication services; 2014 (% of total households expenditures)

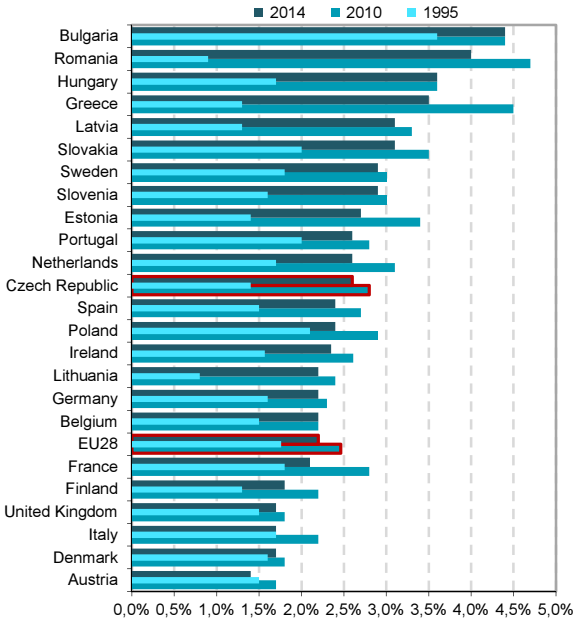
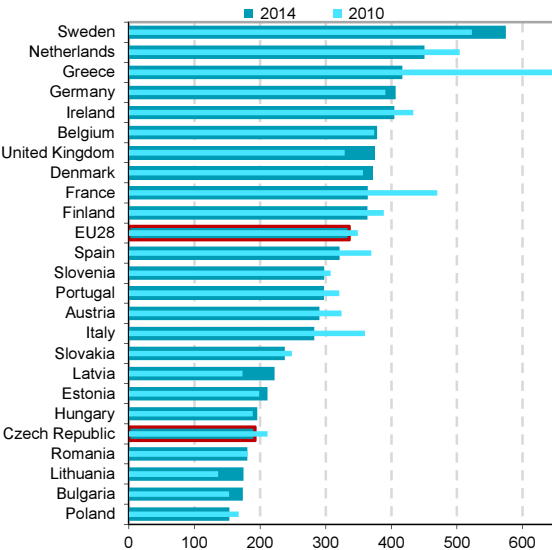


Figure B24 Household expenditures on telecommunication services (per 1 inhabitant, in EUR)



Source: CZSO calculations based on Eurostat data, 2016